

# Panindochina®



**Your Safety Solution Provider**



**INDUSTRIAL  
SCIENTIFIC**



**SKYLOTEC**



**KANOX®**

**Ssekur®**

**OPGAL**  
Beyond the Visible

**ZELINSKY  
GROUP**

**CALGAZ**

**CHEMDEFEND**  
PROTECTIVE CLOTHING



**3M**

**SCOTT  
SAFETY**



**RESPIREX™**  
Living + Breathing Personal Protection

**ION**

**CIRLOCK**  
LOCKOUT / TAGOUT EQUIPMENT

**JSP**



**Panindochina®**

**CleanAIR®**

**STREAMLIGHT**

**NEWTEX**  
EXTREME PROTECTIVE APPAREL



**MFC International**  
by RESPIREX  
ENGINEERED INFLATABLE PRODUCT SOLUTIONS

**THORZT**  
HYDRATE ENERGISE PERFORM

**MAPA®**  
PROFESSIONNEL

**CT**  
climbing  
technology

**CURTISS-  
WRIGHT**

**ST Protect**

**Thorogood**  
SHOES  
Since 1892

**frontier**  
SAFETY INDUSTRIAL FOOTWEAR

**INNO  
TEX®**

**PRATT**  
SAFETY SYSTEMS

**Windsock Company**

**PIP**  
PROTECTIVE INDUSTRIAL PRODUCTS

**NEWAGE FIRE PROTECTION  
INDUSTRIES PRIVATE LIMITED**


**TOBIN**  
EYEWASH SYSTEM



**KLEVER  
INNOVATIONS**

**LW  
&  
COMPRESSORS**





Being an established provider of safety equipment and its services in Vietnam, our main motivational factor comes from customers' satisfaction via our quality product and services. We aspire to become an integrated Provider/ Partner with a leading presence in Indochine.

## VISION

To be a highly valued products and services provider in the manufacturing and services providers market, using progressive management practices and knowledge based skilled employee.

## GOALS

To build a core range of safety products with high quality and performances appreciated by users for it's value and meeting the demands by users to protect lives.

To ensure and build the company to be able to translate these values to the general market users.

To explore and introduce other related potential business units which would help customers with their supply chains.

To continuously plan for growth for the company and it's workforce.

## MISSIONS

Panindochina aims to set up distribution network of dealers and regional sales team to reach out and service customers in major regions of Vietnam.

Panindochina has set up facilities to support after sales service needs of our customers for the products we supply.

Panindochina has set up growth plans for the company and it's workforce to achieve it's Vision and Mission.

## KEY VALUES

Quality product orientated for value and performances.

Teamwork of employees for best customer supports.

Market awareness for best communications between users, manufacturers, supplier and company of market need.







# Personal Protective Equipment



# Head Protection

www.panindochina.com.vn



## AS/NZS 1801:1997 Occupational protective helmets

In addition to any instructions provided with the hard hat users should refer to:

- AS/NZS 1800:1998 Occupational protective helmets - selection, care and use

A hard hat protects the head from injury by falling objects, impact against moving and stationary surfaces, debris, bad weather and electric shock. The internal webbing on hard hats, distributes the weight of the helmet evenly (and therefore the shock of impact) over the entire surface area of the helmet and top of the head.

The internal harness also provides a 50mm "buffer zone" between the shell and the head to further absorb shock.

### How does a hard hat protect you?

A hard hat protects you by providing the following features:

- A rigid shell that resists and deflects blows to the head;
- A suspension system inside the hat that acts as a shock absorber;
- If fitted with a brow guard, it shields your scalp, face, neck and shoulders from splashes, spills and drips
- If fitted with ear muffs, it provides protection for your hearing.

### What tests do the hard hats undergo to meet these Standards?

Every production helmets is tested to ensure it complies with the Australian Standard AS/NZS1801.

Hard hats are conditioned prior to each test to differing heats and conditions to ensure that they comply under a variety of conditions. These are:

- Hot - at a temperature of 50 ±2°C.
- Cold - at a temperature of -10 ±2°C.
- Wet - total immersion in water at a temperature of 23 ±5°C.

### What is the in-use life-span of a hard hat?

When a hard hat shows signs of wear and tear to either the helmet shell or the harness it should be replaced. It should also be replaced after any impact that would have caused the wearer injury, as the integrity of the structure will have been weakened.

Although there is no set service life for hard hats, we recommend replacement after no more than 3 years.

Components of harnesses may deteriorate more rapidly in service, therefore should be replaced every 2 years.

In-use, head protection gear is generally treated with a lack of care, often being thrown or dropped, used as a receptacle or carried on the rear window shelf of a vehicle.

None of these actions are conducive to continued performance so recommend users to regularly inspect both the helmet shell and its harness for signs of wear and tear and to store in a cool, dry place when not in use.

### They then undergo testing for:

- Electrical Resistance – where the leakage current cannot exceed 3 mA with no electrical discharge from the material nor flashover over the rim of the helmet.
- Stiffness – where the indent of the hard hat shell under a force of 90 ±1 Newtons (N) does not exceed 15 mm when measured between 8 seconds and 10 seconds after application of this force. A Newton is the amount of force required to accelerate a body with a mass of one kilogram at a rate of one metre per second squared.
- Shock Absorption – where the impact of 50 ±1 Joules (J) will not cause the deceleration of the striker to exceed 980 m/s<sup>2</sup>, or the force transmitted to the hard hat wearer will not exceed 5.0 kN. A Joule is the work done, or energy expended, by a force of one Newton moving an object one metre along the direction of the force.
- Resistance to Penetration – where the head form is not hit by the point of the striker.

### Replace your hard hat when:

- Cracks appear in the shell
- The shiny surface appears dull or chalky
- The shell becomes brittle
- Impact with helmet surface has been made

### Replace your suspension when:

- The suspension becomes brittle
- One or more of the mounts break off
- The suspension will no longer hold securely to the head
- The cradling straps break or become worn

### Can I use the chin strap off helmets supplied by a different company?

This is not recommended.

Chin straps are not tested under AS/NZS 1801 for Type 1 helmets but in order to provide the best quality product, Chin Straps are tested and certified by BSI against European Standard EN397:1995 Industrial Safety Helmet.

Under the European Standard requirement, it became necessary for the chin strap to break when a specific load is applied. Chin strap may break in a different manner to another company's so it is recommended that you should only use a company chin strap on a company helmet.

## PSHU/PSHV



The PSH series ABS non-vented or vented safety helmet (Type 1) with comfortable 6 point terylene head harness is designed to deflect falling objects and provide protection against knocks and bumps.

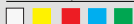
Key Features:

- Lightweight, durable ABS shell
- Shell Material: Injection moulded ABS (plastic)
- Venting: Vented (PSHV) and Unvented (PSHU)
- Harness Cradle: 25mm Nylon webbing 6 point
- Adjustment Range: 53-66 mm
- Weight: 385g

Standards:

Certified AS/NZS 1801:1997, LIC 2566, SAI Global Type 1, EN 397:2012 + A1, TCVN 6407:1998

### Colour options



## HHV6FB



- Lightweight, durable ABS shell
- 6 air vents for increased air circulation & comfort
- 6 point ratchet harness
- Sweatband prevents perspiration build-up
- Full brim extends coverage to over the neck & ears
- Slightly shorter front peak allowing for good upward vision

Standards:

Certified AS/NZS 1801 - SAI Global Certified Lic 20500

### Colour options



## EVO®5



The EVO®5 Olympus® safety helmet combines a super strong ABS shell designed for superior all day protection with the comfort benefits of the Evolution® 3D-Adjustment™ harness system.

Key Features:

- Tough ABS shell
- A 6 point terylene cradle harness system & Egyptian cotton Chamlon™ sweatband offers unrivalled comfort.
- The textile harness features unique 1-2-3 point depth settings.
- Side and rear ventilation for optimum air movement inside the shell
- Using Class RA2, high intensity reflective.

Standards:

Certified AS/NZS 1801: 1997, EN397.

### Colour options



## EVO®3



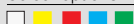
The EVO®3 Comfort Plus helmet combines a super strong shell for superior all day protection in the widest range of environments, with the comfort benefits of the Evolution® 3D-Adjustment harness system.

- Tough HDPE shell
- A 6-point terylene cradle harness system offers unrivalled comfort without compromising performance.
- Precision fit with unique 1-2-3 point harness depth adjustment
- Using Class RA2, high intensity reflective

Standards:

Certified AS/NZS 1801: 1997, EN397.

### Colour options



## PS54/PS55



Endurance Plus ABS shell helmet now available without retractable visor. Sold with 4 points chin strap included.

Key Features:

- Unvented Helmet shell (PS54) and Vented Helmet Shell (PS55)
- Electrical insulation up to 1000Vac or 1500Vdc (EN 50365) for PS54
- 6-point textile suspension harness for enhanced wearer comfort and safety
- Size adjustable headband via wheel ratchet system
- Electrical properties ( 440Vac)
- Up to 7 years lifetime from manufacturing date (as long as undamaged)

Standards:

EN 397 -30°C / +50°C, MM, LD, 440V a.c., EN 50365 Class:0, ANSI/ISEA Z89.1 TYPE I CLASS E, AS/NZS 1801.

### Colour options



## HHV9



- Lightweight, durable ABS shell
- 9 air vents for increased air circulation & comfort
- 6 point pushlock harness
- Sweatband prevents perspiration build-up
- Extended peak for added protection
- Edge gutter to deflect rain

Standards:

Certified AS/NZS 1801 - SAI Global Certified Lic 20500

### Colour options

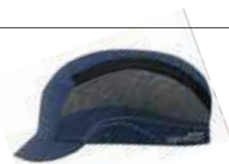






## AAG003-402-100

- Conforms with EN 812
- Weighs less than 135g
- Polygiene® Coating
- EPP Impact Liner
- Tough HDPE Shell



## AAG002-102-100

- Conforms with EN 812
- Fully washable at 60°C
- Weighs less than 135g
- Polygiene® Coating
- EPP Impact Liner
- Tough HDPE Shell



## ABS000-002-100

- Conforms with EN 812
- Reflective Piping
- Ventilation for coolness and comfort
- One-Handed Adjuster giving true one size fits all
- Terry Towelling Sweatband
- Full washable and removable protective liner



## BCBG

- Lightweight, modern baseball style cap
- Complies to EN812 - Industrial bump cap standards
- Foam padded insert provides built in protection against bumps & scrapes in the workplace
- Eyelet holes & mesh venting allows for airflow
- Adjustable strap for the perfect fit



## BCNSP

- Lightweight, modern baseball style cap
- Complies to EN812 - Industrial bump cap standards
- Foam padded insert provides built in protection against bumps & scrapes in the workplace
- Eyelet holes & mesh venting allows for airflow
- Adjustable strap for the perfect fit
- Short peak for greater overhead visibility



## BCFOMP

- Lightweight, modern baseball style cap
- Complies to EN812 - Industrial bump cap standards
- Foam padded insert provides built in protection against bumps & scrapes in the workplace
- Eyelet holes & mesh venting allows for airflow
- Adjustable strap for the perfect fit
- Micro peak for the best overhead visibility



## R5SL

- DuPont™ Kevlar® and Fibreglass Reinforced
  - Composite Shell
  - Ratchet Adjustable Headband
  - 3-Point Polyester Chinstrap
  - Pacific Low Profile Buckle
  - 4-point Nylon Cradle Harness
  - External Screw-On Face Shield
  - Easi On-Off Base for Torch
  - Goggle and Lamp Attachments
  - Flame Resistant Neck Protector
- Standards:  
NFPA 1951:2020, NFPA 1977:2016  
AS/NZS 1801:1997, EN 397:2012  
Compliant: ANSI Z89.1:2014

Colour options



## BE-AUS-393

- For increased safety in the dark, this version is equipped with reflective stickers.
  - Size: 54-63 cm.
  - All of the padding inside can be interchanged, cleaned or replaced.
  - Arena of application: NArborists, Construction / Roofer / Carpenter, High Rack, Mobile Work Platforms, Rope Access / Rigging, Scaffolding, Wind Energy / Offshore Industry.
  - Weight: 0,46 kg.
  - Materials: Polycarbonat, Acrylnitril-Butadien-Styrol, Expanded Polystyrene.
- Standards:  
Certificated to ANSI/ISEA Z89.1:2014, Type 2, class G/E/LT, meets CSA Z94.1-15, Type 1, class E.

Colour options



## HHV6MP

- 10mm micro peak for increased vision whilst working at heights.
  - 6-point Webbed harness.
  - Single hand adjustment wheel harness, quick & precise to manipulate even while wearing gloves.
  - Fully adjustable 4-points chinstrap with quick release buckle.
  - A universal attachment slot enables firm fitting of ProChoice visors & earmuffs.
  - Ideal for high wind areas when a secure fit is needed quickly
- Standards:  
Certified to AS/NZS 1801 - SAI Global Certified Lic 20500, Certified to EN397:2012+A1:2012 - 440V a.c

Colour options



## LOGO PRINTING & BRANDING

Your safety helmet does more than protect your head. It represents you, your company and even your achievements. Our top quality logo safety helmet service is dedicated to putting your logo or slogan on your choice of safety helmet accurately and quickly.  
\* Logo pad printing on 4 positions of helmet shell.  
\* Max: 3 colors



### Headgear

- 6 point harness for extra protection and comfort
- Nylon webbing headgear provides greatest comfort
- Nylon webbing pinlock headgear or ratchet headgear
- Replaceable sweatband, headband

### Material

- A.B.C: Acrylo Butadiene Styrene
- P.C: Polycarbonate

### Advantage Points

- Lightweight
- Universal slots accept accessories such as hearing protection, faceshield and welding helmet.
- 10 colours: White, Yellow, Red, Orange, Blue, Green, Grey, Watermelon, Fluoro Yellow, Fluoro Orange

## Accessories

### Use for EVO®3, EVO®5



Revolution® Wheel Ratchet Harness



OneTouch™ Slip Ratchet Harness



### Use for PSHU/PSHV



Panindochina® Wheel Ratchet Harness



Panindochina® Chinstrap

# Ear Plugs & Ear Muffs

www.panindochina.com.vn

## Disposable Foam Ear Plugs

The very soft polyurethane foam provides comfortable and close-fitting seal against harmful noise. One size fits all.

SE 1373



SE 1374

EPDS500A



SE 1374	Uncorded Disposable Foam Ear Plug, Orange, SNR 37, NRR 32
SE 1373	Corded (PVC Cord) Disposable Ear Plug, Orange, SNR 37, NRR 32
EPDS500A	Uncorded Disposable Ear Plug Dispenser Station 500, Orange, -SLC80, 27dB

EPYU



- Class 5, SLC80, 27dB
- Hearing protection for noise levels to 110dB(A)
- ProPlug Bell shape delivers maximum comfort
- Brightly coloured offering high visibility for worker compliance
- Superior design makes it easier to insert and reduces tendency to back out of the ear
- Pairs packaged in individual poly bags

Certified to AS/NZS 1270:2002

267-HPR410C



- Pre-formed plug shape with no rolling required makes insertion simple
- Self-sealing flanges give all day comfort
- Rigid stem makes insertion easy and reduces the risk of contamination
- Corded versions use a non-resonating textile cord for comfort and easy storage
- Cord can be detached for added safety when working around machines, or when the TPR plug is to be cleaned using soap and water
- NRR:27dB

Certified to ANSI S3.19-1974

267-HPR400C



- Pre-formed plug shape with no rolling required makes insertion simple
- Self-sealing flanges give all day comfort
- Rigid stem makes insertion easy and reduces the risk of contamination
- Corded versions use a non-resonating vinyl cord for comfort and easy storage
- TPR plug is to be cleaned using soap and water
- Can be reused several times, making them very cost efficient
- NRR:27dB

Certified to ANSI S3.19-1974

267-HPR310C



- Pre-formed plug shape with no rolling required makes insertion simple
- Self-sealing flanges give all day comfort
- Rigid stem makes insertion easy and reduces the risk of contamination
- Non-resonating textile cord for comfort and easy storage
- Cord can be detached for added safety when working around machines, or when the TPR plug is to be cleaned using soap and water
- NRR:27dB

Certified to ANSI S3.19-1974

SE 1323



- Flexible flange fits the ear canal for harmful noise protection and comfortable
- The easy grip handle offers easy insertion, removal, reusable and can be washed with ordinary soap and water.
- With neck strip, plastic case for convenient carrying.
- Compliance: ANSI S3.19, EN352-2
- SNR:28dB NRR:27dB

EPYC



- Class 5, SLC80, 27dB
- Hearing protection for noise levels to 110dB(A)
- ProPlug Bell shape delivers maximum comfort
- Brightly coloured offering high visibility for worker compliance
- Superior design makes it easier to insert and reduces tendency to back out of the ear
- Cord allows earplugs to hang around neck when not in use

Certified to AS/NZS 1270:2002

EPSC



- Class 3, SLC80, 18dB
- Reusable silicone earplugs
- Hearing protection for noise levels to 100dB(A).
- Coloured blue for food safety.
- Reusable silicone earplugs.
- Comes in resealable plastic case.
- Cord allows earplugs to hang around neck when not in use

Certified to AS/NZS 1270:2002

EMPYTNB



- Class 4, SLC80, 23dB
- Hi-Vis for visual identification
- Comfortable neckband configuration for extended wear
- Hearing protection for noise levels to 108dB(A)
- Robust steel wire construction for on site demands
- Contemporary low profile design that withstands abuse without compromising comfort
- Solid, lightweight ear cup construction
- High quality ear cushions, Balanced clamping force for comfort

Certified to AS/NZS 1270:2002.

EMVIP



- Class 5, SLC80, 26dB
- General purpose use
- Hearing protection for noise levels to 110dB(A)
- Solid, lightweight ear cup construction
- High quality ear cushions
- Inner foam and headband cushions provides comfort during extended wear
- Low clamping force applies minimum pressure while maintaining a tight, snug seal

Certified to AS/NZS 1270:2002.

\* Option: Hard Hat Earmuffs Class 5, 26 db with part number HHEM

AEA060-040-500



- SNR: 30dB
- The Big Blue™ ear defenders feature soft foam padding to reduce uncomfortable pressure points and deliver high-performance ear protection.
- Large, durable high-impact polystyrene cups
- Acoustic foam for excellent sound attenuation
- Wide, generously padded foam cushions
- Reinforced plastic headband
- Designed for all-day comfort

Certified to EN 352-1

AEB030-0AY-000



- SNR 32, SLC80-116 dB
- The over-moulded headband has a built in comfort area with ventilation. The headband force and the cushion surface area work together to provide optimum cushion pressure and comfort.
- To facilitate even distribution of pressure the wearer can tilt and adjust the position of the earcup for optimum comfort and fit.
- The headband is manufactured from TPE, making it easy to wipe clean. The sealing rings are easy to replace. Hygiene kits are available for each model.

Certified to AS/NZS 1270:2002.

\* Option: Hard Hat Earmuffs Class 5, 31db with part number AEB030-0CY-000

EMPYTS



- Class 5, SLC80, 31dB
- Hi-Vis for visual identification
- High performance and strong durability through steel wire construction for maximum protection with easy adjustment system for individual fit
- Hearing protection for noise levels to 116dB
- Contemporary low profile design that withstands abuse without compromising comfort
- Solid, lightweight ear cup construction
- High quality ear cushions, padded foam headband & robust wire construction
- Low clamping force for comfort

Certified to AS/NZS 1270:2002

\* Option: Hard Hat Earmuffs Class 5, 31db with part number HHEMPYTS

AEB010-0CY-800



- SNR 26, SLC80-106 dB
- The force the helmet adaptor applies and the cushion surface area work together to provide optimum cushion pressure and comfort.
- Sonis® cups can be coloured to meet a corporate identity. They can also be printed with a company logo for improved brand recognition and to discourage theft.
- The wearer can tilt and adjust the position of the cup for optimum comfort and fit, also offering even distribution of pressure.
- The sealing rings are easy to replace. Hygiene kits are available for each model.

Certified to AS/NZS 1270:2002



## HOIAN



- + Single-piece lens fit perfectly on different face contours
- + Nose pad made of soft material for extra comfort
- + Non-slip rubber pad
- + Wrap-around frameless design
- + Extended sideshield for lateral protection

## HANOI



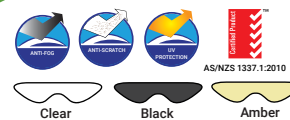
- + Sturdy polycarbonate frame
- + Flexible temple slot
- + Optional metallic frame
- + Nose pad made of soft material
- + Straight temple design

## BREEZE MKII



- + Medium impact rated
- + Lightweight & durable one piece lens.
- + Timeless styling.
- + 99.9% UV protection for outdoor wear.
- + Extended sideshield for lateral protection

## CIRRUS



- + Medium impact
- + Ergonomic lens design
- + Arms with co-injection technology soft temples
- + Super flexible & well secured grip to wearer even with heavy duty work & sweating
- + Soft tip ends to avoid possible lens scratches as spectacles fold into pocket.

## SONDOONG



- + Modern and stylish design
- + Sturdy polycarbonate frame
- + Single-piece lens. Optional polarized lens. Pantoscopic adjustment to alter lens angle
- + Nose pad made of soft material for extra comfort
- + Co-injected rubber pad will not peel off on hot climate

## GALACTUS™



- + Elastomer-injected sleeve for improved comfort and adhesion
- + Polymer inner structure for more flexibility and comfort
- + Adaptable floating nose bridge
- + Ergonomically designed contoured arms for comfort and stability.
- + Base 10 lens provides maximum field of view and protective coverage

## NHATRANG



- + Superb lightweight at 22.6 gram
- + Dielectric construction
- + Comfortable nose piece
- + Slim temple with rubber pad
- + Extended sideshield for lateral protection

## SAIGON



- + Wrap-around protective glasses combining fashion, fit and function
- + Optional blue-blocker lens and Optional elastomeric foam gasket
- + High-visibility rubber colour. Anatomically-shaped nose adapt to all face
- + Co-injected comfort pad will not peel off on hot climate
- + Inner temple coated with elastomer for excellent grip and soft cushioning

# Safety Spectacles

www.panindochina.com.vn

## PROSPECT

- Single-piece lens fit perfectly on different face contours.
- Wrap-around frameless design.
- Ergonomically design temple with indirect ventilation.
- Exceptional comfort, protection and fit.

**Standard:**

Certified to ANSI Z87.1-2010.



Clear

## ZEN

- Single-piece lens fit perfectly on different face contours.
- Wrap-around frameless design.
- Ergonomically design temple with indirect ventilation.
- Exceptional comfort, protection and fit.

**Standard:**

Certified to ANSI Z87.1-2010.



Clear

Black

## SPECTRA

- Single-piece lens with integrated sideshield.
- Exceptional comfort, protection and fit.
- Adjustable temple to fit distinct face profile.
- Hassle-free lens replacement.

**Standard:**

Certified to ANSI Z87.1-2010.



Clear

Black

## PROTEUS 1

- AquaShield Hardened Anti-Fog Technology
- Cold formable arms for individual fit
- Dust Guard Di tech Lens provides dust and water protection
- Low profile arm to aid in use with other PPE
- Ultra soft TPR Anti-Slip Nose Pad
- Certified Medium Impact Protection

**Standard:**

Certified to AS/NZS 1337.1:2010.



Clear

Black

Amber

## 4900

- Medium impact rated.
- 99.9% UV protection for outdoor wear.
- Anti-scratch & anti-fog 2mm hardened lens.
- Lightweight design & adjustable headstrap for enhanced user comfort.
- Indirect vents for increased airflow & minimization of lens fogging.
- Excellent general purpose goggle that will provide the ultimate all round eye protection.
- Clear lens option.

**Standards:**

Certified to AS/NZS 1337.1:2010



## 6FR

- Medium impact rated.
- 99.9% UV protection for outdoor wear.
- Anti-scratch and anti-fog coating on all lenses.
- Certified Liquid Splash Protection.
- High temperature rated, fire fighting approved.
- Closed ventilation system prevents smoke entering the goggle.
- Fits comfortably over prescription eyewear.
- Closed cell foam and 35MM FR head strap for increased protection and comfort.
- Clear, Smoke and Amber lens options

**Standards:**

Certified to AS/NZS 1337.1:2010



## 5000

- Medium impact
- Anti-fog coating on all lenses
- 99.9% UV protection for outdoor wear
- Two-in-one combination for better comfort & value
- Wide peripheral vision & face coverage
- Liquid splash protection
- Ventilated facemask
- Goggles & face shield can detach

**Standards:**

Certified to AS/NZS 1337.1:2010



## 3700

- Certified Medium Impact, Anti-Scratch Lens
- Certified Liquid Splash Protection
- Anti-Fog, Hardened 2mm Lens - Ideal for use with dust masks in humid conditions
- 99.9% UV Protection for Outdoor Wear
- FoamBound with Extra Wide Strap for Comfort
- Indirect Venting
- Available in Clear and Smoke Lens

**Standards:**

Certified to AS/NZS 1337.1:2010



## Accessories: Eye /Facemask



**Complete Lens Cleaning Station ASU200-000-200**

Wall mounted (plastic) Lens Cleaning Station  
4 boxes of 280 tissues and one bottle of lens cleaning spray  
There is also a handy mirror attached to help identify any ocular irritants  
Comes with 4 x screw/plug mounting pack



**Multi Function Cleaning Tissues ASU200-000-300**

Each box contains 280 tissues that are low lint, soft, non abrasive and absorbant for easy cleaning.



**Bottle of Lens Cleaning Fluid ASU200-000-400**

Spray Cleaning Fluid is anti bacterial and anti static  
Alcohol and silicone free



**Pre-Moistened PPE Wipes - Box of 100 ASU200-000-100**

Wall Mounted or Free Standing  
Easy Delivery box containing 100 Alcohol Free Lens Cleaning Wipe Sachets  
The wipes are also suitable for other PPE, including Half masks and Ear Defenders





## TOBIN'S EYEWASH SYSTEMS

Are well proven, quick and safe way to wash chemicals from eyes. This specially designed system gives the fastest possible application combined with a liquid volume large enough for most eye accidents. Chemicals in the eye can cause serious damage within 1-5 seconds. Washing that begins within a few seconds can therefore be decisive in minimizing the damage the eye will receive. It is also of utmost importance that an eyewash system is easy to use and that the exposed eye is washed by a soft flow, both features are engineered into every Tobin bottle. The patient needs just one hand to operate the bottle and the eyewash system empties under natural pressure, the flow cannot be increased by squeezing the bottle.

### IMPORTANT SAFETY FEATURES

#### The Flow

The eye is washed by a soft flow consisting of 6 tiny streams. A damaged eye must not be washed with a hard/sharp jet. Each bottle contains 1 litre of sterile saline solution 0.9% and provides approx 3 minutes of flow.

#### Bottom Air Vent

When the air vent is activated it lets air into the bottle and insures the eye is washed by a soft continuous flow. The flow can be stopped, to allow blinking and eye movements, by placing the thumb over the bottom hole.

#### Shelf Life

As the bottles are disposable, costly refill routines are unnecessary. The contents of the bottle have a 3 year shelf life. Each bottle has an expiry date clearly visible.

#### Volume

Uninterrupted washing over a long period is particularly important. The 5 bottle stand gives approx. 15 minutes washing. Further bottles can be taken from other stands if required.

#### Sterility

The regulations governing sterile liquids are rigorous. The bottle cannot contain any bacteria during its shelf life. When a bottle is opened the contents must be used within few hours or thrown away.

The manufacturing of all Tobin eyewash liquids comply with the European and Swedish regulations in the standards SS-EN ISO 9002, SS-EN 46002, SS-EN 552, and SS-EN 556. They also comply with the German DIN 12930 standard.



#### TOBIN 130

Wall Stand

- Specially designed system for fast application
- Provides soft flow
- Each 1 litre bottle gives approximately 3 minutes washing time
- Includes 2 x 1 litre bottles, cabinet and screws
- 35 (H) x 25 (W) x 11 (D) cm
- 1 litre sterile bottles with 3 years shelf life from time of manufacture



#### TOBIN 129

Wall Stand

- 2x1 litre eyewash in wallstand.
- Suitable when space is a problem and/or
- eyewashes are required in a number of spots in the same area.
- Supplied complete with bottles, wall screws etc.
- Measurements 39x20x10 cm.



#### TOBIN 126

- For eye wash replacement
- 2x1 litre eyewash



#### TOBIN 121

Effective, sterile and safe eyewashes for industrial use, Tobin's Eyewash Systems are a well proven, quick and safe way to wash chemicals from the eyes. Chemicals in the eye cause serious damage within 1-5 seconds. Washing that begins within a few seconds can be decisive in minimising eye damage. With Tobin an eyewash bottle can be within arms' reach to reduce response time.

Key features:

- Personally carry in pocket
- Contains 200mL sterile saline solution

### When and for how long should eyes be washed?

Eye accidents occur without warning. Common to all accidents are acute pain and a sense of blindness. An intense burning sensation makes it feel as if the eyes are on fire. It is extremely important to begin washing immediately. Seconds are decisive. A flow of liquid is important as the purpose is to dilute and wash the chemicals out of the eyes.

**Mechanical Injuries**  
Wash not less than 1 minute

**Degreasing Agents**  
Wash not less than 2-3 minutes

**Acid Injuries**

Washing must begin within 5 seconds. Speed is more important than anything else. Every second's delay aggravates the situation. Damage increases by the second. The damage seldom increases after 1-2 minutes. Washing for 3 minutes should be sufficient. However, to restore a feeling of comfort a further 2 minutes washing is recommended. These time periods apply only if a predominant part of the liquid makes contact with the eye. The patient should always see a doctor.

**Alkaline Injuries**

Lighting fast treatment and prolonged washing are extremely important. Eyewashing equipment should be within arms reach and must be designed so that washing can continue during transportation to a doctor. A 10-20 minutes washing period is recommended. In alkaline cases only a doctor can decide when it is safe to discontinue washing.

# Face Protection

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## BG Visor Holder

- One piece design offering 180° head protection made from Polyethylene
- Ratchet adjustment for ease of adjustment
- Fits all head sizes 53cm-66cm
- Cotton sweat band which provides greater sweat absorption
- QuickLock clips for quick and easy visor replacement
- Certified to AS/NZS 1337.1:2010



## HHBGE Visor Holder

- Ultra high impact rated.
- Lightweight guard will accommodate visor range and hard hat earmuff range.
- Attach to Pro Choice Safety Gear hard hats via 25mm hard hat slots.
- Fitted with QuickLock clips
- Certified to AS/NZS 1337.1:2010



## PFAF21 Visor Holder

- Deluxe aluminum construction
- Fits most hard-hat
- Features with plastic coated
- Suitable for high heat applications
- Smooth visor fitting
- Certified to AS/NZS 1337.1:2010, EN 166



## PFSP171 Visor Holder

- Lightweight design
- Engineered with dielectric materials
- Fits most hard-hat
- Certified to AS/NZS 1337.1:2010, EN 166



## PFAF21 Visor Holder

- Deluxe aluminum construction
- Fits most hard-hat
- Features with plastic coated
- Suitable for high heat applications
- Smooth visor fitting
- Certified to AS/NZS 1337.1:2010, EN 166



## PFSP171 Visor Holder

- Lightweight design
- Engineered with dielectric materials
- Fits most hard-hat
- Certified to AS/NZS 1337.1:2010, EN 166

## Visor Materials

### Polycarbonate

- Polycarbonate visor material is best to select for resistance to impact and waterbased liquids (biological, acids, weak solvents).
- Polycarbonate visors have a safe operating temperature of 105°C (material will start to distort and warp when it reaches its maximum temperature).
- Polycarbonate visors come in three thicknesses: 1mm, 1.5mm and 2mm:
- 1mm và 1.5mm polycarbonate visors provide high impact protection.
- 2mm polycarbonate visors provide extra high impact protection.

Certified to AS/NZS 1337.1:2010



### Thermoguard+

- Thermoguard+ visors provide high impact protection and good protection against high heat and chemical splash.
  - For chemical (C) splash resistance and molten metal/ hot solids (M).
  - Thermoguard+ visors have a safe operating temperature of 125°C (material will start to distort and warp when it reaches its maximum temperature).
  - Thermoguard+ visors come in 1mm thickness providing high impact protection.
- Certified to AS/NZS 1337.1:2010

### Chinguard wide flare.

#### Shaded

- For use with welding operations.
- Shade 2 for low levels of light radiation.
- Shade 5 visors give protection against liquid splash, high glare and ultra violet radiation.



Part number	Material	Thickness	Colour	Size	Type	Molten metal & hot solids	Extra high impact	High impact	Medium impact	Low impact	Chemical splash resistant	Outdoor use
ANX060-230-000	Polycarbonate	1 mm	Clear	530x620mm	Visor	•		•			•	•
ANX010-230-000	Acetate	1 mm	Clear	530x620mm	Visor	•		•			•	•
VCE	Thermoguard+	2 mm	Clear	204x380 mm	Visor	•	•				•	•
VC	Polycarbonate	2 mm	Clear	205x405 mm	Visor	•	•				•	•
VCGC	Polycarbonate	2 mm	Smoke	260x410 mm	Visor with Chinguard	•	•				•	•
VS5	Polycarbonate	2 mm	Green	205x405 mm	Shade 5 Visor	•	•				•	•
VCGS	Polycarbonate	2 mm	Smoke	260x410 mm	Visor with Chinguard	•	•				•	•
PFVI-1	Polycarbonate	2 mm	Clear	205x405 mm	Visor	•		•			•	•
PFVI-6	Polycarbonate	2 mm	Clear	205x405 mm	Visor with Chinguard	•		•			•	•

## SE2741 Welding Helmet

A straight shell welding helmet connected to the helmet with slots, 2" x 4-1/4" flip front lens for easy welding and inspecting. Lenses and helmet sold separately.



Part number	Size	Len material	Description
SE2820	2" X 4.25"	Polycarbonate	Welding clear lens, Clear lens
SE2830	90 X 110 mm	Polycarbonate	Welding clear lens, Shade 9
SE2381	90 X 110 mm	Polycarbonate	Spare filter lens, Shade 11
WW259	100x50 mm	Polycarbonate	Spare filter lens, Shade 9
WW250	100x50 mm	Polycarbonate	Spare filter lens, Shade 10
WW251	100x50 mm	Polycarbonate	Spare filter lens, Shade 11
WW252	100x50 mm	Polycarbonate	Spare filter lens, Shade 12
WW253	100x50 mm	Polycarbonate	Spare filter lens, Shade 13



## Disposable Mask

### Configuration

Foldable, maintenance free respirator without exhalation valve. Manufactured with four layers of non-woven materials, the external part is made of blue or white non-woven fabric treated with material which prevents the absorption of liquid fluids to protect the structural layer and the electrostatic filter. Internally, the respirator is coated with anti-allergic, non-woven fabric for facial contact. In this set, is fixed one elastic bands sliding and a metal clip to provide seal of the mask on the nasal septum.

### Limitations Of Use & Warnings

Do not use this respirator for gases, organic vapors, explosive atmospheres and oxygen of less than 19.5% (Immediate Hazardous to Life and Health). Do not use for dust and mists in concentrations above 10 times your tolerance limit and with a limit of exposure of less than 0.05mg/m<sup>3</sup>.

#### RD10P2



- Type: FFP2
- No valve
- Colour: White
- Recommended for airway protection against fumes, dust and mist such as pesticides, fibrogenic particles, iron ore, cement, vegetable dusts, biological agents such as: tuberculosis, SARS, anthrax, H1N1,...
- Only for use against solid aerosols and liquid-based water.
- Standards:
- Certified to CA 10579; NBR 13698; TCVN 7313.

#### RD20P2



- Type: FFP2
- Valve
- Colour: White
- Recommended for airway protection against fumes, dust and mist such as pesticides, fibrogenic particles, iron ore, cement, vegetable dusts, biological agents such as: tuberculosis, SARS, anthrax, H1N1,...
- Only for use against solid aerosols and liquid-based water.
- Standards:
- Certified to CA 10578; NBR 13698; TCVN 7313.

#### RD20P2OV



- Type: FFP2
- Valve
- Colour: Grey
- Recommended for respiratory protection against odors of organic vapors up to the action level (half the occupational exposure limit of these contaminants) and also metal or plastic dust, fumes and mists, such as asbestos, silica, coal Mineral, aluminum ore, iron ore, textile fibers, refined cement, lime, talc, caustic soda, powder soap, vegetable dust, sanding and grinding dust, among others..
- Only for use against solid aerosols and liquid-based water.
- Standards:
- Certified to CA 10579; NBR 13698; TCVN 7313.

#### PCFFP2V



- P2 rating against mechanically and thermally generated particles
- ProValve for increased exhalation efficiency and comfort - reduces heat build up under mask
- Designed for easy storage before use
- Individually packed to avoid contamination
- Mouldable HD foam nose piece for a contoured fit
- Dual latex free and adjustable straps give firm and comfortable fit
- Standards:
- Certified to AS/NZS 1716 BMP No.547903

#### PC531



- Protects against nuisance-level organic vapours in addition to P2 rating
- ProValve for increased exhalation efficiency and comfort, reduces heat build up under mask
- Colour coded exhalation valve and packaging
- Latex free dual straps give firm and comfortable fit
- Resealable poly bag ensuring masks remain hygienically stored
- Moulded nose piece for close fit and better seal
- Standards:
- Certified to AS/NZS 1716 BMP No.547903

#### 40.05



- Type: FFP2
- Valve
- Colour: Grey
- Recommended for respiratory protection against annoying odors of certain organic vapors and acid gases such as hydrogen fluoride and sulfur dioxide, among others, at levels that do not exceed half of the occupational exposure limits of these contaminants. Additionally, it protects against particles of dust, mist and fumes from metals or plastics, such as: asbestos, silica, mineral coal, aluminum ore, iron ore, textiles, refined cement, lime, talc, caustic soda, vegetable powders, sanding and grinding dust, among others
- Only for use against solid aerosols and liquid-based water.
- Standards:
- Certified to CA 10579; NBR 13698; EN 149.

## UNIX Series Half Mask

### Head Harness

Easily adjustable head harness a perfect fit for every face type

### Mask Body

Improved face seal, designed with all the anatomical features of the facial structure, ensures a tight and stable fit on the face

### Materials

All materials used in the UNIX half masks are hypoallergenic and stable to mechanical and chemical influences, ensuring long-term service life.

### Half Mask Design

Small sized, soft and comfortable half mask applies minimal pressure to the face, providing wearing comfort.

### Bayonet-filter Connection

Quick and safe connection of replaceable filters.

### Disassembled Format

Can be disassembled, cleaned and reused quickly and easily.

### Filter with bayonet connection

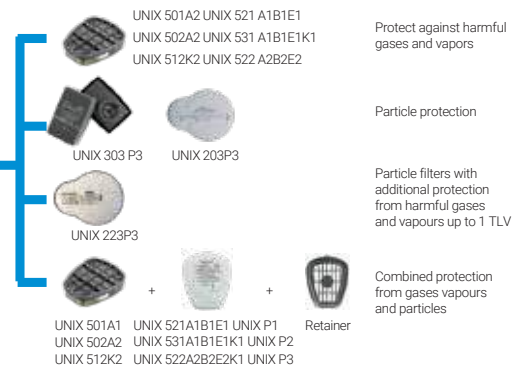
Full face mask are used together with the comprehensive range of gas filters of UNIX 500 series and particle of UNIX series. Filters comply with EN 14387 and EN 143 standards.



### Accessories



Waist bag for storage and transportation as an additional offer.



Part Number	Size	Material	Weight	Expiry of shelf life	Standard
UNIX 1000	1, 2, 3	TPE	130 g	5.5 years	EN 140
UNIX 1100		Silicone	136 g		

## POLIMASK Half Mask

Half masks complying with EN 140, available in EPDM and Silicone rubber. They can be fitted with Sèkur filters series 200, series 230 and DIRIN 230 - DIRIN 300 with thread complying with EN 148/1

Body mask in EPDM or silicone rubber (Polimask 100/2 is available only in EPDM rubber)  
Two-piece harness with adjustable buckles and fasteners

Low breathing resistance:

- Polimask 100/2 (0,5 mbar during inhalation, 1,6 mbar during exhalation, at a rate of 160 l/min).
- Polimask 230 (0,9 mbar during inhalation, 1,6 mbar during exhalation, at a rate of 160 l/min).

Fitting with filters Series 200 (Polimask 100/2), Series 230 (Polimask 230) and DIRIN 230-300 (Polimask 330).

### Advantages

- Adaptability to any kind of face with a good sealing ability (approximately 0.5% leakage).
- Easy donning and doffing.
- Easy maintenance, washing and disinfection
- Compatibility with the use of glasses and goggles



## POLIMASK 230 Half Mask



Half mask in EPDM rubber for use with two Sèkur filters series 200

**Product Code:**  
4336 2100

**Material:**  
Body mask: EPDM  
Filter fittings: Polypropylene  
Harness: EPDM

**Weight:**  
140 g

**Filter:** Series 230



## POLIMASK 100/2 Half Mask



Half mask in EPDM or Silicone rubber for use with one Sèkur filter series 230

**Product Code:**  
4336 1005

**Material:**  
Body mask: EPDM or silicone rubber  
Harness attachment support: Polyamide  
Filter fittings: Polypropylene  
Harness: EPDM

**Weight:**  
145 g

**Filter:** Series 200



## POLIMASK 2000 Half Mask

Half masks complying with EN 140, available in EPDM and Silicone rubber. They can be fitted with Sèkur filters series 200, series 230 and DIRIN 230 - DIRIN 300 with thread complying with EN 148/1.

Body mask in EPDM or silicone rubber.

Elastic textile harness system that does not capture the hair, combined with soft resin elements synthetic that ensure a stable positioning on the neck.

Large internal sealing flap that allows a perfect adaptability to the face and an excellent seal.

Low breathing resistance: (< 1,2 mbar during inhalation, < 2 mbar during exhalation, at a rate of 160 l/min)

Fitting with filters Series 200 (Polimask Beta), Series 230 (Polimask Gamma) and DIRIN 230-300 (Polimask Alfa)

### Advantages

- Adaptability to any kind of face with a good sealing ability (approximately 0.5% leakage).
- Easy donning and doffing.
- Easy maintenance, washing and disinfection.
- Compatibility with the use of glasses and goggles.



## POLIMASK GAMMA Half Mask



Half mask in EPDM or Silicone rubber for use with one Sèkur filter series 230

**Product Code:**  
4336 2112

**Material:**  
Body mask: EPDM or silicone rubber  
Harness attachment support: ABS  
Filter fitting: Polypropylene  
Harness: Nylon/Elastic

**Weight:**  
169 g

**Filter:** Series 230



## POLIMASK BETA Half Mask



Half mask in EPDM or Silicone rubber for use with one Sèkur filter series DIRIN (DIRIN 230-DIRIN 300).

**Product Code:**  
4336 2109

**Material:**  
Body mask: EPDM or silicone rubber  
Harness attachment support: ABS  
Filter fitting: Polypropylene  
Harness: Nylon/Elastic

**Weight:**  
165 g

**Filter:** Series 200





Full face masks complying with EN 136, for use with dust, gas and combined filters with threaded fitting EN 148/1 (DIRIN series). Only C 702 and C 607 Twin have instead a double fitting to be used with a couple of filters Series 200.

	C701	C702	SFERA	C 607	C 607 TWIN
THERMOPLASTIC	X	X			
EPDM			X	X	X
SILICONE			X	X	
CLASS 2				X	X
CLASS 3	X	X	X	X	

### Material

- C607 E, Sfera, masks are available in EPDM and silicone rubber.
- Selecta and C 607 E masks are available only in EPDM.
- C 701 and C 702 full face masks are available in thermoplastic material.

### Protection Class

SFERA, C 701 and C 702 full face masks are class 3. C 607 Twin and Selecta are class 2, C 607 E is class 2 but is also available in class 3



## C701 Full Face Mask



The mask is certified as class 3 according to EN 136 (maximum mechanical, heat and flame resistance). For use with particle, gas and combined filters equipped with EN 148/1 threaded connection.

**Innovative inspiration system** with rectangular inhalation valve and absence of non-return valves, which ensures excellent anti-fog, assuring a minimum level of breathing resistance.

**Panoramic visor, optical class 1 (EN 166), ensures a wide field of vision, without optical distortions.**

- Ballistic resistance (STANAG 2920).
- Available with anti-scratch treatment.

**Half mask and face seal in thermoplastic**

- Excellent adaptability to different facial conformation
- Hypoallergenic material

**Comfortable harness fixed on 5 points**

- Available in EPDM or 3D fabric (interchangeable)

Available in 6 colours (red, olive green, aquamarine, orange, black and white).

### Filter:

Series 230  
Series DIRIN 230  
Series DIRIN 300  
Series DIRIN 500  
DIRIN 530

### Material:

- Face seal: Thermoplastic rubber
- Inner half mask: Thermoplastic rubber
- Visor: Polycarbonate • Connector: Polyamide (PA)
- Harness: EPDM or 3D fabric

### Weight:

With EPDM harness: 650g.  
With 3D harness: 620g.

## C 702 Full Face Mask



The mask is certified as class 3 according to EN 136 (maximum mechanical, heat and flame resistance). For use with a couple of particle, gas and combined filters SERIES 200.

**Innovative inspiration system** with rectangular inhalation valve and absence of non-return valves, which ensures excellent anti-fog, assuring a minimum level of breathing resistance

**Panoramic visor, optical class 1 (EN 166), ensures a wide field of vision, without optical distortions.**

- Ballistic resistance (STANAG 2920).
- Available with anti-scratch treatment.

**Half mask and face seal in thermoplastic**

- Excellent adaptability to different facial conformation
- Hypoallergenic material

**Comfortable harness fixed on 5 points**

- Available in EPDM or 3D fabric (interchangeable)

Available in 6 colours (red, olive green, aquamarine, orange, black and white).

### Filter:

Series 200

### Material:

- Face seal: Thermoplastic rubber
- Inner half mask: Thermoplastic rubber
- Visor: Polycarbonate • Connector: Polyamide (PA)
- Harness: EPDM or 3D fabric

### Weight:

With EPDM harness: 650g.  
With 3D harness: 620g.

## SFERA Full Face Mask



Extra wide view full face mask. Multipurpose connector and accurate distribution of weights.

Wide field of vision: over 85% of the natural field.

Full face polycarbonate visor with a high impact resistance, completely free from distortions. The visor has an antiscratch coating and a good resistance to acids. Resistance to flame and radiant heat: the mask is self-extinguishing and retains its protective capacity even after such severe tests.

Quick donning and doffing; the shoulder strap allows to keep the mask ready for immediate use.

Long shelf life: high ozone resistance of the rubber compounds used.

Easy maintenance, washing and disinfection: all components can be disassembled with simple tools.

### Product Code:

Silicone: 43333002 • EPDM: 43333005

### Material:

Face seal: EPDM or Silicone • Inner half mask: EPDM or Silicone rubber • Visor: Polycarbonate • Connector: Polyamide (PA) • Harness: EPDM

### Weight:

650 g

### Filter:

Series 230 | Series DIRIN 230 | Series DIRIN 300  
Series DIRIN 500 | DIRIN 530

## C 607E Full Face Mask



Compact full face mask, fitting any face conformations. Polycarbonate visor with high impact resistance to acids, even at high concentrations.

Optional: multilayer safety glass visor especially resistant to paints and solvents.

Excellent voice transmission thanks to the frontal position of the speech diaphragm.

### Product Code:

EPDM: 43332034 • Silicone: 43332037

### Material:

Face seal: EPDM or Silicone • Inner half mask: EPDM or Silicone rubber • Visor: Polycarbonate • Connector: Polyamide (PA) • Harness: EPDM

### Weight:

580 g

### Filter:

Series 230 | Series DIRIN 230 | Series DIRIN 300  
Series DIRIN 500 | DIRIN 530

Available C607 TWIN in EPDM rubber, with double fitting for filters Series 200.

### Product Code:

43330608

### Filter:

Series 200

# Respiratory Protection

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## UNIX 5000 Series Full Face Mask

Full face masks of the UNIX series supplied with gas or particle filters are designed to protect respiratory organs, face and eyes from vaporous and gaseous harmful substances and aerosols, while providing a comfortable wearing for the duration of the shift. Full face masks of the UNIX series are used with the same filter system UNIX as half masks of the UNIX series. Tested in accordance with EN 136:1998.



Five-point Head Harness with self-tightening buckles  
Quick adjustment and secure fit

Panoramic Visor  
The visor is constructed from high-strength polycarbonate ensuring increased durability and a wide field of view

Double-sided Bayonet Connection  
Balanced weight distribution

Speech Diaphragm  
Optimal possibility for clear and easy communications

Materials  
All used materials are soft, stable to mechanical and chemical influences and hypoallergenic for wearing comfort and durability.

### Filter with bayonet connection

Full face mask are used together with the comprehensive range of gas filters of UNIX 500 series and particle of UNIX series. Filters comply with EN 14387 and EN 143 standards.



Part number	Size	Material	Class	Expiry of shelf life	Standard
UNIX 5000	One universal size	TPE	2	10 years	EN 136
UNIX 5100		Silicone			

### Accessories



Bag for storage and transportation



Protection film against exposure to corrosive substances and mechanical damage for panoramic glass (10 pcs)

### Advantages of UNIX 500 filters

Prolonged breakthrough time compared to EN 14387 requirements  
We use highly efficient absorbers of proprietary development. A developed scientific and technical base along with 50 years of experience in the field of chemical absorbers production allows us to design high-efficiency absorbers, ensuring the double breakthrough time some of the UNIX 500 filters in comparison with the European standard for chlorine, hydrogen sulfide and hydrogen cyanide, and triple that of sulfur dioxide. This has enhanced the efficiency of UNIX 500 filters.

## UNIX 6100 Full Face Mask

Fields of application Chemical, petrochemical, metallurgical, machine-building, including car manufacturing, aircraft, shipbuilding, woodworking, pulp and paper, pharmaceutical, food industry, medicine, agriculture, construction, painting, welding, quarrying operations.

### Filters for panoramic mask

UNIX 500 series Gas filters

UNIX P1, UNIX P2, UNIX P3 Particle filters (prefilters)

UNIX 223 P3 R D\* particle filters with additional protection from organic gases and vapors (up to 1 TLV)

UNIX 303 P3 R D Particle filters with protective housing

UNIX 521 A1B1E1 filter

UNIX 531 A1B1E1K1 filter

Filter	Gas	Factor
UNIX 521 A1B1E1 filter	C <sub>2</sub> H <sub>6</sub>	x1.14
	Cl <sub>2</sub>	x2.5
	H <sub>2</sub> S	x2
	HCN	x2
	SO <sub>2</sub>	x3.5
UNIX 531 A1B1E1K1 filter	Cl <sub>2</sub>	x2
	H <sub>2</sub> S	x2
	HCN	x2
	SO <sub>2</sub>	x2

Legend:   
█ - in accordance with the requirements of EN 14387  
█ - in accordance with the manufacturer's documentation

Note: when using gas filters with particle filters UNIX P1, UNIX P2, UNIX P3, these advantages remain.

### Silicone version

- increased strength of the head harness, face seal and inner mask
- elasticity of the mask when exposed to high and low temperatures

### Mounting on the head

- convenient adjustment of the head harness allows to put on and remove the mask quickly
- head harness with four mounting points

### Mask housing

- low profile - compatible with protective helmets

### Panoramic glass made of polycarbonate

- the field of vision is more than 80 %
- mechanical strength

### Additional options

- glass with protection from fogging and scratches
- replaceable protective film

### Speech device

- speech intelligibility
- ability to work with means of communication

### Bayonet connection of filters

- fast and reliable one-click filter replacement

### Exhalation valve

- has a protective screen
- exhale downwards - no effect of air flow on the work surface
- ability of exhalation valve disk cleaning

### Three sizes of panoramic mask

- easy selection for people with different face size and shape

Low weight - not more than 480 g



## MAG Series Full Face Mask

For more than 10 years MAG masks have been protecting workers of industrial enterprises engaged in conditions of high air pollution level from a various number of factors, such as: harmful gases and vapors, aerosols (dust, smoke, fog), or their combinations. MAG series full face masks are to be used with DOTpro filters in plastic version and DOT in metal version with thread connection.

5-point headband with self-tightening buckles ensures fast and reliable fit on the head



Increased strength of the sight glass

Wide panoramic view

EN 148-1 standard thread connection for filter junction

Two choices of the inner mask, facepiece seal and headband material: rubber (MAG) and silicone (MAG-4)

The mask material resistance to the action of aggressive substances makes it suitable for various working conditions (EN 136 Class 2)

Double seal allows for one universal mask size

### Thread filters to be used completed with MAG series full face masks.



### Our special offer: prolonged filter protection time

1. DOT and DOTpro filters have extended protective power time in comparison with the requirements of EN 14387 standard (data provided below)
2. Reusable filters for protection against carbon monoxide (DOT M 460) and nitrogen oxides (DOTpro M 600)

Filter	Gas	Factor	
DOTpro 250+ A1B1E2	C <sub>2</sub> H <sub>6</sub>	x1.4	
	Cl <sub>2</sub>	x2	
	H <sub>2</sub> S	x2	
	HCN	x2	
DOTpro 320+ K2	NH <sub>3</sub>	x1.5	
	SO <sub>2</sub>	x2.2	
DOTpro 460+ A2B2E2	C <sub>2</sub> H <sub>6</sub>	x1.3	
	Cl <sub>2</sub>	x5	
	H <sub>2</sub> S	x3.2	
	SO <sub>2</sub>	x2.2	
	HCN	x2.2	
DOTpro 460+ A2B2E2K2	H <sub>2</sub> S	x1.5	
	HCN	x1.2	
	DOTpro 600+ A2B2E2AX	C <sub>2</sub> H <sub>6</sub>	x1.8
		Cl <sub>2</sub>	x2
H <sub>2</sub> S		x2	
HCN		x2	
DOTpro 600+ A2B2E2K2	C <sub>2</sub> H <sub>6</sub>	x2	
	Cl <sub>2</sub>	x2	
	H <sub>2</sub> S	x2	
	HCN	x2	
	NH <sub>3</sub>	x2	
DOTpro 600+ K3P3 R D	H <sub>2</sub> S	x1.5	
	NH <sub>3</sub>	x1.3	

Legend:   
█ - EN 14387 requirements  
█ - extra protection provided by filter



## AerGO®

CleanAIR®AerGO® – universal powered air purifying respirator designed for personal respiratory protection in dusty industrial environments including areas with contaminants in the form of gases and vapours. The unit is provided with a control system of constant air flow and an advanced electronic system for warning the wearer in the case of a sudden decrease of airflow or low battery charge. The ergonomic design, low weight and slim profile of the unit guarantee a high level of user comfort, even in environments with limited possibilities of movement. The unit is compatible with a wide range of CleanAIR® headtops for various industrial applications.

### Features & Benefits:

- Ergonomic design and low weight – only 980 g
- Slim profile of the unit – only 65 mm
- Universal usage – filtration of particulate contaminants, gases and vapours
- Operation time > 20 hours with Heavy Duty battery, or up to 10 hours with the standard battery
- Short battery recharging time < 3 h (standard battery)
- Adjustable airflow (160 lpm and 210 lpm)
- Controlling the constant airflow without regard to the state of the filter and the battery capacity
- Audiovisual and vibrating alarm indicating low airflow and low battery charge
- Simple control with only one button
- Ergonomic and comfortable belt which is easy to exchange
- Unique solution of the filter sealing which provides a perfect unit seal after every change of the filter

Technical data	
Air flow	160 lpm and 210 lpm
Operation time*	up to 10 hours with Standard battery more than 20 hours with Heavy Duty battery
Weight	980 g (incl. standard battery)
Noisiness	max. 70 dB
Dimensions	235 mm / 126 mm / 65 mm
Battery Standard	Li-Ion 14,4 V / 2,6 Ah
Battery Heavy Duty	Li-Ion 14,4 V / 5,2 Ah
Certification	EN 12941 TH3

\* Measured with airflow 160 lpm, fully charged battery and clean particle filters



## Chemical 3F

New generation of powered air purifying respirator designed to filtrate contaminants in the form of gases, vapours, particles and their combinations.

High level of performance, mechanical and chemical resistance, UV resistance and Ingress protection IP64 guarantee sufficient protection of the wearer even in heavy industrial environments, the chemical industry, laboratories and the pharmaceutical industry. Full colour display clearly shows all the relevant information needed.

### Features & Benefits:

- High mechanical and chemical resistance
- Resistance to intrusion of liquids and solid particles – IP64
- Can be decontaminated by a shower
- Advanced electronic system for warning the wearer
- Full colour TFT display clearly shows all the relevant information needed
- User modes HOOD / MASK
- Airflow 120–235 lpm
- Li-Ion battery and quick battery charger (charging time < 3 h)

Technical data	
Air flow – adjustable	120–235 lpm
Operation time*	Up to 10 hours
Weight	1100 g (including battery)
Noisiness	max. 62 dB
Dimensions	320 mm / 200 mm / 150 mm
Battery	Li-Ion 14,4 V / 2,6 Ah
Certification	EN 12941 TH3



## Chemical 2F

New generation of powered air purifying respirator designed to filtrate contaminants in the form of gases, vapours, particles and their combinations.

Despite its compact size and low weight, the Chemical 2F unit has high mechanical and chemical resistance, and UV resistance. The construction of the unit allows easy decontamination in a shower thanks to Ingress protection IP64. The unique automatic closing system prevents unwanted contamination of the unit by particles while the filters are being changed. Full colour display clearly shows all the relevant information needed.

### Features & Benefits:

- Compact design and low weight
- High mechanical and chemical resistance
- Resistance to intrusion of liquids and solid particles – IP64
- Can be decontaminated by a shower
- Unique automatic closing system
- Advanced electronic system for warning the wearer
- Full colour TFT display clearly shows all the relevant information needed
- Individual working modes HOOD / MASK
- Airflow 120–235 lpm
- Li-Ion battery and quick battery charger (charging time < 3 h)

Technical data	
Air flow – adjustable	120-235 lpm
Operation time*	up to 10 hours with Standard battery more than 16 hours with Heavy Duty battery
Weight	960g (including battery)
Noisiness	max. 62 dB
Dimensions	240 mm / 110 mm / 120 mm
Battery Standard	Li-Ion 14,4 V / 2,6 Ah
Battery Heavy Duty	Li-Ion 14,4 V / 5,2 Ah
Certification	EN 12941 TH3, EN 12942 TM3



## Safety Helmet CA-40GW

### Safety helmet CA-40GW with grinding and welding shield

Multi-purpose safety helmet with a welding and grinding shield provides 5 levels of protection at once: eye, face, head, respiratory and optional hearing protection. Stable flip-up is compatible with auto-darkening filters or passive filters in dimension of 110x90 mm. Superb quality visor with anti-fog / anti-scratch coating guarantees excellent field of vision and increased durability. The easy to change DIN4 or DIN5 visor expand the system to the perfect protector for efficient Plasma or Oxy cutting. The product is suitable for the most challenging welding tasks including welding preparations (positioning, clamping) and further surface operations (grinding, cleaning, polishing).

#### Features & Benefits:

- Multiple protection – 5 levels of protection at once: eye, face, head, respiratory and optional hearing protection.
- Easy to wear, easy to use and easy to maintain system.
- Compatible with ADFs or passive filters 110x90 mm.
- Superb quality spherical visor guarantees an excellent field of vision.
- Anti-fog coating prevents the visor from fogging.
- Anti-scratch coating increases the mechanical durability of the visor.
- Shade 4, shade 5 and yellow visors available.
- Enhanced robustness – protection against high-speed particles with HIGH energy.
- In-built air distribution system.
- The highest standard in respiratory protection – TH3.



## Welding Hood CA-20

### Superb optics & uncompromising respiratory protection

The highest optical quality 1/1/1/1 and superb clarity of vision in both light state and during welding. Wide field of vision thanks to enlarged lens with True Colour feature. CA-20 helmet features enhanced TIG detection optimized down to 1 amp. In-built air distribution system delivers the air right into the breathing zone with possibility of individual adjustment of airflow direction. CA-20 meets the highest standard in respiratory protection.

#### Features & Benefits:

- Superb clarity of vision and the highest optical quality 1/1/1/1.
- Enlarged viewing area 97x68 mm.
- True colour display – improved colour perception.
- Extended shade adjustment:
  - 6 - 8 for Oxy and Plasma cutting.
  - 9 - 13 for welding.
- Grind mode function.
- Fast and easy spare parts replacement.
- Advanced air distribution system.
- The highest standard in respiratory protection – TH3.
- 5 years warranty.



## Unimask

### Light universal face shield providing the highest comfort and safety.

The highest level of breathing protection with enhanced inner airflow regulation and a visor with excellent optical and mechanical features make this universal light face shield a true leader of its class. UniMask is light (just 380 g) and offers excellent user's comfort – the inner airflow regulation allows the user to set direction and intensity of the air to be delivered to the face or directly into the breathing zone. The users can opt for a soft textile or a neoprene face seal according to their preferences. The visor provides clear and undisturbed view of the highest quality (class 1 according to EN 166), high mechanical resistance and anti-fog coating. UniMask is easy to use and all spare parts are quickly and easily removable which enables fast and simple maintenance.

#### Features & Benefits:

- The highest class of breathing protection TH3.
- Enhanced inner airflow regulation.
- Light weight – only 380g.
- Excellent optical quality EN 166 class 1.
- High mechanical resistance of the visor.
- Anti-fog coating.
- Safety helmet compatible.
- Neoprene or textile face seal option.
- Easy to use and adjust.
- Fast and simple maintenance.



## Long Hood CA-2

### Ultralight long hood with superior breathing protection

This long light hood ensures respiratory protection and protection of the head, neck and shoulders in dusty environments where no further mechanical protection is required. In combination with PAPR or airline systems CleanAIR® it reaches the highest level of breathing protection. It perfectly fits to various head types due to adjustable headgear and comfortable elastic rubber band. The distance of the visor can be individually set, as well as the perimeter of the headgear. The light nylon fabric and spacy cut makes it pleasant to wear even for long time work. The wide panoramic visor with antifog coating ensures undisturbed view and provides basic mechanical protection of the eyes.

#### Features & Benefits:

- Superior respiratory protection.
- Wide visor with antifog coating.
- Individual headgear settings – adjustable perimeter and distance from the visor.
- Pleasant to wear due to the spacy cut and light weight durable material.
- Provides full protection of the eyes according to EN 166.
- Practical reflective tab on the top.
- Protection of the upper part of the body.



## Protective Shield CA-3

### Spacy shield with an unlimited view

This popular light protective shield with a wide acetate visor provides respiratory protection and face protection against splashing chemicals. The visor offers a broad and clear field of vision, high chemical resistance and protection against liquid spraying.

Attention! This type of visor is not recommended for grinding operations. It provides protection against liquid spraying in accordance with the standard EN 166.

#### Features & Benefits:

- Light and spacious face shield
- Broad field of vision
- High chemical resistance
- Easily exchangeable visor
- Comfortable adjustable headgear
- Soft headband



## Protective Shield CA-4

### Lightweight industrial safety helmet with air distribution

CA-4 safety helmet combines respiratory protection with protection of the head, face and ears and can be modified according to the wearer's needs. The helmet can be equipped with further safety elements: an additional flip-up acetate visor (transparent or green DIN 5), earmuffs or a long cape for protection of the neck against splashing liquids. The wide panoramic visor with an anti-fog coating enables good orientation. The helmet fits well thanks to adjustable headgear and is provided with a sweatband.

#### Features & Benefits:

- Combined respiratory protection and protection of the head, face and ears.
- Wide field of vision.
- Anti-fog coating.
- Comfortable adjustable headgear.





## Poliblitz ABEK 15



The respirator is available in POLIBLITZ ABEK 15 "Ex" version: ATEX approved, according to the 94/9/EC ATEX Directive. It is suitable for use in potentially explosive atmospheres. The device is of Group II (for civil and industrial environments); Category 1, for 0 and 20 zones (by far the zones with the highest risk of explosion).

- One size fits all faces.
- Very quick donning.
- Equipped with exhalation valve.
- Its protection can be completed by a pair of gas goggle Type 888.
- The filter can be replaced after use.
- Weight: approx. 410 g

## Blitz 10



BLITZ 10 is an escape device with ABEK filter, equipped with a mouthpiece and a nose clip. It protects against industrial gases and vapours. Protection is limited with respect to compounds with a boiling point lower than 65°C and in highly toxic concentrations.

- The device does not protect from carbon monoxide or oxygen lack, since it does not provide oxygen.
- The duration of respirator BLITZ 10 is 10 minutes.

## Sèkur escABEK



Sèkur escABEK is a disposable escape device, with a mouthpiece and a hood, especially developed for the evacuation from industrial areas in case of chemical accidents. Sèkur escABEK è available in 2 configurations:

- EscABEK P 15: protects against gases and dusts (class P2);
- EscABEK P3 15: has been additionally certified in conformity to EN 14387, thus resulting in an A1B1E1K1 P3 filter device;
- Both devices do not protect against carbon monoxide;
- The duration of respirator Sèkur escABEK is 15 minutes.
- Total weight is 450 grams.

## Sèkur esCAPE



Sèkur esCAPE is an escape device with filter that protects respiratory organs, eyes and face against hazardous substances and smoke developed in the event of fire. Sèkur esCAPE, fitted with a mouthpiece and a hood, allows a high degree isolation of the wearer in a contaminated environment.

- The combined filter protects the user from P2 dusts, acrolein, HCl, HCN and carbon monoxide also in high concentrations (until 10000ppm of CO). All materials are heat and flame resistant, and grant the device a high impact resistance. The use is simple and intuitive.
- This device is for a single use only.
  - The duration of respirator Sèkur esCAPE is 15 minutes.

## ZEVS-U

### Application

ZEVS-U, a filtering device with hood for escape from fire, is intended for protection of respiratory system, eyes, and head of adults and children over 12 years old from toxic combustion products including carbon monoxide, other hazardous chemical substances, and aerosols like smoke, dust and mist emitted in case of fire and other man-made emergencies.

ZEVS-U is a single use device used for self rescue of a person at evacuation during fires in hotels, residential and administrative buildings, hospitals, crowded buildings, and other similar facilities.

ZEVS-U corresponds to the Main Safety Requirements according to the EU Directive 89/686/EEC (Annex II) and the requirements of EN 403:2004 «Respiratory protective devices for self-rescue – Filtering devices with hood for escape from fire - Requirements, testing, marking.



### Application Conditions

ZEVS-U refers to a filter type protective equipment. It is used for protection against toxic substances when the content of oxygen in the ambient air is not less than 17% and ambient temperature is from 0° to +60°C. ZEVS-U maintains its protective properties even after exposure to temperature of +200°C for 1 minute and short-term influence of the open flame with temperature +800±50°C during 5 seconds.

### Advantages:

- High level of effectiveness
- Protection against a wide range of hazardous substances
- Comfortable breathing and speech communication
- One size for adults and children
- Convenient in operation
- Special preparation and training of a user isn't required

## iEvac®

The iEvac Smoke Mask/Fire Escape Hood is the only smoke/fire evacuation hood certified to the American Standard ASTM E2952. Years of research and testing went into creating the iEvac, the most technologically advanced escape mask on the market today.

The iEvac® Protects against:

- Carbon Monoxide
- Hydrogen Sulfide
- Additional Toxic Gases: sarin, smoke, hydrogen cyanide, chlorine, ammonia, sulfur dioxide, tear gas, OC, and more
- Harmful Particulates: soot, fumes, aerosols, and others
- Contains a HEPA P100 filter that removes sub-micron particles such as ebola, anthrax, ricin, smallpox, and radioactive particles
- Life-Threatening Physical Hazards: flammability and radiant heat



iEvac is currently being used nationwide by federal, state, local government agencies, all branches of the military, Fortune 500 companies, transit authorities, sporting arenas, marine, aviation, hospitals, homeowners and more.

iEvac has also achieved overwhelming acceptance internationally for its groundbreaking technological advantages and is currently being used in over 40 countries.

### Features

- Maintenance-free
- At 9.5 in. (240mm) can withstand up to 1700°F (927°C) in radiant heat
- Twin filters for easier breathing
- Improved field of view compared with single filter in front
- Hood is a clear material resulting in an unobstructed field of view
- High visibility reflective strips for easy recognition
- Highest level of protection maintained by silicone neck dam
- Protects lungs, head, eyes, and face
- Can be used with eyeglasses, beards, and long hair
- Packaged in puncture- and- water-proof laminate barrier
- Quick and easy donning
- Latex-free
- One universal size



## How To Select A Filter?

- Will the atmosphere contain sufficient oxygen throughout the period of exposure?
- Which hazardous substances are likely to be present? What are their physical and chemical properties?
- Which forms do the airborne contaminants take – dust, fibre, mist, fume, microorganism, gas, vapour, radioactive particulates or gases?
- What health effects can these substances have on the body? Special attention is needed if there are several substances that may interact, either by reacting chemically, or by having synergistic adverse health effects.
- What are the concentrations in the atmosphere?
- What are the relevant occupational exposure limit values or the safe exposure levels?
- A filtering device should have the correct type of filter matched to the substance(s) from which the wearer needs protection. The maximum mass of filter designated to be connected to a half mask is 300g and to a full face mask 500g. Filters are colour coded, marked with type and class, as well as labelled with the shelf life as factory sealed. The filter label includes the "CE" mark and EN standard number(s), and markings relevant to particular types; if for a powered respirator, the device class.

## Particle filter classification according to EN 143

Class	Efficiency (%)	NPF	Maximum permitted penetration		Assigned protection factor*		
			NaCl	Paraffin oil	D	FIN	UK
P1	Low (80,00%)	5	20 %	20 %	4	4	4
P2	Medium (94,00%)	16	6 %	6 %	15	15	10
P3	High (99,95%)	2 000	0,05 %	0,05 %	500	400	40

## Gas / combined filter capacity requirements

Classification	EN 14 387 negative pressure respirators			EN 12 941, EN 12 942 powered air purifying respirators		
	Class 1	Class 2	Class 3	Class 1	Class 2	Class 3
Capacity	LOW	MED	HIGH	LOW	MED	HIGH
Concentration of the test gas	0,1 %	0,5 %	1,0 %	0,05 %	0,1 %	0,5 %

Filter type	Test gas	Minimum breakthrough time			Minimum breakthrough time		
		70 min	35 min	65 min	70 min	70 min	35 min
B	Cyclohexane C6H6	70 min	35 min	65 min	70 min	70 min	35 min
	Chlorine Cl2	20 min	20 min	30 min	20 min	20 min	30 min
	Hydrogen sulphide H2S	40 min	40 min	60 min	40 min	40 min	40 min
E	Hydrogen cyanide HCN	25 min	25 min	35 min	25 min	25 min	35 min
	Sulphur dioxide SO2	20 min	20 min	30 min	20 min	20 min	20 min
K	Ammonia NH3	50 min	40 min	60 min	50 min	50 min	40 min

## Special filters

Filter type	Test gas	Test gas concentration	Minimum allowed breakthrough time
AX	Dimethyl ether	0,05 v%	50 min
	Isobutane	0,25 v%	50 min
Hg-P3	Mercury, Hg vapour	1,6 ml/mg	100 hour
NOP	NO, NO <sub>2</sub>	0,25 v%	20 min

## UNIX Series Filter

### Purpose & Conditions of use:

UNIX series filters with bayonet connection are designed to clean the inhaled air from harmful vaporous and gaseous substances and particles as part of full face masks and half-masks of UNIX series. Filters are applied when the volume content of oxygen in the air is not less than 17%.

### Available Range:

1. Gas filters of UNIX 500 series protect from one or more harmful substances.
2. Particle filters UNIX 203 P3 D.
3. Particle filters UNIX 223 P3 protect against particles and harmful gases and vapors up to 1 TLV.
4. Particle filters UNIX 303 P3 D filter of the closed type, designed for operation in conditions of high humidity.
5. Particle prefilters UNIX P1, P2, P3 together with gas filters of UNIX 500 series provide combined protection. Join them with a retainer.

### Guaranteed Shelf Life:

- Gas filters of UNIX 500 series – 5.5 years  
 Particle filters UNIX 203 P3 D – 3.5 years  
 Particle filters UNIX P1, P2, P3, UNIX 223 P3 D, UNIX 303 P3 D – 5.5 years

### Certificates:

1. Gas filters of UNIX 500 series : EN14387:2004+A1:2008.
2. Particle filters UNIX 203 P3 D, UNIX 223 P3 D, UNIX 303 P3 D, prefilters UNIX P1, P2, P3: EN143:2000 /A1:2006.



## The service life of a gas filter depends on:

- Concentration and characteristics of the workplace contaminant.
- Filter capacity, eg. filter class, compare workplace concentrations to test values.
- Breathing volume and work rate. Humidity of the air.
- Temperature of the atmosphere.

## Gases and vapours have various effects on health:

- They can irritate the membranes of respiratory organs, the eyes and skin.
- They can reach the lungs and cause damage there.
- They can be absorbed in the blood and cause temporary or permanent damage to various parts of the body.
- They can cause irreparable damage to the nervous system
- The most hazardous gases can intoxicate or suffocate, and even destroy individual bodily organs.
- They can be lethal.

## Effects of gaseous substances depend on:

- The characteristics of the gas or vapour; eg. toxicity.
- The concentration of the contaminant in the air.
- Duration of exposure to the contaminant.
- The chemical compound or mixture of substances making up the contaminant.
- The ability to react chemically with organic tissue as well as the propensity to be absorbed in the blood.
- Personal characteristics, e.g. rate of respiration, blood circulation and sensitivity.

Colour code	For use against
<b>Brown A</b>	Organic gases and vapours (boiling point above 65 °C) Class 1, 2, 3
<b>Brown AX</b>	Organic gases and vapours (boiling point at or below 65 °C) Single use only; AX filters are only specified for one class
<b>Grey B</b>	Inorganic gases and vapours Class 1, 2, 3 Do not use against carbon monoxide
<b>Yellow E</b>	Acid gases Class 1, 2, 3
<b>Green K</b>	Ammonia and its organic derivatives Class 1, 2, 3
<b>White P</b>	Particles Class 1, 2, 3
<b>Red Hg</b>	Mercury Must include P3 particle filter. Maximum use time 50 hours Special filter are only specified for one class
<b>Black CO</b>	Carbon Monoxide
<b>Blue NO</b>	Nitrous gases, including nitrogen monoxide

P1 R UNIX P1	P				
P2 R UNIX P2	P				
P3 R UNIX P3	P				
P3 R D UNIX 223	P				
A1 UNIX 501	A				
A2 UNIX 502	A				
K2 UNIX 512				K	
A1B1E1 UNIX 521	A	B	E		
A1B1E1K1 UNIX 531	A	B	E	K	
A2B2E2 UNIX 522	A	B	E		



## Series 200, Series 230 & DIRIN Seres Filter for POLIMASK, C 701, C 702, SFERA & C 607 SERIES

D.P.I. has a wide range of dust, gas and combined filters: series 200 (to be used in pairs), series 230 and DIRIN (with threaded connector EN 148/1). Dust filters comply with the standard EN 143, gas and combined filters with EN 14387. All dust and combined filters with P2 and P3 are marked with R (reusable) and D (dolomite tested)

The series 200 include particulate, gas and combined filters in a synthetic resin container built with special screw in connector for use with half mask POLIMASK® 100/2, POLIMASK® Beta, or C607/TWIN full face mask.

The series 230 includes particulate, gas, vapour and combined filters. The filter case is made of light, impact resistant, synthetic resin. Directly connectable to the half mask POLIMASK 230. By using the threaded adapter (code 4201.0600) conforming with EN 148/1, they can also be fitted on the POLIMASK® 2000 Gamma or on the C607 and SFERA full face masks.

The DIRIN series includes antigas class 2 filters, combined class 2-P2 and 2-P3 filters built with screw-in connector EN 148/1.

The container is made of syntetic resin or light alloy. They can be fitted on POLIMASK® 2000 Alfa, or SFERA, C607 full face masks.



Series 200 Filter	A2 P3 RD 4340 1024	P	A						
Series 200 Filter	A1B1E1K1 P3 RD 4340 1020	P	A		B	E	K		
Series 230 Filter	A2P3 RD 4340 5120	P	A						
Series 230 Filter	A2B2P3 RD 4340 5122	P	A		B				
Series 230 Filter	A2B2E2K2P3 RD 4340 1166	P	A		B	E	K		
DIRIN 230 Filter	AX P3 RD 4341 0606	P		AX					
DIRIN 230 Filter	A2P3 RD 4341 0625	P	A						
DIRIN 230 Filter	A2B2P3 RD 4341 0627	P	A		B				
DIRIN 230 Filter	HGP3 RD 4341 0634	P							Hg
DIRIN 230 Filter	A2B2E2K2P3 RD 4341 0640	P	A		B	E	K		
DIRIN 230 Filter	A2B2E2K2HGP3 RD 4341 0654	P	A		B	E	K		Hg
DIRIN 300 Filter	A2B2P2 RD 4341 0111	P	A		B				
DIRIN 500 Filter	A2B2E2K2P3 RD 4341 1887	P	A		B	E	K		
DIRIN 530 Filter	A2B2E2K2HGNO20COP3RD 4341 1885	P	A	NO	B	E	K	Hg	CO

## DOTpro Filter for MAG Series

Gas filter DOT M 460 A1B1E1K2 + protection from carbon monoxide in set with full face mask MAG is intended for protection respiratory organs from harmful vapours and gases, including carbon monoxide.

### Your benefits:

1. Saving of money.
2. Secure protection of health, and prevention of work-related deceases.

### Advantages:

1. REUSABLE PROTECTION for carbon monoxide.
2. Highly efficient filtration due to unique technology of uniform distributing the absorbent particles inside the filter.
3. Handy bag for storage and carrying the filter.



A2 250 A2			A						
A2P3 RD 320 A2P3 RD	P	A							
HGP3 RD 320 HGP3 RD	P								Hg
K2P3 RD 320+ K2P3 RD	P							K	
A2B2E2 P3 RD 320+ A2B2E2 P3 RD	P	A			B	E			
A2B2E2K2 P3 RD A2B2E2K2 P3 RD		A			B	E	K		
A2B2E2 460+ A2B2E2		A			B	E			
A2B2E2K2 460+ A2B2E2K2		A			B	E	K		
A2B2E2-AX 460+ A2B2E2-AX		A	AX		B	E			
A1B1E1K2 CO M460 A1B1E1K2 CO		A			B	E	K		CO

## CleanAIR® Filter

The complete production programme of CleanAIR® canister filters offers a wide choice of filters for most industrial applications, pharmaceutical industry, laboratories and agriculture. The filters are supplied with a standard connection thread RD40x1/7" according to EN 148-1.

### Particle filters

They catch a wide range of solid particles in the form of liquid and solid aerosols such as dust, smoke, fibres, bacteria, viruses and radioactive particles. Certification: EN 143, EN 12941, EN 12942

### Gas filters

Provide protection against contaminants in the form of gases and vapours. EN 14387, EN 12941, EN 12942

### Combined filters

Provide protection against a combination of contaminants in the form of gases, vapours and solid particles. EN 14387, EN 12941, EN 12942

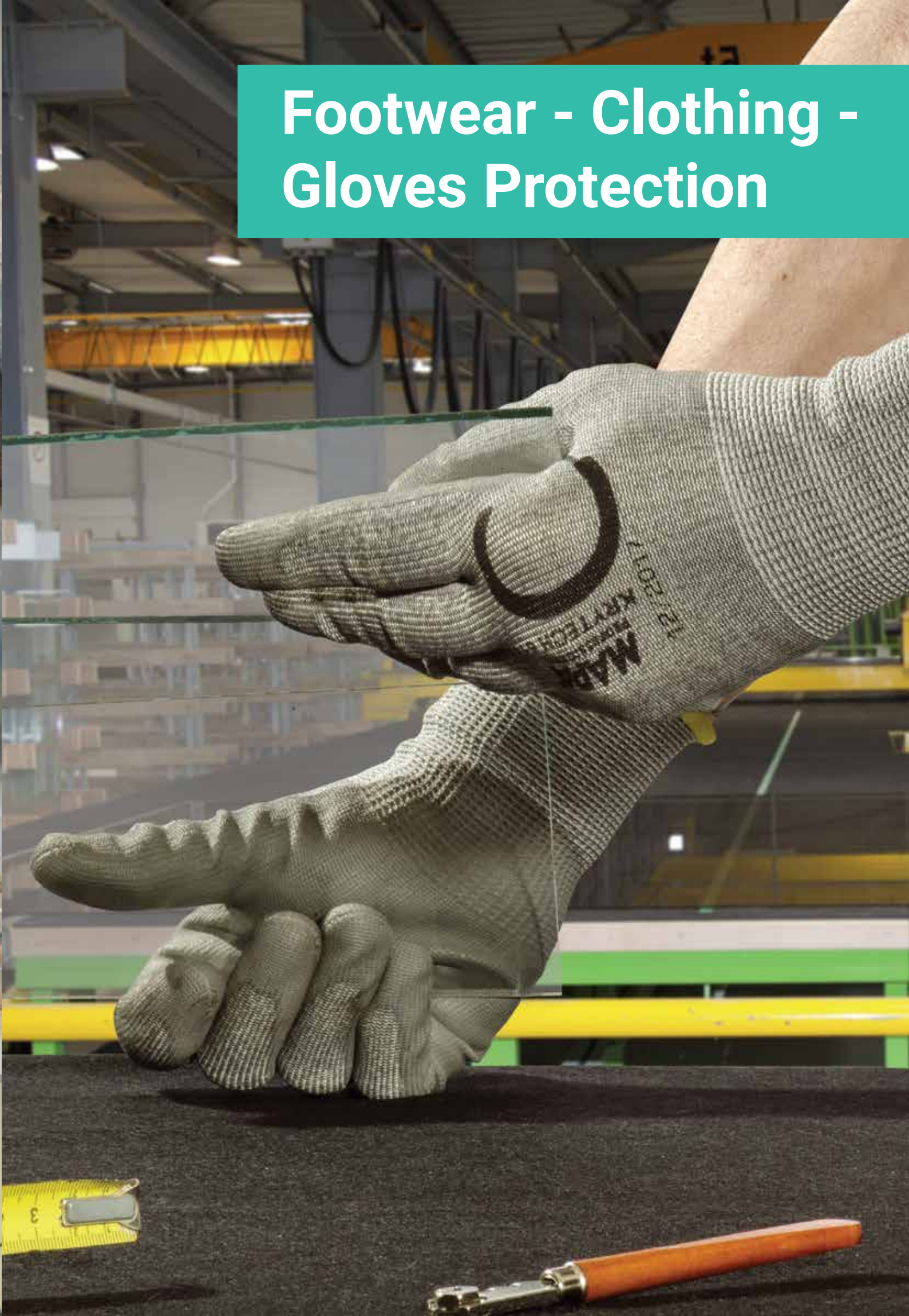


P3 50 00 48	P								
A2B2E2 50 01 63		A			B	E			
A2P3 50 01 57	P	A							
A2B2P3 50 01 67	P	A			B				
K2P3 50 01 60	P							K	
50 01 64 A2B2E2P3	P	A			B	E			
50 01 68 A2B2E2K2P3	P	A			B	E	K		
50 01 66 A2B2E2K2HGP	P	A			B	E	K		Hg





# Footwear - Clothing - Gloves Protection



## Embossing

Depending on the type of contact, the glove embossing may vary. In some cases, in particular with product protection, gloves may be smooth. In other cases different types of embossing may be needed to improve grip.



Pebbled



Standard



Dots



Harpon

## Materials Mechanical and chemical properties

	Natural latex	Neoprene	Nitrile	PVC	Fluoroelastomer
Elasticity and flexibility	High	Medium	Medium	Low	Medium
Abrasion	Low	Low	High	Medium	High
Cut	High	Medium	High	Low	Medium
Tear	High	Medium	Low	Medium	Low
Puncture	Low	Medium	High	Medium	Medium
Acids	Low	High	Medium	High	High
Bases	High	High	High	High	High
Oils and greases	Low	Medium	High	Medium	High
Hydrocarbons	Low	Medium	High	Medium	High
Aromatic solvents (styrene, etc.)	Low	Low	Medium	Low	High
Chlorinated solvents (perchloroethylene, etc.)	Low	Low	Medium	Low	High
Ketonic solvents (acetone, etc.)	High	Medium	Low	Low	Low
Acetates (butyl acetate, etc.)	Low	Medium	Medium	Low	Low
Glycol ethers (ethoxyethylacetate, etc.)	Low	High	Medium	Low	Medium

## Advantages and limitations of materials

	Natural latex	Neoprene	Nitrile	PVC	Fluoroelastomer
Advantages	Excellent flexibility and resistance to tearing. Good resistance to numerous acids and ketones.	Multi-purpose chemical resistance: acids, aliphatic solvents. Performs well when exposed to sunlight and ozone.	Very good resistance to abrasion and perforation. Very good resistance to hydrocarbon derivatives.	Good resistance to acids and bases.	Excellent resistance to aliphatic, aromatic and chlorinated solvents.
Limitations	Avoid contact with oils, greases and hydrocarbon derivatives. Proteins from natural latex may cause allergies.	Avoid contact with chlorinated and aromatic solvents.	Avoid contact with solvents containing ketones, oxidising acids and organic compounds containing nitrogen.	Weak mechanical resistance. Avoid contact with solvents containing ketones and aromatic solvents.	Avoid contact with ketones and acetates.

## Chemical resistance table

	Blue	Red	Green	Grey	Orange		Blue	Red	Green	Grey	Orange		Blue	Red	Green	Grey	Orange
Acetaldehyde (acetic aldehyde)	+	+	-	-	-	Ethylaniline	=	++	++	++	=	Perchloroethylene	-	=	++	++	=
Acetic acid 50 %	++	++	-	=	++	Ethylene glycol	++	++	++	++	++	Perfumes và essences	++	++	++	++	++
Acetic acid, glacial	+	++	=	=	=	Fertiliser	++	++	++	++	++	Petrol	-	+	++	++	=
Acetone	=	=	-	-	-	Fish và shellfish	=	++	++	++	=	Petroleum ether	-	=	++	++	-
Alcoholic beverages	++	++	++	++	++	Fixing agents	++	++	++	++	++	Petroleum products	-	=	+	++	=
Ammonium acetate	++	++	++	++	++	Fluorides	=	++	++	++	=	Phenol (phenic alcohol)	=	+	+	+	+
Ammonium carbonate	++	++	++	++	++	Formaldehyde 30 %	++	++	++	++	++	Phosphoric acid 75 %	++	++	++	++	++
Ammonium chloride	++	++	++	++	++	Formic acid 90 %	+	++	=	=	++	Polyester resins	-	=	+	+	=
Ammonium concentrated	++	++	+	+	++	Fuels	-	=	++	++	+	Potassium bicarbonate	++	++	++	++	++
Ammonium nitrate	++	++	++	++	++	Furaldehyde	+	++	-	++	-	Potassium bichromate	=	++	++	++	++
Amylic alcohol	=	+	+	+	=	Gas oil	-	+	++	++	+	Potassium carbonate	++	++	++	++	++
Aniline	=	++	+	-	=	Glycerine	++	++	++	++	++	Potassium carbonate concentrated	++	++	+	++	++
Animal fats	=	++	++	++	+	Glycerophthalic paint	-	=	++	++	=	Potassium chloride	++	++	++	++	++
Asphalt	-	=	++	++	=	Glycols	++	++	++	++	++	Potassium cyanide	++	++	++	++	++
Beet	+	++	++	++	++	Hairdressing bleaches	++	++	++	++	++	Potassium nitrate	++	++	++	++	++
Benzaldehyde (benzoic aldehyde)	-	=	+	=	-	Hexane	-	+	++	++	=	Potassium permanganate	++	++	++	++	++
Benzene	-	-	++	=	-	Household detergents	++	++	+	+	++	Potassium phosphate	++	++	++	++	++
Benzyl alcohol	=	+	++	=	+	Hydraulic fluid (petrol)	-	=	++	++	=	Potassium sulphate	++	++	++	++	++
Bleach	+	++	++	++	+	Hydraulic fluids (esters)	++	++	++	++	=	Poultry	=	++	++	++	-
Borax	++	++	++	++	++	Hydrochloric acid 30% và 5 %	++	++	++	++	++	Setting agents	++	++	++	++	++
Brake fluid (lookheed)	=	++	++	++	+	Hydrofluoric acid 30 %	+	++	+	+	++	Shampoos	++	++	++	++	++
Bromides	=	++	++	++	=	Hydrogen peroxide	=	++	++	++	++	Silicate	++	++	++	++	++
Butoxyethanol	+	++	++	++	=	Isobutanol (isobutylic alcohol)	+	++	++	++	++	Sodium bicarbonate	++	++	++	++	++
Butter	-	++	++	++	=	Isobutylcetone	++	+	-	-	-	Sodium bisulphate	++	++	++	++	++
Butyl acetate	-	+	=	+	-	Kerosene	-	+	++	++	+	Sodium carbonate	++	++	++	++	++
Calcium chloride	++	++	++	++	++	Lactic acid 85 %	+	++	+	+	++	Sodium chloride	++	++	++	++	++
Calcium hydroxide	++	++	++	++	++	Lard oil	-	++	++	++	=	Sodium hydroxide concentrated	++	++	+	++	++
Calcium hydroxide	++	++	++	++	++	Linseed oil	-	++	++	++	=	Sodium hypochloride	++	++	++	++	++
Calcium hypochloride	++	++	++	++	++	Lubricating oil	-	=	++	++	=	Sodium nitrate	++	++	++	++	++
Calcium nitrate	++	++	++	++	++	Magnesium oxide	++	++	++	++	++	Sodium phosphates	++	++	++	++	++
Calcium oxide	++	++	++	++	++	Methanol (methyl alcohol)	=	+	++	++	+	Sodium sulphate	++	++	++	++	++
Calcium phosphate	++	++	++	++	++	2-Methoxyethanol	=	++	++	++	+	Soya bean oil	-	++	++	++	=
Carbon tetrachloride	-	=	++	+	=	Methyl ethyl ketone	+	=	-	-	-	Styrene	-	=	=	++	-
Castor oil	-	++	++	++	+	Methyl isobutyl ketone	+	=	-	-	-	Sulphites, bi-sulphites, hyposulphites	++	++	++	++	++
Chlorine	=	++	++	++	=	Methylamine	+	++	++	++	++	Sulphuric acid concentrated	=	+	=	-	+
Chloroacetone	++	++	-	-	-	Methylaniline	=	=	++	++	++	Sulphuric acid diluted (battery)	++	++	++	++	++
Chloroform	-	-	+	=	-	Methylene chloride	-	=	=	+	-	THF = Tetrahydrofurane	=	=	-	-	-
Chromic acid	=	+	=	=	+	Milk and dairy products	=	++	++	++	-	Toluene	-	=	+	++	=
Citric acid	++	++	++	++	++	Mineral fats	-	=	++	++	=	Tributylphosphate	-	=	=	-	-
Creosote	=	++	++	++	+	Monochlorobenzene	-	=	=	++	-	Trichloroethylene	-	=	=	++	-
Cresol	+	++	++	++	+	Monoethanolamine	++	++	++	++	++	Triethanolamine 85 %	++	++	++	++	++
Cutting oil	-	++	++	++	++	Naphta (white spirit)	-	+	++	++	+	Trinitrobenzene	-	=	+	++	=
Cyclohexane	-	++	++	++	++	Naphtalene	-	=	+	++	=	Trinitrotoluene	-	=	+	++	=
Cyclohexanol	++	++	++	++	++	n-butanol (butylic alcohol)	+	++	++	++	++	Triphenylphosphate	=	+	-	-	-
Cyclohexanone	+	=	-	-	-	Nitric acid 20 %	+	++	+	+	++	Turnipseed oil	-	=	++	++	-
Diacetone alcohol	++	++	=	+	-	Nitrobenzene	-	=	-	++	-	Turpentine	-	=	++	++	=
Dibutyl phtalate	=	++	++	++	=	Nitrohydrochloric acid	-	+	=	=	=	Turpentine spirit	-	=	++	++	=
Dibutylether	-	=	+	+	=	Nitropropane	=	=	-	-	-	Vinegar and condiments	++	++	++	++	+
Dichloroethane	-	=	++	=	-	Non alcoholic beverages	++	++	++	++	++	Vinyl acetate	-	=	=	=	-
Diesel oils	-	=	++	++	=	Octanol (octyl alcohol)	++	++	++	++	++	Washing powders	++	++	++	++	++
Diethanolamine	++	++	++	++	++	Oils for turbines	-	=	++	++	=	Water paint	++	++	++	++	++
Diocetyl phtalate	-	++	++	++	-	Oleic acid	+	++	++	++	+	Weedkillers	+	++	++	++	+
Dyes (hair)	++	++	++	++	++	Olive oil	-	++	++	++	=	Xylene	-	=	+	++	=
Ethanol (ethyl alcohol)	+	++	++	++	++	Oxalic acid	++	++	++	++	++	Xylophene	-	=	+	++	=
2-Ethoxyethanol	=	++	++	++	+	Paraffin oil	-	=	++	++	++	Zinc sulphate	++	++	++	++	++
2-Ethoxyethylacetate	-	++	=	=	-	Peanut oil	-	++	++	++	=						

This table gives only general indications. It is important to bear in mind that the resistance of a glove depends on factors such as the exact nature of the chemical product, its temperature, concentration, the thickness of the glove, the immersion times, etc.

We recommend that you refer to the information on the chemical resistance of each glove\* and carry out a preliminary test to determine whether or not the glove is suitable for use in real conditions.

\* For more detailed information, see Chemical resistance guide or product brochures

Symbol	Description
++	Excellent
+	Good
=	Fair
-	Not recommended



## Legislation and European Standards

European Directives regarding personal protective equipment lay down the requirements that the equipment and their users must satisfy. The standards are used to draw up technical specifications that meet these new requirements.

Directive 89/656/EEC (use) lays down the requirements that employers must meet with regard to the supply and use of PPE by their employees. Directive 89/868/EEC lays down the essential requirements for marketing protective gloves within the European Union.

The whole **Panindochina** range is certified in compliance with these essential requirements, and is labelled with CE marking.

## CE Certification Categories

### Category 1

The manufacturer is responsible for the conformity of its products with respect to the essential requirements of the Directive.

### Category 2

Certificate of conformity obtained from a notified body

### Category 3

Certificate of conformity and regular production inspections on the manufacturer's premises by the notified bodies.

The following pictograms conform with European standards and will help you to understand the performance of the gloves:

Mechanical Protection	Chemical & Micro-Organisms Protection	Others	Thermal Protection																		
<p><b>Mechanical Hazards EN 388</b></p> <p>4 3 4 3 C (P)</p> <p>Protection against impacts (P)</p> <p>From A to F ISO 13997 cut resistance</p> <p>From 0 to 4 Puncture resistance</p> <p>From 0 to 4 Tear resistance</p> <p>From 0 to 4 Couptest cut resistance</p> <p>From 0 to 4 Abrasion resistance</p>	<p><b>Chemical Protection EN ISO 374-1</b></p> <p>EN ISO 374-1 / TYPE A</p> <p>U V W X Y Z</p> <p>Resistance to penetration EN 374-2 Breakthrough time <math>\geq 30</math> min for at least 6 chemicals on the list (EN 16523-1)</p> <p>Degradation test according to EN374-4 is undertaken without performance level requirement</p> <p><b>Chemical Protection EN ISO 374-1</b></p> <p>EN ISO 374-1 / TYPE B</p> <p>X Y Z</p> <p>Resistance to penetration EN 374-2 Breakthrough time <math>\geq 30</math> min for at least 3 chemicals on the list (EN 16523-1)</p> <p><b>Chemical Protection EN ISO 374-1</b></p> <p>EN ISO 374-1 / TYPE C</p> <p>X Y Z</p> <p>Resistance to penetration EN 374-2 Breakthrough time <math>\geq 30</math> min for at least 1 chemical on the new list (EN 16523-1)</p> <p><b>Letter Code</b></p> <table border="0"> <tr> <td>A Methanol</td> <td>G Diethylamine</td> <td>M Nitric Acid 65 %</td> </tr> <tr> <td>B Acetone</td> <td>H Tetrahydrofuran</td> <td>N Acetic Acid 99%</td> </tr> <tr> <td>C Acetonitrile</td> <td>I Ethyl acetate</td> <td>O Ammonia 25%</td> </tr> <tr> <td>D Dichloromethane</td> <td>J n-Heptane</td> <td>P Hydrogen Peroxide 30%</td> </tr> <tr> <td>E Carbon disulphide</td> <td>K Sodium hydroxide 40%</td> <td>S Hydrogen Fluoride 40%</td> </tr> <tr> <td>F Toluene</td> <td>L Sulphuric acid 96%</td> <td>T Formaldehyde 37%</td> </tr> </table> <p><b>Micro-Organisms Protection EN ISO 374-5</b></p> <p>EN ISO 374-5</p> <p>For gloves protecting against bacteria and fungi.</p> <p>VIRUS</p> <p>For gloves protecting against bacteria, fungi and viruses.</p>	A Methanol	G Diethylamine	M Nitric Acid 65 %	B Acetone	H Tetrahydrofuran	N Acetic Acid 99%	C Acetonitrile	I Ethyl acetate	O Ammonia 25%	D Dichloromethane	J n-Heptane	P Hydrogen Peroxide 30%	E Carbon disulphide	K Sodium hydroxide 40%	S Hydrogen Fluoride 40%	F Toluene	L Sulphuric acid 96%	T Formaldehyde 37%	<p><b>Radioactive Contamination EN 421</b></p> <p>With No Performance Levels</p> <p><b>Protection Against Pesticides ISO 18889</b></p> <p>ISO 18889</p> <p>Resistance to diluted pesticides/no mechanical risk</p> <p>ISO 18889</p> <p>Resistance to diluted &amp; concentrated pesticides/mechanical risk</p> <p>ISO 18889</p> <p>Re-entry tasks</p> <p><b>Protection Against Static Electricity EN 16350</b></p>	<p><b>Cold Hazard EN 511</b></p> <p>3 2 1</p> <p>0 or 1 Water permeability</p> <p>0 or 4 Contact cold resistance</p> <p>0 or 4 Convective cold resistance</p> <p><b>Heat And Fire EN 407</b></p> <p>X 2 X X X X</p> <p>From 0 to 4 Resistance to large quantities of molten metal</p> <p>From 0 to 4 Resistance to small drops of molten metal</p> <p>From 0 to 4 Radiant heat resistance</p> <p>From 0 to 4 Convective heat resistance</p> <p>From 0 to 4 Contact heat resistance</p> <p>From 0 to 4 Limited flame spread</p>
A Methanol	G Diethylamine	M Nitric Acid 65 %																			
B Acetone	H Tetrahydrofuran	N Acetic Acid 99%																			
C Acetonitrile	I Ethyl acetate	O Ammonia 25%																			
D Dichloromethane	J n-Heptane	P Hydrogen Peroxide 30%																			
E Carbon disulphide	K Sodium hydroxide 40%	S Hydrogen Fluoride 40%																			
F Toluene	L Sulphuric acid 96%	T Formaldehyde 37%																			

## Different cuff edging Depending on your use



**Safety cuff**  
Protects the wrist, ease of removal, ventilation of the hand.



**Knitted wrist**  
Protects the wrist and stays firmly on the hand.



**Straight cuff**  
Better ventilation of the hand.



**Rolled cuff**  
Increased resistance to tearing when putting gloves on.



**Scalloped cut**  
Long-lasting life.

## Shapes, size and thicknesses

### Glove length

They must be chosen in accordance with the risks associated with the handling circumstances, to give more or less protection to the forearm. They generally vary between 22 and 60 cm



### Glove size

This depends on the circumference of the user's palm and varies from size 5 to 12. This affects usage comfort



### Glove thickness

This influences the user's dexterity and the performance



## A number of external finishes according to your needs

- Smooth**  
Does not mark the handled objects
- Non-slip embossing**  
Excellent grip in oily environments
- Pebbled**  
Good grip and minimal glove fouling
- Reinforced grip**  
Excellent grip in wet environment
- Dot embossing**  
Improved thermal insulation

## Textile types

### Cotton:

Comfort, thermal insulation and absorption of perspiration.

### Polyamide:

Optimised dexterity (thin, seamless).

### Para-aramide (Kevlar® or Twaron®):

Blade cut and fire resistant.

### High density polyethylene (Dyneema® or Spectra®):

Comfortable and blade cut resistant.

## Anatomical or ambidextrous gloves

### Powdered

Helps when putting on and taking off the gloves without increasing the thickness.

### Chlorinated

Powder-free treatment which helps when putting on and taking off the gloves without increasing the thickness. Reduces the risk of allergy from natural latex gloves.

### Flocked

Cotton based textile fibres on the inside of the gloves. Fleeced feel. Good absorption of perspiration for extended use.

### Textile support

Knitted interior made from cotton or synthetic materials to increase comfort. Particularly suitable for long-term work.



## Disposable Gloves

### Solo 977

The best chemical protection in disposable range : the compromise between protection and dexterity

- Suitable for a wide range of chemical (see the chemical resistance chart)
- Good compromise between thickness, suppleness and resistance
- Chlorinated for a better doning
- Pebbled on fingertips for a good grip place on the arm

Solo	977
Material	Nitrile
Length (cm)	24
Thickness (mm)	0.11
Wrist	Rolled cuff
Color	Green
Interior finish	Chlorinated
Exterior finish	Smooth with pebbled fingertips
Size	6 7 8 9 10
Packaging	100 gloves/box - 1000 gloves/carton

Cat. 3

Type B



JKT



## Chemical Resistant Gloves

### Ultranitril 480

Ultra-long chemical protection.

- Optimised service life: excellent mechanical resistance (abrasion, perforation)
- Excellent protection during intensive handling of high-risk chemical products
- Good grip on slippery objects, due to the embossed texture

Ultranitril	480
Material	Nitrile
Length (cm)	46
Thickness (mm)	0.55
Wrist	Straight cuff
Color	Green
Interior finish	Chlorinated
Exterior finish	Embossed texture
Size	7 8 9 10
Packaging	1 pair/bag - 12 pairs/carton

Cat. 3



4102X

Type A



AJKOPT



## Disposable Gloves

### Trilites 994

Tripolymer formula for protection against chemical splashes

- Unique triple polymer blend for enhanced comfort and resistance.
- Protection against chemical splashes.
- Optimal thickness delivering maximum tactility with superior durability.

Trilites	994
Material	Natural latex, neoprene and nitrile
Length (cm)	25.5
Thickness (mm)	0.15
Wrist	Rolled cuff
Color	Purple
Interior finish	Chlorinated
Exterior finish	Pebbled
Size	6 S 7 M 8 L 9 XL
Packaging	100 gloves/box - 1000 gloves/carton

Cat. 3

Type B



KPT



## Chemical Resistant Gloves

### Ultranitril 492

Good mechanical resistance and long-lasting chemical protection.

- Dexterity and comfort, due to the anatomical shape and the quality of the flock-lining
- Longer service life: excellent mechanical resistance (abrasion, perforation)
- Available in vending machine packaging

Ultranitril	492
Material	Nitrile
Length (cm)	32
Thickness (mm)	0.38
Wrist	Straight cuff
Color	Green
Interior finish	Flocked
Exterior finish	Embossed texture
Size	6 7 8 9 10 11
Packaging	1 pair/bag - 10 pairs/bag - 100 pairs/carton

Cat. 3



3101X

Type A



AJKOPT



## Chemical Resistant Gloves

### Ultranitril 381

Maximum comfort and chemical protection.

- Extremely supple, due to the unique Mapa multi-layer process.
- Embossed texture for better grip of wet objects
- Added comfort and thermal insulation, due to the cotton-knit lining

Ultranitril	381
Material	Nitrile
Length (cm)	35.5
Thickness (mm)	0.85
Wrist	Scalloped cuff
Color	Green
Interior finish	Textile support Mapa Technology
Exterior finish	Embossed texture
Size	7 8 9 10 11
Packaging	12 pairs/bag - 72 pairs/carton

Cat. 3



3111A

Type A



JKLOPT



## Chemical Resistant Gloves

### UltraNeo 401

Tactile sensitivity for light chemical protection.

- Added comfort, due to the cotton flock-lining.
- Great dexterity, due to the glove's reduced thickness.
- Good grip on slippery objects, due to the embossed texture.

UltraNeo	401
Material	Neoprene and natural latex
Length (cm)	31
Thickness (mm)	0.55
Wrist	Straight cuff
Color	Black
Interior finish	Flocked
Exterior finish	Embossed texture
Size	7 8 9 10
Packaging	1 pair/bag - 10 pairs/box - 100 pairs/carton

Cat. 3



2110X

Type A



ALMNST



Cat. 3



2121X

Type A



LMNST

## Chemical Resistant Gloves

### UltraNeo 450

Extremely supple with freedom of movement for standard chemical protection.

- Freedom of movement, due to the supple quality of the neoprene and the comfort of the cotton flock-lining.
- Good grip, due to embossed texture.
- Forearm protection: long-sleeved glove.

UltraNeo	450
Material	Neoprene and natural latex
Length (cm)	41
Thickness (mm)	0.75
Wrist	Straight cuff
Color	Black
Interior finish	Flocked
Exterior finish	Embossed texture
Size	7 8 9 10
Packaging	1 pair/bag - 10 pairs/bag - 50 pairs/carton



Cat. 3



0010X

Type A



ABCILM  
NOS

## Chemical Resistant Gloves

### Butoflex 651

Ultimate specific chemical resistance.

- Ultimate specific chemical resistance, for very corrosive acids, ketones, esters and amine derivatives.
- Unrivalled flexibility and dexterity.
- In compliance with the requirement of the norm EN 16350, standard for protective gloves - Electrostatic properties : <1.0 10E5

Butoflex	651
Material	Butyl
Length (cm)	35
Thickness (mm)	0.5
Wrist	Rolled cuff
Color	Black
Interior finish	Smooth
Exterior finish	Embossed texture
Size	7 8 9 10
Packaging	1 pair/bag - 6 pairs/carton



Cat. 2



4121X

ISO 13997:  
3.4 N (327 g)



CUT

## Handling Protection Gloves

### Ultrane 500

Grip and skin protection for oily environments.

- Oilproof, it repels oil penetration and reduce dermatitis.
- Grip and Proof coating ensures an excellent grip in oily environment . It also reduces muscle strain and boost productivity
- Excellent abrasion resistance due to the nitrile coating.
- Long lasting and cost effective glove.
- Attractive dark colored glove adapted to the industrial environments.

Ultrane	500
Material	Nitrile GRIP&PROOF coating
Length (cm)	23 - 28
Thickness (mm)	Light Weight
Wrist	Knitted wrist
Color	Black
Interior finish	Seamless textile support
Exterior finish	Ventilated back
Size	6 7 8 9 10 11
Packaging	1 pair/bag - 12 pairs/bag - 96 pairs/carton



Cat. 2



4121X

ISO 13997 :  
3.4 N (327 g)

## Handling Protection Gloves

### Ultrane 526

Grip assured, skin protected and unbeatable fingertip sensitivity in very oily environments.

- Oilproof, fully dipped, repels oil penetration and reduce dermatitis
- Grip and Proof coating ensures an excellent grip in very oily environment . It also reduces muscle strain and boosts productivity
- Excellent abrasion resistance due to the nitrile coating
- Unbeatable fingertip sensitivity.
- Long lasting and cost effective glove

Ultrane	526
Material	Nitrile GRIP&PROOF coating
Length (cm)	23 - 28
Thickness (mm)	Light Weight
Wrist	Knitted wrist
Color	Black
Interior finish	Seamless textile support
Exterior finish	Fully-coated
Size	7 8 9 10 11
Packaging	1 pair/bag - 12 pairs/bag - 96 pairs/carton



Cat. 2



4121X

## Handling Protection Gloves

### Ultrane 553

Unbeatable for fingertip precision in dirty environments

- Excellent abrasion resistance: longer-lasting
- Nitrile coating resistant to dirt particles
- Excellent tactile sensitivity and freedom of movement, due to the reduced thickness of the glove.

Ultrane	553
Material	Nitrile
Length (cm)	21-26 (depending on size)
Thickness (mm)	-
Wrist	Knitted wrist
Color	Black
Interior finish	Seamless textile support
Exterior finish	Ventilated back
Size	6 7 8 9 10
Packaging	1 pairs/bag - 10 pairs/bag - 100 pairs/carton



Cat. 2



4343B

ISO 13997 :  
5.3 N (540 g)



CUT

## Cut Protection Gloves

### Krytech 557

Standard protection for intricate handling in reasonably clean environments.

- Suitable for long-term wear: excellent abrasion resistance
- Excellent dexterity: anatomical shape.
- Ergonomic to reduce fatigue in the hand.
- A reinforced welt in nitrile for an improved durability for the most exposed areas.
- A long cuff for a better protection of the forearm.

Krytech	557 R LC
Material	Polyurethane
Length (cm)	26 - 31
Thickness (mm)	-
Wrist	Knitted wrist
Color	Grey
Interior finish	Seamless textile support from HDPE fibres
Exterior finish	-
Size	6 7 8 9 10 11
Packaging	1 pair/bag - 12 pairs/bag - 96 pairs/carton



## Cut Protection Gloves

### KryTech 580



- Cut, Grip and Skin Protection for oily environments.
- Cut and oilproof. It repels oil penetration, reduce dermatitis while ensuring you a cut protection.
  - Grip and Proof coating ensures an excellent grip in oily environments. It also reduces muscle fatigue and boost your productivity.
  - Excellent abrasion resistance due to nitrile coating.

Cat. 2



4342B  
ISO 13997:  
6 N (612 g)



CUT

KryTech	580
Material	Nitrile GRIP & PROOF coating
Length (cm)	23 - 28
Thickness (mm)	-
Wrist	Knitted wrist
Color	Black
Interior finish	Seamless textile support from HDPE fibres
Exterior finish	Ventilated back
Size	6 7 8 9 10 11
Packaging	1 pair/bag - 12 pairs/bag - 48 pairs/carton

## Cut Protection Gloves

### KryTech 582



- Special Grip&Proof nitrile coating provides better liquidproofness and grip in oily situations.
- Optimal cut resistance: level 5 (ANSI Cut 4).
  - Excellent abrasion resistance increases glove lifetime.
  - A visible indicator in blue textile to easily identify the cut-performance level in the workplace.
  - Washable until 5 cleaning cycles (see laundering and drying conditions).

Cat. 2



4X43D  
ISO 13997:  
18 N (1835 g)



CUT

KryTech	582
Material	Nitrile GRIP & PROOF coating
Length (cm)	23 - 28
Thickness (mm)	NS
Wrist	Knitted wrist
Color	Black
Interior finish	Seamless textile support from HDPE fibres
Exterior finish	Non-slip grip
Size	7 8 9 10 11
Packaging	1 pair/bag - 12 pairs/bag - 48 pairs/carton

## Cut Protection Gloves

### KryTech 832



Good protection for handling heavy and sharp metal parts in dry and slightly wet environments.

- Added comfort, due to the gloves anatomical shape and the flexibility of the material.

Good grip for picking up parts safely in oily environments, due to external leather layer

- Long service life even when faced with untrimmed metal
- Excellent thermal insulation of the hand.

Cat. 2



4X43E  
ISO 13997:  
24.3 N (2477 g)



X1XXXX CUT

KryTech	832
Material	-
Length (cm)	23 - 26
Thickness (mm)	Heavy weight
Wrist	Knitted wrist
Color	Grey
Interior finish	Seamless textile support from superior strength fibres
Exterior finish	Leather layer on palm with reinforced thumb/index
Size	8 9 10 11
Packaging	1 pair/bag - 12 pairs/box - 72 pairs/carton

## Cut Protection Gloves

### KryTech 836



Excellent cut protection and resistance to wear with optimal dexterity and comfort.

- Excellent cut resistance on all parts of the glove.
- Reinforced protection of the fore-arm thanks to its longer cuff.
- Good resistance to wear and good puncture resistance (barbs) due to leather palm..
- Reinforced crotch between thumb and forefinger.

Cat. 2



4X43D  
ISO 13997:  
19.8 N (2019 g)



X1XXXX CUT

KryTech	836
Material	-
Length (cm)	27 - 32
Thickness (mm)	-
Wrist	Knitted wrist
Color	Grey
Interior finish	Seamless textile support from HDPE fibres
Exterior finish	Leather layer on palm with reinforced thumb/index
Size	7 8 9 10 11
Packaging	1 pair/bag - 12 pairs/bag - 48 pairs/carton

## Cut Protection Gloves

### KryTech 395



Combined long lasting chemical protection and cut protection. Total hand protection, level 5 against cuts.

- Entirely liquid-proof, withstanding mechanical aggression.
- Proven long-lasting performance.
- Good grip for picking up wet and slippery objects safely.

Cat. 3



4X43D  
ISO 13997:  
14.6 N (1488 g)

Type B



JKOPT



X2XXXX CUT

KryTech	395
Material	Nitrile
Length (cm)	32
Thickness (mm)	Heavy weight
Wrist	Straight cuff
Color	Green
Interior finish	Textile support Mapa Technology
Exterior finish	-
Size	8 9 10
Packaging	1 pair/bag - 12 pairs/carton

## Cut Protection Gloves

### KryTech 586



High-performance protection for intricate handling in reasonably clean environments.

- Optimal cut resistance, level 5.
- Excellent dexterity due to the precise fit.
- Added comfort and flexibility.
- A visible indicator in blue textile to easily identify the cut-performance level in the workplace.
- Washable until 3 cleaning cycles (see laundering and drying conditions).

Cat. 2



4X43D  
ISO 13997:  
18.6 N (1896 g)



CUT

Krytech	586
Material	Polyurethane
Length (cm)	24 - 30
Thickness (mm)	Medium Weight
Wrist	Knitted wrist
Color	Blue
Interior finish	Seamless textile support from HDPE fibres
Exterior finish	Ventilated back
Size	6 7 8 9 10 11
Packaging	1 pair/bag - 12 pairs/bag - 48 pairs/carton

# Hand Protection

www.panindochina.com.vn

## Cut Protection Gloves



### 87811

- Synthetic leather palm enhances grip in dry and light oil applications while providing dexterity
- PU-reinforced thumb crotch, palm and fingers for extended glove life, enhanced comfort, increased abrasion resistance and added durability in a high-wear area
- Thermo Plastic Rubber (TPR) molded finger, thumb and back hand guards for maximum protection
- Synthetic 30 G fleece lined with waterproof insert
- Slip on cuff
- Hi-Vis coloring makes this product very easy to see

Cat. 2



3232P



CUT

R2	87811
Material	Synthetic Leather
Length (in)	31.5
Thickness (mm)	-
Wrist	-
Color	Synthetic Leather
Interior finish	-
Exterior finish	Spandex
Size	S-3XL
Packaging	72 Pair/Case



## Cut Protection Gloves

### C5PUD

- Cut resistant without sacrificing comfort or dexterity
- Polyurethane finish coated palm
- Breathable liner
- Form fitting for comfortable all day wear
- Colour coded cuff for size identification

Cat. 2



4X43D

C5PUD	
Material	Grey Engineered Composite 15 Gauge Seamless Liner
Length (cm)	23.5 - 28
Thickness (mm)	-
Wrist	Knitted wrist
Color	Grey
Interior finish	Grey Polyurethane
Exterior finish	-
Size	7 8 9 10 11 12
Packaging	12 pair/bag - 120 pairs/carton

## Cut Protection Sleeves



### Krytech 532

- Maximum comfort and practical protection
- An ultra thin thumb hole area provides better comfort and increased safety while maintaining dexterity and a velcro adjustable strap for secure fit
- Washable until 5 cleaning cycles (see laundering and drying conditions)
- OEKO-TEX® certified to guarantee the absolute protection of the health of the workers.

Cat. 2



334XB  
ISO 13997:  
5.3 N (540 g)



CUT

Krytech	532
Material	-
Length (cm)	18
Thickness (mm)	ANSI Cut Level 2
Wrist	-
Color	Grey
Interior finish	Seamless textile support from HDPE fibres
Exterior finish	-
Size	-
Packaging	6 pairs/bag - 72 pairs/carton



## Cut Protection Sleeves

### A5SLE35

- The Arax Cut 5 Sleeve is designed to be worn under Arax Cut 5 gloves to protect the arm & forearm from cuts & abrasions. • Arax Knit Technology with EN 388 Cut 5 Protection
- Contact heat resistant to 100°C
- Protects forearms from cuts and abrasions
- Quick and easy donning and doffing
- Anti static

Cat. 2



4X4XD



X1XXXX

Arax	A5SLE35
Material	High Performance Industrial Yarn Arax Cut 5 Thread
Length (cm)	35 cm
Thickness (mm)	EN388 Cut Level 5
Wrist	-
Color	Grey
Interior finish	Seamless textile support
Exterior finish	-
Size	-
Packaging	12 pairs/bag - 120 pairs/carton

## Thermal Protection Gloves



### Temp-Dex 720

- Dexterity and resistance to cuts for optimised thermal protection.
- Special nitrile Grip coating facilitates work in moderately oily environments.
- Knitted aramide fibres ensures protection from cuts.
- Comfort and insulation of the interior terry-cloth.
- Excellent abrasion resistance: superior durability.

Cat. 2



4343B  
ISO 13997:  
10.2 N (970 g)



X2XXXX CUT

Temp-Dex	720
Material	Nitrile
Length (cm)	23 - 28
Thickness (mm)	Med. Wt.
Wrist	Knitted wrist
Color	Orange
Interior finish	Knitted thermal protection
Exterior finish	Dots
Size	7 9 11
Packaging	1 pair/bag - 12 /bag - 72 pairs/carton



## Thermal Protection Gloves

### TempIce 700

- Stay dry when working in wet conditions
- Coating 5 times as durable than standard gloves on the market
- Excellent grip when handling wet parts
- Suitable for frozen, dry and some fatty foods use according to the French law of November 9th, 1994 and to the European Directive CEE 1935/2004
- Silicone free to prevent traces, defects on metal sheet and glass prior to painting
- Washable up to 5 times at 60°C without any alteration on performances\* allowing to extend glove lifespan, reduce costs



3222X  
ISO 13997:  
N (690g)



02X CUT

Temp-Ice	700
Material	Nitrile
Length (cm)	23 - 28
Thickness (mm)	-
Wrist	Knitted wrist
Color	Blue
Interior finish	Knitted thermal protection
Exterior finish	Dots
Size	7 9 11
Packaging	1 pair/bag - 12 /bag - 48 pairs/carton



## Leather Gloves

### CGL41B

- Finest quality cow grain leather
  - Generous leather thickness for extra protection
  - Supple feel for greater dexterity
  - Wing thumb, stitch-free palm for increased durability and hand feel
  - Sizes: S, M, L, XL, 2XL
- Standards:**  
Certified EN 388 3121.



## Leather Gloves

### CGL41N

- High quality grey cow grain leather
  - Wing thumb, stitch-free palm for increased durability
  - Colour coded cuff for size identification
  - Sizes: S, M, L, XL
- Standards:**  
Certified EN 388 3121.



## Leather Gloves

### PGL41TL

- 100gm 3M Thinsulate lining
  - Pig grain beige rigger glove
  - Dexterity and feel plus warmth
  - Wing thumb, stitch free palm
  - One Size Fits All
- Standards:**  
Certified EN 388 3111.

## Leather Gloves

### A260



- Made from high quality durable goat leather
- Breathable leather for use in mild and hot climates
- Elasticated cuffs for a secure fit
- Classic leather driver
- Leather palm greatly improves durability
- Durable leather

**Standards:**  
Certified to EN ISO 21420:2020, EN388:2016 +A1:2018 - 2132X, ANSI/ISEA 105: 2016 ABRASION Level

## Cut Protection Gloves

### AFYN



- Arax Knit Technology with EN388 Cut Level D
- Black nitrile foam dip for durability and comfort
- Form fitting design that emulate individual hand contour for the most comfortable fit
- Contact heat resistant to 100°C
- Anti-static, breathable liner
- Available sizes: 7, 8, 9, 10, 11, 12

**Standards:**  
Certified to AS/NZS 216.3 BMP No.668611, EN 388 4X43D

## Welders Gloves

### BRW16E



- High quality red cow split leather
- Kevlar stitched to withstand high temperatures for longer periods
- Lined and welted
- Reinforced palm to first finger for added durability
- 406mm (16 inches) long for forearm protection
- One size fits all

**Standards:**  
Certified to EN 388 4143, EN 407 41434X

## Welders Gloves

### TIGW13



- Excellent fit and feel for precision welding.
- Durable deerskin provides unmatched dexterity with lighter weight.
- Sewn with Kevlar thread for maximum seam strength.
- 340mm overall length with a 140mm cuff for added forearm protection.
- Available Sizes - L, XL.

**Standards:**  
Certified to EN 388 2121, EN 407 41224X

## Welders Gloves

### TIGWKEV



- Supple goatskin leather - durable and tough
- Lined with fine gauge Kevlar interlock knit for precise fit
- Excellent touch sensitivity and dexterity
- Available Sizes - M, L, XL

**Standards:**  
Certified to EN 388 2232, EN 407 413241

## Thermal Protection Gloves

### TGP



- Removable acrylic wool liner for extra warmth & excellent protection in cold weather applications.
- Soft PVC gives superior feel.
- Sand Grip provides superior gripping power in wet & dry conditions.
- Extended cuff for extra wrist protection.

**Standards:**  
Certified to EN 388 4131, EN 374-5, EN 511 12X

## Accessories for Gloves



### Gloves Clip

### Utility Guard

The Utility Guard glove clip features robust design as the Glove Guard clip but uses a belt clip instead of a small clamp to attach to the user. The belt clip is slipped over your belt, heavy waistband or pocket while the large clamp attaches to your gloves, towel or earmuff.



### Gloves Clip

### Handi Klip

Designed primarily for the firefighting industry, the new Handi Klip glove clip uses a ball and socket joint that has a higher breakaway point and holds up to the brief flash temperatures of a fire. With its oversized jaws and interlocking teeth it will hold even the largest pair of gloves.



### Gloves Clip

### Glove Guard

The Glove Guard glove clip is with the patented safety breakaway design. It weighs just 3/4 oz and measures 4.5" long and is made from an engineered grade material.



### Gloves Clip

### Custom Imprinting

Customize your Glove Guard, Handi Klip or Utility Guard clip with a custom imprint using your company name, logo, phone number, web address or even your own safety slogan. Imprints can be up to two colors and printed on both sides.

Custom imprints available for all plastic clips. Contact us for more information.



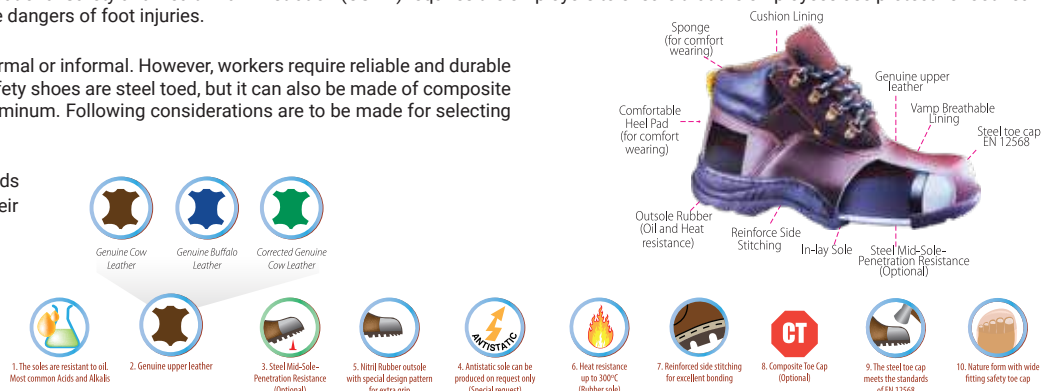
# Foot Protection

www.panindochina.com.vn

A pair of safety shoes (also known as safety boots) is personal protective equipment (PPE) for foot protection at workplaces. It prevents from getting foot injuries due to slippery surface, heavy falling or rolling objects, sharp piercing edges, pinch points, rotary machinery, hot objects, loops of ropes under tension, splinters, electricity, chemicals or even bad weather etc. Occupational Safety and Health Administration (OSHA) requires the employers to ensure that the employees use protective footwear while working in the areas where there are dangers of foot injuries.

Safety shoes come in many styles both formal or informal. However, workers require reliable and durable work shoes for their safety. Traditional safety shoes are steel toed, but it can also be made of composite materials such as thermoplastics and aluminum. Following considerations are to be made for selecting right type of safety shoes for the workers:

- Work environment and associated hazards
- Material used in safety shoes and their effectiveness to resistant hazards
- Water, heat and cold resistance
- Electric resistance
- Puncture and cut resistance



**M93304-11**

Safety Shoes, Lace Up

- Full grain leather.
- Steel toecap and steel midsole.
- Nitrile rubber outsole.
- Size: 4-5-6-7-8-9-10-11-12.
- Origin: Malaysia.
- Steel toe cap, Steel Mid-Plate, impact resistant, slip resistant, acid and alkali resistant, oil resistant, antistatic, waterproof.



**M93308-11**

Safety Ankle Boots, Lace Up

- Full grain leather.
- Steel toecap and steel midsole.
- Nitrile rubber outsole.
- Size: 4-5-6-7-8-9-10-11-12.
- Origin: Malaysia.
- Steel toe cap, Steel Mid-Plate, impact resistant, slip resistant, acid and alkali resistant, oil resistant, antistatic, waterproof.



**M98801-11**

Safety Shoes, Ez Slip on

- Full grain leather.
- Steel toecap and steel midsole.
- Nitrile rubber outsole.
- Size: 4-5-6-7-8-9-10-11-12.
- Origin: Malaysia.
- Steel toe cap, Steel Mid-Plate, impact resistant, slip resistant, acid and alkali resistant, oil resistant, antistatic, waterproof.



**M2-8838-11**

Safety Ankle Boots, Lace Up

- Suede leather collar padding.
- Steel toecap and steel midsole.
- Nitrile rubber outsole.
- Waterproof (with M2-8838-11-WPL).
- Size: 4-5-6-7-8-9-10-11-12.
- Origin: Malaysia.
- Steel toe cap, Steel Mid-Plate, impact resistant, slip resistant, acid and alkali resistant, oil resistant, antistatic.



**M2-8839-11**

Safety Shoes, Lace Up

- Suede leather collar padding.
- Steel toecap and steel midsole.
- Nitrile rubber outsole.
- Waterproof (with M2-8839-11-WPL).
- Kích cỡ: 4-5-6-7-8-9-10-11-12.
- Origin: Malaysia.
- Steel toe cap, Steel Mid-Plate, impact resistant, slip resistant, acid and alkali resistant, oil resistant, antistatic.



**M93320-11**

Safety Ankle Boots, EZ Slip on 6"

- Safety ankle boot.
- Full grain leather.
- Steel toecap and steel midsole.
- Nitrile rubber outsole.
- Size: 4-5-6-7-8-9-10-11-12.
- Origin: Malaysia.
- Steel toe cap, Steel Mid-Plate, impact resistant, slip resistant, acid and alkali resistant, oil resistant, antistatic, waterproof.



**M3200-11**

Safety Shoes, Ez Slip on

- Full grain leather.
- Steel toecap and steel midsole.
- Nitrile rubber outsole.
- Size: 3-4-5-6.
- Origin: Malaysia.
- Steel toe cap, Steel Mid-Plate, impact resistant, slip resistant, acid and alkali resistant, oil resistant, antistatic, waterproof.



**M3300-11**

Safety Shoes, Lace Up

- Full grain leather.
- Steel toecap and steel midsole.
- Nitrile rubber outsole.
- Size: 3-4-5-6.
- Origin: Malaysia.
- Steel toe cap, Steel Mid-Plate, impact resistant, slip resistant, acid and alkali resistant, oil resistant, antistatic, waterproof.



**M-93309-22**

Safety Gumboots

- Pull on.
- Full grain leather.
- Steel toecap and steel midsole.
- Nitrile rubber outsole.
- Size: 4-5-6-7-8-9-10-11-12.
- Origin: Malaysia.
- Steel toe cap, Steel Mid-Plate, impact resistant, slip resistant, acid and alkali resistant, oil resistant, antistatic.

## SERIES 110



ChemDefend® 110 range of protective coveralls utilise the latest SMMS nonwoven technology, whereby two layers of meltblown polypropylene barrier films are sandwiched between structural spunbonded polypropylene outer layers. The polypropylene is spun to a fine dtex to create a high fibre density. This delivers a strong breathable material with excellent protection against particulate hazards. For the whole suit the Type 5 Total Inward Leakage figure TIL = 3.71 %.

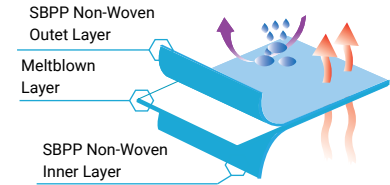
**Fabric Description:** SMMS (Spunbond, Meltblown:Meltblown Spunbond).

**Fabric Weight:** 50 gsm.

**Seam Type:** Stitched - a strong tight seam with high particle barrier properties.

**Colour Options:** White, Red, Blue and Orange.

### Accessories



### Suitable Applications:

- Dust and particle protection
- Asbestos removal and handling
- Handling and mixing of powders
- General maintenance
- Construction
- Wood and Metal processing
- Touch up paint spraying
- Handling and mixing of pharmaceutical materials
- Fibre glass and resin handling, application and mixing

### Protection Levels & Additional Properties



## SERIES 200



The ChemDefend® 200 range of protective coveralls are constructed from a microporous polyethylene barrier film, glued to a spunbonded polypropylene structural layer. This provides a strong and breathable material, with excellent repellency of liquid chemicals. The material is coated with an electrostatic dissipative layer.

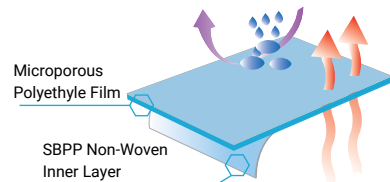
**Fabric Description:** Microporous Polyethylene (PE) Laminate.

**Fabric Weight:** 50 gsm.

**Seam Type:** The garment has both stitched and bound seams, to combine strength, maximum liquid and particle protection and cost effectiveness. Models also available with all seams fully bound and sealed.

**Colour Options:** White.

### Accessories



### Suitable Applications:

- Production environments where dust and low level liquid and chemical spray protection is needed
- Pharmaceutical industry
- Automotive industry
- General paint spraying
- Boat and ship building
- Windmill turbine production
- Handling and mixing of resin compounds
- Mining
- Low hazard chemical cleaning

### Protection Levels & Additional Properties



## SERIES 250



The ChemDefend® 250 range of protective coveralls are constructed from a microporous polyethylene barrier film glued to the latest generation of spunbond polypropylene (SBPP). The PP fibres are spun to a high density of fine fibres per square metre, creating a lightweight and strong, but breathable material. The barrier and repellency to liquid chemicals and biological agents is excellent. This material is coated with an electrostatic dissipative layer.

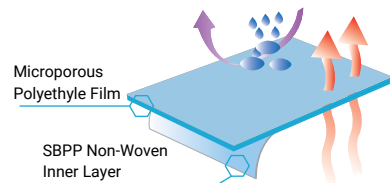
**Fabric Description:** Microporous Polyethylene (PE) Laminate with SMMS back panel.

**Fabric Weight:** 60 gsm.

**Seam Type:** Bound - which delivers maximum strength and liquid and particle barrier properties.

**Colour Options:** White.

### Accessories



### Suitable Applications:

- Agriculture- pesticide mixing and handling
- Chemical industry
- Pharmaceutical industry
- Cleanroom
- Electronic sector
- Nuclear industry
- Paint spraying within automotive and shipbuilding industries
- Veterinary and livestock handling
- Cleaning and remediation
- Sewage industry

### Protection Levels & Additional Properties



## SERIES 255



The ChemDefend® 255 range of protective coveralls are constructed from the latest generation of microporous polyethylene barrier film, glued to a lightweight but strong, spunbonded polypropylene structural layer. This delivers a durable and breathable material, with excellent barrier and repellency of liquid chemicals in the front of the coverall. The material is coated with an electrostatic dissipative layer.

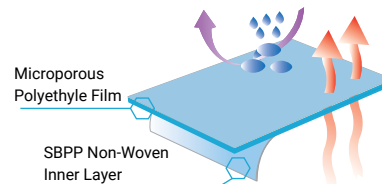
**Fabric Description:** Microporous Polyethylene (PE) Laminate with SMMS back panel.

**Fabric Weight:** 60 gsm.

**Seam Type:** Bound - which delivers maximum strength and liquid and particle barrier properties.

**Colour Options:** White.

### Accessories



### Suitable Applications:

- Agriculture - pesticide mixing and handling
- Veterinary services
- Pharmaceutical mixing and handling
- Paint spraying
- General cleaning and clean up operations

### Protection Levels & Additional Properties



## SERIES 310



The ChemDefend® 310 series of garments are constructed from a unique nonwoven composite which has been engineered to offer a high level of barrier to the permeation of inorganic chemicals and infective agents. The material provides a good level of comfort, strength and durability. A polyethylene barrier layer is combined with a meltblown polypropylene film, bonded onto a structural spunbonded polypropylene base layer. This construction provides an excellent barrier to liquids under high pressure.

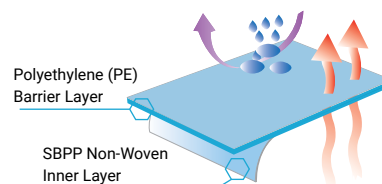
**Fabric Description:** Polyethylene Barrier material applied to a meltblown and spunbonded polypropylene structural layer.

**Fabric Weight:** 70 gsm.

**Seam Type:** Internal stitching which is overlapped the fabric and seam deliver equivalent barrier properties.

**Colour Options:** Yellow and White.

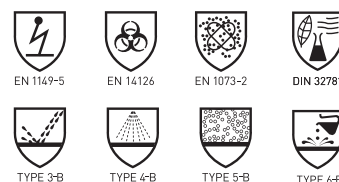
### Accessories



### Suitable Applications:

- Industrial Cleaning
- General Sanitation
- Sewage and Biohazards
- Petrochemical

### Protection Levels & Additional Properties



## SERIES 410



The ChemDefend® 410 series of garments are constructed from a unique nonwoven composite which has been engineered to offer a high level of barrier to the permeation of organic, inorganic chemicals and infective agents. The material provides a very high level of strength and durability combined with good levels of drape. A polyethylene and EVOH barrier composite is bonded onto a structural spunbonded polypropylene base layer. The product is made from a highly visible orange composite.

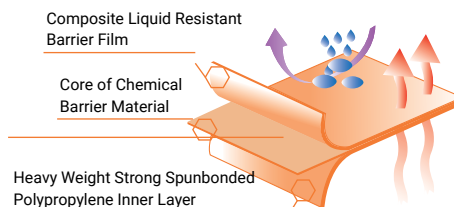
**Fabric Description:** Polyethylene and EVOH composite barrier material applied to a spunbonded polypropylene structural layer.

**Fabric Weight:** 155 gsm.

**Seam Type:** Internal stitching which is overlapped the fabric and seam deliver equivalent barrier properties.

**Colour Options:** Orange.

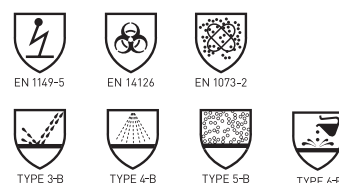
### Accessories



### Suitable Applications:

- Industrial Cleaning
- General Sanitation
- Sewage and Biohazards
- First Response and Fire Services
- Oil and Petrochemical
- Chemical and Pharmaceutical

### Protection Levels & Additional Properties





## GTB ET LAMINATE VITON

The fully encapsulating GTB is a Type 1A - ET reusable gas tight suit covering both the wearer and breathing apparatus. Manufactured in our new Laminate Viton® material, the suit is lightweight and provides advanced chemical protection. The laminate Viton® material consists of a polyester fabric coated one side with orange fireproof DuPont™ Viton® and one side with grey thermoplastic with an insert barrier film

### Applications:



- Encapsulating design for Self Contained Breathing Apparatus (SCBA) worn inside the suit
- Gas-tight zip running from side of head to lower thigh, covered by double zip flap with hook & loop fastener
- Protection against liquid & gaseous chemicals (Type 1), infective agents and chemical warfare agents
- Inward Leakage tested to EN 1073-2:2002, Class 3 with a Nominal Protection Factor (NPF) >9090
- Gas-tight locking cuff system for changing gloves
- Dual glove system consisting of a Kemblok™ chemical barrier inner glove bonded to an outer neoprene glove for mechanical protection
- Two exhalation valves maintain a comfortable working pressure inside the suit
- Rigid chemically resistant double layer visor permitting clear undistorted vision and a wide field of view
- Bat-wing sleeves allow wearer to remove their hand from the glove to check gauges and other equipment inside the suit
- Adjustable internal support belt
- Choice of fixed or detachable chemical safety boots or sock feet
- Fifteen year shelf-life, with internal pressure test required annually or after each use

### Certification:



## GTL GAS-TIGHT SUIT

The fully encapsulating GTB is a Type 1A - ET reusable gas tight suit covering both the wearer and breathing apparatus. Manufactured in our new Laminate Viton® material, the suit is lightweight and provides advanced chemical protection. The laminate Viton® material consists of a polyester fabric coated one side with orange fireproof DuPont™ Viton® and one side with grey thermoplastic with an insert barrier film

### Applications:



- Encapsulating design for Self Contained Breathing Apparatus (SCBA) worn inside the suit
- Gas-tight zip running from side of head to lower thigh, covered by zip flap with hook & loop fastener
- Protection against liquid & gaseous chemicals (Type 1), infective agents and chemical warfare agents
- Inward Leakage tested to EN 1073-2:2002, Class 3 with a Nominal Protection Factor (NPF) >9090
- Kemblok™ gloves welded to sleeves, with elasticated oversleeve
- Neoprene outer gloves permanently attached to the Kemblok™ inner glove, for mechanical protection
- Integral sock feet with outer splash guard legs
- Two exhalation valves maintain a comfortable working pressure inside the suit
- Large chemically resistant flexible visor for wide field of view
- Bat-wing sleeves allow wearer to remove their hand from the glove to check gauges and other equipment inside the suit
- Adjustable internal support belt
- For Type 1A (ET) the suit must be worn with F3A certified safety footwear (e.g. Hazmax™ FPA)
- Seven year maintenance free shelf-life, maximum shelf life 10 years

### Certification:



## GLS 300A SUIT

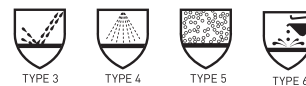
The single-use GLS 300A suit in Chemprotex™ 300 is a fully encapsulating gas-tight chemical protection suit covering both the wearer and the breathing apparatus. The suit combines the benefits of a lightweight high-performance chemical barrier fabric with a gas-tight construction to method 2 of ISO 17491-1. It incorporates permanently attached antistatic chemical gloves, sock feet and a lightweight gas-tight zip.

### Applications:



- Large laminated chemically protective anti-mist visor giving clear undistorted vision
- KCL Butoject chemically protective anti-static glove permanently attached to the suit material
- Twin exhalation valves to side of hood to ensure that the suit maintains a comfortable working pressure
- Lightweight gas-tight zip fitted to rear of suit, closing at the top and covered with a double storm flap with hook and loop fastener
- Integral sock feet with outer splash guard legs
- Must be worn with ESD footwear (e.g. Hazmax™ ESD boots) to ensure a conductive path to ground when used in explosive atmospheres
- Ten year shelf-life

### Certification:



## GLS 300B SUIT

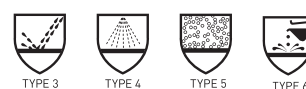
The GLS 300B suit in Chemprotex™ 300 is a single use gas-tight chemical protection suit with a patented integral facemask seal designed for use with breathing apparatus worn outside the suit, a facemask and filter or airline respirator. The suit combines the benefits of a lightweight high-performance chemical barrier fabric with a gas-tight construction to method 2 of ISO 17491-1. It incorporates permanently attached antistatic chemical gloves, sock feet and a lightweight gas-tight zip.

### Applications:



- Integral hood with patented facemask seal providing a type 3 liquid jet seal with an outer chemical barrier fabric
- KCL Butoject chemically protective anti-static glove permanently attached to the suit material
- Jet tested for use with the following facemasks: MSA™ Auer 3S, Draeger™ Panorama Nova
- Lightweight gas-tight zip fitted across the shoulders in rear of suit, with double external cover flaps with a hook and loop fastener
- Integral sock feet with outer splash guard legs
- Must be worn with ESD footwear (e.g. Hazmax™ ESD boots) to ensure a conductive path to ground when used in explosive atmospheres
- Ten year shelf-life

### Certification:



## GLS 300C SUIT

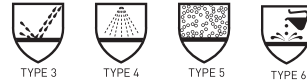
The GLS 300C suit in Chemprotex™ 300 is a single use air-fed gas-tight chemical protection suit for use with breathable air supplied from an external compressed air source providing positive pressure. The suit combines the benefits of a lightweight high-performance chemical barrier fabric with a gas-tight construction to method 2 of ISO 17491-1. It incorporates permanently attached antistatic chemical gloves, sock feet and a lightweight gas-tight zip.

### Applications:



- Semi-rigid laminated chemically resistant visor giving clear undistorted vision
- Air distribution system in the hood with an air permeable collar to provide cooling air through the suit, making the wearer more comfortable and better able to focus on tasks
- Lightweight gas-tight zip fitted across the chest covered by double external storm flaps with hook and loop fastener
- External air control valve and hose (supplied separately) are easily detached during doffing procedure for decontamination and reuse
- Twin exhalation valves to side of hood to ensure that the suit maintains a comfortable working pressure
- The hood design provides high protection without the need for a tight-fitting face piece
- KCL Butoject chemically protective anti-static glove permanently attached to the suit material
- Integral sock feet with outer splash guard legs
- Must be worn with ESD footwear (e.g. Hazmax™ ESD boots) to ensure a conductive path to ground when used in explosive atmospheres
- Ten year shelf-life

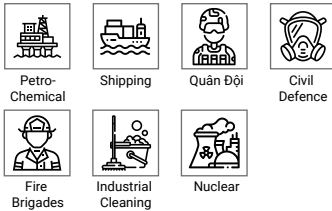
### Certification:



## SC1 SPLASH SUIT

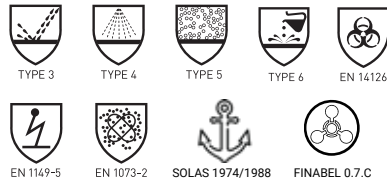
The single-use SC1 chemical protective suit is manufactured from our high-performance Chemprotex™ 300 chemical barrier fabric. The liquid-tight (Type 3) design protects against contamination from liquid chemical splashes and can be used with breathing apparatus worn outside the suit or with a full facemask and filter. The SC1 is intended for use in areas that are not immediately dangerous to life or health.

### Applications:



- Integral hood with neoprene rubber face grommet to seal around the wearer's face mask
- Rear-entry design with 91cm (36") Nylon zip fitted across the shoulders, with double external zip flaps and self-adhesive tape closure
- Protection against liquid chemicals (Type 3), infective agents and chemical warfare agents
- Chemically protective Kemblok™ laminated glove welded to the suit material
- Supplied with separate neoprene outer gloves for mechanical protection
- Integral sock feet with outer splash guard legs
- Bright Blue colour as standard. Olive Green and Navy Blue available to special order (minimum quantity applies)
- For use with the customers own safety boots
- Ten year shelf-life

### Certification:



## SC1 REUSABLE SPLASH SUIT

The Respirix SC1 is a reusable Type 3 splash contamination suit designed for Self Contained Breathing Apparatus (SCBA) worn externally.

The Reusable SC1 is designed to be laundered in commercial washing machines (see user instructions for laundering guidelines), ensuring a lower overall lifetime cost of ownership than the equivalent number of single use garments.

### Applications:



- Hood with integral neoprene face seal that is both shaped and flexible and provides a tight seal around the face mask, to prevent liquid penetration
- Rear horizontal 91cm (36") zip across the shoulders of the garment with zip flaps secured by a hook & loop fastener to prevent liquid ingress
- Double layer of material at the rear to prevent wear caused by the breathing apparatus rubbing against the suit
- Safety gloves compatible with the material of the suit, fitted with a liquid-tight locking cuff
- Optional reinforcement on knees and/or elbows
- Elasticated inner legs with stirrups with elasticated outer legs (other zip, cuff and leg termination options available on request)
- Designed to be worn with chemical safety footwear (e.g. Hazmax™ boots)

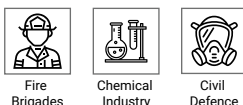
### Certification:



## SC4 SPLASH SUIT

The SC4 in Chemprotex™ 300 is a single-use fully encapsulating Type 3 (liquid tight) suit covering both the wearer and the self contained breathing apparatus (SCBA). The rear-entry design incorporates integral Kemblok™ chemical barrier gloves and sock feet with splash guard outer legs.

### Applications:



- Large laminated anti-mist visor giving clear undistorted vision
- Chemically protective Kemblok™ glove permanently attached (welded) to the suit material
- Single exhalation valve to side of hood to ensure that the suit maintains a comfortable working pressure
- Fine tooth zip fitted at rear of suit, closing at the bottom and covered with a single storm flap secured with double sided tape
- Integral sock feet with outer splash guard legs
- For use with chemical safety boots (e.g. Hazmax™)
- Ten year shelf-life

### Certification:



## ONE-PIECE SUITS

Reusable Type 3 and 4 chemically protective one-piece suits

### Applications:



- Reusable chemical protection one-piece suits are available in a wide range of fabrics to provide the best possible protection in numerous industries.
- Suits feature nylon coarse tooth zips and a choice of hook and loop or press stud fastening zip flaps. Zip can be central or from thigh to collar.
- Our reusable workwear is designed to be laundered in commercial washing machines (see user instructions for laundering guidelines), ensuring a lower overall lifetime cost of ownership than the equivalent number of single-use garments.

### Certification:



## SPLASHMASTER COVERALL

A lightweight, Type 3 liquid-tight, limited re-use hooded coverall, designed for use with a full face mask and filter or appropriate facial and respiratory protection. Manufactured from Chemprotex™ 300 the suit is highly chemically resistant and features a comfortable spun-bonded lining inside.

### Applications:



- Integral hood with elastic face seal for a comfortable fit around a full or half mask respirator
- Adjustable throat flap for improved seal around the base of the facemask
- Nylon zip fitted at the front with double external zip flaps with hook and loop fastening
- Protection against liquid chemicals (Type 3), infective agents and chemical warfare agents (Respirex recommend taping around the facemask, at the wrists and ankles)
- Elasticated wrists with thumb loop
- Elasticated ankles
- For use with customers own chemical safety boots
- Ten year shelf-life

### Certification:



## HAZMAX™ BOOTS

A chemically protective anti-static boot with an integral steel toe cap and vulcanized rubber sole.

- Manufactured from our proprietary Hazmax compound, providing significantly better chemical resistance than PVC or PU materials
- Chemically resistant boot certified to EN 13832-3:2018 (footwear protecting against chemicals)
- Conforms to EN 943-1 (Chemical protective clothing) and certified to this standard as part of an appropriate Respirex gas-tight suit
- Antistatic - Electrical resistance meets the requirements of EN ISO 20345:2011 A (0.1MΩ to 1,000MΩ)
- Integral 200 Joule epoxy coated steel toecap and stainless steel penetration resistant mid-sole
- Heat resistant sole EN 20345:2011 HRO, 60 seconds at 300°C
- Cold insulation to EN ISO 20345:2011 CI



- Fuel and oil resistant upper and sole
- Vulcanized rubber sole for improved slip resistance - 30% better than a conventional safety boot sole
- Durable, cut-resistant vulcanised rubber sole, significantly extends working life, even in harsh terrain
- Cleated outsole for maximum grip in wet and oily conditions (SRC)
- Energy absorbing tunnel system in heel to EN 20345:2011 E
- Ergonomic cushioned insole (removable & machine washable) for greater wearer comfort
- Seamless construction
- Kick-off lug
- Adjustable height
- Knitted nylon lining
- CE marked on the shaft with date and year of manufacture
- REACH Compliant
- Machine washable at up to 40°C
- Shelf life of over 10 years

**Certification:** EN 13832-3: 2018 A,K,O,P,Q,R,T  
EN ISO 20345:2011 S5 SRC HRO CI FO  
PPE Regulation (EU) 2016/425

## HAZMAX™ FPA BOOTS

A heat resistant version of the Hazmax™ chemical boot conforming to the EN15090 fire boot standard for flame resistance, radiant heat and heat insulation of the sole.

- Manufactured from our proprietary Hazmax compound, providing significantly better chemical resistance than PVC or PU materials
- Chemically resistant boot certified to EN 13832-3:2018 (footwear protecting against chemicals)
- Conforms to EN 943-2 (Chemical protective clothing) and certified to this standard as part of an appropriate Respirex gas-tight suit
- Conforms to EN 15090:2012 F3A Fire fighter boot standard
- Heat insulation of the sole EN 15090:2012 (HI3): The sole withstands 40 minutes at 250°C with an increase in internal temperature of less than 21°C after 10 minutes
- Antistatic - Electrical resistance meets the requirements of EN ISO 20345:2011 A (0.1MΩ to 1,000MΩ)



- Integral 200 Joule epoxy coated steel toecap and stainless steel penetration resistant mid-sole
- Heat resistant sole EN 20345:2012 HRO, 60 seconds at 300°C
- Cold insulation to EN ISO 20345:2012 CI
- Fuel and oil resistant upper and sole
- Vulcanized rubber sole for improved slip resistance - 30% better than a conventional safety boot sole
- Durable, cut-resistant vulcanised rubber sole, significantly extends working life, even in harsh terrain
- Cleated outsole for maximum grip in wet and oily conditions (SRC)
- Energy absorbing tunnel system in heel to EN 20345:2011 E
- Ergonomic cushioned insole (removable & machine washable) for greater wearer comfort
- Seamless construction
- Kick-off lug
- Adjustable height
- Knitted nylon lining
- CE marked on the shaft with date and year of manufacture
- REACH Compliant
- Machine washable at up to 40°C
- Shelf life of over 10 years

**Certification:** EN 13832-3: 2018 A,K,O,P,Q,R,T  
EN 15090:2012, Class 2 - Type F3A (HI3, CI, SRC)  
EN ISO 20345:2011 S5 SRC HI HRO CI FO  
PPE Regulation (EU) 2016/425



## Aluminised Jacket and Trousers



### Jacket:

#### Description:

- Jacket with concealed velcro fastener at side
- Low or high collar made from water-repellent grain leather
- Vents under the arms
- Option of velcro-fastening cuffs
- Kevlar® thread seams
- Fabric: 500 gsm para-aramid

### Trousers:

#### Description:

- Trousers with concealed press-stud fly
- Two hand openings under flap
- Kevlar® thread seams
- Fabric: 500 gsm para-aramid

## Aluminised Hood

- Hood with integrated adjustable helmet
- Shoulder-cover collar
- Side air vents
- Interchangeable screen, small or large models
- Polycarbonate or Triplex glass, colourless or gold



## Helmet Cover With Visor

- Combination of the helmet cover and aluminised visor above
- Creates a light, airy aluminised hood with raisable front, which protects the whole of the head
- No shoulder-cover.



## Aluminised Overboots

- Gaiters with holding strap under the sole
- Height: 36 cm
- Suitable for floors up to 400°C
- Standard:**
- Certificated: ISO 11612



## Helmet Cover

- Made from aluminised para-aramid fibre
- Can be easily used with most helmets



## Helmet Gaiters

- Gaiters with holding strap under the sole
- Height: 36 cm
- Standard:**
- Certificated: ISO 11612



## HTR Solit Leather Glove

- HTR split leather glove with reinforced palm and thumb
- Aluminised top of the hand and oversleeves
- Wool internal lining, stitched with Kevlar® thread
- Possible variant with oversleeve fastening with three velcro strips
- Length: 40 cm
- Standards:**
- Certificated: EN 388 4144, EN 407 4124X4



Product	Lining	Standards	Part Number
Jacket	Unlined	A1 B1 C3 D3 E3	E2200 - 100
Trousers	Proban®-treated cotton lining		E2300 - 100
Aluminised Hood	-	-	E5110 - 100
Helmet Cover	-	-	E5600 - 000
Helmet Cover With Visor	-	A1 B1 C3 D3 E3	E1000 - 102
Aluminised Gaiters	Velcro fastening	A1 B1 C3 D3 E3	E6200 - 000
Aluminised Overboots	Insulating soles	A1 B1 C4 D3 E3 F1	E6600 - 000
	Simplified soles		E6600 - 009
HTR Solit Leather Glove	Aluminium back	EN388 4144, EN407 4124X4	E4554 - 804
	Aluminium back	EN388 4223, EN407 42X4XX	E4054 - 804

## Reflective Vest



### V81622

Lightweight, comfortable Class 2 vests feature 55% modacrylic/45% cotton blend material, flame resistant hook and loop closure, and 2" flame resistant silver reflective tape.

- ANSI/ISEA 107 Type R Class 2 compliant vest for high visibility and flame resistance.
- Fluorescent yellow-green background material for excellent daytime visibility.
- ASTM F1506 compliant for flame resistance and electric arc related thermal hazards.
- Arc Rating 6.8 cal/cm<sup>2</sup>.
- Conforms to NFPA 70E - HRC 1.
- 6.5 oz, 55% Modacrylic/45% Cotton blend - solid.
- 2 inch FR silver reflective tape reflects light for 360° nighttime conspicuity.
- FR hook & loop closure.
- D-ring access for fall protection
- 2 interior pockets

## Reflective Vest



### V81832

Lightweight, comfortable Class 2 vests feature 55% modacrylic/45% cotton blend material, flame resistant hook and loop closure, and 2" flame resistant silver reflective tape.

- ANSI/ISEA 107 Type R Class 2 compliant vest for high visibility and flame resistance.
- Fluorescent yellow-green background material for excellent daytime visibility.
- ASTM F1506 compliant for flame resistance and electric arc related thermal hazards.
- Arc Rating 6.8 cal/cm<sup>2</sup>.
- Conforms to NFPA 70E - HRC 1.
- 6.5 oz, 55% Modacrylic/45% Cotton blend - solid.
- 2 inch FR silver reflective tape reflects light for 360° nighttime conspicuity.
- FR hook & loop closure.
- 5 exterior pockets.
- 3 interior pockets.
- 2 microphone tabs.

## Reflective Vest



Lightweight, comfortable Class 2 vests feature 55% modacrylic/45% cotton blend material, flame resistant hook and loop closure, and 2" flame resistant silver reflective tape.

- ANSI/ISEA 107 Type R Class 2 compliant vest for high visibility and flame resistance.
- ASTM F1506 compliant for flame resistance and electric arc related thermal hazards.
- Arc Rating 6.8 cal/cm<sup>2</sup>.
- Conforms to NFPA 70E - HRC 1.
- 6.5 oz, 55% Modacrylic/45% Cotton blend - solid.
- 2 inch FR silver reflective tape reflects light for 360° nighttime conspicuity.
- FR hook & loop closure.
- Breakaway FR hook & loop at shoulders, sides, and front.
- 2 interior pockets.

## Reflective Vest



### RVMO/RVMY - RVPY

Panindochina reflective vest.

- 100% polyester, fluorescent orange/ yellow.
- High reflective fabric (100 polyester) 5 cm width with gery color.
- Available with Mesh and Polyester material.
- Size: S - 2XL.



## Welders Sleeves



### WS

- Red chrome leather with buckle and webbing strap for quick and easy fitting and removal
- 630mm length gives complete arm protection
- One Size Fits All
- Kevlar stitched to increase resistance to heat, cuts and abrasion
- Sold and packaged individually

## Welders Jacket



### WJ

- High quality red cow split leather
- Kevlar® stitched to increase resistance to heat, cuts and abrasion
- Staggered double studs to ensure a secure fit
- Moderate heat protection
- Sizes: M, L, XL, 2XL, 3XL
- Sold and Packaged Individually

## Chemical Resistant Apron



### A41008

- Green Apron - 38" x 48".
- The SafetyFlex® flame resistant specialty PVC on polyester apron combines tough protection and comfortable fit.
- Made to resist industrial acids, chemicals, and caustics.
- The heavy exterior coating offers excellent permeation performance and liquid splash protection.
- Equipped with one strap around the waist and one around the neck with a buckle for a secure and adjustable fit.
- 48 inch total length, 38 inch total width. 17 mil total thickness.
- PVC chemical resistant apron..

## Chemical Resistant Apron



### WA108

- Chrome leather
- Adjustable neck and waist webbed straps with quick release buckles
- New and improved webbing straps and plastic buckle for easier adjustment
- Buckle and leather strap for quick and easy fitting and removal
- One size fits all
- Sold and packaged individually

## Rain Suit

### SE6385



A high quality, durable, windproof and waterproof jacket, enhance safety at night and in low visibility situations.

#### Rain Jacket:

- With detachable hood and reflective tape
- Storm front with metal snaps

#### Waist Trouser:

- With reflective tapes, no fly in front, non-conductive
- Size: S to 4XL
- Compliance: EN471 CLASS 3

## Rain Suit

### SE6332



PVC rain suit

- Made of havy duty PVC coated on polyester, heat sealed seams offer 100% waterproof.
- Jacket with hood and trousers.
- Three layers for more protection.
- Thickness: 0.3 - 0.35 mm.
- Colour: Yellow.
- Sizes: S - 3XL.

# Clothing Protection

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## Low GI Concentrates

Workers who drink when they are thirsty typically replace only half the fluid lost through sweat.

Conversely, workers who engage in Program Drinking maintain optimal hydration levels and do not become dehydrated. Program Drinking involves drinking small amounts of fluid frequently. Ensure you have access to fluid at regular intervals - the THORZT Hydration Backpack keeps hydration on person at all times.

- 2 litre bladder - Color: Black | Part number: BP25B
- 3 litre bladder - Color: Hi-Vis Yellow | Part number: BP2Y
- 3 litre bladder - Color: Hi-Vis Orange | Part number: BP25O



### Accessories:



BPRT  
Neoprene insulated  
hydration tube



BPB  
Replacement backpack  
bladder 3L

## Cooling Vest

Part number: ECVHVV XS | S | M | L | XL | 2XL | 3XL

### Features & Benefits:

- Simple V-neck with zipper closure; works for a wide range of people and uses
- Can provide 5-10 hours of cooling relief per soaking
- Lightweight, easy to activate, and durable
- Comfortable quilted nylon outer with HyperKewl Plus fabric inner, water repellent nylon liner, and black poly-cotton trim
- Machine Washable up to 60°C



### Active:

1. Simply submerge the vest in water for 1-2 minutes, allowing the HyperKewl fabric to absorb the water.
2. Gently squeeze out any excess water, wipe dry and the vest is ready to wear. The vest will remain activated for 5-10 hours and can be re-hydrated by repeating these simple steps.

## Cooling Cap

Part number: CCB | CCRB

### Features & Benefits:

- Adjustable ties at the nape of the neck
- Ideal for wearing under a helmet, hard hat or alone
- When wet, stays cool while you are active
- Absorbent when dry, perfect for absorbing moisture and sweat
- Use for hours at a time, simply re-wet to reactivate
- Lightweight and durable
- Machine washable - cooling ability is not affected, reuse again and again



### Active:

1. Submerge the THORZT Cooling Scarf in any temperature water and let it soak for 1 to 3 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Snap to activate.

## Chill Towel

Part number: CSB

The THORZT Chill Towel stays cool for hours with no refrigeration or cold water needed - just 'Wet, Wring and Wave'. It's made from PVA material which can retain moisture for periods far longer than conventional towels, and contains a special plant extract that (once activated) turns moisture cold regardless of it's initial temperature.

### Features & Benefits:

- Promotes Thermoregulation
- Reduces Heat Stress risks
- Comforts and cools the skin
- Looks as cool as it feels
- Machine washable



### Active:

1. Submerge the THORZT Chill Towel in any temperature water and let it soak for 1 to 3 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Take hold of two corners, and wave it up and down for about 10 seconds.
4. Wrap it around your neck or other warm point on the skin for instant cooling relief.

## Chilly Vests

Part number: CV | CVO

### Features & Benefits:

- Promotes thermoregulation
  - Reduces heat stress risks
  - Comforts and cools the skin
  - Looks as cool as it feels
- Inner Fabric  
MICRO KNIT - 100% Australian Merino Wool for temperature and odour control  
Naturally fire retardant, ant-static and easy care
- Outer Fabric  
COOLMESH - This 100% Australian made high performance sport fabric uses a Moisture Management system and Multi-Filament Technology for comfort and durability
- Cooling Crystals  
Non-Toxic High Performance Polyacrylate/ Polyalcohol Copolymer



### Active:

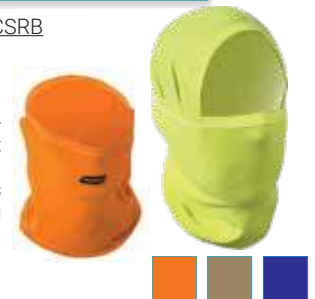
1. Vest comes in crystal form. Initially soak in water for 20-30 minutes so crystals in pockets swell into gel form (Pockets should be firm but not bursting).
2. When removing from water, grab top and bottom of vest and gently twist in opposite directions to remove excess water and hang to dry. Vest is now activated.

## Cooling Scarf

Part number: CSHVO | CSHVV | CSK | CSRB

### Features & Benefits:

- Microfiber Evaporative Cooling
- UPF 50 chemical-free production
- Lightweight stretch fabric with non-chafing-gelastic ends for comfortable cooling that will stay put
- Multi-purpose: protects from sun, defends against dust and debris, and keeps you cool at the same time
- Machine washable - reuse again and again



### Active:

1. Submerge the THORZT Cooling Scarf in any temperature water and let it soak for 1 to 3 minutes.
2. Wring out the excess water, leaving it nice and moist.
3. Snap to activate.
4. Multiple ways to wear:



## Cooling Ties

Part number: CTB | CTRB

Cooling Ties are designed to assist with Heat Stress prevention by promoting the body's thermoregulation.

Cooler skin contributes to a number of physiological advantages:

- Less output is directed toward the skin
- A lower core body temperature

### Features & Benefits:

- Promotes Thermoregulation
- Reduces Heat Stress risks
- Comforts and cools the skin
- Looks as cool as it feels

### Active:

Submerge your Cooling Tie in cold water for 15-20 minutes then wrap it around the neck, head or wrist (ideally at a pulse point) to immediately feel the cooling effect. You can also place the tie in the fridge or freezer overnight, then store in your esky/cooler on site for use later in the work day.

Cooling ties can be re-used as needed throughout the day by re-submerging in cold water for several minutes. However, it should be stressed that whilst this will deliver a refreshing feel, the main benefits of the ties come from the prolonged evaporative cooling that occurs over long periods.

Once the polymer crystals have fully absorbed the water, the cooling effects can last for hours, although the exact period varies depending on the climatic conditions.







## Single Decontamination Shower

Lightweight and quick to deploy, the inflatable Decontamination Unit range from MFC International allow for rapid response.

- Lightweight and easily portable scenarios
- Will be set up within a matter of minutes and will stay standing without continuous inflation
- Raised floor panels prevent contact with contaminated shower wash off which is collected in a PVC chemically resistant sump
- Sleeves for pumped extraction of contaminated water are included as standard
- Chemical resistant PVC gloves are added onto the sides of the shower to allow a second person to help wash down the contaminated person
- Can be used on hard or soft standing and guy ropes are provided for securing in position
- Minimal training, servicing and maintenance costs



## Four Person Decontamination Unit

Lightweight and quick to deploy, the inflatable Four Person Decontamination Unit from MFC Survival allow for rapid response in a decontamination situation.

- Lightweight and easily portable
- Will be set up within a matter of minutes and will stay standing without continuous inflation
- Optional raised floor panels prevent contact with contaminated shower wash off which is collected in a chemically resistant sump
- Sleeves for pumped extraction of contaminated water are included as standard
- Can be used on hard or soft standing and guy ropes are provided for securing in position
- Minimal training, servicing and maintenance costs



## Mass Decontamination Units

Lightweight and quick to deploy, the inflatable Mass Decontamination Unit from MFC Survival allow for rapid response in a decontamination situation.

- Lightweight and easily portable scenarios
- Will be set up within a matter of minutes and will stay standing without continuous inflation
- The Mass decontamination unit is internally partitioned into three lanes with pre and post decon changing rooms
- Optional raised floor panels prevent contact with contaminated shower wash off which is collected in a chemically resistant sump
- Sleeves for pumped extraction of contaminated water are included as standard
- Can be used on hard or soft standing and guy ropes are provided for securing in position
- Minimal training, servicing and maintenance costs

### Welding Blanket

#### Kanox 3

- Model:
  - Kanox-3A (Length 0.75 M x Width 1.0 M x Thickness 3 mm).
  - Kanox-3D (Length 1.50 M x Width 2.0 M x Thickness 3 mm).
- Material : 100% PAN ( Pre-Oxidized Acrylonitrile ).
- Weight: 400 g/m<sup>2</sup> ± 5%.
- Type : Non-Woven felt type.
- Flame Testing: Up to 900° above, within 3 minutes. No Shrinkage, No Melting, No Burning.
- Caution: Store away from water.



### Welding Blanket

#### Kanox 6

- Kanox® NW6 - 100% PAN ( Pre-Oxidized Acrylonitrile ) fabric Non-Woven felt, with brass grommets (diameter 17mm) along 4 opposite sides at 18" intervals.
- Model:
  - KANOX-6A (Width 1.5 M x Length 3.0 M x Thickness 6.0 mm)).
  - KANOX-6B (Width 1.5 M x Length 3.0 M x Thickness 6.0 mm).
- Weight: 900 g/m<sup>2</sup> ± 5%.
- Flame Testing: Up to 900° above. Non- Shrinkage, Non-Melting, Non-Burning within 3 minutes.
- Caution: Store away from water.

### Welding Blanket

#### WB

- Heavy duty chrome leather for added durability
- Kevlar stitched to increase resistance to heat, cuts and abrasion
- Metal eyelets on outer edges for ease of securing
- Generous size 1800mm x 1800mm
- Moderate heat protection
- Sold and packaged individually
- Qty/Cartron - 5.



### Welding Blanket

#### WB33

- Heavy duty chrome leather for added durability
- Kevlar stitched to increase resistance to heat, cuts and abrasion
- Metal eyelets on outer edges for ease of securing
- Generous size 3000mm x 3000mm
- Moderate heat protection
- Sold and packaged individually
- Qty/Cartron - 5.





# Fall Protection Equipment





Effective fall protection is more than one product – it's a team of products working together.

FALL PROTECTION IS AS EASY AS A, B, C & D

The first four letters of the alphabet help us understand the components of fall protection.

A is for anchorage, B is for body support, C is the connector that joins the two. D stands for the descent and rescue plan that must be on-site for each job.



## A ANCHORAGE CONNECTORS

offer secure attachment to your location.

Anchorage connectors, as defined by OSHA, are secure points of attachment for lifelines, lanyards or deceleration devices and are designed to hold fast under the forces generated during a fall. Anchorage connectors vary by industry, job, type of installation and structure.

- An anchorage connector may be a beam anchor, hook anchor, cross-arm strap, D-bolt, tripod, davit or other secure device that serves as a point of attachment.
- Anchorages and anchorage connectors must be independent and capable of supporting 5,000 lbs. per worker attached, or they may be designed, installed and used under the supervision of a qualified person as part of a complete personal fall arrest system that maintains a safety factor of at least two times maximum arresting force. They must also be located high enough for a worker to avoid contact with a lower level should a fall occur.

## B BODY SUPPORT

provides a personal connection point and distributes fall force across the entire body.

Full Body Harnesses are used to distribute fall arrest forces across the shoulders, upper thighs, chest, and pelvis.

They feature a center back fall arrest attachment (dorsal D-ring) for clipping to the fall arrest connector and may have other D-rings for use in worker positioning, travel restraint, retrieval or ladder climbing. They are the only form of bodywear acceptable for fall arrest and should be selected based on the job task as well as the work environment.

Body Belts circle the waist and are used for worker positioning and travel restraint. While they are used in conjunction with a full body harness, they must NEVER be used for personal fall arrest.

## C CONNECTORS

provide the lifeline between body harness and anchorage connector.

Connectors attach the worker's harness to the anchorage connector. Types will vary depending on whether the worker needs connecting for either of the following:

- Personal Fall Arrest

This connector is often a lanyard equipped with an energy-absorbing element to reduce the force transmitted to the user's body in the event of a fall.

- Positioning and Travel Restriction

This connector is usually a simple lanyard intended to reduce the potential for entering a fall hazard zone or for free falling from a distance of less than 2 feet.

## D DESCENT AND RESCUE DEVICES

retrieve an injured worker and lower him/her to the ground.

Users must have a rescue plan that either provides the prompt rescue of employees in the event of a fall or ensures that employees are able to rescue themselves.

Panindochina's harness part numbers vary based on product brand, sizing, and buckle configuration. Reference the infographics below to determine your ideal harness size and buckle preference.



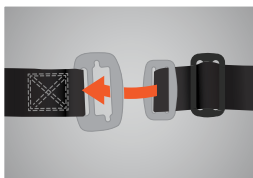
## D-ring locations



## D-Ring Applications

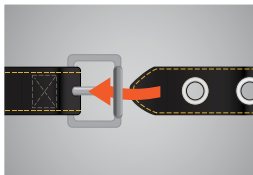
	Dorsal	Sternal	Lateral	Shoulder	Ventral
Arrest	Yes	No	No	No	No
Restraint	Yes	Yes	Yes	Yes	No
Rescue	Yes	Yes	No	Yes	No
Work positioning	No	No	Yes	No	No
Climbing	No	Yes	No	No	No
Rope Access	No	No	No	No	Yes

## Buckle Styles



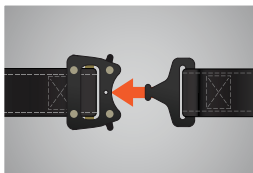
### Pass-Through

Connect by passing the male plate through the female plate to create a secure connection.



### Tongue Buckle

Adjust by pulling a strap through the buckle and locking it in place by connecting the tongue through a grommet on the strap.



### Quick-Connect

Connect by clicking the male end into the female end, and disconnect by pushing the release buttons on each side of the buckle.





# Full Body Harness

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## Comfort padding

Select models feature cushioning on shoulders, back and legs for increased comfort and additional security in a fall.

## Dorsal D-ring

Make easier connections with the conveniently adjustable D-ring, which is built from high-quality alloy steel for strength and durability.

## Lanyard keepers

Help prevent accidental entanglements by "parking" lanyards here when not in use.

## Built-in impact indicator

Simplifies inspection for prior fall events.

## Spring-loaded torso buckles

Provide fast and easy adjustment on the job.

## Lightweight hardware

Reduces weight and fatigue. Increases comfort and productivity.

## Body belt and hip pad

Add lumbar support, positioning capabilities and tool carrying capabilities.

## Multiple connection points

Enhance versatility, allowing harness to be used for many different jobsite applications.

## Tongue-buckle legs

Simple, fast and easy adjustment. An excellent choice when more than one worker uses a harness.



Dorsal



Lateral



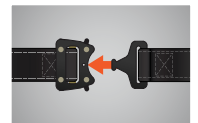
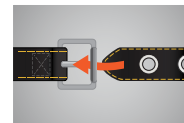
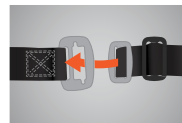
Shoulder



Ventral



Sternal





## Harness Standards



### Fall arrest harness in accordance with EN 361

For protection in areas where there is a danger of falling and for catching in the event of falls (e.g. when working on towers, masts, overhangs on buildings).

### Work position harness in accordance with EN 358

To keep the user in the working position and hold him back in areas where there is a danger of falling. The holding eyelets are normally on the side in the area of the hips.

### Rescue Harness/Loop

Harnesses and loops for rescuing people. Different designs for various rescue situations.

### Fall-arrest harness for use in climbing protection in combination with EN 353-1

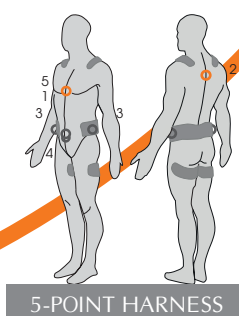
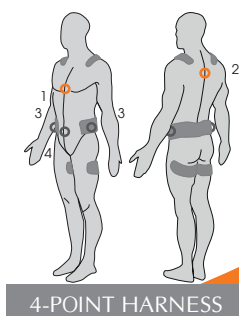
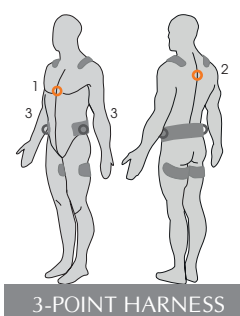
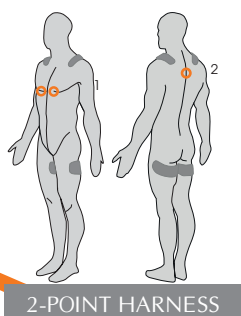
For protection in areas where there is a danger of falling and for catching in the event of falls in combination with following devices in fixed guides – climbing protection – (e.g. during work on towers, masts). The climbing protection eyelets are normally on the waist belt, centrally in front of the body.

### Sitting Harness in accordance with EN 813

For holding in sitting working position when hanging freely. Sitting harness eyelets are, if possible, in the area of the body's centre of gravity.

**User weight according to EN in combination**

	+	 SKYSAFE PRO	:	 max. 140 kg
		 oder or		
	+	 PEANUT	:	 max. 135 kg
		 oder or		



# Full Body Harness

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> **G-0902** <

Dorsal attachment point, sternal attachment point, pass-through buckle legs.



> **G-0030** <

Dorsal attachment point, sternal attachment point, pass-through buckle legs.




> **G-0030-C** <

Dorsal attachment point, sternal attachment point, pass-through buckle legs.




> **G-0110-C** <

Dorsal attachment point, sternal attachment point, pass-through buckle legs.




> **G-1130** <

Dorsal attachment point, sternal attachment point, quick-connect buckles.




> **G-1131** <

Dorsal attachment point, sternal attachment point, shoulder attachment point, quick-connect buckles.




> **G-1135** <

Dorsal attachment point, sternal attachment point, shoulder attachment point, quick-connect buckles.




> **G-0904** <

Dorsal attachment point, sternal attachment point, shoulder attachment point, quick-connect buckles.



> **G-0030-HRS** <

Dorsal attachment point, sternal attachment point, lateral attachment point, pass-through buckle legs.



> **G-0131** <

Dorsal attachment point, sternal attachment point, shoulder attachment point, quick-connect buckles.



> **G-1170** <

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.



> **G-1171** <

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.



**G-1172**

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.



**G-1131-M**

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.



**G-1131-ST**

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.



**G-1155**

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.




**G-0908**

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, pass-through buckle legs.



**G-1161**

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.



**G-1132**

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.



**G-1132-W**

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.



**G-1132-WS**

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.



**G-1132-WS-ST**

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.



**G-1133**

Dorsal attachment point, sternal attachment point, lateral attachment point, ventral attachment point, quick-connect buckles.



**G-1156**

Dorsal attachment point, sternal attachment point, pole strap attachment point, restraint travelling attachment point, climbing protection, seat attachment point.





**G-1112**

Dorsal attachment point, sternal attachment point, pole strap attachment point, restraint travelling attachment point, climbing protection, seat attachment point



**G-1143-01**

Dorsal attachment point, sternal attachment point, pole strap attachment point, restraint travelling attachment point, climbing protection, seat attachment point



**G-1153**

Dorsal attachment point, sternal attachment point, pole strap attachment point, restraint travelling attachment point, climbing protection, seat attachment point



**G-1157**

Dorsal attachment point, sternal attachment point, pole strap attachment point, restraint travelling attachment point, climbing protection, seat attachment point

## HARNES ACCESSORIES

### SUSPENSION RELIEF STRAPS

Suspension Relief Straps should be ordered with each harness without further thinking: they serve to alleviate the potentially lethal suspension trauma from a fall and therefore could save your life, since applying these loops give you a substantial amount of precious minutes extra-time before a rescue arrives! On top of that, these Suspension Relief Straps have no expiration period and can be reused. Take them with you each and every time you use your harness. Better safe than sorry!



- Part Number: ACS-0189
- Material: Polyamide, Steel
- Weight: 0.13 kg

### X-PAD



Made from mesh fabric and foam. Makes putting on the harness easier. Increases wearing comfort. For every harness.

- Part Number: ACS-0095
- Size: Unisize
- Weight: 0.4 kg

### SKYPARK PAD

With hook and loop fastener strips for easy attachment to harness.

- Part Number: ACS-0131-K
- Weight: 0.05 kg



### PYRIT



The PYRIT is a specially developed harness for via ferrata and high altitude mountaineering. A harness for climbing on both horizontal and vertical sections.

- Extremely lightweight, small packing dimensions
- Easy to put on and take off even with shoes, ski, crampons
- Double-pass buckle: opens completely, don't loosen up during walk
- Fidlock buckle on the leg loops: easy to put on and take off even while wearing shoes, crampons, skis
- Two gear loops

GSC-0155-XXS/S | GSC-0155-S/M | GSC-0155-L/XXL

### SEAT TEC

The SEAT TEC is a robust and adjustable positioning seat developed for suspended working. Its broad and padded seat ensures maximum comfort and excellent stability.

- Part Number: G-0208
- Size: Unisize
- Material: Polyester, Polyamide, Aluminium



### RESC B

- Part Number: G-1042-B
- Max Service Life: 6-8 years
- Size: Unisize
- Weight: 0.7 kg
- Material: Polyester
- Webbing Material: Polyester
- Standards: EN 1498-B:2006



### RESC B-HARNES

- Part Number: G-1045
- Max Service Life: 6-8 years
- Size: Unisize
- Weight: 0.4 kg
- Material: Polyester, Steel
- Webbing Material: Polyester
- Standards: ANSI Z359.4:2007, EN 1498-B



### BASALT FA SPORT



The Basalt is a fully adjustable, multi-purpose addition to our harness collection. Ice climbing, via ferratas, alpine routes, sport climbing or trad climbing - the Basalt is the right choice:

- Four adjustable buckles for an individual and tailored fit
- Chalk bag loop
- Four gear loops
- Ice screw clip attachments
- Comfort Shield Technology

GSC-0147-XS/M | GSC-0147-M/XL

# Choosing a lanyard

Look for quality in these features when selecting a lanyard

## 1 Webbing

Webbing must be strong enough to endure rough use and exposure to sunlight and other elements, without tearing or fraying. Nomex®/Kevlar® with fibre webbing should be used for applications such as welding or arc flash hazards. Webbing may also be coated with polyurethane for protection against grease, oil and grime. Cable lanyards offer extra durability and are ideal if you're working in abrasive or high-heat environments.

## 2 Impact indicators

Impact indicators let you see if an energy absorber has been involved in a fall. Once an energy absorber has been deployed, the lanyard must be removed from service immediately and destroyed.

## 3 Connector/Hook

Snap Hooks are popular because they allow one-handed use and won't pinch your thumbs or fingers. Lanyards can also be fitted with larger hooks or carabiners, for connection to larger anchorages.

## 4 Length

The standard lanyard length is 6 ft. (1.8 m), but both shorter and longer lanyards are available. A lanyard should be long enough to be user-friendly, but kept as short as possible to minimize the free fall distance.



## 5 Energy absorber

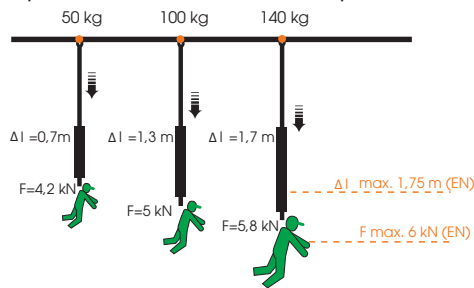
Lanyards used as part of a personal fall arrest system must contain an energy absorbing unit that limits fall arrest forces during a fall to less than 1,800 lbs. (8 kN). Most designs keep forces below 900 lbs. (4 kN) for added safety. Energy absorbers come in pack or tubular styles to meet your preference.

# Lanyards and Work Positioning Ropes

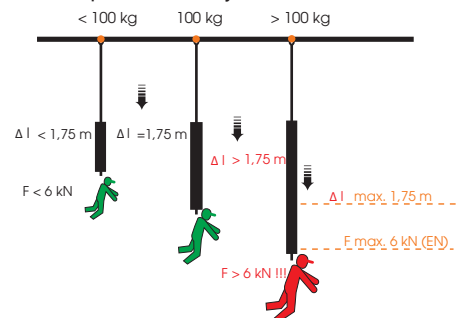
Revolutionary, patented energy absorber with a large weight range from 50 kg to 140 kg that always withstands a maximum impact of less than 6 kN at a maximum absorber length of 1.75 m. The final impact resistance of 22 kN throughout the system, including absorber, before AND after a fall is exceptional as well.

Therefore, the SKYSAFE PRO can be used in combination with any of our safety harnesses for a user weight of up to 140 kg. SKYSAFE PRO also meets the most relevant international standards in a SINGLE product. Available in four versions with different carabiner combinations: I-rope, Y-rope, I-rope tieback, Y-rope tie-back.

Simplified and accelerated becomes possible through integrated rescue loops that can be suspended directly into a rescue device.



EN Common elastic shock absorber devices are only designed to dampen weight below 100 kg at under 6 kN and use a high dampening force in ANY case of weight.



EN in the case of weight exceeding 100 kg of all of the theoretically possible force is absorbed. After an initial peak, the weight drops to the end stop and 6 kN are exceeded.

# Fall Factor

This image shows a range of possible fall scenarios:

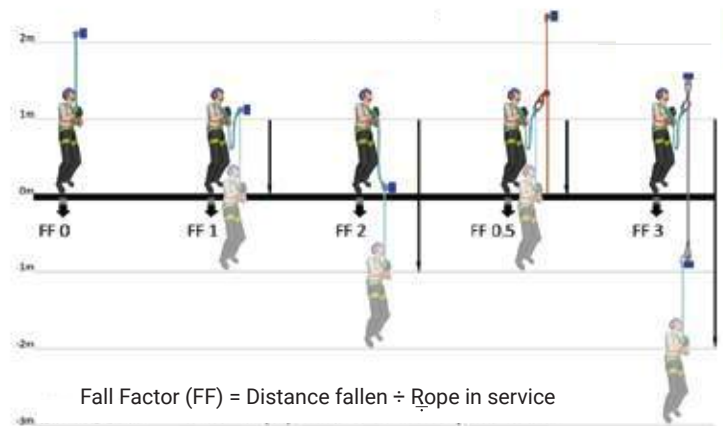
The 1m lanyard is tight to an overhead anchor thus no fall is possible and this is effectively FF0.

The ends of the lanyard are attached to the harness and an anchor at the same height. The operator can fall 1m on a 1m lanyard so this is FF1.

Now the 1m lanyard is anchored down at foot level and thus a 2m fall is possible. This is FF2.

This time the 1m lanyard is attached to separate rope which runs another 1m straight up to an overhead anchor. Now there are 2m of rope in the system to absorb the impact of the 1m fall so this becomes FF0.5.

This final situation is unusual but sees the lanyard clipped to a vertical cable. Now the operator can fall 3m on their 1m lanyard which gives FF3. This would be a very dangerous fall.



Fall Factor (FF) = Distance fallen ÷ Rope in service

## Lanyard options

### Internal Shock



Shock absorbing functionality incorporated into entire length of lanyard.

### External Shock



Shock absorbing functionality incorporated into integral external shock pack.

### Non-Shock



No shock absorbing functionality.

### Adjustable



Adjust to fit length required by job.

### Tie-Back



For tying around compatible structural anchor.

### Tie-Off



For workers to move horizontally from one area to another while being continuously attached.

### Work Positioning



Used in work positioning applications.

### Extension



## Hook types



One-hand operation makes snap hooks the most popular in the industry.

You can even operate them with your gloves on. Open and close without getting your fingers in the way!

All lanyards feature 16kN rated gates, meeting the rigorous ANSI Z359 standard.

### Lanyard hook options

#### FS 51 ST Hook

18 mm gate opening.  
20kN gate strength.

Material: Steel.



#### FS 90 ALU Hook

60 mm gate opening.  
22 kN gate strength

Material: Aluminium.



#### FS 90 ST Rebar Hook

50 mm gate opening.  
23 kN gate strength.

Material: Steel.



#### FS 90 ST ANSI Hook

60 mm gate opening.  
50 kN gate strength.

Material: Steel.



#### FS 92 Hook

90 mm gate opening -  
23kN gate strength.

Material: Steel.



#### FS 64 ALU Lock Hook

64 mm gate opening.  
28 kN gate strength

Material: Aluminium.



#### ATTACK Hook

25 mm gate opening.  
36 kN gate strength.

Material: Aluminium.



#### WIB IND ANSI Hook

30 mm gate opening.  
16kN gate strength.

Material: Steel.



#### SNAP HOOK 23kN

22 mm gate opening -  
23 kN gate strength.

Material: Steel.



#### KOBRA AL TRI Carabiner

22 mm gate opening.  
45 kN gate strength.

Material: Aluminium.



#### KOBRA TRI Carabiner

22 mm gate opening.  
45 kN gate strength.

Material: Steel.



#### STAK TRI Carabiner

22 mm gate opening.  
28 kN gate strength.

Material: Aluminium.





Lanyards are split into 3 distinct types, each with a specific purpose: shock absorbing lanyards (with absorber), restraint lanyards (no absorber), and work positioning lanyards.

### Shock Absorbing Lanyards

These lanyards are for use in situations where a user is exposed to a potential risk of fall. Whether they are made of rope or of webbing, whether they are adjustable or not, shock absorbing lanyards incorporate a shock absorbing system to ensure forces are limited in a fall to under 6 kN.

### Restraint Lanyards

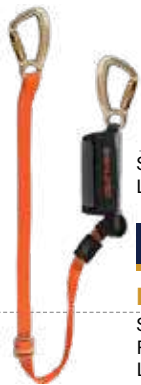
A connecting lanyard must only be used for restraining purposes.

In no case should the user be able to manoeuvre in an area where there is a risk of falling. The restraint system is precisely defined for each place where it will be used.

### Work Positioning Lanyards

A work positioning lanyard when used in conjunction with a belt/harness with a belt allows the user to work in comfort, whilst keeping both hands free. Normally a work position system would be used in conjunction with a fall arrest system.

## Single-Leg Lanyards



### L-AUS-0583

Single-leg with Polyester web, with KOBRA TRI carabiner  
Length-adjustable from 1.2 to 1.8 m.

#### SKYSAFE PRO ADJUSTABLE I

### L-AUS-0641

Single-leg with Polyester web, with KOBRA TRI carabiner and FS 90 ST ANSI Hook.  
Length-adjustable from 1.2 to 1.8 m.



### L-AUS-0005-KOB

Single-leg with Polyamide web, with ATTACK Hook.  
Length 0.3 m.

#### BFD SHOCK PACK

### L-AUS-0005-AT

Single-leg with Polyamide web, with KOBRA TRI carabiner.  
Length 0.3 m.



### L-0571-1,8

Single-leg with Polyester web, floating D-ring for KOBRA TRI carabiner and FS 90 ST ANSI Hook.  
Length 1.8 m.

#### SKYSAFE PRO TIE BACK

### L-0571-1

Single-leg with Polyester web, floating D-ring for KOBRA TRI carabiner and FS 90 ST ANSI Hook.  
Length 1.0 m.

### L-0575-1

Single-leg with Polyester web, floating D-ring for KOBRA AL TRI carabiner and FS 64 ALU Hook.  
Length 1.0 m.

### L-0575-1,8

Single-leg with Polyester web, floating D-ring for KOBRA AL TRI carabiner and FS 64 ALU Hook.  
Length 1.8 m.



### L-AUS-0589-1,8

Single-leg with Polyester web, with KOBRA TRI carabiner and FS 64 ALU Hook.  
Length 1.8 m.

#### SKYSAFE PRO FLEX

### L-AUS-0588-1,8

Single-leg with Polyester web, with KOBRA TRI carabiner.  
Length 1.8 m.

### L-AUS-0590-1,8

Single-leg with Polyester web, with SNAP HOOK 23kN.  
Length 1.8 m.

### L-AUS-0569-1,8

Single-leg with Polyester web, with KOBRA TRI carabiner and FS 90 ST ANSI Hook.  
Length 1.8 m.



## L-AUS-0700-1,8

Single-leg with Polyester and Polyamide web, with SNAP HOOK 23 kN Hook.  
Length-adjustable from 1.2 to 1.8 m.

### BFD ADJUSTABLE I



## L-AUS-0713-1,8

Single-leg with Polyester and Polyamide web, with SNAP HOOK 23 kN Hook and FS 90 ST Hook.  
Length-adjustable from 1.2 to 1.8 m.

## L-AUS-0701-1,8

Single-leg with Polyester and Polyamide web, with SNAP HOOK 23 kN Hook and FS 90 ST ANSI Hook.  
Length-adjustable from 1.2 to 1.8 m.

## L-AUS-0702-1,8

Single-leg with Polyester and Polyamide web, with SNAP HOOK 23 kN Hook and FS 64 ALU Hook.  
Length-adjustable from 1.2 to 1.8 m.

## L-AUS-0703-1,8

Single-leg with Polyester and Polyamide web, with KOBRA TRI carabiner.  
Length-adjustable from 1.2 to 1.8 m.

## L-AUS-0704-1,8

Single-leg with Polyester and Polyamide web, with KOBRA TRI carabiner and FS 90 ST ANSI Hook.  
Length-adjustable from 1.2 to 1.8 m.

## L-AUS-0543-1,5

Single-leg with Polyester and Polyamide web, with SNAP HOOK 23 kN Hook and FS 90 ST Hook.  
Length 1.5 m.

### BFD FLEX



## L-AUS-0543-2

Single-leg with Polyester and Polyamide web, with SNAP HOOK 23 kN Hook and FS 90 ST Hook.  
Length 2.0 m.

## L-AUS-0403-2

Single-leg with Polyester and Polyamide web, with SNAP HOOK 23 kN Hook.  
Length 2.0 m.

## L-AUS-0078-2

Single-leg with Polyamide web, with KOBRA TRI carabiner.  
Length 2.0 m.

### BFD SK12

## L-AUS-0089-2

Single-leg with Polyamide web, with SNAP HOOK 23 kN.  
Length 2.0 m.



## Twin-Leg Lanyards

## L-AUS-0715-1,8

Twin-leg with Polyester web, with STAK TRI carabiner and FS 90 ST Hook.  
Length 1.8 m.

### SKYSAFE PRO FLEX Y



## L-AUS-0562-1,8

Twin-leg with Polyester web, with STAK TRI carabiner and FS 92 Hook.  
Length 1.8 m.

## L-AUS-0563-1,8

Twin-leg with Polyester web, with STAK TRI carabiner and FS 90 ST ANSI Hook.  
Length 1.8 m.

## L-AUS-0593-1,8

Twin-leg with Polyester web, with SNAP HOOK 23 kN and FS 90 ST ANSI Hook.  
Length 1.8 m.

## L-AUS-0594-1,8

Twin-leg with Polyester web, with SNAP HOOK 23 kN and FS 64 ALU Hook.  
Length 1.8 m.

## L-AUS-0595-1,8

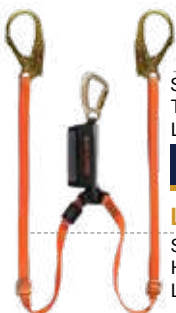
Twin-leg with Polyester web, with KOBRA TRI carabiner and FS 64 ALU Hook.  
Length 1.8 m.



## L-AUS-0642

Single-leg with Polyester and Polyamide web, with KOBRA TRI carabiner and FS 90 ST ANSI Hook.  
Length-adjustable from 1.2 to 1.8 m.

### SKYSAFE PRO ADJUSTABLE Y



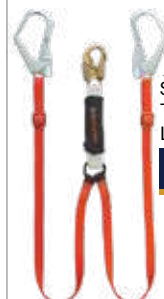
## L-AUS-0709-1,8

Single-leg with Polyester and Polyamide web, with SNAP HOOK 23 kN Hook and FS 90 ST ANSI Hook.  
Length-adjustable from 1.2 to 1.8 m.

## L-AUS-0711-1,8

Single-leg with Polyester and Polyamide web, with KOBRA TRI carabiner and FS 90 ST ANSI Hook.  
Length-adjustable from 1.2 to 1.8 m.

### BFD ADJUSTABLE Y







## L-AUS-0199-1,5

Twin-leg with Polyamide web, with SNAP HOOK 23 kN Hook and FS 110 ALU Hook.  
Length 1.5 m.

### BFD Y SK12

## L-AUS-0667-2

Twin-leg with Polyamide web, with SNAP HOOK 23 kN Hook and FS 90 ST ANSI Hook.  
Length 2.0 m.

## L-AUS-0582-1,5

Twin-leg with Polyester and Polyamide web, with SNAP HOOK 23 kN Hook and FS 90 Hook.  
Length 1.5 m.

### BFD Y FLEX

## L-AUS-0582-2

Twin-leg with Polyester and Polyamide web, with SNAP HOOK 23 kN Hook and FS 90 Hook.  
Length 2.0 m.



## Work Positioning Ropes



## L-0699-1,5

Adjustable rope positioning lanyard with rope adjuster and ATTACK Hook on one end and carabiner on the other.  
Maximum tensile force 24 kN. Length 1.5 m.

### SET LORY PRO

## L-0699-2

Adjustable rope positioning lanyard with rope adjuster and ATTACK Hook on one end and carabiner on the other.  
Maximum tensile force 33 kN. Length 2 m.

## L-0695-1,5

Adjustable rope positioning lanyard with rope adjuster and FS64 ALU Hook on one end and carabiner on the other.  
Maximum tensile force 41 kN. Length 1.5 m.

## L-0695-2

Adjustable rope positioning lanyard with rope adjuster and FS64 ALU Hook on one end and carabiner on the other.  
Maximum tensile force 25 kN. Length 2.0 m.



## L-0030-2

Adjustable rope positioning lanyard with rope adjuster, with ATTACK Hook on one end and carabiner on the other.  
Length 2.0 m.

### ERGOGRIP SK

## L-0031-2

Adjustable rope positioning lanyard with rope adjuster, with FS 51 Hook on one end and carabiner on the other.  
Length 2.0 m.

## L-AUS-0031-S-2

Adjustable rope positioning lanyard with rope adjuster, with FS 91 Hook on one end and carabiner on the other.  
Length 2.0 m.

## L-AUS-0030-S-2

Adjustable rope positioning lanyard with rope adjuster, with ATTACK Hook on one end and carabiner on the other.  
Length 2.0 m.

## L-AUS-0714-2

Adjustable rope positioning lanyard with rope adjuster, with ATTACK Hook on one end and carabiner on the other.  
Length 2.0 m.

## I-AUS-0368-1,8

Adjustable rope positioning lanyard with rope adjuster, with FS 64 AL Hook on one end and carabiner on the other.  
Length 1.8 m.





# Self-Retracting Lifelines

www.panindochina.com.vn

## 1 Connector

Simplifies connection to anchor point (use Carabiner, Hook or Sling).

## 2 Top anchor/Handle

Helps prevent lifeline twisting and reduces wear on web lifeline.

## 3 Impact resistant case

Thermoplastic housing is lightweight, compact and durable.

## 4 Lifeline

The lifeline can be stainless steel/ galvanized steel or webbing.

## 5 Indicator

Designed to aware if the fall happens.

## 6 Hook

Self-locking snap hook.



## Hook Types



## How to choose the right SRL

### 1. Anchor location

Not all SRLs are the same. SRLs designed for anchoring at foot-level are different than those meant for overhead anchorage.

### 2. Lifeline material

Galvanized and stainless steel increase durability and dependability, while web is lighter for personal use.

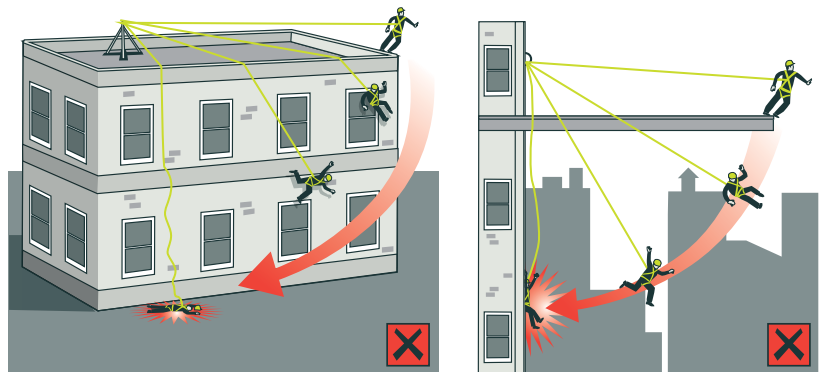
### 3. Length

Select a length that will allow maximum mobility while still arresting your fall at a safe distance.

### 4. Hook options

A variety of hook options help you to be flexible on the job when tying off to fall arrest rated anchor points.

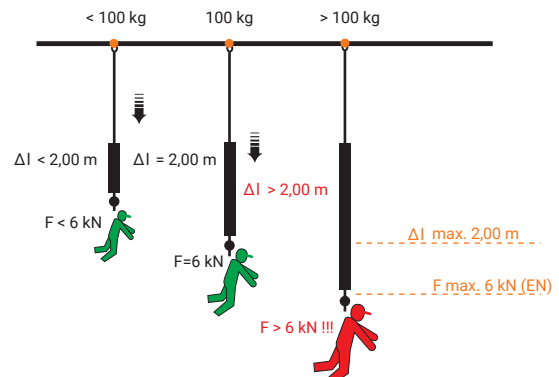
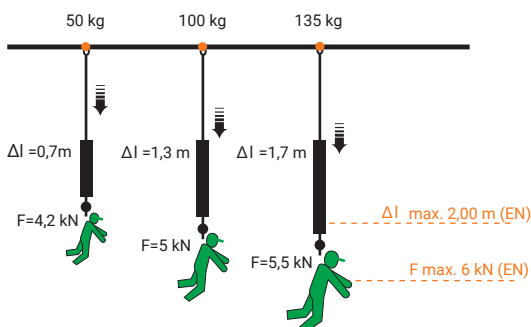
## How to prevent the pendulum effect



Pendulum effect caused by anchor point rope too long (left) and anchor point swing back (right)

- > Select an anchorage point at a right angle to the position of the line at the perimeter edge. If a right angle to the work position is not possible to achieve, the anchor point should be no more than 30 degrees to the work position. A mobile anchorage may be used.
- > Use a secondary anchor point and/or an anchor line.
- > Use a perimeter guardrail to prevent the possibility of a fall.
- > Use a work positioning system, or some other means of access such as an elevating work platform.

The ultra-compact fall protection device PEANUT, with the One-4-All shock absorber a large weight range from 50 kg to 135 kg that always withstands a maximum impact of less than 6 kN at a maximum absorber length of 2.00 m. When using the PEANUT, the load on the entire safety chain is reduced. As a result, PEANUT can be used in combination with any of our harnesses for a user weight from 50 kg up to 135 kg.



## PEANUT

### Self Retracting Lifeline

The PEANUT range of ultra-compact retractable lanyard devices, like the SKYSAFE PRO range of lanyards is already equipped with the One-4-All shock absorber.

Key features:

- A weight range from 50kg to 135 kg
- Edge certified
- Suitable for horizontal use applications
- A unique zip lock cover over the shock pack. This allows it to be removed for 100% inspection & maintenance i.e. if the device becomes wet the zip lock cover can be removed & the shock pack laid out to dry, prolonging the life of the product
- The PEANUT devices are certified for anchorage as low as foot level. (NOTE: Recommends ALL fall arrest product be anchored at shoulder height or above as a 'BEST PRACTICE')
- Certified & suitable for use in tasks involving Elevating Work Platforms (EWP)



The PEANUT range of RETRACTABLE LANYARDS is compliant with AS/NZS 1891.3 TYPE 2 devices.

### Single-Leg Self Retracting Lifeline



PART NO.	RATED LOAD	CONNECTOR HARNESS	CONNECTOR ANCHORAGE	WEIGHT	LENGTH
HSG-021-1,8-1	135 kg	Tie-back Carabiner	Aluminium Rebar Hook	1.4 kg	1.8 m
HSG-021-2,5-1	135 kg	Tie-back Carabiner	Aluminium Rebar Hook	1.5 kg	2.5 m
HSG-021-1,8-2	135 kg	Tie-back Carabiner	Aluminium Rebar Hook	1.9 kg	1.8 m
HSG-021-2,5-2	135 kg	Tie-back Carabiner	Aluminium Rebar Hook	2.0 kg	2.5 m
HSG-021-1,8-3	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	1.6 kg	1.8 m
HSG-021-2,5-3	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	1.7 kg	2.5 m
HSG-021-1,8-4	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	1.9 kg	1.8 m
HSG-021-2,5-4	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	2.0 kg	2.5 m
HSG-021-1,8-5	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	1.9 kg	1.8 m
HSG-021-2,5-5	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	1.9 kg	2.5 m
HSG-021-1,8-6	135 kg	Tie-back Carabiner	Aluminium Rebar Hook	1.7 kg	1.8 m
HSG-021-2,5-6	135 kg	Tie-back Carabiner	Aluminium Rebar Hook	1.8 kg	2.5 m

### Twin-Leg Self Retracting Lifeline



PART NO.	RATED LOAD	CONNECTOR HARNESS	CONNECTOR ANCHORAGE	WEIGHT	LENGTH
HSG-022-1,8-1	135 kg	Tie-back Carabiner	Aluminium Rebar Hook	2.0 kg	1.8 m
HSG-022-2,5-1	135 kg	Tie-back Carabiner	Aluminium Rebar Hook	2.1 kg	2.5 m
HSG-022-1,8-2	135 kg	Tie-back Carabiner	Aluminium Rebar Hook	3.1 kg	1.8 m
HSG-022-2,5-2	135 kg	Tie-back Carabiner	Aluminium Rebar Hook	3.2 kg	2.5 m
HSG-022-1,8-3	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	2.2 kg	1.8 m
HSG-022-2,5-3	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	2.9 kg	2.5 m
HSG-022-1,8-4	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	1.9 kg	1.8 m
HSG-022-2,5-4	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	2.0 kg	2.5 m
HSG-022-1,8-5	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	2.8 kg	1.8 m
HSG-022-2,5-5	135 kg	Tie-back Carabiner	Flat Steel Rebar Hook	2.9 kg	2.5 m

## MERLIN

### Self Retracting Lifeline



The NEW Merlin Wire Fall Arrest Blocks are lightweight Blocks with durable, Cast Aluminium housings. The new design features an offset attachment hole, designed to position the block in order to keep the working line free from excessive bend, as it exits the block. As standard, Merlin blocks are fitted with a CE and ANSI rated steel swivel-eye double-action snaphook with built-in fall indicator, but other connectors including stainless steel models are available on request.

#### UB033

- Line type: Webbing
- Working load limit: 136 kg
- Arrest distance: 1372 mm
- Size: 3.3 m
- Weight: 1 kg



#### UB066

- Line type: Webbing
- Working load limit: 136 kg
- Arrest distance: 1372 mm
- Size: 6.6 m
- Weight: 2 kg



#### UB100B (Stainless steel)

- Line type: 5 mm stainless steel
- Material: Cast Aluminium
- Working load limit: 140 kg
- Arrest distance: 1372 mm
- Size: 10 m
- Weight: 4 kg



#### UB100A

- Line type: 5 mm galvanised steel
- Material: Cast Aluminium
- Working load limit: 140 kg
- Arrest distance: 1372 mm
- Size: 10 m
- Weight: 4 kg



# Self-Retracting Lifelines

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## HK PLUS

### Self Retracting Lifeline

HK PLUS fall-arrest blocks stand for a high degree of freedom of movement along with a short fall distance, which makes these reliable fall arresters the ideal companions for many jobs at height. The automatic rope retraction ensures that only the rope length actually required is extended. This means that the arrest distance is always as short as possible, whether the system is anchored overhead or applied horizontally.

- Edge suitability: HK PLUS devices are suitable for edges without using additional energy absorbers, which makes them appropriate for horizontal use as well
- Fall indicator: Carabiner has an integrated color symbol to display a previous fall and indicates that the device needs to be checked
- Resistant materials: Synthetic housing integrates cutting-edge technology for an extended service life



Part number	Max. Service Life	Cable Material	Rated Load	Fall Indicator	Weight	Size
HSG-050-03	10 Years	Steel	140 kg	Yes	2.83 kg	3 m
HSG-050-04	10 Years	Steel	140 kg	Yes	2.93 kg	4 m
HSG-050-05	10 Years	Steel	140 kg	Yes	3.03 kg	5 m
HSG-050-06	10 Years	Steel	140 kg	Yes	3.7 kg	6 m
HSG-050-10	10 Years	Steel	140 kg	Yes	4.1 kg	10 m
HSG-050-15	10 Years	Steel	140 kg	Yes	7.32 kg	15 m

## TUFF-BLOC

### Self Retracting Lifeline

Introducing the 6m TUFF-BLOC, an exciting new addition to SafetyLink's personal protection range.

The TUFF-BLOC features an energy absorbing over-mould design suitable for robust environments. This unique housing provides protection to the internal mechanisms and allows for easy storage when stacking.

- Tough durable housing built for hard knocks.
- Built in fall indicator.
- Ezy-Grip handle providing easy installation when holding up SRL for install.
- Carry/storage clip.



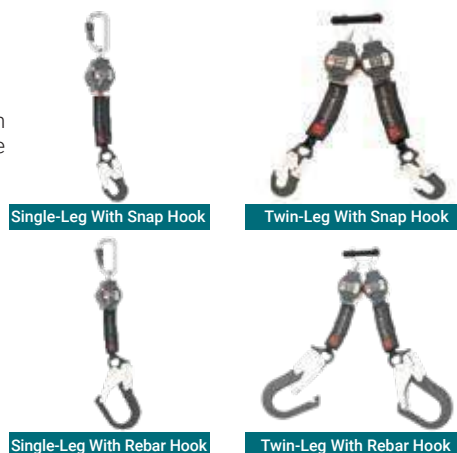
Part number	Max. Service Life	Cable Material	Rated Load	Fall Indicator	Ezy-Grip Handle	Size
TUFF-BLOC006	5 Years	Galvanized Steel	140 kg	Yes	Yes	6 m
TUFF-BLOC010	5 Years	Thép mạ kẽm	140 kg	Yes	Yes	10 m
TUFF-BLOC015	5 Years	Thép mạ kẽm	140 kg	Yes	Yes	15 m
TUFF-BLOC020	5 Years	Thép mạ kẽm	140 kg	Yes	Yes	20 m

## AERO-BLOC

### Self Retracting Lifeline

Ergonomically designed to be used as a single person fall protection device. The 2m Aero-Bloc's lightweight compact design fits comfortably to the users harness keeping the Aero-Bloc out of the workers way.

- Lightweight compact unit.
- Clear durable housing for ease of unit inspection.
- External shock pack with durable cover.
- 140kg user rating.



Part Number	Type	Material	Rated Load	Fall Indicator	Minimum Breaking Strength	Size
AEROBLOC2M-SH-KB	Single-Leg With Snap Hook	Webbing	140 kg	Yes	16kN	2 m
AEROBLOC2M-RH-KB	Single-Leg With Rebar Hook	Webbing	140 kg	Yes	16kN	2 m
AEROBLOC2M-SH-X2	Twin-Leg With Snap Hook	Webbing	140 kg	Yes	16kN	2 m
AEROBLOC2M-RH-X2	Twin-Leg With Rebar Hook	Webbing	140 kg	Yes	16kN	2 m





**KH411**



**KH219**



**KH212**



**KH311**



**KH202**



**KL321**



**H-173**



**H-176**



**H-163**



**H-137**



**H-137-SC**



**H-176-SC**



**H-036**



**H-069**



**H-037**



**H-038**



**H-051**



**KH307**

Part #	Description	Material	Gate Opening	Locking Mechanism	Minimum Breaking Strength
KH411SG	Luke Oval	Aluminium	21 mm	Screwgate	25 kN
KH411TL	Luke Oval	Aluminium	21 mm	Double-action	25 kN
KH411SS	Luke Oval	Aluminium	21 mm	Triple-action	25 kN
KH219SG	Small Iron Wizard Large D	Aluminium	28 mm	Screwgate	70 kN
KH219TL	Small Iron Wizard Large D	Aluminium	28 mm	Double-action	70 kN
KH219SS	Small Iron Wizard Large D	Aluminium	28 mm	Triple-action	70 kN
KH311SG	Steel Oval	Stainless Steel	18 mm	Screwgate	25 kN
KH202SG	Stainless Klettersteig	Stainless Steel	22 mm	Screwgate	35 kN
KH202TL	Stainless Klettersteig	Stainless Steel	22 mm	Double-action	35 kN
KL311SG	Oval	Steel	16 mm	Screwgate	25 kN
KL311TL	Oval	Steel	16 mm	Double-action	25 kN
KL311SS	Oval	Steel	16 mm	Triple-action	25 kN
KL321SG	Offset Oval	Steel	17 mm	Screwgate	40 kN
KL321TL	Offset Oval	Steel	17 mm	Double-action	40 kN
KL321SS	Offset Oval	Steel	17 mm	Triple-action	40 kN
H-163-PL-OR	Pinlock II	Aluminium	29 mm	Double-action	22 kN
H-163-PL-AN	Pinlock II	Aluminium	29 mm	Double-action	22 kN
H-137-TW	Passo-Twist	Aluminium	30 mm	Triple-action	30 kN
H-137-TRI	Passo-TRI	Aluminium	30 mm	Triple-action	30 kN
H-137-SC-03	Passo-SC	Aluminium	30 mm	Triple-action	30 kN
H-176-SC	Ovaloy SC Black	Aluminium	18 mm	Double-action	22 kN
H-36	Ovaloy TW	Aluminium	18 mm	Double-action	22 kN
H-69	Ovaloy TRI	Aluminium	21 mm	Triple-action	24 kN
H-037	Ovaloy SC	Stainless Steel	17 mm	Triple-action	22 kN
H-038	Ovalsteel TW	Stainless Steel	18 mm	Double-action	22 kN
H-051	Ovalsteel TRI	Steel	21 mm	Triple-action	30 kN
KH307SG	Firemans	Steel	48 mm	Screwgate	40 kN
KH307TL	Firemans	Steel	48 mm	Double-action	40 kN
KH307SS	Firemans	Steel	48 mm	Triple-action	40 kN

Carabiner

# Anchorage

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## CAB HERCULES S 12

Product code: [L-001-1](#)

Wire rope sling with steel inlay and transparent protective tube 22 kN.

Key Features:

- Material: Stainless Steel, Polyester, Polypropylene
- Rope material: Stainless Steel, Polyester
- Diameter: 12 mm
- Size: 1 m
- Breaking load: 22 kN



## WSX00 RANGE

The Wire Strops are available with 7mm galvanised steel or stainless steel wire and with a choice of thimble (rigid) eye, or soft eye loops. The Strops are fitted with a protective PVC cover. Strops are available in a range of standard lengths (at 0.5 m increments), with bespoke lengths also available on request.

WS100 100 cm

WS150 150 cm

WS200 200 cm



## GREIF FIX 140

Product code: [H-045-140](#)

Key Features:

- Material: Stainless Steel
- Gate opening : 140 mm
- Breaking load: 20 kN

## BEAMTAC



Product code: [AP-017](#)

The Skylotec Beamtac I-Beam Anchor is rated at 180kg Max 1 person. It is adjustable to suit 90mm flanges to 300mm Flange max. It is constructed from Aluminium/Steel allowing a lightweight, but strong piece of gear.

Weight: 1.8 kg

Flange width: 90 to max. 300mm

Material: Aluminium



## JAMBTAC

Product code: [AP-070](#)

JAMBTAC Mobile Door Truss. Mobile anchoring point for all door widths from 600 to 1,100 mm. The adjustable mobile door truss made of aluminium is very light and can be easily adapted to different door widths. Rounded profile edges and plastic caps at the ends reduce the wear of material, the risk of injuries for the user and prevent the door posts from being scratched. JAMBTAC can be used simultaneously by up to two persons.

• Weight: 1.8 kg

• Material: Aluminium, Steel

AP-070-1 Flange width: 600 - 1150 mm

AP-070-2 Flange width: 985 - 1525 mm

## LOOP SEP

LOOP SEP was specially developed for working at sharp edges. The tensile force of 40 kN and the flexible casing made from special cutproof fibres make the loop practically indestructible. The fixing is stitched conically so that the loop does not get caught at this critical point.



Product code: [L-0398-0,75](#) | [L-0398-1,35](#) | [L-0398-2](#)

- Material: Polyester
- Diameter: 30 mm
- Length: 0.75m | 1.35 m | 2 m
- Breaking load: 22 kN



Product code: [L-0397-0,75](#) | [L-0397-1,35](#) | [L-0397-2](#)

- Material: Polyester
- Diameter: 30 mm
- Length: 0.75m | 1.35 m | 2 m
- Breaking load: 40 kN



Product code: [L-0321-0,75](#) | [L-0321-1,35](#) | [L-0321-2](#)

- Material: Polyester
- Diameter: 30 mm
- Length: 0.75m | 1.35 m | 2 m
- Breaking load: 40 kN



## HOIST LOOP

Product code: [L-0636-40](#)

- Material: Polyester, Polyamide
- Diameter: 25 mm
- Length: 38 cm



## BEAMSTRAP 25kN

Product code: [L-0647-1](#) | [L-0647-1,5](#) | [L-0647-2](#)

- Material: Polyester, Polyamide
- Diameter: 85 mm
- Length: 1 m
- Breaking load: 25 kN



## LOOP 26 kN EINGEDREHTES AUG

Product code: [L-0465](#)

Key Features:

- Material: Polyamide
- Diameter: 25 mm
- Breaking load: 25 kN



## LOOP 35 kN

Product code: [L-0010-SW](#)

Key Features:

- Material: Polyamide
- Diameter: 25 mm
- Breaking load: 35 kN



## GIRDER & CONCRETE

The Girder & Concrete Anchors are a quick and easy portable anchorage solution which can be used in the vertical or horizontal plane. These anchors are operated by using two fingers to pull back the red collar. This action retracts the retention bar, allowing the device to be inserted in to the anchor hole. Once the device is in position, the red collar can be released, causing the retention bar to engage, fixing the device in position.

GG101



GG201



GG301



### Technical Information

Part Number	Material	Weight	Minimum Breaking Strength
GG101	Aluminium	550 g	28 kN
GG201	Aluminium	1160 g	28 kN
GG301	Aluminium	680 g	28 kN



76mm - 255mm range

## BEAM TROLLEY

The ClimbTech™ Beam Trolley is a mobile anchor point, for use on structural beams. The device is fitted with toggle plates, which allow for simple adjustment of the rollers when installing/uninstalling the device. The Beam Trolley is ideal for use as an anchor connection for fall arrest systems, (not suitable for material handling). No surface alteration (i.e. drilling), is required in order to use the Beam Trolley.

### Technical Information

	Weight	Minimum Breaking Strength	Working Load Limit
CT100	3.5 kg	22 kN	140 kg

## CT101.2



88mm - 355mm range

## CT110



305mm - 762mm range

## BEAM SLIDER

The ClimbTech™ I-Beam Slider and Super Beam Sliders are lightweight, reusable anchor clamps which can be attached to a range of beam widths. The Beam Sliders are quick & easy to fit/adjust and eliminate the need for surface alteration (i.e. drilling). Once mounted, the Beam Sliders slide freely and easily along the beam in either direction. Beam sliders are suitable for use in Rope Access and Suspension Applications and are suitable for rescue loads.

### Technical Information

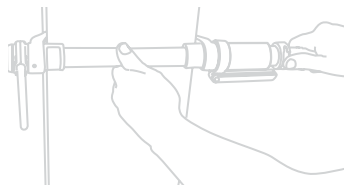
	Weight	Minimum Breaking Strength	Working Load Limit
CT101.2	1.6 kg	22 kN	454 kg
CT110	3.5 kg	22 kN	140 kg



102mm - 355mm range  
Flange thickness: 7-31mm

## VERTICAL/FIX BEAM CLAMP

The ClimbTech™ Vertical Beam Clamp is quick and easy to fit, remove and adjust. Designed to clamp onto horizontal or vertical I-Beams, to create a fixed anchor point.



### Technical Information

	Weight	Minimum Breaking Strength	Working Load Limit
CT113	3 kg	22 kN	454 kg

## CT105 (Concrete)



## CT106 (Steel)



## CONCRETE/STEEL SWIVEL

The ClimbTech™ Concrete MEGA Swivels rotates through 360° and the D ring pivots through 180°, for maximum versatility. The Swivel Anchor is ideal for permanent or portable use for horizontal lifeline systems, tie back, staging and rigging.

The CT105 Concrete Anchor requires a minimum hole depth of 19mm (3/4").

### Technical Information

	Weight	Minimum Breaking Strength	Working Load Limit
CT105	917 g	44 kN	181 kg
CT106	847 g	44 kN	181 kg



## TOGGLE LOK

The ClimbTech™ Toggle Lok Anchor is a portable, reusable device which can be used as part of a flexible horizontal life line system (for up to two users), or as a direct anchorage connection (single user). The Toggle Lok can be used in precast concrete and on steel flanges and can be placed in horizontal, vertical, and overhead surfaces.

This Anchor should be placed in to a 20mm (3/4") diameter hole.



### Technical Information

	Weight	Minimum Breaking Strength	Working Load Limit
CT104	181 g	22 kN	181 kg

## CT102



## CT103



## REMOVABLE CONCRETE

ClimbTech™ Concrete Anchors are portable, reusable devices which can be used in vertical, horizontal or overhead concrete substrate surfaces. Once a suitable hole has been drilled, the anchors can be inserted and removed as required. These anchors are available in two sizes/ratings and are suitable for fall protection applications.



### Technical Information

	Weight	Minimum Breaking Strength	Working Load Limit
CT102	221 g	22 kN	181 kg
CT103	222 g	22 kN	181 kg

## RIGGING

### RP300



### RP310



### H-089



### RP320



### H-086



### Technical Information

Part Number	Material	Weight	Minimum Breaking Strength
RP300	Aluminium	93 g	36 kN
RP310	Aluminium	220 g	40 kN
RP320	Aluminium	442 g	45 kN
H-086	Aluminium	440 g	45 kN
H-089	Aluminium	220 g	40 kN



# Descenders & Rescue

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## Descenders & Rescue Devices

### Work/ Rescue Descender

Part #	Material	Finish	Weight	Rope Size	Rate Load
RP885	Aluminium	Anodised	818 g	10.5 - 12.7 mm	240 kg
RP880	Aluminium	Anodised	678 g	10.5 - 11.5 mm	240 kg
RP815	Aluminium	Anodised	306 g	10.5 - 12.7 mm	200 kg
RP810	Aluminium	Anodised	452 g	10.5 - 11 mm	-
A-031	Aluminium	-	430 g	-	-



Figure 8 & 9S

Part #	Material	Finish	Weight	Rope Size	Minimum Breaking Strength
RP110	Aluminium	Anodised	112 g	8 - 13 mm	25 kN
RP100	Aluminium	Anodised	196 g	9 - 13 mm	35 kN

## Backup Device & Hand, Chest Ascender Device

### Backup Device

Part #	Type	Material	Finish	Weight	Rope Size
RP892	Proper™	Aluminium	Anodised	210 g	10.5 - 11 mm
RP204	Large	Aluminium	Anodised	300 g	14 - 16 mm
RP205	Small	Aluminium	Anodised	302 g	14 - 16 mm



### Hand & Chest Ascender Device

Part #	Type	Material	Finish	Weight	Rope Size
RP210	Left Handed	Aluminium	Anodised	364 g	9 - 13 mm
RP220	Right Handed	Aluminium	Anodised	364 g	9 - 13 mm
RP230	Left Handed	Aluminium	Anodised	367 g	9 - 13 mm
RP240	Right Handed	Aluminium	Anodised	367 g	9 - 13 mm
H-064-L	Left Handed	Aluminium	-	220 g	8 - 13 mm
H-064-R	Right Handed	Aluminium	-	220 g	8 - 13 mm
RP229	Chest	Aluminium	Anodised	154 g	9 - 13 mm
H-058	Chest	Aluminium	-	140 g	8 - 13 mm



## HaulerBiner

### Compact Rescue Kit

The HaulerBiner Rescue is a compact kit, which can be worn on the harness and used for Pick-off Rescue in work at height and rope access rescues. The HaulerBiner can also be used to easily adjust the orientation of a stretcher and can be used for short-haul tensioning.

The HaulerBiner device has a theoretical mechanical advantage of either 6:1 or 7:1, depending on the orientation the device is used in.

The pulley wheels are mounted in the body of the Karabiner, keeping them clear of the anti-tangle mesh outer, preventing it from jamming the wheels). Due to the in-Karabiner wheel mounting, the HaulerBiner kit is very compact when fully contracted, giving maximum haul height.



Coned Cam Profile  
Positive engagement, without excess wear



Cam Engaged climb  
Progress Capture,  
used during lifting



Cam Disengaged  
For lowering

Length (fully extended) [A]	Maximum 1.05m
Length (fully contracted) [B]	32 cm
Mechanical Advantage	6:1 or 7:1
Weight (packed in pouch)	575 g
Rated Load	140 kg
Rope Size	6 mm
Body Material	Aluminium (Anodised)
Gate Type	Supersafe (Triple-lock)
Minimum Breaking Strength	16 kN



## MILAN 2.0

For more than decade, MILAN has served as standard rescue equipment in many areas. The reinforced brake is controlled centrifugally; it keeps the speed constant during the entire descent and permits a quick and safe rescue. The brake shaft is mounted on ball bearings on both sides. The housing is constructed of milled aircraft grade aluminium which makes MILAN 2.0 the most robust equipment in the world. This is what allows rescue techniques such as rescue support in lattice mast structures. A seal reveals whether the MILAN 2.0 has been opened without authorisation. The MILAN 2.0 is certified under international standards and special regulations to be used on vessels and offshore structures, e.g.

- Part number: A-027
- Abseiling height: 500 m
- Abseiling speed: 0,9 m/s
- Max. number of person: 2 người
- Rated load: 260 kg
- Weight: 2.31 kg
- Material: Nhôm, thép, polyamide
- Standards: EN 341-1A:2011



## MILAN 2.0 HUB

MILAN 2.0 HUB is equipped with a lifting function. Therefore, it is possible to lift a casualty first over a short distance to release the fasteners and then lower the person safely; the new housing design improves handling during accompanied rescue. The SUPERSTATIC 9.0 continues to meet this requirement with only 9 mm in diameter. Compared to devices with 10.5 mm ropes, the pack size remains small when using the MILAN 2.0 HUB. This is a big advantage especially at great heights.

- Part number: A-028
- Abseiling height: Lên đến 500 m
- Abseiling speed: 0,9 m/s
- Max. number of person: 2 người
- Rated load: 260 kg
- Weight: 3.19 kg
- Material: Nhôm, thép, polyamide
- Standards: EN 1496-A:2017, EN 341-1A:2011

## MILAN 2.0 POWER



The MILAN 2.0 POWER - RESCUE & EVACUATION KITS are the ideal tool for all work sites where an emergency evacuation or rescue may be required. Evacuation or rescue may need to be conducted at height or from a confined space. The MILAN 2.0 Power kits, combined with a Rescue Device Driver (RDD) will enable a swift, simple evacuation or rescue of stranded or injured workers from the work site. Consult your SKYLOTEC Technical Sales Specialist for guidance on the right kit for your needs & any further accessories & training requirements to ensure the rescue teams competence.



### SEAL PAC

All rescue devices must be inspected on an annual basis - even unused devices stored for emergencies. With the SEAL PAC, this regular inspection becomes easier. The MILAN is stored in a sealed metal box. An authorized inspector opens the sealed box once a year and checks the moisture indicator on the MILAN packaging and it's perfect condition. If everything is all right, the inspector marks month and year of the next inspection, signs, and seals the metal box with a new seal. Saving costs and time with controlled safety are the essential advantage of the SEAL PAC. Operation time 10 years.

### RDD für MILAN 2.0 POWER



The RESCUE DEVICE DRIVER (RDD) is a specially modified battery-operated driver for the MILAN 2.0 POWER. It is powered by a Li-Ion battery. With a fully charged battery, you can cover ascents of up to 60 metres carrying 100 kilograms. For rescue situations, weights of up to 280 kilograms can be lifted. The RDD is only for use in combination with the MILAN 2.0 POWER rescue device and the supplied MILAN 2.0 POWER BATTERY.



## RESCUE KIT WIND



- 1 x MILAN 2.0 HUB | 1 x MILAN ROPE | 3 x passO-Tri | 1 x LOOP 35 KN | 1 x SKA ROPE CLAMP | 1 x COLBAG | 1 x DRYBAG



### TELESTICK

- Telescopic extension from 54cm to 285cm.
- Part number: ACS-0071
- Weight: 0.65 kg



### TELESCOPE

- Telescopic rod extendable to a maximum of 6.25 meters, which serves to attach a karabiner to an unreachable anchor point.
- Part number: ACS-0069-6/9
- Size: Tối đa 6,25m
- Weight: 2.21 kg
- Material: Nhôm

### TELESTICK

- Telescopic extension from 63cm to 310cm.
- Part number: ACS-0070-01
- Size: Tối đa 310 cm
- Weight: 0.61 kg



### H-015-KUP

- Carabiner hook with coupling for telescopic bar
- Inner eyelet: 29 mm
- Breaking load, major axis: 20 kN
- Max. opening: 60 mm
- Size: 238 x 117mm
- Weight: 0.75 kg
- Locking system: One-Hand
- Material: Aluminium



## MILAN SEA KIT



- 1x MILAN ROPE (10 - 30 m) | 1x SEAL PAC DRYBAG | 2x RESC B | 1x LOOP 35 KN | 1x OVALOY TRI | 1x Manual





## ActSafe ACX Power Ascender

The ACX battery-powered winch is a motorised system to ensure the transport of persons or loads to areas that are difficult to access and where occasional or recurring work is carried out. ACX is used, among other things, for cleaning facades or windows, for the maintenance of complex building structures, for the rotor blade maintenance of wind turbines or for transporting loads on masts. The ACX POWER ASCENDER considerably simplifies and accelerates work on complex structures and makes expensive access systems or lifting platforms superfluous. Countless rescue scenarios can also be carried out efficiently and with minimum effort with the ACX. ACX forms a highly flexible system for easy and cost-efficient cleaning or maintenance. In an emergency, the ACX can be controlled by remote control. The operation and use of the ACX can be learned in special training courses.

- Simplifies and accelerates work on structures that are difficult to access
- Gentle application
- Control by remote control up to 150 m

## Tời Điện ActSafe RCX

The battery-powered ActSafe RCX rope winch is a motorised system to ensure the transport of persons or loads to hard-to-reach areas where occasional or repetitive work is carried out. The ActSafe RCX rope winch has been specially developed for effortless and efficient rescue operations. The main users are search and rescue (SAR) teams from the fire brigade, disaster relief or emergency services. The innovative device is compact, lightweight and complies with protection class IP67 (dustproof and waterproof). It is equipped with replaceable and rechargeable batteries and a remote control with a range of up to 150 metres. The ActSafe RCX is perfectly suited for ropes with different diameters and is therefore flexible and quickly ready for use. The device is certified for a user weight up to 250 kg.

- Simplifies and accelerates work during rescue operations
- 0-24 m/minute at 250 kg, IP67 standard
- Variable rope grab system

### ActSafe ACX REMOTE Control



This replacement accessory of the ActSafe ACX POWER ASCENDER increases the safety of every user considerably. With the ActSafe ACX REMOTE CONTROL, a second person working on the ground can take over the control of the passenger winches up to a range of 150 metres. This enables them, for example, to abseil a disabled and unconscious person in an emergency without an elaborate rescue system. The person working on the rope can override the control at any time.

### ActSafe ACX Cable Power Supply



The ActSafe ACX CABLE POWER SUPPLY is used in combination with the ACX POWER SUPPLY EU. It connects the ActSafe ACX rope winch to a the POWER SUPPLY EU. It couldn't be easier: Connect the cable to the power supply unit, connect it to the Power Ascender, and use run your ACX off of AC power. (A separate cable is needed for connecting to the ACCII ascender.)

- Power cable for continuous, reliable power source
- Flexible and versatile use
- Easy to use

### ActSafe ACX Power Supply EU



The ActSafe ACX POWER SUPPLY EU adds a reliable and continuous power source to the ActSafe Power Ascenders. The power supply system has been specially developed for the ActSafe ACCII and ACX Power Ascenders and is a reliable companion for any type of work. When operating the Power Ascender from a fixed position you can now use the Power Supply as your main power source. It couldn't be more simple: plug in the Power Supply to an AC socket, connect it to the cable to the Power Ascender, and start using your system exactly the way you need it. The ActSafe ACX POWER SUPPLY EU creates new possibilities for working with the Ascender system. It gives you the flexibility, versatility and reliability you need to be efficient and work safely at height. A specific cable is needed for each model of ascender

- Continuous, reliable power source
- Flexible and versatile use
- Easy to use

### ActSafe PMX Power Ascender



The ActSafe PMX rope winch is the enhanced generation of petrol Powered Ascender to ensure the transport of persons or loads to areas that are difficult to access and where occasional or recurring work is carried out. The petrol-powered ActSafe PMX ascender has its uniqueness in the combination of strength and the small portable size. Weighing only 13 kg and with at least 700 metres of rope-travelling on one tank of fuel, this is the tool that will take you through the hard, dirty jobs where you need to be able to rely on your equipment. The features of this petrol rope winch include an enclosed rope grab system, and a left-hand-operated throttle. The descent lever is easy to operate for going down the rope, and the whole sturdiness of this Power Ascender makes it perfect for a never-ending list of lifting operations. Delivered in a rugged transportation box with wheels.

- For use in dirty working environments
- Working Load Limit (WLL) of 250kg
- 17 m / min at 100 kg
- For recommended 11 mm ropes



## GORDON

GORDON is the all-rounder among fall arrest blocks. Its low weight and robustness are impressive features. This offers great advantages especially when working at height: the devices can be combined with various certified textile ropes which can be easily interchanged by the user. GORDON offers an endless variety of potential uses: It can be used solely as a fall arrester, and in the GORDON RESCUE version as a fall arrester and lead climbing delay device.

GORDON RESCUE can also be used in combination with other hardware as a self-locking pulley system. GORDON RESCUE is suitable for entry, lead climbing and for belaying during rescues. Its compact dimensions and milled aluminium housing make it slimline, lightweight and easy to handle. The device can be equipped with rope of any length and used in both directions. GORDON stops falls. Thanks to a built-in gauge and distinct laser markings wear inspection is very simple.

### Pulley systems



GORDON PULLEY SYSTEM 1:3  
A-120-3+ L-0741-Length (R-064)  
Semi-static rope 10.5 mm  
Sewn eyelets  
rope length corresponds to lifting  
height times 3

GORDON PULLEY SYSTEM 1:4  
A-120-3+ L-0741-Length (R-064)  
Semi-static rope 10.5 mm  
Sewn eyelets  
rope length corresponds to lifting  
height times 4

GORDON PULLEY SYSTEM 1:5  
A-120-3+ L-0741-Length (R-064)  
Semi-static rope 10.5 mm  
Sewn eyelets  
rope length corresponds to lifting  
height times 5

### Pre-configured devices

These GORDON configurations are very well suited for a safe descent or controlled abseiling, for example, in high rope courses or other environments where fall arrest devices with long rope lengths over 20 meters are needed.

These GORDON configurations are particularly useful as fall arrest devices for ascents as well as for descents in high ropes courses or for use in confined spaces, as endless rope movement in both directions is possible. Using a pulley (such as STANDARD ROLL) on the ground is recommended.



HSG-020  
+ L-0741-Length (R-064)  
Semi-static rope 10.5 mm  
Sewn eyelets

HSG-020-R  
+ L-0741-Length (R-064)  
Semi-static rope 10.5 mm  
Sewn eyelets

HSG-020  
+ L-0743-Length (R-064)  
Semi-static rope 10.5 mm  
Sewn eyelets, 1 rings

HSG-020  
+ L-0744-Length (R-064)  
Semi-static rope 10.5 mm  
Sewn eyelets, 2 rings

### Basic Device



HSG-020  
GORDON

HSG-020-R  
GORDON RESCUE

### Progress Capture Pulleys

Progress Capture Pulleys incorporate a cam which automatically captures the load whilst lifting/pulling a load or tensioning a line. To lower/release the line the cam must be manually unclamped by using the flexible Dyneema release cord and held/pinned clear of the rope during the lower/ release of the line.

Part #	Material	Finish	Weight	Rope Size	Minimum Breaking Strength	Working Load Limit
RP701	Aluminium	Anodised	660 g	10-13 mm	40 kN	800 kg
RP702	Aluminium	Anodised	663 g	10-13 mm	40 kN	800 kg
RP703	Aluminium	Anodised	905 g	10-13 mm	40 kN	800 kg



### Eiger Lightweight Pulleys

Eiger Pulleys are made from high strength Aluminium and fitted with tamper-proof rivets. ISC Eiger Pulleys are fitted with MOS2 Impregnated Bushings, which are ideal in lightweight applications.

Part #	Material	Finish	Weight	Rope Size	Minimum Breaking Strength
RP012	Aluminium	Anodised	87 g	13 mm	36 kN
RP030	Aluminium	Anodised	153 g	13 mm	36 kN
RP302	Aluminium	Anodised	158 g	13 mm	36 kN
RP303	Aluminium	Anodised	284 g	13 mm	36 kN
RP304	Aluminium	Anodised	181 g	13 mm	36 kN



### Heavy Duty Prussiks

All pulleys in our latest Prussik range have tamper-proof Rivets, in compliance with CE EN12278 (2007) & NFPA (1983). These pulleys are available with MOS2 Impregnated Bushings, or Roller Bearings. ISC Prussiks have load rated becketts, which are large enough to allow a Karabiner to rotate fully.

#### Single with Becket

#### Double Prussik



#### Prussik Pulleys - Aluminium

Part #	Material	Finish	Weight	Rope Size	Minimum Breaking Strength
RP061	Aluminium	Anodised	375 g	13 mm	40 kN
RP064	Aluminium	Anodised	555 g	13 mm	50 kN
RP065	Aluminium	Anodised	330 g	13 mm	50 kN
RP067	Aluminium	Anodised	818 g	16 mm	70 kN

#### Prussik Pulleys - Stainless Steel

Part #	Material	Finish	Weight	Rope Size	Minimum Breaking Strength
RP061	Stainless steel	Polished	674 g	13 mm	40 kN
RP064	Stainless steel	Polished	1036 g	13 mm	50 kN
RP065	Stainless steel	Polished	620 g	13 mm	50 kN
RP067	Stainless steel	Polished	1626 g	16 mm	50 kN



## CONREST

### Sophisticated Design

Short, rigid construction and carrying straps enable fast rescue of accident victims

### Patient Fixation

The wide and strong pelvic strap, arm loops and head attachment protect against additional injury

### Solid Skid Plate

Sturdy and solid skid plate allows moving over edges or obstacles

- The most compact advanced rescue stretcher on the market.
- Stable skid plate and fasteners simplify rescue work.
- Clear colour system for fast handling.
- Foot cover allows the injured person's feet to be secured.
- One bag for everything: stretcher with skid plate, waist belt, head attachment, reflective strips, foot cover and lanyards including carabiners.

Conrest makes it possible to rescue accident victims in places that cannot be reached with other stretchers. Its short design secures the spine, head, pelvis and arms with a particularly strong and stabilising webbing construction an additional foot cover secures the legs. The existing injuries are thus stabilised – and new ones prevented. Carrying straps on all sides enable the stretcher to be manoeuvred safely and quickly in all directions. CONREST is a long way ahead thanks to its compact dimensions and numerous additional features.



### FOOT COVER

The foot cover enables the injured person's legs to be secured if necessary.



## SAN-9000

### Ultra Basket Stretcher

The ultraROLLTRETCHER, rollable carrier system, is particularly suitable for rescue in areas, which are difficult to access, in confined spaces, shafts and for mountain rescue. The rollstretcher can be used horizontally, angularly and vertical. Thanks to its tube-like form is it characterized by its exceptional stability. The patient is additionally protected by stabilizing elements in the shoulder, thorax, pelvic and spinal areas. The big advantage of the product is this low weight and small storage size on the way to rescue mission, simple and fast assembly on site, flexible and variable handling.

- Size: 2000 x 600 x 300mm
- Weight: 7.3 kg



## SAN-9001

### UltraRoll Stretcher Military

The ultraROLLTRETCHER, rollable carrier system, is particularly suitable for rescue in areas, which are difficult to access, in confined spaces, shafts and for mountain rescue. The rollstretcher can be used horizontally, angularly and vertical. Thanks to its tube-like form is it characterized by its exceptional stability. The patient is additionally protected by stabilizing elements in the shoulder, thorax, pelvic and spinal areas. The big advantage of the product is this low weight and small storage size on the way to rescue mission, simple and fast assembly on site, flexible and variable handling. The rollstretcher is approved for use by specific German Federal Armed Force helicopters (Bell UH-1D / NH90 / Sea King Mk. 41). Included in the delivery contents: 1 compact waterproof backpack carrier, 8 padded handles, 4 retainer belts with COBRA-Lock-System, 2 adjustable foot straps

- Size: Unisize
- Weight: 7.3 kg



## SAN-0087-1

### Ultra Basket Stretcher

- Size: 2178 x 618 x 189mm
- Rated load: 315 kg
- Max Service Life: 12 Years
- Weight: 14 kg
- Material: Polypropylene



## SAN-0087-2

### Ultra Basket Stretcher

- Size: 2200 x 650 x 200 mm
- Rated load: 315 kg
- Max Service Life: 12 Years
- Weight: 12 kg
- Material: Polypropylene



## SAN-0089

### Ultrabelt "X-Treme"

Special 6-point harness for fast and secure fixation of the patient in extreme rescue situations. Even transport of the patient "head over" poses no problem.

- Max Service Life: 10 Years
- Weight: 1,8 kg
- Material: Polyester



## SAN-0284

### Ultra Headock

Head restraint set for fixation of the head on the spine board, or similar item.

- Weight: 1,0 kg
- Material: Acrylnitril-Butadien-Styrol

## Design

SKYLOTEC rope design is core-sheathed. Ropes based on this construction function via two fundamental components - the sheath and the core. While the core primarily carries the load, the sheath protects the rope from external elements such as dirt, friction, UV rays and moisture. In the event that the sheath is damaged, exposing the core, immediately replace the rope.

The rope core is made of high-quality material, which is wound or woven into intricate strands. The rope thus has excellent flexibility, as well as enormous strength and energy absorption capacity. These characteristics are extremely important for use in fall protection systems, rescue operations and abseiling equipment. Stranded cores also allow for highly stable rope end finishing, since the rope is not pressed or knotted as per conventional practice, but rather sewed by means of innovative sewing techniques.

## Rope types

Primarily two categories of ropes are available: static ropes and dynamic ropes.

Static ropes are core-sheathed ropes with low extension.

Dynamic ropes are divided into three different types. While single ropes can be used in all applications to complete the safety chain and absorb the fall of a person, half-ropes may only be used in pairs for this purpose and twin ropes only in pairs and parallel. Dynamic ropes have a very high energy absorption capacity and thus reduce the arresting force.



Coated core rope, double plaited.



Coated core rope with twisted structure.



Twisted rope, 4-shaft



## Shifting of the Outer Sheath

... states the shifting of the Outer Sheath in relation to the core of the rope, if a 2 m long piece of rope is pulled 5 x through a standardised test device. The permitted limit is  $\pm 40$  mm, the UIAA standard is  $\pm 20$  mm!

## Expansion in Use

... is the stretching of a piece of rope under a load of 80 kg.

## Arresting Force

... is a relative measure for the flexibility of a rope. Low values describe ropes with high flexibility.

## Fall Count

... designates the number of normal falls withstood during dynamic fall testing (laboratory results). It is generally the case that the safety reserves increase with a rising number of falls.

## SUPER STATIC 11.0

Super Static Rope 11.0mm, 30kN low expansion & sheaf slip with high abrasion resistance. Just 3% elongation makes this rope ideal for rope access, rescue & winch operations.

Colour option: White/ Black/ Red/ Blue

### Technical use:

**Diameter: 11 mm**  
**MBS: 30 kN**



Part #	Color
R-079-WE	White
R-079-BL	Blue
R-079-RD	Red
R-079-SW	Black

## EXPLORER 12.0

Explorer static polyester rope 12.0mm extremely low sheaf slippage & very high abrasion resistance & just 1.7% elongation make this an excellent choice for arborists. Can be spliced

**Technical use:**  
**Diameter: 12 mm**  
**MBS: 26.3 kN**



## EXTREME - DYNAMIC

X-TREME 11.0 mm Low kink dynamic rope is extremely abrasion resistance & very low sheaf slip

**Technical use:**  
**Diameter: 11 mm**



## PRUSIK CORD (100M ON A ROLL)



Material	Polyamide								
Weight	0.34 kg	0.65 kg	1.2 kg	1.2 kg	1.5 kg	1.5 kg	2.7 kg	3.6 kg	3.6 kg
Diameter	2 mm	3 mm	4 mm	4 mm	5 mm	5 mm	6 mm	7 mm	7 mm
MBS	0.8 kN	1.8 kN	4.1 kN	4.1 kN	6.5 kN	6.5 kN	9.9 kN	14.5 kN	14.5 kN
Color									
Part #	R-115-100-S	R-116-100-O	R-107-100-S	R-107-100-RO	R-108-100-O	R-108-100-BL	R-109-100-S	R-110-100-O	R-110-100-RO

## DEUS - ROPE OPTIONS

### TECHNORA FIRE RESISTANT 7.5

Because this rope is constructed of 100 % Technora, it provides superior fire-resistance and strength - ideally suited for personal escape and rescue in fire and harsh industrial environments when using a DEUS 3300 device.

**Technical use:**  
**Diameter: 7.5 mm**  
**MBS: 13.5 kN**



### POLY-TECHNORA 7.5

Combining strength and affordability with lower weight makes this rope ideal for use with the DEUS 3300.

**Technical use:**  
**Diameter: 7.5 mm**  
**MBS: 13.5 kN**



### POLY-TECHNORA/TECHNORA 8.0

This strong 8 mm rope is a multiple-use, fire-resistant escape and rescue rope. It is our primary rope with the DEUS 3700 device. The sheath is constructed of a unique combination of polyester and technora, providing extra durability. The 100 % Technora core provides extra strength.

**Technical use:**  
**Diameter: 12 mm**



### NYLON ROPE 12.0

This 12 mm Nylon Rope is designed for use as a training rope with DEUS 7300 controlled descent device and therefore has an extremely durable quality. Features a twisted nylon core under a 100% nylon sheath.

**Technical use:**  
**Diameter: 8 mm**  
**MBS: 23.6 kN**





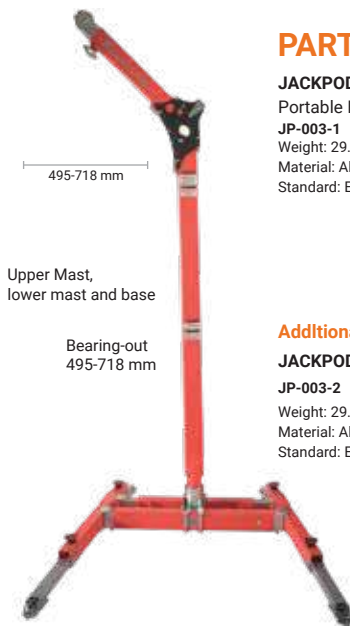
# Confined-Space Rescue

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## JACKPOD DAVIT SET

Flexible fall prevention for working in confined spaces is now easier than ever with the new JACKPOD davit arm and tripod systems. The portable and stepwise adjustable systems require only a small working base area and are easy to transport and store thanks to their low weight and volume. High-quality finished aluminium and galvanised steel offer high ageing resistance. JACKPOD TRI is suitable for vertical, JACKPOD DAVIT for horizontal and vertical entrances. Both systems are certified as anchoring points according to EN 795, Class B with a max. load capacity of 280 kg (for up to 2 persons with a weight of 140 kg each) and can be combined with winches and fall arrester devices.

The swivelling JACKPOD DAVIT SETS can be used vertically. With a few additional elements the system is also attachable to walls, tanks or other entrances. A simple plug-in mechanism allows quick and purposeful installation.



## PARTS

### JACKPOD BASE PORTABLE

Portable Base  
JP-003-1  
Weight: 29.1 kg  
Material: Aluminium, Steel  
Standard: EN 795



### Additional Base For Vertical Entry

#### JACKPOD BASE BOLT ON FLANGE

JP-003-2  
Weight: 29.1 kg  
Material: Aluminium, Steel  
Standard: EN 795



### JACKPOD DAVIT UM

Upper Mast  
JP-002-1 | 1016 mm  
JP-002-2 | 1320 mm  
Weight: 9.5 kg | 11.4 kg  
Material: Aluminium, Steel  
Standard: EN 795



### JACKPOD DAVIT LM

Lower Mast  
JP-001-1 | 1170-1400 mm  
JP-001-2 | 1475-1695 mm  
Weight: 5.4 kg | 7.3 kg  
Material: Aluminium, Steel  
Standard: EN 795



SETS	Upper Mast	Lower Mast	Base	Total Height	Total Weight
JP-100-1	JP-001-1 9.5 kg	JP-002-1 5.4 kg	JP-003-1 27.7 kg	2186-2416 mm	42.60 kg
JP-100-2	JP-001-1 9.5 kg	JP-002-2 7.3 kg	JP-003-1 27.7 kg	2490-2720 mm	44.50 kg
JP-100-3	JP-001-2 11.4 kg	JP-002-1 5.4 kg	JP-003-1 27.7 kg	2491-2711 mm	44.50 kg
JP-100-4	JP-001-2 11.4 kg	JP-002-2 7.3 kg	JP-003-1 27.7 kg	2795-3015 mm	46.40 kg

## JACKPOD TRI

In two versions, the JACKPOD TRI covers the areas of the vertical entry with a variable height adjustment from 1.2 to incredible 3.1 meters. Even very wide entries can be covered. When using a winch, for example the JACKPOD WINCH 1, the retention function of a person is already in place and a descent into deeper work environments is no longer a risk.

### JACKPOD TRI 1

JP-011-1

Tripod, small  
With 1 deflection pulley

- Weight: 16.7 kg
- Material: Aluminium, Steel
- Standard: EN 795



### JACKPOD TRI 2

JP-011-2

Tripod, tall  
With 3 deflection pulleys

- Weight: 23.8 kg
- Material: Aluminium, Steel
- Standard: EN 795



## JACKPOD WINCH

### JACKPOD WINCH 1

JP-008-1

18 m stainless steel cable and carabiner

- Weight: 14.0 kg
- Material: Steel, Synthetic
- Standards: EN 795/B:1998/A1:2001; EN 1496:2007



### JACKPOD WINCH 2

JP-008-2

45 m stainless steel cable and carabiner

- Weight: 18.0 kg
- Material: Steel, Synthetic
- Standards: EN 795/B:1998/A1:2001; EN 1496:2007



## AP-004 TRIBOC



The TRIBOC is a multifunctional power package on three legs. It is ideal for lifting loads, as well as for securing, recovering and rescuing people. The tripod is easy to use and provides complete safety.

- The TRIBOC can be used with a material load of up to 500 kg (secured with chains).
- The legs can be set in 8 different ways.
- The standard steel head offers three additional anchoring points for material loads of up to 200 kg.
- The modular system means that hoisting and fall arrest devices can easily be taken out and transported separately.

### TRIBOC T WIND

- Part number: ACS-0036-15-T
- Material: Steel
- Size: 15 m
- Weight: 11.9 kg



### HSG HR 15

- Part number: HSG-004-15
- Material: Aluminium, Steel
- Size: 15 m
- Weight: 16.2 kg
- Standard: EN 1496-B, EN 360:2002
- Type Three SRL allows for EMERGENCY retrieval of a fallen worker
- Supplied with bracket to suit Tripod for Model HSG-004-15-T.

### TRIBOC BAG

- Part number: ACS-0013
- Material: Polyester
- Size: 1750 mm
- Weight: 0.91 kg



## TRIPODS & Accessories

### Attachment Bracket

A hard wearing Tripod Bracket, for use with the Tripod, UB171 Fall Arrest Block or Winch system. The GRB150 antislip bracket is quick and easy to fit, with a hinged lid and screw design.



### GRB150 Bracket

- Body material: Aluminium
- Finish: Powder Coated

### TP143 Tripod

The Tripod Heads are manufactured from Cast Aluminium for strength and durability. The standard version (TP143) is fitted with two pulley wheels, with removable captive pins to keep the rope/wire line in place on the pulley wheel.

The standard Tripod also has two swivel-eye anchor points. The Tripod legs are adjusted with R-Clips, up to a maximum overall height of 255 cm (approximately 100"). The Tripods are ideal for work and rescue in confined spaces.

Extensive testing of our Tripods without a foot retention strap has confirmed that our Tripods meet/exceed the strength requirements of the standard, without the need to tether the feet. Our Tripod can therefore be supplied and used without a foot retention strap, meaning that the trip hazard around the Tripod is greatly reduced.



### UB171 Winch

#### Winch

The UB171 Fall Arrest Block is fitted with a Twistlock Fall-indicating, Swivel Eye Karabiner as standard.

The UB171 Block is fitted with an Emergency Recovery, for the safe retrieval of a casualty. The Blocks are made in solid Aluminium Housings, proven to last in all sorts of environments, from rental to off-shore. The internal mechanisms are simple, making them easily serviceable.

- Arrest distance: 13.7 m
- Working load limit: 136 kg
- Length: 20 m
- Weight: 9 kg
- Fall indicator: As standard
- Gate/lock type: Twistlock
- Line type: Galvanized steel cable
- Finish: Powder coated
- Colour: Red



### Fall Arrest Blocks

The UB171 Fall Arrest Block has a cast Aluminium housing, making it suitable for heavy-duty use, even in harsh environmental conditions. The UB171 is fitted with a retrieval winch which can be easily engaged in emergency situations.

The block is fitted with a Swivel-eye Karabiner, which also has a load-indicator. In the event of a fall, the swivel eye will pull out a short way, exposing a red collar.

## ACCESSORIES for RESCUE



### SPREADER BAR

Designed to provide the user with a vertical lift into & out of tight confined space openings. Wrist slings allow for an injured or unconscious worker to place their hands above the head to prevent catching on obstructions within the confined space.



### RINGO

This unique tiny personal ascender device is a perfect aid for rope ascent and any type of pulling rope. It is placed like a ring on the middle finger and provides extra grip and strength during dragging and hauling operations - for highest efficiency. For rope diameters from 8 to 13 mm.



# Rope Grab

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Guided type fall-arrest devices allow the adjustment of the rope length with the device to prevent a slack rope in changing working positions and keep the fall distance short. To avoid swinging falls and rope stress on edges, the carabiner hook of the movable guide (rope) should always be attached as vertical as possible above the user. Unfortunately, this is not always possible. In particular, when working on flat roofs, no attachment elements are above the user; therefore, a lateral attachment point becomes necessary. In this case, the rope is pulled over the roof edge during a fall causing a particularly high stress. For this application field, we round off our range with products suitable for edges.



## SK4

**Part number:** L-0419

- Diameter: 12 mm
- Weight: 0.65 kg
- Carabiner on device: H-037
- Material: Steel



## SKA TWIST

**Part number:** L-0058-TW

- Size: 0.118m
- Weight: 0.75 kg
- Carabiner on device: H-137-TW
- Material: Stainless Steel, Aluminium



## SK12 KOBRA TRI/E

**Part number:** L-0084

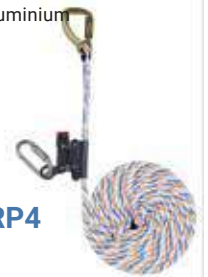
- Diameter: 12 mm
- Suspension element: Coated corerope 12 mm
- Length: 5, 10, 15, 20, 25, 50, 60, 70 m
- Carabiner on rope: H-121
- Material: Polyamide, Steel
- Rope material: Polyamide



## SK12 KOBRA TRI/RP4

**Part number:** L-0058-TW

- Diameter: 12 mm
- Suspension element: Coated core rope 12 mm
- Length: 5, 10, 15, 20, 40 m
- Carabiner on device: H-038
- Carabiner on rope: H-121
- Material: Polyamide, Steel
- Rope material: Polyamide



## MAGIC

**Part number:** L-0200

- Diameter: 12 mm
- Suspension element: Coated core rope 12 mm
- Length: 5, 10, 15, 20, 25 m
- Carabiner on device: H-121
- Carabiner on rope: H-121
- Material: Stainless Steel, Aluminium, Polyamide
- Rope material: Polyamide



## SK3

**Part number:** L-0360

- Diameter: 12 mm
- Suspension element: Coated core rope 12 mm
- Length: 5, 10, 15, 20 m
- Carabiner on device: H-037
- Carabiner on rope: H-037
- Material: Stainless Steel, Aluminium, Polyamide
- Rope material: Polyamide



## SKN BAND

**Part number:** L-0043

- Diameter: 11 mm
- Suspension element: Coated core rope 12 mm
- Length: 5, 10, 15, 20, 25 m
- Carabiner on device: H-009
- Carabiner on rope: H-009
- Material: Polyamide, Steel, Stainless Steel
- Rope material: Polyamide



## ERGOGRIP SK16

**Part number:** L-0280

- Diameter: 16 mm
- Suspension element: Coated core rope 12 mm
- Length: 5, 10, 15, 20, 25, 30 m
- Carabiner on device: H-009
- Carabiner on rope: H-016
- Material: Stainless Steel, Aluminium, Polyamide
- Rope material: Polyamide



## ERGOGRIP SK12

**Part number:** L-0448

- Diameter: 12 mm
- Suspension element: Coated core rope 12 mm
- Length: 5, 7, 10, 15, 20 m
- Carabiner on device: H-009
- Carabiner on rope: H-016
- Material: Stainless Steel, Aluminium, Polyamide
- Rope material: Polyamide





## Zippey Clip 'n' Zip

### Zippey™ Clip 'n' Zip

This new compact trolley has been introduced to compete with lightweight one-handed fitting trolleys. Often the trolleys for this end of the market are 'low-cost' or 'budget' options, which suffer the common problems of premature wear (due to poor materials), short bearing life (due to poor quality bearings) and offer very few features.

Part #	Material	Finish	Weight	Rope Size	Minimum Breaking Strength
RP074	Aluminium	Anodised	450 g	13 mm	25 kN

Zippey is manufactured from high-spec 4mm aluminium plate, has a forged Aluminium gate and Stainless Steel wheels, all of which offer the best weight to performance ratio on the market. The Zippey trolley weighs 450 g, yet has an MBS of 25 kN and therefore exceeds the 2260 kg rating required by US standards, as well as being fully CE approved.

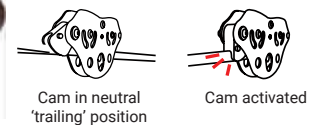


### ZipSpeed Trolley & Accessories

The NEW ZipSpeed Tandems represent industry leading Zipline Trolley innovation at its most affordable! The design of these midsize trolleys uses state of the art engineering techniques and highperformance components to ensure that they run and run. They offer several unique features. All these trolleys have been extensively trialled and are in use at several major parks around the world. These are possibly the fastest, strongest & most durable Zipline Trolleys available.

#### 50 mm Diameter Wheels

Part #	Material	Finish	Weight	Rope Size	Minimum Breaking Strength
RP075A	Aluminium	Anodised	875 g	13 mm	40 kN
RP075B	Aluminium	Anodised	875 g	16 mm	40 kN
RP075C	Aluminium	Anodised	875 g	20 mm	40 kN



#### 75 mm Diameter Wheels

Part #	Material	Finish	Weight	Rope Size	Minimum Breaking Strength
RP076A	Aluminium	Anodised	1739 g	13 mm	40 kN
RP076B	Aluminium	Anodised	1739 g	16 mm	40 kN
RP076C	Aluminium	Anodised	1739 g	19 mm	40 kN

### 5CM-LRA101

Standard length range:  
Minimum 600 mm - Maximum 900 mm



### 5AB-ZLH Parachute Sit Harness



### 5AB-ZLS Superman Harness



### BE-390-XX

#### INCEPTOR GRX

- Size: 54-63 cm
- Weight: 0.45 kg
- Material: Polycarbonat, Acrylnitril-Butadien-Styrol, Expanded Polystyrene
- Color: White, Black, Orange



### BE-392-XX

#### INCEPTOR GRX HIGH VOLTAGE

- Size: 54-63 cm
- Weight: 0.45 kg
- Material: Polycarbonat, Acrylnitril-Butadien-Styrol, Expanded Polystyrene
- Color: White, Black, Orange



### ACS-0020

#### EQUIPMENT BAG

- Diameter: 170 mm
- Material load, max.: 3 kg
- Size: 170 x 170 x 300mm
- Contents: 6 l
- Weight: 0.12 kg
- Material: Polyamide



### ACS-0112

#### ROPEBAG

- Material load, max.: 20 kg
- Size: 400 x 250 x 250mm
- Contents: 37 L
- Weight: 0.46 kg
- Material: 50/600D Polyester



### ACS-0133-4

#### TOOL BAG PRO LIFT 4 K

- Diameter: 300 mm
- Material load, max.: 30 kg
- Size: 300 x 600mm
- Contents: 40 L
- Weight: 0.96 kg
- Material: Polyamide



### ACS-0014

#### DRYBAG

- Diameter: 350 mm
- Material load, max.: 25 kg
- Size: M,L
- Material: Polyurethane



### ACS-0003-F

#### STATRANS FALLSTOP

- Size: 410 x 200 x 275 mm
- Contents: 22 L
- Weight: 3.16 kg
- Material: Steel



### BE-070

#### FLEX

- Size: S, M, L, XL, XXL
- Material: Synthetik-Leder und Spandex



### BE-071

#### GRIP

- Size: S, M, L, XL, XXL
- Material: Synthetik-Leder und Spandex



### ACS-0249

#### TOOLKEEPER

Maximum retraction force 200 g



### ACS-0250

#### TOOLKEEPER CLIP











## SURFACE MOUNTED ANCHORS



- This revolutionary all in one unit has been designed to attach to all metal profiles with a single row of attachment holes. This unique configuration makes it a fast simple unit for installation.
- Its low profile reflective design is a plus for many commercial or residential enterprises wanting to maintain an aesthetically pleasing facade.
- Dynamic design reduces the load back on to the structure and person attached to the anchor.

### ANCHORS

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
FROGL001	FrogLink Anchor	0.291
FROGL001+Rivets	FrogLink Anchor with 7 Aluminium Rivets	0.340
FROGL001+S5Z	FrogLink Unit + S5_Z Brackets	0.725
FROGL001+STROP_swaged	FrogLink Anchor, 1.2m Strop swaged, Strop Hook, Tag	0.779
FROGLINK+STROP+RIVETS_swaged	FrogLink Anchor, 1.2m Strop swaged, Strop Hook, Tag and Rivets	0.828

### FrogLink Anchor with Rivets



- FrogLink is a surface mounted height safety anchor point for use on metal roof profiles where access to building structure is difficult.
- 360° Multi-directional, enabling full rotation around the anchor.
- Install using 7 x 8mm Rivets (Drill Size 7.8-8.2mm Aluminium).

#### PRODUCT CODE: FROGL001+RIVETS

Components	Description	Material	Qty
FROGL001	FrogLink Anchor	316SS	1
RIVETS_8mm	Rivets: 8mm	Aluminium	7

### FrogLink Anchor with S5\_Z Brackets



- FrogLink is a surface mounted height safety anchor point for use on standing seam metal roof profiles where access to building structure is difficult.
- 360° Multi-directional, enabling full rotation around the anchor.
- Install using 2 x S5 Clamps, please advise standing seam roof sheeting profile to obtain quote for clamps required.

#### PRODUCT CODE: FROGL001+S5\_Z

Components	Description	Material	Qty
FROGL001	FrogLink Anchor	316SS	1
S5_Z_BRACKET	S5 Z Clamp Bracket	Alum/SS	2

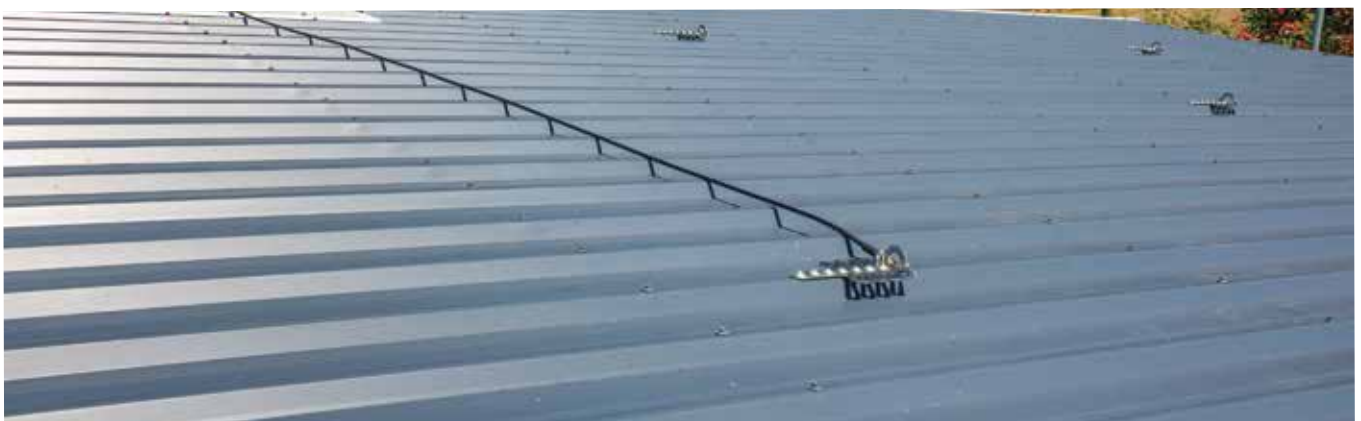
### FrogLink Anchor with First Man up Strop



- FrogLink anchor with swaged Strop, to be used as a first man up system.
- 360° Multi-directional, enabling full rotation around the anchor.
- Attachment end should be secured with a strop hook when not in use to ensure it can be accessed from a safe area for next use.
- Install using 7 x 8mm Rivets (Drill Size 7.8-8.2mm Aluminium).

#### PRODUCT CODE: FROGLINK+STROP+RIVETS\_swaged

Components	Description	Material	Qty
FROGL001	FrogLink Anchor	316SS	1
STROP 1.2m_swaged	1.2m Strop	316SS/PVC	1
STROPHOOK	Spring Fender Hook	316SS	1
STROPHOOK_TAG	Strop Hook Warning Label	Plastic	1
RIVETS_8mm	Rivets: 8mm	Aluminium	7



## RAFTER MOUNTED ANCHORS

- The team designed the TileLink roof anchor (winner of an episode on ABC1 The New Inventors) with unique energy absorbing capabilities, to reduce the risk of injury to the person and damage to the structure.
- The TileLink is quick to install, with amazing performance ability. The unique design is practically invisible when looking at the roof.
- The TileLink fits between the existing tiles ensuring no waterproofing issues. There is no need to cut the sarking as the design of this unique roof anchor, eliminates any future potential roof leaks.



### ANCHORS

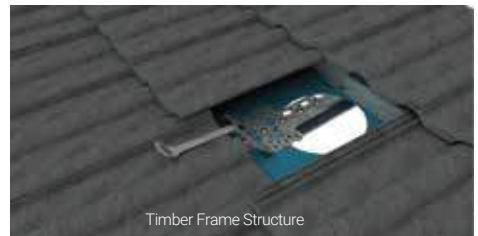
The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
TILEL001	TileLink Timber Rafter Mounted Anchor	0.634
TILEL001+SCREWS	TileLink Timber Rafter Mounted Anchor + 5 Screws	0.679
TILEL001_SFM	TileLink Steel Frame Mounted Anchor	0.630
TILEL001_SFM+RIVETS	TileLink Steel Frame Mounted Anchor + 5 Aluminium Rivets	0.665

### TileLink Anchor with Screws



- TileLink anchor point designed for use on timber rafters with tiled roof.
- 360° Multi-directional, enabling full rotation around the anchor.
- Five fixing points with five (5) alternate fixing rows to suit multitude of tile roof profiles.
- Install using 5 x 12 gauge (50mm) roofing screws.
- Eyelet 30mm ID.



Timber Frame Structure

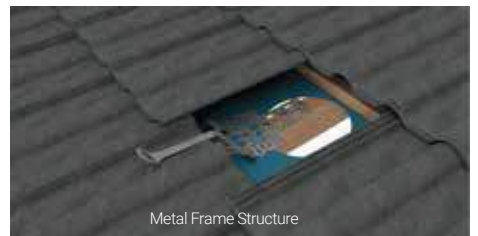
PRODUCT CODE: TILEL001+SCREWS

Components	Description	Material	Qty
TILEL001	TileLink Anchor	316SS	1
SCREW 12x50mm	12 gauge x 50mm Hex Head Screw	Coated	5

### TileLink SFM Anchor with Rivets



- TileLink anchor point designed for use on steel rafters with tiled roof.
- 360° Multi-directional, enabling full rotation around the anchor.
- Five fixing points with three (3) alternate fixing rows to suit multitude of tile roof profiles.
- Install using 5 x 8mm Rivets (Drill Size 7.8-8.2mm Aluminium).
- Eyelet 30mm ID.



Metal Frame Structure

PRODUCT CODE: TILEL001+RIVETS

Components	Description	Material	Qty
TILEL001_SFM	TileLink Anchor	316SS	1
RIVET_8mm	Rivet: 8mm	Aluminium	5



## STEEL PURLIN MOUNTED ANCHORS

- The RetroLink anchor points are designed for use on metal roofing with steel purlin structure.
- Installation is a simple task requiring no access from underside of the roof, requiring only one hole to be drilled into the roof sheeting and through the purlin.
- Waterproofing washer combined with an o ring seals the hole, eliminating any waterproofing issues.
- Easy installation into concealed areas.



### ANCHORS

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
RETRO003	RetroLink Anchor with Flat Washer	0.447
RETRO004	RetroLink Anchor with Raised Washer (Cannot be used for Abseiling)	0.447
SWIVEL001	SwiveLink Anchor with Nut	0.568

### RetroLink Anchor with Flat Washer



- RetroLink anchor can be installed onto a steel C or Z purlin, where no access is available from underneath the roof. Steel purlins must be a minimum 1.2mm gauge.
- Abseiling and Fall Arrest anchor with an unobtrusive design that requires no special tooling and minimal penetration to the roof sheeting.
- 360° Multi-directional, enabling full rotation around the anchor.
- Drill a 25mm hole.

PRODUCT CODE: RETRO003

Components	Description	Material	Qty
EYEBOLT-RETRO	Retro Eyebolt	316SS	1
RETRO-WASHER	Retro Washer with Foam	316SS	1
RETRO-TUBE	Retro Tube with Positioning Ties	316SS	1

### RetroLink Anchor with Raised Washer



- RetroLink anchor with raised washer can be installed onto a steel C or Z purlin, where no access is available from underneath the roof. Steel purlins must be a minimum 1.2mm gauge.
- The RetroLink anchors installed to the raised section of roof sheet profiles are NOT suitable for Rope Access/Abseiling due to potential roof sheet distortion under live loading.
- 360° Multi-directional, enabling full rotation around the anchor.
- Drill a 25mm hole.

PRODUCT CODE: RETRO004

Components	Description	Material	Qty
EYEBOLT-RETRO	Retro Eyebolt	316SS	1
RETRO-WASHER-RAISED	Retro Raised Washer with Foam	316SS	1
RETRO-TUBE	Retro Tube with Positioning Ties	316SS	1

### SwiveLink



- The patented SwiveLink is an anchor point used in concrete.
- Designed to swivel 360 degrees.
- Must be chemically fastened.
- Built in shock absorber.

PRODUCT CODE: SWIVEL001

Components	Description	Material	Qty
SWIVELINK	SwiveLink: Swiveling Unit 83mm	316SS	1
SWIVELINK NUT	SwiveLink Nut	316SS	1



## RAFTER MOUNTED ANCHORS

- The RafterLink and HingeLink units include SafetyLink's patented Eyebolts. The length of the eyebolt enables to protrude above the roof structure when installing into timber structures.
- Standard Eyebolt is designed for fall arrest, its long tapered stem is designed to absorb energy while arresting a fall therefore reducing the load off the structure and the person attached to the anchor.
- Abseil Eyebolt can be adapted to the RafterLink forming an anchor from where you can abseil, creating a safe work station for hard to get to maintenance on buildings.



### ANCHORS

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
RAFTR001	RafterLink Anchor with Standard Eyebolt	1.446
RAFTR001 + ABSEIL	RafterLink Anchor with Abseil Eyebolt	1.423
RAFTR004	Side Mounted RafterLink Anchor with Standard Eyebolt	1.682
RAFTR004 + ABSEIL	Side Mounted RafterLink Anchor with Abseil Eyebolt	1.659
HINGE001	HingeLink Anchor with Standard Eyebolt	1.301
HINGE001+ABSEIL	HingeLink Anchor with Abseil Eyebolt	1.258

### RafterLink Anchor



- RafterLink anchor point is designed for use on timber structures where there is easy access to the top of the rafter.
- Fixing to hardwood F14 or greater, use 8 type 17 hex head 14g x 75mm screws.
- Fixing to softwood less than F14, use 8 type 17 hex head 14g x 90mm screws.
- 360° Multi-directional, will arrest a fall from any direction.
- Eyelet 28mm ID.

#### PRODUCT CODE: RAFTR001

Components	Description	Material	Qty
WASHER 75mm Square	75mm Rubber Hat Washer	Rubber	1
RAFTER-BASE	RafterLink Base 0 Degree Pitch	316SS	1
Advise if you require Standard or Abseil Eyebolt			
EYEBT001	Standard Eyebolt (Install Length 178mm)	316SS	1
EYEBT002	Abseil Eyebolt (Install Length 178mm)	316SS	1

### Side Mounted RafterLink Anchor



- RafterLink Side Mounted anchor point is designed for use on timber structures where there is easy access to the rafter, installs onto the side of the rafter.
- Fixings required, eight (8) type 17 Hex Head 14g x 50mm screws.
- 360° Multi-directional, will arrest a fall from any direction.
- Eyelet 28mm ID.

#### PRODUCT CODE: RAFTR004

Components	Description	Material	Qty
WASHER 75mm Square	75mm Rubber Hat Washer	Rubber	1
RAFTER-BASE-SIDE	RafterLink Side Mounted Base	316SS	1
Advise if you require Standard or Abseil Eyebolt			
EYEBT001	Standard Eyebolt (Install Length 178mm)	316SS	1
EYEBT002	Abseil Eyebolt (Install Length 178mm)	316SS	1

### HingeLink Anchor



- HingeLink anchor point is designed for use on metal/tiled/timber structures where there is easy access to the underside of the roof, the base of the unit is hinged enabling flexible means of attachment.
- Secure with four (4) M12 bolts and 2 Hex Head 12g 50mm screws.
- 360° Multi-directional, will arrest a fall from any direction.
- Eyelet 28mm ID.

#### PRODUCT CODE: HINGE001

Components	Description	Material	Qty
WASHER 75mm Square	75mm Rubber Hat Washer	Rubber	1
HINGE-BASE-SS	Hingelink Base	316SS	1
Advise if you require Standard or Abseil Eyebolt			
EYEBT001	Standard Eyebolt (Install Length 228mm)	316SS	1
EYEBT002	Abseil Eyebolt (Install Length 178mm)	316SS	1

## CONCRETE MOUNTED ANCHORS



### ANCHORS

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
CONCL001(ABSEIL)	ConcreteLink Anchor with Abseil Eyebolt	0.466
CONCL001(STANDARD)	ConcreteLink Anchor with Standard Eyebolt	0.509
CONCL002	ConcreteLink Anchor with Collared Eyebolt	0.491
CONCL005	ConcreteLink One Piece Anchor	0.332
WINDL001	WindowLink Anchor	0.476
SWIVL002	SwiveLink Anchor	0.495
CONCL006	Concrete Brass Bolt	0.037

### ConcreteLink Anchor with Abseil Eyebolt



- ConcreteLink can be ordered with Standard or Abseil Eyebolt. The Standard Eyebolt is designed for fall arrest only. The Abseil Eyebolt is designed to withstand a live load without activating the bending motion that occurs when arresting a fall.
- 360° Multi-directional, enabling full rotation around the anchor.
- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.
- Eyelet 28mm ID.

PRODUCT CODE: CONCL001

Components	Description	Material	Qty
NUT M16	Nut M16	316SS	1
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	1
Advise if you require Standard or Abseil Eyebolt			
EYEBT001	Standard Eyebolt (Install Length 178mm)	316SS	1
EYEBT002	Abseil Eyebolt (Install Length 178mm)	316SS	1

### ConcreteLink Anchor with Collared Eyebolt



- ConcreteLink Collared Eyebolt is a low profile anchor point designed for use in concrete, where the eyebolt can be removed if required.
- 360° Multi-directional, enabling full rotation around the anchor.
- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.
- Eyelet 35mm ID.

PRODUCT CODE: CONCL002

Components	Description	Material	Qty
EYEBOLT M16x26mm	Collared Eyebolt M16 26mm	316SS	1
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	1

### ConcreteLink One Piece Unit



- ConcreteLink One Piece Unit is a low profile anchor point designed for use in concrete, where the eyebolt will remain in place exposed for attachment.
- 360° Multi-directional, enabling full rotation around the anchor.
- Chemically anchored into concrete.
- Drill a 18mm hole to a depth of 100mm.
- Eyelet 35mm ID.

PRODUCT CODE: CONCL005

Components	Description	Material	Qty
CONCL005	One Piece Concrete Anchor	316SS	1

### WindowLink



- WindowLink anchor point designed for use in concrete structures where the eyebolt will remain concealed until needed for use.
- Designed to swivel 360 degrees with built in shock absorber.
- Discreet stainless steel cover.
- Chemically anchored into concrete.
- 55mm core drill to 20mm depth.
- 28mm drill to 122mm depth.
- Eyelet 28mm ID.

PRODUCT CODE: WINDL001

Components	Description	Material	Qty
WINDL001	Wall Mounted Concrete Anchor	316SS	1

### SwiveLink



- SwiveLink anchor point designed for use in concrete structures with the convenience of a swivelling eyebolt.
- Designed to swivel 360 degrees with built in shock absorber.
- Chemically anchored into concrete.
- Drill a 28mm hole.
- Eyelet 28mm ID.

PRODUCT CODE: SWIVL002

Components	Description	Material	Qty
SWIVL002	SwiveLink Eyebolt Anchor	316SS	1

### Concrete Brass Bolt



PRODUCT CODE: CONCL006

Components	Description	Material	Qty
CONCL006	Concrete Brass Bolt	Brass	1

## SURFACE MOUNTED ANCHORS

- Classic surface mounted roof anchor is multi directional, attaching to the top of the profile on the roof sheeting for superior waterproofing.
- The eyebolt is forged from 316 stainless steel with powerful energy absorbing qualities.
- The eyebolt was developed and tested extensively to maximize energy absorption while retaining its strength when arresting a fall.
- The eyebolts tapered design enables it to bend like a fishing pole to reduce the load back on the structure and the person attached to the anchor.
- Surface mounted anchors must not be used for rope access (abseiling).



### ANCHORS

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
SURFL001	Surface Mounted Anchor (2 Side Plates)	1.907
SURFL001+Rivets	Surface Mounted Anchor (2 Side Plates) with 12 Aluminium Rivets	1.991
SURFL001-BROWNUILT	Surface Mounted Anchor (2 Side Plates Bent for Brownbuilt Roof Profile) with 12 x 34mm Rivets (yellow)	1.991
ASURF001	Surface Mounted Anchor (Aluminium Plate)	0.892
ASURF001+Rivets	Surface Mounted Anchor (Aluminium Plate) with 10 Aluminium Rivets	0.962
HSURF001	Surface Mounted Anchor (Stainless Steel Plate)	1.420
HSURF001+Rivets	Surface Mounted Anchor (Stainless Steel Plate) with 10 Aluminium Rivets	1.490

### Classic SurfaceLink Anchor (Adjustable Side Plates)



- SurfaceLink anchor point with two adjustable plates, designed for use on metal roof sheeting where access to building structure is difficult.
- Plates can be bent for Brownbuilt Roof Sheeting.
- 360° Multi-directional, enabling full rotation around the anchor.
- Eyelet 28mm ID.

PRODUCT CODE: SURFL001+FIXINGS

Components	Description	Material	Qty
EYEBOLT-SURFACELINK	SurfaceLink Eyebolt (Install Length 178mm)	Rubber	1
SURF-SIDEPLATE	SurfaceLink Side Plate with foam	316SS	2
WASHER 70od-SS	Washer: 70mm OD	316SS	1
WASHER 50od-SS	Washer: 50mm OD	316SS	1
NUT M16	Nut: M16	316SS	1
RIVETS 8mm	Rivets 8mm	Aluminium	12

### Classic SurfaceLink Anchor (Aluminium Plate)



- SurfaceLink anchor point designed for use on metal roof sheeting where access to building structure is difficult.
- Adjustable design to suit different roof profiles.
- 360° Multi-directional, enabling full rotation around the anchor.
- Eyelet 28mm ID.

PRODUCT CODE: ASURF001+FIXINGS

Components	Description	Material	Qty
EYEBOLT-SURFACELINK	SurfaceLink Eyebolt (Install Length 178mm)	316SS	1
ADV-PLATE-AL-H-305	SurfaceLink Plate (precut holes)	*MGA	1
WASHER 70od-Plastic	Washer: 70mm OD	Plastic	1
WASHER 50od-SS	Washer: 50mm OD	316SS	1
NUT M16	Nut: M16	316SS	1
FOAM-TAPE	Adhesive single sided tape	Foam	2
RIVETS 8mm	Rivets 8mm	Aluminium	10

### Classic SurfaceLink Anchor (Stainless Steel Plate)



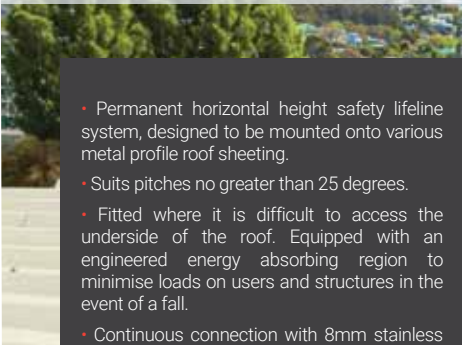
- SurfaceLink anchor point designed for use on metal roof sheeting where access to building structure is difficult.
- Adjustable design to suit different roof profiles.
- 360° Multi-directional, enabling full rotation around the anchor.
- Eyelet 28mm ID.

PRODUCT CODE: HSURF001+FIXINGS

Components	Description	Material	Qty
EYEBOLT-SURFACELINK	SurfaceLink Eyebolt (Install Length 178mm)	Rubber	1
ADV-PLATE-SS-H-305	SurfaceLink Plate (precut holes)	316SS	1
WASHER 50od-SS	Washer: 50mm OD	316SS	1
NUT M16	Nut: M16	316SS	1
FOAM-TAPE	Adhesive single sided tape	Foam	2
RIVETS 8mm	Rivets 8mm	Aluminium	10



## SURFACE MOUNTED FROGLINE



- Permanent horizontal height safety lifeline system, designed to be mounted onto various metal profile roof sheeting.
- Suits pitches no greater than 25 degrees.
- Fitted where it is difficult to access the underside of the roof. Equipped with an engineered energy absorbing region to minimise loads on users and structures in the event of a fall.
- Continuous connection with 8mm stainless steel cable, utilising the Frogline Shuttle System, up-to four users per system, two per span.



### LIFELINES

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
STAT.FROGSAL001	Surface Mounted Intermediate Anchor	1.440
STAT.FROGSAL001+Fixings	Surface Mounted Intermediate Anchor + Fixings	1.540
STAT.FROGSAL002	Surface Mounted End Anchor	1.454
STAT.FROGSAL002+Fixings	Surface Mounted End Anchor + Fixings	1.554
STAT.FROGSAL003	Surface Mounted Corner Anchor	1.517
STAT.FROGSAL003+Fixings	Surface Mounted Corner Anchor + Fixings	1.617
To order Surface Mounted Lifeline with Stainless Steel Plates use below product codes		
STAT.FROGSUR001	Surface Mounted Intermediate Anchor	1.886
STAT.FROGSUR001+Fixings	Surface Mounted Intermediate Anchor + Fixings	1.986
STAT.FROGSUR002	Surface Mounted End Anchor	1.981
STAT.FROGSUR002+Fixings	Surface Mounted End Anchor + Fixings	2.081
STAT.FROGSUR003	Surface Mounted Corner Anchor	2.044
STAT.FROGSUR003+Fixings	Surface Mounted Corner Anchor + Fixings	2.144

### Surface Mounted INTERMEDIATE Anchor

Intermediate anchor designed to be mounted on the surface of a metal roof profile to limit lifeline span distances.



PRODUCT CODE: STAT.FROGSAL001+FIXINGS

Components	Description	Material	Qty
FROGLINE INT	FrogLine Base Intermediate	316SS	1
BOLT-M16x35mm-SS	Bolt: M16 x 35mm Set Screw	316SS	1
ADV-PLATE-AL-H-305	SurfaceLink Plate 305mm (precut holes)	*MGA	1
WASHER 70od-Plastic	Washer: 70mm OD	Plastic	2
WASHER 70od-SS	Washer: 70mm OD	316SS	1
NUT M16	Nut: M16	316SS	1
FOAM-TAPE 29cm	Barrier Foam Tape	Foam	2
SCREW 14.10x75mm	14-10x75mm Hex Head Screws	Coated	2
RIVETS_8mm	Rivets: 8mm	Aluminium	10

### Surface Mounted END Anchor

End anchor designed to be mounted on the surface of a metal roof profile as attachment points for the cable to start and terminate at.



PRODUCT CODE: STAT.FROGSAL002+FIXINGS

Components	Description	Material	Qty
FROGLINE END	FrogLine Base End	316SS	1
BOLT-M16x35mm-SS	Bolt: M16 x 35mm Set Screw	316SS	1
ADV-PLATE-AL-H-305	SurfaceLink Plate 305mm (precut holes)	*MGA	1
WASHER 70od-Plastic	Washer: 70mm OD	Plastic	2
WASHER 70od-SS	Washer: 70mm OD	316SS	1
NUT M16	Nut: M16	316SS	1
FOAM-TAPE 29cm	Barrier Foam Tape	Foam	2
SCREW 14.10x75mm	14-10x75mm Hex Head Screws	Coated	2
RIVETS_8mm	Rivets: 8mm	Aluminium	10

### Surface Mounted CORNER Anchor

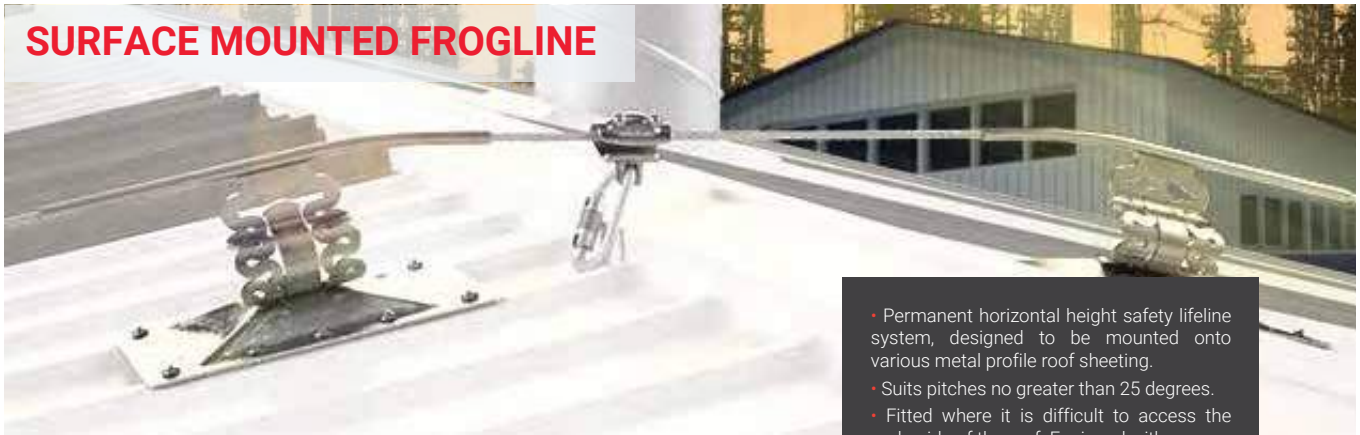
Corner anchor designed to be mounted on the surface of a metal roof profile. The lifeline cable runs through the corner anchor point re-directing it by up to 90 degrees.



PRODUCT CODE: STAT.FROGSAL003+FIXINGS

Components	Description	Material	Qty
FROGLINE CNR	FrogLine Base Corner	316SS	1
BOLT-M16x35mm-SS	Bolt: M16 x 35mm Set Screw	316SS	1
ADV-PLATE-AL-H-305	SurfaceLink Plate 305mm (precut holes)	*MGA	1
WASHER 70od-Plastic	Washer: 70mm OD	Plastic	2
WASHER 70od-SS	Washer: 70mm OD	316SS	1
NUT M16	Nut: M16	316SS	1
FOAM-TAPE 29cm	Barrier Foam Tape	Foam	2
SCREW 14.10x75mm	14-10x75mm Hex Head Screws	Coated	2
RIVETS_8mm	Rivets: 8mm	Aluminium	10

## SURFACE MOUNTED FROGLINE



- Permanent horizontal height safety lifeline system, designed to be mounted onto various metal profile roof sheeting.
- Suits pitches no greater than 25 degrees.
- Fitted where it is difficult to access the underside of the roof. Equipped with an engineered energy absorbing region to minimise loads on users and structures in the event of a fall.
- Continuous connection with 8mm stainless steel cable, utilising the Frogline Shuttle System, up-to four users per system, two per span.

### LIFELINES

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
STAT.FROGSAL008	Surface Mounted Intermediate EXTENDED Anchor (Aluminium Plate)	1.536
STAT.FROGSUR008	Surface Mounted Intermediate EXTENDED Anchor (316 Stainless Steel Plate)	2.113
STAT.FROGSUR004	Fixings for Surface Mounted Plate Installation	0.100

### Surface Mounted INTERMEDIATE EXTENDED Anchor (Aluminium Plate)

Intermediate anchor designed to be mounted on the surface of a metal roof profile as part of a horizontal lifeline system, to limit lifeline span distances.

Longer tube to enable bending to suit small degree changes in the line.



PRODUCT CODE: STAT.FROGSAL008

Components	Description	Material	Qty
FROGLINE INT_EXT	FrogLine Base Int EXTENDED	316SS	1
BOLT-M16x35mm-SS	Bolt: M16 x 35mm Set Screw	316SS	1
ADV-PLATE-AL-H-305	SurfaceLink Plate 305mm (precut holes)	*MGA	2
WASHER 70od-Plastic	Washer: 70mm OD	Plastic	2
WASHER 70od-SS	Washer: 70mm OD	316SS	1
NUT M16	Nut: M16	316SS	1
FOAM-TAPE 29cm	Barrier Foam Tape	Foam	2

### Surface Mounted INTERMEDIATE EXTENDED Anchor (Stainless Plate)

Intermediate anchor designed to be mounted on the surface of a metal roof profile as part of a horizontal lifeline system, to limit lifeline span distances.

Longer tube to enable bending to suit small degree changes in the line.



PRODUCT CODE: STAT.FROGSUR008

Components	Description	Material	Qty
FROGLINE INT_EXT	FrogLine Base Int EXTENDED	316SS	1
BOLT-M16x35mm-SS	Bolt: M16 x 35mm	316SS	1
ADV-PLATE-SS-H-305	SurfaceLink Plate (precut holes)	316SS	1
WASHER 70od-SS	Washer: 70mm OD	316SS	1
NUT M16	Nut: M16	316SS	1
FOAM-TAPE 29cm	Barrier Foam Tape	Foam	2

### Fixings



Fixings required to install surface mounted plate to roof sheeting.

PRODUCT CODE: STAT.FROGSUR004

Components	Description	Material	Qty
SCREW 14.10x75mm	14-10x75mm Hex Head Screws	Coated	2
RIVETS_8mm	Rivets: 8mm	Aluminium	10



## STANDING SEAM MOUNTED FROGLINE



- Permanent horizontal height safety lifeline system, designed to be mounted onto standing seam roof profile.
- Install using S5 Clamp Brackets, contact us to find the bracket to suit your roof sheeting.
- Brackets clamp to the roof profile with no penetration to the roof sheeting for superior waterproofing.
- Suits pitches no greater than 25 degrees.
- Fitted where it is difficult to access the underside of the roof. Equipped with an engineered energy absorbing region to minimise loads on users and structures in the event of a fall.
- Continuous connection with 8mm stainless steel cable, utilising the Frogline Shuttle System, up-to four users per system, two per span.

### LIFELINES

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
STAT.FROGKSCF001+FIXINGS	FrogLine AL SurfaceLink Intermediate Anchor+FIXINGS	3.109
STAT.FROGKSCF002+FIXINGS	FrogLine AL SurfaceLink End Anchor+FIXINGS	3.123
STAT.FROGKSCF003+FIXINGS	FrogLine AL SurfaceLink Corner Anchor+FIXINGS	3.186

### Surface Mounted INTERMEDIATE Anchor (S5 Brackets)

Intermediate anchor designed to be mounted on standing seam roof profiles where access to structure is difficult or roof penetrations are not permitted.

Permanent horizontal lifeline system to limit lifeline span distances.



PRODUCT CODE: STAT.FROGKSCF001+FIXINGS

Components	Description	Material	Qty
FROGLINE INT	FrogLine Base Intermediate	316SS	1
BOLT-M16x35mm-SS	Bolt: M16x35mm Set Screw	316SS	1
WASHER 70od-Plastic	Washer: 70mm OD	Plastic	2
ADV-PLATE-AL-SIZE	SurfaceLink Plate (Plate Selector)	*MGA	1
WASHER 70od-SS	Washer: 70mm OD	316SS	1
NUT M16	Nut: M16	316SS	1
S5_Z_BRACKET	S5 Clamp (ADIVSE TYPE)	Alum/SS	4

### Surface Mounted END Anchor (S5 Brackets)

End anchor designed to be mounted on standing seam roof profiles where access to structure is difficult or roof penetrations are not permitted.

Permanent horizontal lifeline system as attachment points for the cable to start and terminate at.



PRODUCT CODE: STAT.FROGKSCF002+FIXINGS

Components	Description	Material	Qty
FROGLINE END	FrogLine Base End	316SS	1
BOLT-M16x35mm-SS	Bolt: M16x35mm Set Screw	316SS	1
WASHER 70od-Plastic	Washer: 70mm OD	Plastic	2
ADV-PLATE-AL-SIZE	SurfaceLink Plate (Plate Selector)	*MGA	1
WASHER 70od-SS	Washer: 70mm O.D	316SS	1
NUT M16	Nut: M16	316SS	1
S5_Z_BRACKET	S5 Clamp (ADIVSE TYPE)	Alum/SS	4

### Surface Mounted CORNER Anchor (S5 Brackets)

Corner anchor designed to be mounted on standing seam roof profiles where access to structure is difficult or roof penetrations are not permitted.

The lifeline cable runs through the corner anchor point re-directing it by up to 90 degrees.

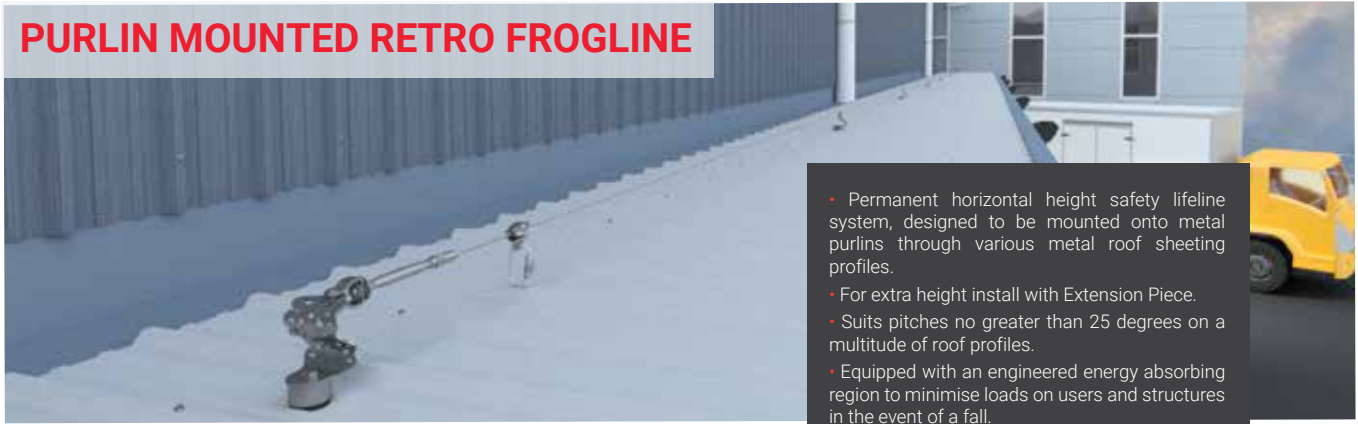


PRODUCT CODE: STAT.FROGKSCF003+FIXINGS

Components	Description	Material	Qty
FROGLINE CNR	FrogLine Base Corner	316SS	1
BOLT-M16x35mm-SS	Bolt: M16x35mm Set Screw	316SS	1
WASHER 70od-Plastic	Washer: 70mm OD	Plastic	2
ADV-PLATE-AL-SIZE	SurfaceLink Plate (Plate Selector)	*MGA	1
WASHER 70od-SS	Washer: 70mm OD	316SS	1
NUT M16	Nut: M16	316SS	1
S5_Z_BRACKET	S5 Clamp (ADIVSE TYPE)	Alum/SS	4



## PURLIN MOUNTED RETRO FROGLINE



- Permanent horizontal height safety lifeline system, designed to be mounted onto metal purlins through various metal roof sheeting profiles.
- For extra height install with Extension Piece.
- Suits pitches no greater than 25 degrees on a multitude of roof profiles.
- Equipped with an engineered energy absorbing region to minimise loads on users and structures in the event of a fall.
- Continuous connection with 8mm stainless steel cable, utilising the Frogline Shuttle System, up-to four users per system, two per span.

### LIFELINES

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
STAT.FROGRET001	Lifeline RetroLink Intermediate Anchor	0.971
STAT.FROGRET002	Lifeline RetroLink End Anchor	0.985
STAT.FROGRET003	Lifeline RetroLink Corner Anchor	1.048
STAT.FROGRET008	Lifeline RetroLink Intermediate Extended Anchor	1.117
Extensions are used when extra height is required - lengths available 35mm, 55mm and 90mm		
STAT.FROGRET001_EXT	Lifeline RetroLink Intermediate Anchor with 35mm Extension	1.784
STAT.FROGRET002_EXT	Lifeline RetroLink End Anchor with 35mm Extension	1.798
STAT.FROGRET003_EXT	Lifeline RetroLink Corner Anchor with 35mm Extension	1.861
STAT.FROGRET008_EXT	Lifeline RetroLink Intermediate Extended Anchor with 35mm Extension	1.930

### Retro INTERMEDIATE Anchor

Intermediate anchor designed to be mounted into metal purlin construction with various metal roof profiles, to limit lifeline span distances.

- Drill a 25mm hole.



PRODUCT CODE: STAT.FROGRET001

Components	Description	Material	Qty
FROGLINE INT	FrogLine Base Intermediate	316SS	1
BOLT-M16x90mm-SS	Bolt: M16 90mm Set Screw	316SS	1
O-RING	O-Ring	Rubber	1
WASHER M20	Washer: M20	316SS	1
WASHER 700D-Foam	Foam Washer: 700D	Foam	1
RETRO-TUBE	Retro Tube with Tie	316SS	1

### Retro END Anchor

End anchor designed to be mounted into metal purlin construction with various metal roof profiles as attachment points for the cable to start and terminate at.

- Drill a 25mm hole.



PRODUCT CODE: STAT.FROGKSCF002

Components	Description	Material	Qty
FROGLINE END	FrogLine Base End	316SS	1
BOLT-M16x90mm-SS	Bolt: M16 90mm	316SS	1
O-RING	O-Ring	Rubber	1
WASHER M20	Washer: M20	316SS	1
WASHER 700D-Foam	Foam Washer: 700D	Foam	1
RETRO-TUBE	Retro Tube with Tie	316SS	1

### Retro CORNER Anchor

Corner anchor designed to be mounted into metal purlin construction with various metal roof profiles. The lifeline cable runs through the corner anchor point re-directing it by up to 90 degrees.

- Drill a 25mm hole.



PRODUCT CODE: STAT.FROGKSCF003

Components	Description	Material	Qty
FROGLINE CNR	FrogLine Base Corner	316SS	1
BOLT-M16x90mm-SS	Bolt: M16 90mm Set Screw	316SS	1
O-RING	O-Ring	Rubber	1
WASHER M20	Washer: M20	316SS	1
WASHER 700D-Foam	Foam Washer: 700D	Foam	1
RETRO-TUBE	Retro Tube with Tie	316SS	1

### Retro EXTENDED INTERMEDIATE Anchor

Intermediate anchor designed to be mounted into metal purlin construction with various metal roof profiles, to limit lifeline span distances.

Longer tube to enable bending to suit small degree changes in the line.



PRODUCT CODE: STAT.FROGKSCF008

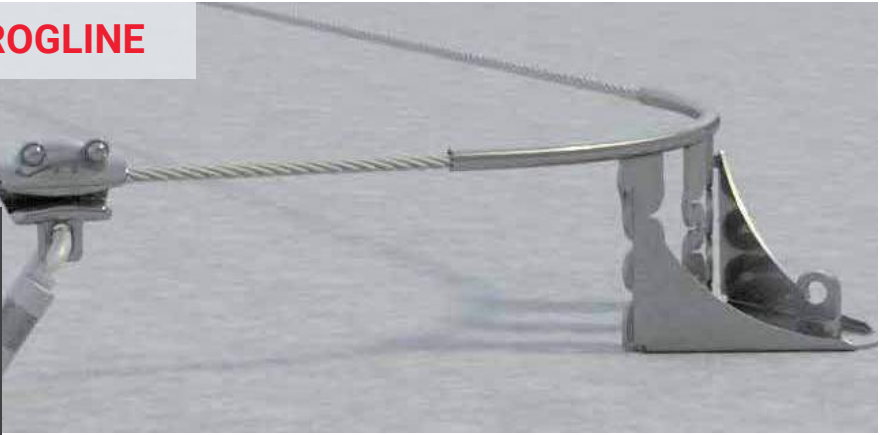
Components	Description	Material	Qty
FROGLINE INT_EXT	FrogLine Base Intermediate Extended	316SS	1
BOLT-M16x90mm-SS	Bolt: M16 90mm Set Screw	316SS	1
O-RING	O-Ring	Rubber	1
WASHER M20	Washer: M20	316SS	1
WASHER 700D-Foam	Foam Washer: 700D	Foam	1
RETRO-TUBE	Retro Tube with Tie	316SS	1

# Horizontal Lifeline

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## CONCRETE MOUNTED FROGLINE

- Permanent horizontal height safety lifelinesystem, designed to be mounted onto metalpurlins through various metal roof sheetingprofiles.
- For extra height install with Extension Piece.
- Suits pitches no greater than 25 degrees on a multitude of roof profiles.
- Equipped with an engineered energyabsorbing region to minimise loads on users and structures in the event of a fall.
- Continuous connection with 8mm stainlesssteel cable, utilising the Frogline Shuttle System, up-to four users per system, two per span.



### LIFELINES

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
STAT.FROGCON001	Lifeline Concrete Intermediate Anchor	1.021
STAT.FROGCON002	Lifeline Concrete End Anchor	1.035
STAT.FROGCON003	Lifeline Concrete Corner Anchor	1.098
STAT.FROGCON008	Lifeline Concrete Intermediate Extended Anchor	1.167

### Concrete Mounted INTERMEDIATE Anchor



Intermediate anchor designed to limit lifeline span distances.

- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.

PRODUCT CODE: STAT.FROGCON001

Components	Description	Material	Qty
FROGLINE INT	FrogLine Base Intermediate	316SS	1
FROGLINE BOLT	FrogLine Eyebolt M16 35mm	316SS	1
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	1

### Concrete Mounted END Anchor



End anchor designed to be mounted into a concrete structure as attachment points for the cable to start and terminate at.

- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.

PRODUCT CODE: STAT.FROGCON002

Components	Description	Material	Qty
FROGLINE END	FrogLine Base End	316SS	1
FROGLINE BOLT	FrogLine Eyebolt M16 35mm	316SS	1
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	1

### Concrete Mounted CORNER Anchor



Corner anchor designed to re-direct cable by up to 90 degrees.

- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.

PRODUCT CODE: STAT.FROGCON003

Components	Description	Material	Qty
FROGLINE CNR	FrogLine Base Corner	316SS	1
FROGLINE BOLT	FrogLine Eyebolt M16 35mm	316SS	1
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	1

### Concrete Mounted CORNER Anchor



Intermediate anchor designed to limit lifeline span distances. Longer tube to enable bending to suit small degree changes in the line.

- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.

PRODUCT CODE: STAT.FROGCON008

Components	Description	Material	Qty
FROGLINE INT_EXT	FrogLine Base Intermediate Extended	316SS	1
FROGLINE BOLT	FrogLine Eyebolt M16 35mm	316SS	1
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	1



## STEEL MOUNTED FROGLINE

- Permanent horizontal height safety lifeline system, designed to be mounted into steel construction.
- Suits pitches no greater than 25 degrees on a multitude of roof profiles.
- Equipped with an engineered energy absorbing region to minimise loads on users and structures in the event of a fall.
- Continuous connection with 8mm stainless steel cable, utilising the Frogline Shuttle System, up-to four users per system, two per span.



### LIFELINES

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
STAT.FROGSTE001	Lifeline Steel Purlin Intermediate Anchor	0.816
STAT.FROGSTE002	Lifeline Steel Purlin End Anchor	0.830
STAT.FROGSTE003	Lifeline Steel Purlin Corner Anchor	0.893
STAT.FROGSTE008	Lifeline Steel Intermediate Extended Anchor	0.962

### Steel Purlin INTERMEDIATE Anchor



Intermediate anchor designed to be mounted into steel structures to limit lifeline span distances.

- Drill a 25mm hole.

PRODUCT CODE: STAT.FROGSTE001

Components	Description	Material	Qty
FROGLINE INT	FrogLine Base Intermediate	316SS	1
BOLT-M16x50mm-SS	Bolt: M16x50mm Set Screw	316SS	1
WASHER M16	Washer: M16	316SS	1
NUT M16	Nut: M16	316SS	1

### Steel Purlin END Anchor



End anchor designed to be mounted into steel structures as attachment points for the cable to start and terminate at.

- Drill a 25mm hole.

PRODUCT CODE: STAT.FROGSTE002

Components	Description	Material	Qty
FROGLINE END	FrogLine Base End	316SS	1
BOLT-M16x50mm-SS	Bolt: M16x50mm Set Screw	316SS	1
WASHER M16	Washer: M16	316SS	1
NUT M16	Nut: M16	316SS	1

### Steel Purlin CORNER Anchor



Corner anchor designed to be mounted into steel structures. The lifeline cable runs through the corner anchor point re-directing it by up to 90 degrees.

- Drill a 25mm hole.

PRODUCT CODE: STAT.FROGSTE003

Components	Description	Material	Qty
FROGLINE CNR	FrogLine Base Corner	316SS	1
BOLT-M16x50mm-SS	Bolt: M16x50mm Set Screw	316SS	1
WASHER M16	Washer: M16	316SS	1
NUT M16	Nut: M16	316SS	1

### Steel Purlin EXTENDED INTERMEDIATE Anchor

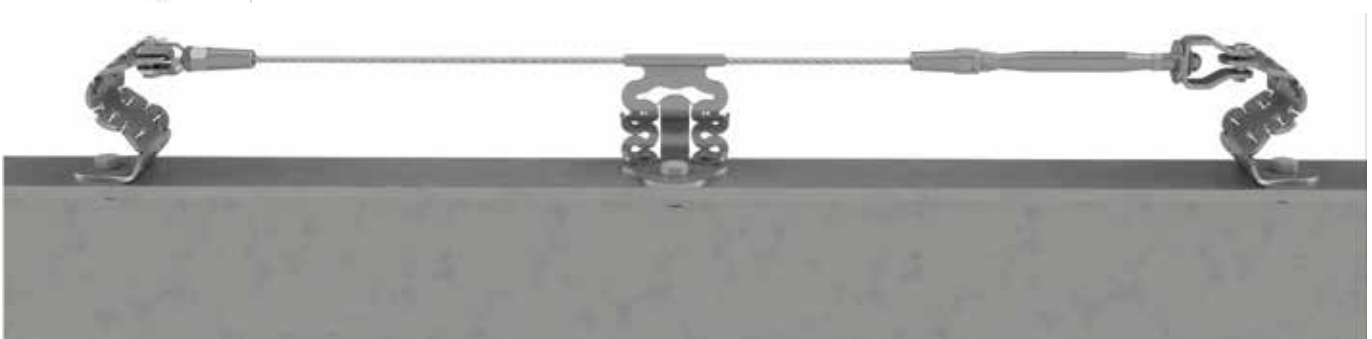


Intermediate anchor designed to be mounted into steel structures to limit lifeline span distances. Longer tube to enable bending to suit small degree changes in the line.

- Drill a 25mm hole.

PRODUCT CODE: STAT.FROGSTE008

Components	Description	Material	Qty
FROGLINE INT_EXT	FrogLine Base Intermediate Extended	316SS	1
BOLT-M16x50mm-SS	Bolt: M16x50mm Set Screw	316SS	1
WASHER M16	Washer: M16	316SS	1
NUT M16	Nut: M16	316SS	1

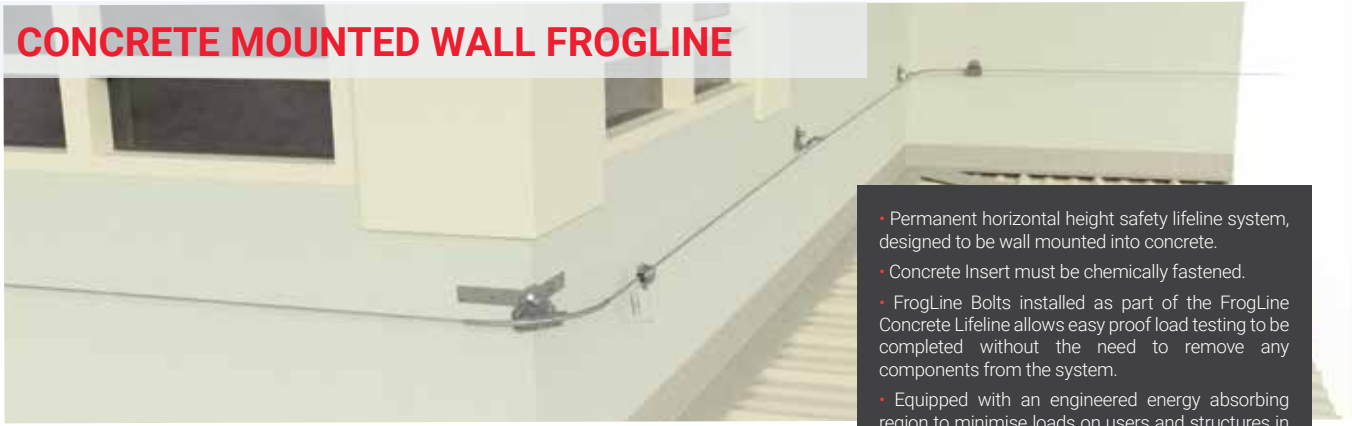




# Horizontal Lifeline

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## CONCRETE MOUNTED WALL FROGLINE



- Permanent horizontal height safety lifeline system, designed to be wall mounted into concrete.
- Concrete Insert must be chemically fastened.
- FrogLine Bolts installed as part of the FrogLine Concrete Lifeline allows easy proof load testing to be completed without the need to remove any components from the system.
- Equipped with an engineered energy absorbing region to minimise loads on users and structures in the event of a fall.
- Continuous connection with 8mm stainless steel cable, utilising the Frogline Shuttle System, up to four users per system, two per span.

### LIFELINES

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
STAT.FROGCON002	Concrete End Anchor	1.035
STAT.FROGCON001	Concrete Intermediate Anchor	1.021
STAT.FROGCON006	Concrete Corner Wall Anchor	2.986

### Concrete Mounted (Internal) Corner Wall Anchor Components Below

STAT.FROGCON001	Concrete Intermediate Anchor x 2	1.021
CORNERTUBE90	Corner Tube: 90 degrees	0.179

### Concrete Mounted INTERMEDIATE Anchor



Intermediate anchor designed to be mounted into a concrete wall structure, to limit lifeline span distances.

- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.

PRODUCT CODE: STAT.FROGCON001

Components	Description	Material	Qty
FROGLINE INT	FrogLine Base Intermediate	316SS	1
FROGLINE BOLT	FrogLine Eyebolt M16 35mm	316SS	1
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	1

### Concrete Mounted END Anchor



End anchor designed to be mounted into a concrete wall structure as attachment points for the cable to start and terminate at.

- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.

PRODUCT CODE: STAT.FROGCON002

Components	Description	Material	Qty
FROGLINE INT_OH	FrogLine Base Overhead Intermediate	316SS	1
FROGLINE BOLT	FrogLine Eyebolt M16 35mm	316SS	1
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	1

### Concrete Mounted (EXTERNAL) CORNER WALL Anchor



Corner anchor designed to be mounted into a concrete wall as part of a horizontal lifeline system. The lifeline cable runs through the corner anchor point re-directing it by up to 90 degrees.

PRODUCT CODE: STAT.FROGCON006

Components	Description	Material	Qty
FROGLINE CNR_WM	FrogLine Base Intermediate	316SS	1
FROGLINE CNR_WM BRACKET	FrogLine Corner_WALL Bracket (made to suit)	316SS	1
BOLT-M16x35mm-SS	Bolt: M16x35mm	316SS	1
WASHER M16	Washer: M16	316SS	1
NUT M16	Nut: M16	316SS	1
FROGLINE BOLT	FrogLine Eyebolt M16 35mm	316SS	4
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	4

### Concrete Mounted (INTERNAL) CORNER WALL Anchor



Corner anchor designed to be mounted into a concrete wall. The lifeline cable runs through the corner tube re-directing it by up to 90 degrees.

- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.

Components	Description	Material	Qty
FROGLINE INT_EXT	FrogLine Base Intermediate EXTENDED	316SS	1
FROGLINE BOLT	FrogLine Eyebolt M16 35mm	316SS	1
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	1



## STEEL MOUNTED WALL FROGLINE



- Permanent horizontal height safety lifeline system, designed to be wall mounted onto steel purlin construction.
- Equipped with an engineered energy absorbing region to minimise loads on users and structures in the event of a fall.
- Continuous connection with 8mm stainless steel cable, utilising the Frogline Shuttle System, up-to four users per system, two per span.

### LIFELINES

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

	Description	Weight (kg)
STAT.FROGSTE002	Lifeline Steel Purlin End Anchor	0.830
STAT.FROGSTE001	Lifeline Steel Purlin Intermediate Anchor	0.847
STAT.FROGSTE005	Lifeline Steel Purlin Corner Wall Anchor	1.618

### Steel Purlin INTERMEDIATE Anchor



Intermediate anchor designed to be mounted onto steel purlin construction as part of a wall mounted horizontal lifeline system.

- To limit lifeline span distances.
- Drill a 25mm hole.

PRODUCT CODE: STAT.FROGSTE001

Components	Description	Material	Qty
FROGLINE INT	FrogLine Base Intermediate	316SS	1
BOLT-M16x50mm-SS	Bolt: M16x50mm Set Screw	316SS	1
WASHER M16	Washer: M16	316SS	1
NUT M16	Nut: M16	316SS	1

### Steel Purlin END Anchor



End anchor designed to be mounted into steel purlin structures as part of a wall mounted horizontal lifeline system.

- End anchor attachment points for the cable to start and terminate at.
- Drill a 25mm hole.

PRODUCT CODE: STAT.FROGSTE002

Components	Description	Material	Qty
FROGLINE END	FrogLine Base End	316SS	1
BOLT-M16x50mm-SS	Bolt: M16x50mm Set Screw	316SS	1
WASHER M16	Washer: M16	316SS	1
NUT M16	Nut: M16	316SS	1

### Steel Purlin CORNER WALL Anchor



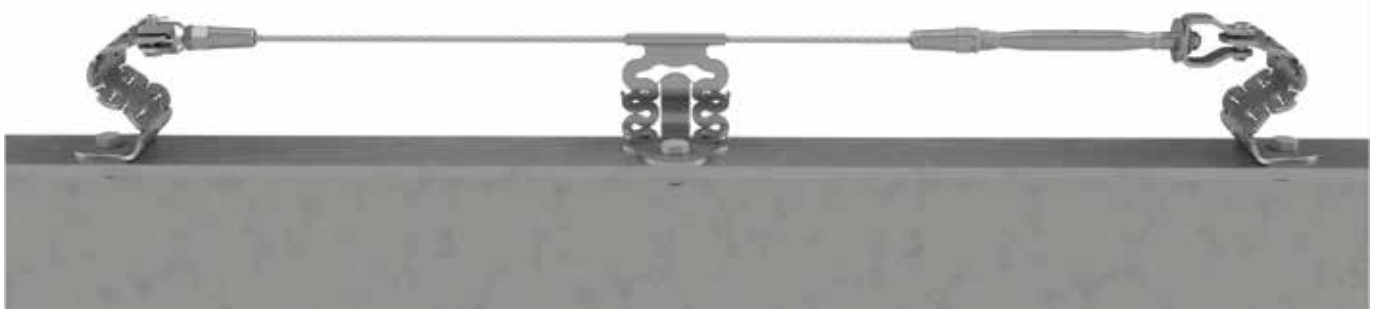
Corner anchor designed to be mounted onto steel purlin structures as part of a wall mounted horizontal lifeline system.

- The lifeline cable runs through the corner anchor point re-directing it by up to 90 degrees.
- Drill a 25mm hole.

PRODUCT CODE: STAT.FROGSTE005

Components	Description	Material	Qty
FROGLINE CNR_WM	FrogLine Base Corner WALL	316SS	1
FROGLINE CNR_WM_BRACKET	FrogLine Base Corner WALL BRACKET (made to suit)	316SS	1
BOLT-M16x50mm-SS	Bolt: M16x50mm Set Screw	316SS	1
WASHER M16	Washer: M16	316SS	1
NUT M16	Nut: M16	316SS	1

FIXINGS REQUIRED TO INSTALL TO STRUCTURE



# Horizontal Lifeline

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## CONCRETE MOUNTED OVERHEAD FROGLINE

- Permanent horizontal height safety lifeline system, designed to be wall mounted overhead into concrete.
- Concrete Insert must be chemically fastened.
- FrogLine Bolts installed as part of the FrogLine Concrete Lifeline allows easy proof load testing to be completed without the need to remove any components from the system.
- Equipped with an engineered energy absorbing region to minimise loads on users and structures in the event of a fall.
- Continuous connection with 8mm stainless steel cable, utilising the Frogline Shuttle System, up-to four users per system, two per span.



### LIFELINES

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

Product Code	Description	Weight (kg)
STAT.FROGCON002	Concrete End Anchor	1.035
STAT.FROGCON001	Concrete Intermediate Anchor	1.052
STAT.FROGCON006	Concrete Corner Wall Anchor	0.791
<b>Concrete Mounted (Internal) Corner Wall Anchor Components Below</b>		
STAT.FROGCON001	Concrete Intermediate Anchor x 2	1.052
CORNERTUBE90	Corner Tube: 90 degrees	0.179

### Concrete Mounted OVERHEAD INTERMEDIATE Anchor



Intermediate anchor designed to be mounted into a concrete overhead structure to limit lifeline span distances.

- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.

PRODUCT CODE: STAT.FROGCON004

Components	Description	Material	Qty
FROGLINE INT_OH	FrogLine Base Overhead Intermediate	316SS	1
FROGLINE BOLT	FrogLine Eyebolt M16 35mm	316SS	1
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	1

### Concrete Mounted END Anchor



End anchor designed to be mounted into a concrete overhead structure as attachment points for the cable to start and terminate at.

- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.

PRODUCT CODE: STAT.FROGCON002

Components	Description	Material	Qty
FROGLINE END	FrogLine Base End	316SS	1
FROGLINE BOLT	FrogLine Eyebolt M16 35mm	316SS	1
CON-INSERT	ConcreteLink Insert M16 90mm	316SS	1

### Concrete Mounted OVERHEAD INTERMEDIATE Anchor



Corner anchor designed to be mounted into a concrete overhead structure. The lifeline cable runs through the corner tube re-directing it by up to 90 degrees.

- Chemically anchored into concrete.
- Drill a 28mm hole to a depth of 100mm.

PRODUCT CODE: STAT.FROGSTE002

Components	Description	Material	Qty
FROGLINE END	FrogLine Base End	316SS	1
BOLT-M16x50mm-SS	Bolt: M16x50mm Set Screw	316SS	1
WASHER M16	Washer: M16	316SS	1
NUT M16	Nut: M16	316SS	1

### Overhead Lifeline Shuttle



- For use on SafetyLink OVERHEAD Lifeline Systems.
- No need to disconnect from Lifeline as it passes easily over Intermediate Anchor Points.
- Shuttle: Solid Stainless Steel construction.
- Karabiner - Alloy steel, silver zinc plated.
- Suits 8mm Cable.

PRODUCT CODE: STAT.SHUTL002

Components	Description	Material	Qty
STAT.SHUTL002.01	OVERHEAD Shuttle (Nylon Wheels)	316SS	1
KARBNR015	SafetyLink Karabiner	Zinc Plated	1



## STEEL MOUNTED OVERHEAD FROGLINE



- Permanent horizontal height safety lifeline system, designed to be mounted overhead onto steel purlin construction.
- Equipped with an engineered energy absorbing region to minimise loads on users and structures in the event of a fall.
- Continuous connection with 8mm stainless steel cable, utilising the Frogline Shuttle System, up-to four users per system, two per span.

### LIFELINES

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

	Description	Weight (kg)
STAT.FROGST002	Lifeline Steel Purlin End Anchor	0.830
STAT.FROGST004	Lifeline Steel Purlin OVERHEAD Intermediate Anchor	0.847
STAT.SHUTL002	Overhead Lifeline Shuttle with Karabiner	0.791

### Steel Purlin INTERMEDIATE OVERHEAD Anchor



Intermediate anchor designed to be mounted into steel structure as part of an overhead horizontal lifeline system.

- To limit lifeline span distances.
- Drill a 25mm hole.

PRODUCT CODE: STAT.FROGST004

Components	Description	Material	Qty
FROGLINE INT_OH	FrogLine Intermediate Overhead	316SS	1
BOLT-M16x50mm-SS	Bolt: M16x50mm Set Screw	316SS	1
WASHER M16	Washer: M16	316SS	1
NUT M16	Nut: M16	316SS	1

### Steel Purlin END Anchor



End anchor designed to be mounted into steel structures as part of an overhead horizontal lifeline system.

- End anchor attachment points for the cable to start and terminate at.
- Drill a 25mm hole.

PRODUCT CODE: STAT.FROGST002

Components	Description	Material	Qty
FROGLINE END	FrogLine Base End	316SS	1
BOLT-M16x50mm-SS	Bolt: M16x50mm Set Screw	316SS	1
WASHER M16	Washer: M16	316SS	1
NUT M16	Nut: M16	316SS	1

### Overhead Lifeline Shuttle



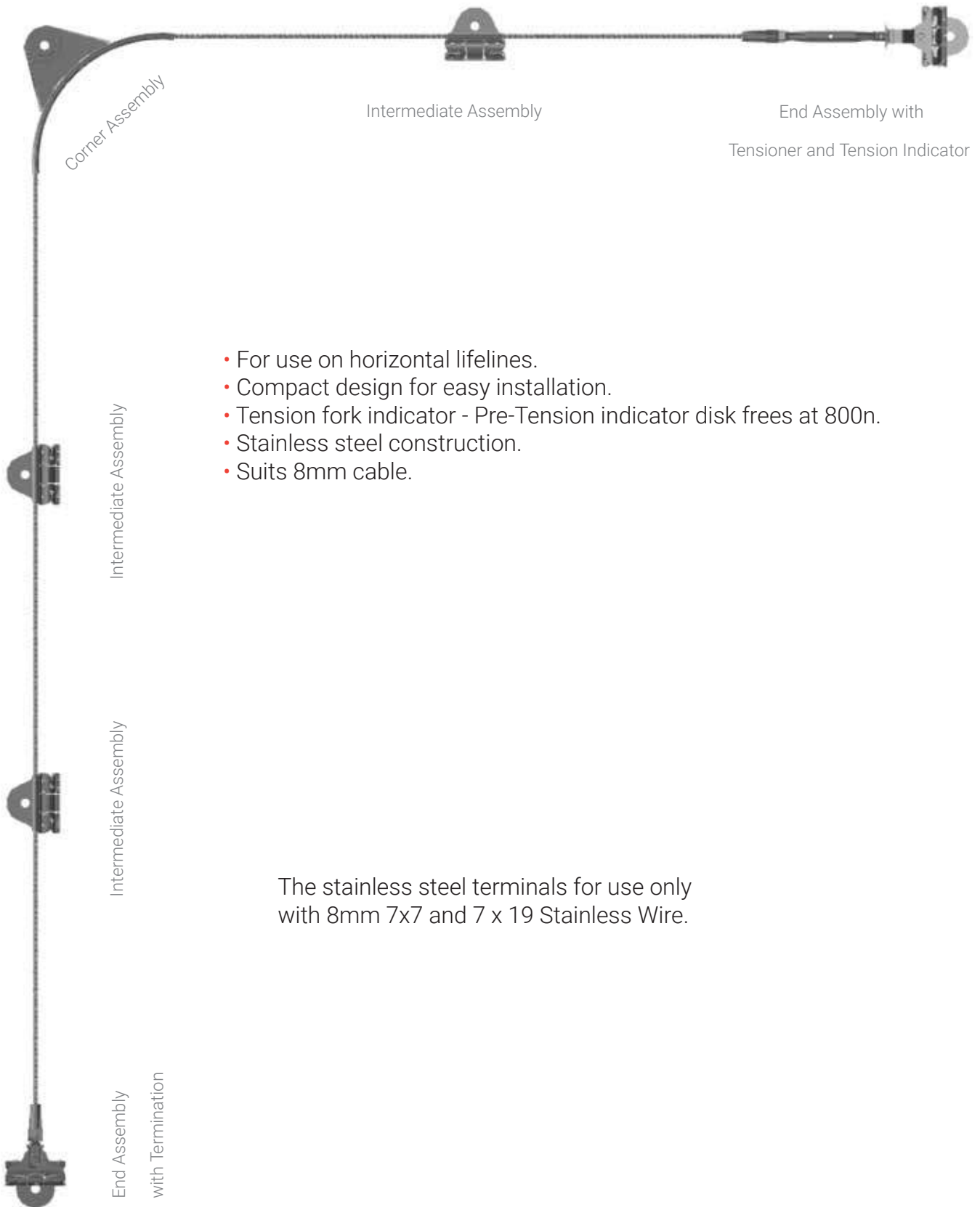
- For use on SafetyLink OVERHEAD Lifeline Systems.
- No need to disconnect from Lifeline as it passes easily over Intermediate Anchor Points.
- Shuttle: Solid Stainless Steel construction.
- Karabiner - Alloy steel, silver zinc plated.
- Suits 8mm Cable.

PRODUCT CODE: STAT.SHUTL002

Components	Description	Material	Qty
STAT.SHUTL002.01	OVERHEAD Shuttle (Nylon Wheels)	316SS	1
KARBNR015	SafetyLink Karabiner	Zinc Plated	1



## HORIZONTAL LIFELINE TERMINALS



- For use on horizontal lifelines.
- Compact design for easy installation.
- Tension fork indicator - Pre-Tension indicator disk frees at 800n.
- Stainless steel construction.
- Suits 8mm cable.

The stainless steel terminals for use only with 8mm 7x7 and 7 x 19 Stainless Wire.

### Cable



- For use on SafetyLink Lifeline Systems.
- 316 Stainless steel cable.
- 8mm diameter.
- 7 x 7 wire rope.

Product Code	Description	Material
STAT.CABLE001	Cable: 8mm 7x7, per metre	316SS
STAT.CABLE001.01	Roll Cable: 8mm 7x7, 305 metres	316SS
STAT.CABLE_8mm_7x19_SS	Cable: 8mm 7x19, per metre	316SS



## Horizontal Lifeline Shuttle



- For use on SafetyLink HORIZONTAL Lifeline Systems.
- No need to disconnect from Lifeline as it passes easily over Intermediate Anchor Points.
- Suits pitches up-to 25 degrees.
- Must be used with included Karabiner.
- Suits 8mm Cable.

PRODUCT CODE: STAT.SHUTL003

Components	Description	Material	Qty	Weight
STAT.SHUTL003.01	FROGLINE Shuttle	316SS	1	401g
KARBNR015	SafetyLink Karabiner	Zinc Plated	1	163g

## Horizontal Overhead Lifeline Shuttle



- For use on SafetyLink OVERHEAD Lifeline Systems.
- No need to disconnect from Lifeline as it passes easily over Intermediate T Bolts.
- Shuttle: Solid Stainless Steel construction.
- Karabiner - Alloy steel, silver zinc plated.
- Suits 8mm Cable.

PRODUCT CODE: STAT.SHUTL002

Components	Description	Material	Qty	Weight
STAT.SHUTL002.01	OVERHEAD Shuttle (Nylon Wheels)	316SS	1	628g
KARBNR015	SafetyLink Karabiner	Zinc Plated	1	163g

## Horizontal Overhead Lifeline Shuttle



- For use on SafetyLink horizontal OVERHEAD Lifeline Systems.
- No need to disconnect from Lifeline as it passes easily over Intermediate anchor points.
- Suits pitches up-to 25 degrees.
- Must be used with included Karabiner.
- Suits 8mm Cable.

PRODUCT CODE: STAT.SHUTL004

Components	Description	Material	Qty	Weight
STAT.SHUTL004.01	OVERHEAD Shuttle (SS Wheels)	316SS	1	943g
KARBNR015	SafetyLink Karabiner	Zinc Plated	1	163g

## Vertical Lifeline Shuttle with Karabiner



- For use on SafetyLink VERTICAL Lifeline Systems.
- Will track up or down with user vertically and self lock if a fall occurs.
- Can be installed/removed mid-line.
- For use on 8mm stainless steel or galvanised wire only.
- Must be used in conjunction with a personal energy absorber.
- Must be used with included Karabiner.

PRODUCT CODE: STAT.SHUTL002

Components	Description	Material	Qty	Weight
LADER001.10.01	Vertical Shuttle	316SS	1	482g
KARBNR015	SafetyLink Karabiner	Zinc Plated	1	163g

## SWAGELESS Terminals



- Swageless Terminals.
- Do not reuse jaws or house.
- Easy Installation.

Product Code	Description	Material	Weight
STAT.TERMN002	Swageless Termination	316SS	362g
STAT.TENSR002	Swageless Tensioner	316SS	629g
STAT.TENSR004	Swageless Tensioner with Tension Indicator	316SS	815g

## CRIMP ON Terminals



- Crimp On Terminals.
- Easy installation with battery powered crimping tool.

Product Code	Description	Material	Weight
STAT.TERMN003	Crimped Termination	316SS	362g
STAT.TENSR003	Crimped Tensioner	316SS	629g
STAT.TENSR005	Crimped Tensioner & Tension Indicator	316SS	815g

## SWAGED Terminals



- Swaged Terminals.
- Installation requires a Roll Swaging Machine.

Product Code	Description	Material	Weight
STAT.TERMN001	Swageless Termination	316SS	362g
STAT.TENSR002	Swageless Tensioner	316SS	629g
STAT.TENSR007	Swaged Tensioner with Tension Indicator	316SS	815g

## Cable Connector

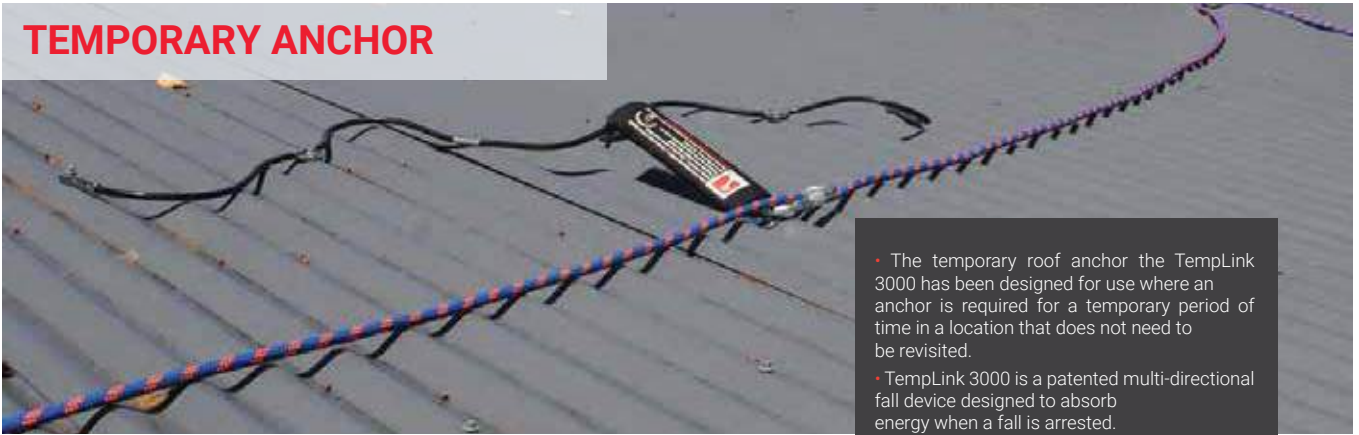


- Cable Connector used to join 8mm cable on lifelines.
- Installation requires battery crimping tool.

Product Code	Description	Material	Qty	Weight
STAT.CABJOIN	SS Cable Connector	316SS	1	125g



## TEMPORARY ANCHOR



The Temporary Roof Anchor the TempLink 3000 is fast, compact, portable, lightweight and relocatable. Be sure to include one in your safety kit today.

- The temporary roof anchor the TempLink 3000 has been designed for use where an anchor is required for a temporary period of time in a location that does not need to be revisited.
- TempLink 3000 is a patented multi-directional fall device designed to absorb energy when a fall is arrested.
- The TempLink 3000 is an extremely useful item for any person wishing to do roof maintenance where there is no permanent safety anchors.
- The design incorporates the same stand out features of all our height safety anchors maximising energy absorption, reducing the load back onto the structure and the person attached to the anchor.

### ANCHORS

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

### TempLink 3000

- Lightweight compact unit, enabling easy manoeuvring to desired location.
- The TempLink can be installed directly on timber rafters or through metal roof sheeting to battens.
- Secure with six (6) 14g 75mm roofing screws.
- 360° Multi-directional, enabling full rotation around the anchor.
- One person anchor.
- Easy to secure with adjustable stainless steel mounting tabs.
- UV coated cable.
- Protective rubberised sleeve preventing damage to roof materials.
- Handy carry bag with installation instructions.
- Eyelet 33.8mm ID.



PRODUCT CODE: SWIVL002

Components	Description	Qty	Weight
TEMPL003	TempLink 3000 - Temporary Anchor	1	1,019g

### Certification Labels



- Certification Labels supplied in packet of 100.
- Labels contain serial numbers for use in computer tracking systems.
- Supplied with permanent marker.
- To be used for marking each individual anchor point for certification purposes.
- Made from High Density Polyethylene.
- Protective clear cover to prevent removal of text from weather or tampering.

Product Code	Description	Weight
LABEL001	Certification Labels	157g

### Warning Entry Compliance Sign



- Essential entry point information for safety system.
- Notes installer information, safe use and inspection details.
- Size: 300mm x 120mm x 1mm.

Product Code	Description	Weight
WARNG001	Warning Compliance Entry Sign	157g

### First Man Up Strop



- Used as first man up system; reduces the amount of entry access anchors required.
- Quicklink must be attached to a load rated anchor.
- Attachment end should be secured with a strop hook when not in use to ensure it can be accessed from a safe area for next use.
- UV plastic coated to prevent wear on roof sheeting.
- 15kN Rated.

Product Code	Description	Material	Qty	Weight
STROP001	1m First man up Strop	316SS/PVC	1	353g
STROP001.5	1.5m First man up Strop	316SS/PVC	1	440g
STROP002	2m First man up Strop	316SS/PVC	1	531g
STROP002.5	2.5m First man up Strop	316SS/PVC	1	619g
STROP003	3m First man up Strop	316SS/PVC	1	669g
STROP003.5	3.5m First man up Strop	316SS/PVC	1	814g
STROP004	4m First man up Strop	316SS/PVC	1	886g

### Strop Hook with Sign



- NOT INCLUDED with strops, order separately.
- Secures the attachment point of the strop when not in use, ensuring the wind cannot blow the strop away from the access point.
- Please note this is not a load rated anchor, only to be used as an accessory to secure the strop.
- Hook can be secured with 2 screws or 2 rivets.
- Sprung Gate for easy and secure use.

Product Code	Description	Qty	Weight
Strohook+Sign	Strop Hook with Warning Tag	1	48g

## LADDER ACCESS BRACKETS

- Essential entry point system to any height safety system, quick and easy installation.
- LadderLink stabilises your ladder preventing sideways movement and therefore holding your ladder in place.
- Adjusting the pitch of the LadderLink is to be done by a sheet metal fabricators' bending machine.
- Protective coating must not be removed.

### STANDARDS:

Tested and manufactured in accordance with AS 1657 Standards.

The building or structure for the anchorages must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

### Facia Mounted LadderLink



- Facia mounted ladder bracket.
- Quick and easy installation.
- Essential entry point system to stabilise your ladder stopping sideways movement and therefore holding the ladder in place safely.
- In addition the LadderLink bracket has two tie off points to aid in securing the ladder in position.

Product Code	Description	Material	Qty	Weight
LADFX008	LadderLink: Facia Mounted	*MGA	1	1,046g

### Rope Guide Bracket



- Guides your ropes and protects your ropes being damaged when abseiling over a sharp edge or gutter.
- One person user, easy to install and non-obtrusive.
- Protects the guttering systems from rope pressure and damage.
- Can be permanently installed or removed after use.
- Eyelets are not rated as anchor points.
- Eyelets for use with strap to contain abseil rope.

Product Code	Description	Material	Qty	Weight
LADFX007	Rope Guide Bracket	*MGA	1	3,415g

### Fixed LadderLink



- Quick and easy installation, protects gutters.
- Essential entry point system to stabilise your ladder.
- In addition, the LadderLink bracket has two tie off points to aid in securing the ladder in position.
- Can be installed under or over roof sheets.

Product Code	Description	Material	Qty	Weight
LADFX001	Fixed LadderLink	*MGA	1	2,290g

### Extended LadderLink



- To extend beyond box gutters and larger areas.
- 980mm gutter to end, overall length 1115mm.
- In addition the LadderLink bracket has two tie off points to aid in securing the ladder in position.
- Can be installed under or over roof sheets.

Product Code	Description	Material	Qty	Weight
LADFX002	Fixed LadderLink: Extended	*MGA	1	6,600g

### Wall Mounted LadderLink



- Wall mounted ladder bracket, fixes directly onto wall.
- In addition the LadderLink bracket has two tie off points to aid in securing the ladder in position.
- Secure with a minimum of four appropriate fixings, see manual.

Product Code	Description	Material	Qty	Weight
LADFX003	Fixed LadderLink: Wall Mounted	*MGA	1	2,203g



## SURFACE MOUNTED ANCHORS



- Surface mounted 360° Multi-directional, will arrest a fall from any direction.
- Install using S5 Clamp Brackets, contact us to find the bracket to suit your roof sheeting.
- Brackets clamp to the roof profile with no penetration to the roof sheeting for superior waterproofing.

### ANCHORS

The provides a comprehensive online platform that enables you to participate in installation training, access product information and compile your certificate information in the one place.

The structure must be assessed by an engineer, unless it is clear to a competent person that the structure is adequate.

### SurfaceLink S5 Bracket Anchor

- A surface mounted height safety anchor point for use on standing seam roof profiles where access to structure is difficult or roof penetrations are not permitted.
- 360° Multi-directional, enabling full rotation around the anchor.
- Eyelet 28mm ID.



PRODUCT CODE: SURFCF001+FIXINGS

Components	Description	Material	Qty
EYEBOLT-SURFACELINK	SurfaceLink Eyebolt	316SS	1
NUT LOCKING HEX	Locking Hex Nut	316SS	1
ADV-PLATE-AL-SIZE	SurfaceLink Plate (Plate Selector)	*MGA	2
WASHER 70od-SS	Washer: 70mm OD	Plastic	1
WASHER 50od-SS	Washer: 50mm OD	316SS	1
NUT M16	Nut: M16	316SS	1
S5_S.BRACKET	S5 Clamp (ADVISE TYPE)	Alum/SS	2

## SURFACE MOUNTED PLATE MATRIX

Description	Photo	Material	Fixings	Weight (kg)
SURFACELINK PLATE – STANDARD (Blank) PART CODE: ADV-PLATE-AL-305 SIZE: 305mm x 243mm x 3mm ROOF PROFILE: Multitude		*MGA	Rivets or S5 Brackets	0.554
SURFACELINK PLATE – STANDARD (Holes) PART CODE: ADV-PLATE-AL-H-305 SIZE: 305mm x 243mm x 3mm ROOF PROFILE: Trimdek (195), Corrugated (228) and Kliplik (258), can also be used with 16x 14 Gauge 50mm Hex Screws in 15mm Plywood		*MGA	Rivets	0.554
SURFACELINK PLATE – STANDARD (Holes) PART CODE: ADV-PLATE-SS-H-305 SIZE: 305mm x 243mm x 2mm ROOF PROFILE: Trimdek (195), Corrugated (228) and Kliplik (258), can also be used with 16x 14 Gauge 50mm Hex Screws in 15mm Plywood		316SS	Rivets	1.083
SURFACELINK PLATE – 370 (Blank) PART CODE: ADV-PLATE-AL-370 SIZE: 370mm x 243mm x 3mm ROOF PROFILE: Multitude		*MGA	Rivets or S5 Brackets	0.710
SURFACELINK PLATE – 370 (Holes) PART CODE: ADV-PLATE-AL-370-H SIZE: 370mm x 243mm x 3mm (Holes at 333mm) ROOF PROFILE: Multitude		*MGA	Rivets	0.710
SURFACELINK PLATE – 450 (Blank) PART CODE: ADV-PLATE-AL-450 ROOF PROFILE: Standing Seam SIZE: 450mm x 243mm x 4mm (option 4x Holes at 400mm profile)		*MGA	Rivets or S5 Brackets	1.117
SURFACELINK PLATE – 550 (Blank) PART CODE: ADV-PLATE-AL-550 ROOF PROFILE: Standing Seam Size: 550mm x 243m x 4mm (option holes at 300mm-400mm-500mm)		*MGA	Rivets	1.365
SURFACELINK PLATE – 550 (Multi Hole) PART CODE: ADV-PLATE-AL-550 ROOF PROFILE: Standing Seam Size: 550mm x 243m x 4mm (option holes at 300mm-400mm-500mm)		*MGA	Rivets	1.365g
SURFACELINK PLATE - 295 PART CODE: ADV-PLATE-SS-295SQ ROOF PROFILE: Membrane SIZE: 295mm x 295mm Square		316SS	Rivets	0.90



## SKYRAIL SYSTEM

SKYRAIL is a horizontal fall protection system, which allows people to work at great heights. The system can be used, for example, on flat roofs, stadium roofs, loading plants, wind turbines or cranes. Attached to floors, walls or ceilings, maintenance work and other activities can be carried out safely with the SKYRAIL system. A MAXIMUM of THREE users can attach themselves easily to the SKYRAIL RUN using their Personal Fall Protection Equipment (PFPE) and move freely along the rail without stopping. The high-quality, architectural appearance of the system will fulfil all your design requirements. A choice of colour scheme allows the SKYRAIL to blend in with the building.



SKYRAIL is tested according to DIN EN 795/D:2012 and CEN/TS 16415 and approved for the protection of up to 3 persons. The system, made of robust, sea water-resistant aluminium alloy, is suitable as personal fall protection and restraint system. In case of a fall, it absorbs the energy through deformation.

Additional components, such as curve elements, are perfectly aligned with the system. The high flexibility of SKYRAIL is most suitable to provide a maximum of safety, also at complex structures. The system was designed and tested to be operated using the SKYRAIL RUNNER.

This runner, certified according to EN 795/D:2012, runs on ball bearings and makes it less affected by wear. It can be attached or removed at any point of the system's rail. Furthermore, it provides excellent running properties.



Further advantages:

- The materials are resilient under particularly aggressive conditions, such as constant alternating immersion in sea water or in the sea water splash zone, in atmospheres that contain chlorine, in indoor swimming pools or in atmospheres with extreme chemical pollution.
- The system only needs a small number of components.
- Easy assembly that can be performed by qualified staff, trained by SKYLOTEC.



## SKYRAIL RAIL COMPONENTS



Available in individual lengths



Available in different radii - standard radius 220 mm

## SKYRAIL RAIL COMPONENTS



Available in different radii - standard radius 240 mm



Available in different radii - standard radius 280 mm

## SKYRAIL SINGLE COMPONENTS



Mounting on various subsurfaces possible. 2 x TORX countersunk screws M8 x 16 included.



Including self tapping cylinder head screws M6 x 25. Drilling template available for forming the holes.

## SKYRAIL ADAPTER PLATES



4 x TORX countersunk screws M8 x 20 included. Easy assembly, since rail connector is framed.



For mounting the SKYRAIL on SKYLOTEC System Pins



With 2 x 13 mm through bores for mounting on concrete.



Internal thread for mounting on SKYLOTEC Assembly Plates and for holding the SKYRAIL bracket.



## TOOLS



Riveting tools for installing the surface mounted roof anchors.

Crimping tools for crimping tensioners and terminations to the cable on lifeline systems.

### RIVET TOOLS



#### GESIPA POWERBIRD BT

Product Code: GESIPA001.01

Includes extra battery with case.

- Used in conjunction with bulbrite rivets, (Drill Size 7.8-8.2mm, 27.7mm length, 1.0-9.5mm grip range).
- Constant forward and backward speed of the jaw assembly.
- Immediate repositioning of the jaw assembly after completion of the setting process saves energy and increases setting frequency.
- Electronic control, no mechanical switching.
- Electronic temperature and overloading monitoring.
- High efficiency through ball screw drive with low energy dispersion.
- 3 piece anti-wear jaws.
- Nosepieces: - 3/16", 5mm, 6mm, 1/4", extended nosepieces available.
- Compact, shockproof plastic housing.
- Disposal of spent mandrel through action of gravity, either forwards through the nosepiece or backwards into the spent mandrel container.

#### GESIPA TOOL HN 2-BT

Product Code: GESIPA001.02

- Gesipa Hand Rivet Tool (HN 2-BT)
- Used in conjunction with 8mm bulbrite rivets

- Drill size 7.8-8.2mm
- Length 27.7mm
- Grip Range 1.0-9.5mm

Technical Data:

- Weight: 1.85Kg
- Stroke: 10mm
- Length: 577mm



#### RIVET - 8mm

- Aluminium Bulbrite Rivets.
- Diametre 7.7.
- Hole 7.8-8.2 mm



Product Code	Description	Seal	Grip mm
RIVET_8mm(27.7)	8mm Bulbrite Rivet	Green	1.1-9.5
RIVET_8mm(34)	8mm Bulbrite Rivet	Yellow	6.4-15.9
RIVET_8mm(39)	8mm Bulbrite Rivet	Black	9.5-19.1

#### COMPACT HAND RIVET TOOL

Product Code: HANDTOOL001

- Designed for installing height safety surface mounted anchor points.
- Reliable, lightweight, simple operation with low maintenance.
- Three piece jaws made of CR Mo steel provides long lasting tool life.
- Designed for use with 8mm bulbrite/tri fold rivets.
- Regularly empty collection container and clear swarf deposits from nose piece.
- Maximum Rivet Size : 8mm.
- Length 320mm.



#### RIVET TOOL SIDE EJECTOR NOSE PIECE

Product Code: GESIPA001.10

- Nose Piece: 9/32BT Side eject nose assembly and adaptor.
- Eliminate swarf contamination within the tool.
- Prevents possible damage to the nose/jaw assembly and saves time in cleaning.
- Saves battery power with larger stroke.



### CRIMPING TOOL



Product Code: STAT.CRIMP009

Battery powered Crimping Tool.

- Able to rotate for different working positions.
- Battery capacity indicator (LED).
- Comes with carry case, charger and two batteries.
- Output force: 12 TONNE.
- Motor: 14.4 VDC.
- C Jaw opening: 42mm.
- EXTRA DIE REQUIRED TO CRIMP 8MM CABLE - Product code: STAT.CRIMP001 (use with STAT.TENSR003, STAT.TENSR005 & STAT.TERMN003).

### CRIMPING TOOL ACCESSORIES

STAT.CRIMP001

Die for battery powered crimping tool STAT.CRIMP009.

- Required for 8mm Cable, for use with STAT.TENSR003, STAT.TENSR005 and STAT.TERMN003.
- Size A/F10.83.



STAT.CRIMP001

Extra Battery for Crimping Tool





## HYDRAJAWS PULL TESTER

- To comply with recognised Industry Standards each Concrete Insert must be tested after installation and at every recertification inspection.
- Ensure you wait the recommended curing time as specified by the chemical anchor instructions.
- The pull test can be done using a 16mm threaded eyebolt. Test consists of ultimate pull out force proof loading to 50% of design purpose of anchorage.



Model 2000 Medium Duty Fixing Testers - enabling engineers to confirm the holding power of anchors in most construction materials.

- The Model 2000 Eye Bolt Kit comprises the necessary accessories to enable the pull test of common eye bolt and ring bolt fixings.

### KIT CONTENTS:

1. Model 2000 medium duty tester
2. 50mm Stroke tester body
3. 15kn Gauge
4. 150 Load spreading bridge with level bubbles
5. 75mm Hex legs with 25mm leg extension adjustment
6. Swivel feet
7. M12 Locking adaptor
8. M12 Ringbolt adaptor clevis
9. Operating nut
10. 3mm Ball driver
11. Allan key
12. Spare screws
13. Carry case with filler
14. Operating instructions
15. Calibration certificate

### EXPORT MODELS:

All export kits are fitted with a hydraulic tester body coupler, gauge couplers and an oil bottle with coupler.



## HYDRAJAWS PULL TESTER - MODEL 2000 DELUXE PLUS

- The Model 2000 Deluxe 'PLUS' Kit is our general purpose kit and features a gauge of choice and a comprehensive range of accessories to cover a wide range of pull test situations.
- Fixings and anchors from M4 to M20 can be tested as standard, while the variety of adaptors enable a wide range of other types and sizes to be tested including: - all industry specific Scaffold fixings including ringbolts and drop in anchors. - any eyebolt and ringbolt across multiple applications.
- Other accessories include 50mm and 75mm Hex Extension Legs should there be a requirement to extend the gap between the tester jaw and the fixings.

### Important:

- An important point regarding specifying a 30kN gauge is that Hydrajaws insists that 75mm hex extension legs are purchased with a 'Deluxe' type tester kit and that these are installed on the load spreading bridge when loads exceed 25kN to reinforce the standard threaded legs. The new 'Deluxe PLUS' and 'Deluxe Master PLUS' tester kits feature these legs as standard.







The SKYTAC climbing protection system is a follow-on fall arrest device on a fixed guide rail in accordance with EN 353-1. The system allows you to climb safely up or down to any height or depth on installed vertical ladders. The guide rail with a C profile is made from 3mm wide galvanized steel and the rungs have an extra zinc layer for better protection against corrosion.



## SPEED

To enhance the safety of users of the climbing protection system, SKYLOTEC developed the SPEED, the a runner with two redundant brake systems and a catch function that works according to speed.

The principle is simple: the lock system is hidden in the housing and is therefore protected against unwanted access. An additional lever means that SPEED works like a pull-back runner. The runner is short and so, therefore, is the fall distance. This makes it easier to climb and also reduces injuries caused during falls. In the event of a failure of the pull-back system, whether through misuse or unfortunate circumstances, the runner can only reach a maximum pre-set speed. If this speed is exceeded, the second safety catch independently kicks in: a centrifugal brake swings the lock system out and the runner is blocked.

TAC-0002

Standards	EN 353-1:2014
Weight	1.05 kg
Materials	Aluminium, Steel



## CLIMBING PROTECTION LADDER

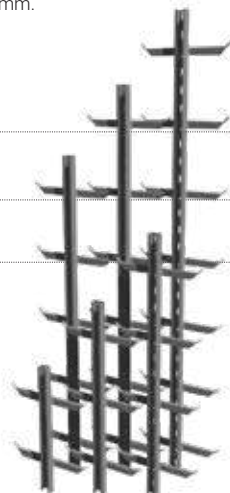
Climbing safety ladder Climbing safety ladder, rungs with anti-skid surface

- Profile of the guide rail with coupling, without fixture: 50 x 30 mm
- Recommended mounting distance: 1,400 mm - max. 1,680 mm
- Rung distance: 280 mm
- Step width per side: 150 mm
- Maximum overhang: 8° (with SPEED capture device, more is also possible)

All system units are respectively delivered including required couplings. Available in lengths from 560mm up to 5600mm.

TAC-0010-560

Materials	Steel
Weight	3.31 kg / m



## SPEED ATTACH

The SPEED ATTACH is a runner of the latest generation that can be attached and detached at any point of a C-profile, but comprises two redundant retention systems as usual. Construction and double locking mechanism also prevent reversed placement or opening under load. A green indicator shows secure locking at any time. Therefore, operating errors are virtually impossible.

The runner is suitable for back-pull and drag operation. Solid aluminium housing, stainless steel axles and metal guide rollers ensure low wear. Even after a fall, the runner can still be reconditioned.

TAC-0004-EU

Standards	EN 353-1:2014
Weight	1.27 kg
Materials	Aluminium, Stainless Steel, Steel



## Construction/Roofer/Carpenter

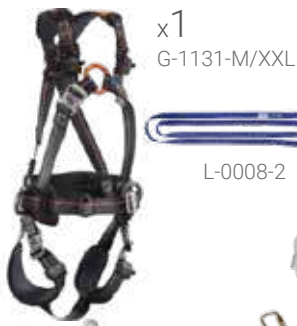
### KIT SECURION



### KIT 2



### KIT PERFORMION



### KIT OMNION



### SRS SET

#### SRS 3300



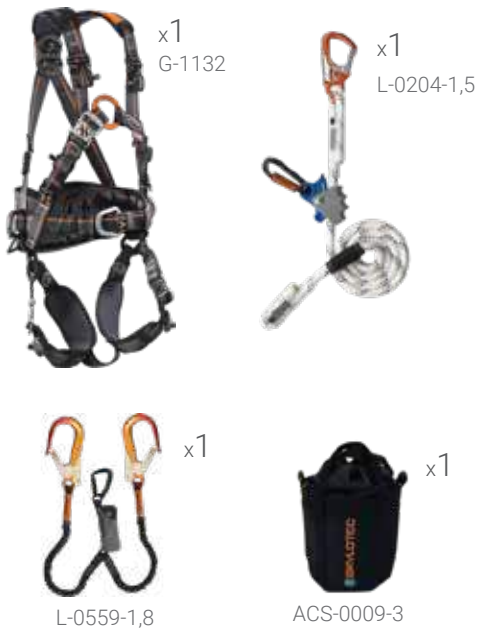
#### SRS 3700





## Wind Energy/ Offshore Industry

### KIT SUPERION



### RESCUE KIT WIND



## Power Supplies/ Transmission/ Telecommunications

### BASIC KIT MAST CLIMBING 120



### High Rack

#### RESCUE KIT 1



## Fire Brigade/Rescue/Special Forces

### DEUS EXIT KIT



### GORDON KIT



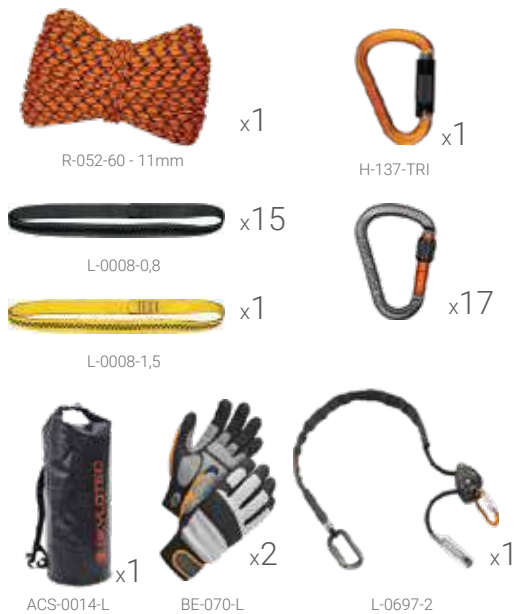
### EVAKUIERUNGSKIT WIND



### SAFETY ROLL 3:1 KIT



### Giratesatz Absturzsicherung KIT



#### Option 1



#### Option 2



#### Option 3



#### Option 4



## ESSENTIAL CHAIN BLOCK (COMMERCIAL)

A manually operated chain device using a series of gears providing a mechanical advantage to lift and lower significant loads.

Product detail:

- Capacity: 0.25T – 3T (refer to table below)
- Standard Lift Height: 1.5M – 3M

**AS1418.2**  
 CE G S ISO 9001 ISO 14001

**AS2321**  
 CE G S ISO 9001 ISO 14001



0.25T      0.75T / 1.5T / 3T

Part Number		cbc025	cbc05	cbc01	cbc02	cbc03
Capacity	Tons	0.25	0.5	1	2	3
Load Chain GALV Grade 80 ISO3077 20Mn <sup>2</sup> dia x pitch	mm	4 x 12	6 x 18	6 x 18	8 x 24	8 x 24
Hand Chain - white galv dia x pitch	mm	5 x 25				
Number of Load Chain FALLS		Single	Single	Single	Single	Double
Standard Lift Height	zzm	1.5	3	3	3	3
Gear Ratio: load sheave displacement per 1m vertical lift	m	TBA	33.3	41.5	72.6	111.2
Effort required to lift rated load	kg	23.9	20.4	32.6	37.2	39.26
Pre-delivery Proof load-test (150% of rated WLL)	Tons	0.3125	0.75	1.5	3	4.5
Dimensions (mm)	A	114	137.5	146.5	170	170
	B	121	137	162	194	220
	Hmin	280	270	340	414	512
	D	31	35	35.5	42.5	50
	K	19	28	26	32	37
Extra weight per metre of extra lift	kg	n/a	1.6	1.6	2.2	3.6
Net weight with standard lift	kg	6	9.5	11.6	18	24.3

## ESSENTIAL LEVER HOIST (COMMERCIAL)

A lever operated manual device which provides incremental adjustment used to lift, lower or pull a heavy load, can also be used for tensioning.

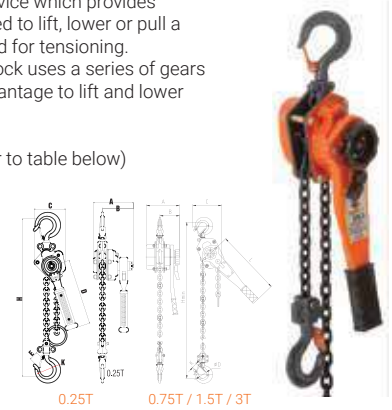
Lever Hoists, like a chain block uses a series of gears providing a mechanical advantage to lift and lower significant loads.

Product detail:

- Capacity: 0.25T – 3T (refer to table below)
- Standard Lift Height: 1.5M

**AS1418.2**  
 CE G S ISO 9001 ISO 14001

**AS2321**  
 CE G S ISO 9001 ISO 14001



0.25T      0.75T / 1.5T / 3T

Part Number		LHC025	LHC075	LHC015	LHC03
Capacity	Tons	0.25	0.75	1.5	3
Load Chain GALV Grade 80 ISO3077 20Mn <sup>2</sup> dia x pitch	mm	4 x 12	6 x 18	8 x 24	10 x 30
Number of Load Chain FALLS		Single	Single	Single	Single
Standard Lift Height	zzm	1.5	1.5	1.5	1.5
Gear Ratio: load sheave displacement per 1m vertical lift	m	n/a	19.8	21.3	16.8
Effort required to lift rated load	kg	26	20.4	24.4	35.6
Pre-delivery Proof load-test (150% of rated WLL)	Tons	0.377	1.125	2.25	4.5
Dimensions (mm)	A	91	148	176	195
	B	70	88	102	109
	C	71	135	162	211
	D	157	40	45	55
	Hmin	21	320	380	480
	L	233	290	420	420
	K	28	26	30	38
Extra weight per metre of extra lift	kg	0.36	0.8	1.4	2.2
Net weight with standard lift	kg	1.9	6.3	11	18.1

## TOOL LANYARD

### LONG LEASH FLEX

up to 4.5 kg



### PHONE CABLE SHORT

up to 2.3 kg



### PHONE CABLE LONG

up to 2.3 kg



### PHONE CABLE CLIP

up to 0.9 kg



### STROPP

up to 15 kg



### NEOPRENE WRISTBAND

up to 2.3 kg



### FIXING STRIPE LONG

up to 5 kg



### TOOLADAPTER

up to 10 kg



### TOOLADAPTER

length adjustable from 0.9 to 1.2m







## Why does PPFE need to be checked?

Personal Fall Protection Equipment (PFPE) must be checked by an expert (in accordance with DGUV 112-198) at least once a year and after being put under any stress or if you have any doubts as to its working order. The expert will decide whether the equipment is in good working order and whether it has reached a level of maturity defined by professional regulations. The material inspection is based on the principles governed in Germany by German statutory accident insurance (DGUV statutes 312-906) and on the relevant manufacturer specifications. The legibility of the product labelling should also be checked. The inspection should be carried out according to the manufacturer's specifications and must be documented.

## General service life

The service life of Personal Fall Protection Equipment (PFPE) depends to a large extent on the conditions of use. Harnesses and ropes made of chemical fibres are subject to a certain ageing effect even if not put under any stress, e.g. from ultraviolet light or from climatic or other environmental influences. In addition, the softening agents in textile materials used in PFPE can volatilize over time, which can lead to the equipment becoming brittle even when it is not being used. This can cause damage to the material, which may not be visible, and loss of resistance. The DGUV 112-198 statutes therefore recommend that ropes and cables are replaced every 4-6 years and harnesses every 6-8 years, although the manufacturer's instructions in the user handbook should also be observed in this respect. Almost all products that are used very intensively will not reach their maximum service life.

## Service life of products

The products are made from the highest quality materials, under normal usage conditions, the maximum service life may be expected to exceed the recommendations of the DGUV 112-198. If the equipment is stored correctly and for a maximum of 2 years, harnesses must be replaced after a maximum of 8 years after the first use and ropes and cables after a maximum of 6 years. A total service life of a maximum of 10 years is possible if the products are allocated to only one user, who does not use them excessively, always handles them carefully and is aware of the entire usage history.

## Inspection by Panindochina

As a manufacturer, Panindochina is authorised to inspect ropes, cables and harnesses from all manufacturers and to approve these products for further use by recording this in service logbooks. Panindochina also carries out inspections of all the abseiling and rescue equipment it manufactures or sells itself.

Panindochina carries out inspections in-house or on site at your own premises.

## Internal inspections:

- Harnesses, fall arrest devices, ropes and cables.
- Carabiners, band loops, anchor ropes.
- Safety systems.
- Abseil and rescue equipment (MILAN, Safety Roll, Safety Roll II, Rollgliss R 300, Rollgliss 350, Swissroll R 300).
- Tripods.
- Fall arresters.
- Climbing protection runners.
- Lifting devices (in accordance with UVV).



## External inspections:

PPFE (on site at the user's premises).



We can also provide you with our services worldwide, thanks to our mobile services and a wide-ranging network with partner companies.

- Inspection of your devices
- Assembly of fall-arrest systems
- Working at heights with experienced experts and modern equipment

Where access is difficult and your projects need to be carried out at great heights or in areas where there is a danger of falling, our trained staff and state-of-the-art equipment are on hand to help. Our specialists are available worldwide and in particular for:

- Maintenance and inspections.
- Assembling and dismantling permanent systems.
- Photography and filming, documentaries.
- Putting together risk assessments and rescue concepts.

## Installation & Assembly

Professional installation by certified fitters on site.

If you decide to install our permanent fall protection systems, such as SKYLINE or SKYRAIL, we will of course take over the planning and professional installation as well as the regular system inspections required later on.

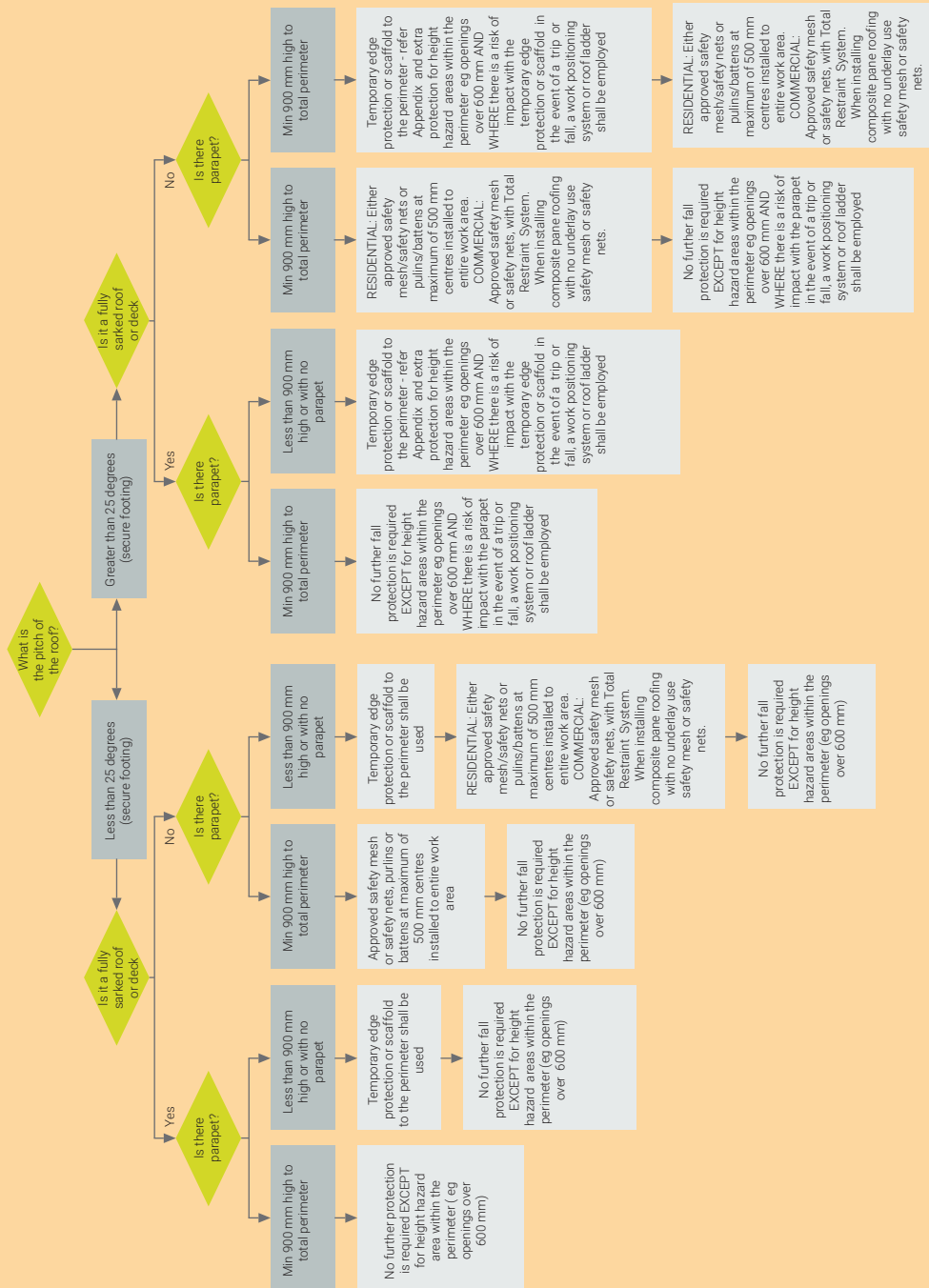
As well as permanent systems, we also install climbing protection ladders, single anchor points and much more besides in places where there is a risk of falling.

Three good reasons to choose Panindochina:

- Our specialists assembly and dismantle equipment on site.
- We provide support for maintenance and inspections.
- We help you with renovation, cleaning and servicing.



## Working on roofs - good practice guidelines



Decision tree for preventing falls from roofs





# Portable Gas Detector



# Single Gas Detector

www.panindochina.com.vn



## GasBadge® Pro

Built to Industrial Scientific's highest quality and reliability standards, GasBadge Pro provides a lifetime of gas hazard protection. A wide range of sensor types makes it easy to monitor unsafe levels of gases specific to your site.

- Interchangeable "smart" sensors monitor oxygen or any one of many toxic gases
- One-year data logging capacity (minimum)
- Standard STEL and TWA
- iNet® ready and DSX™ Docking Station compatible

### Specifications

#### Case:

- Rugged, water-resistant polycarbonate shell with protective concussion-proof overmold. RFI resistant.

#### Dimensions:

- 94 mm x 50.8 mm x 27.9 mm.

#### Weight:

- 85 g.

#### Display:

- Custom LCD with graphical icons for easy use.
- Segmented display for direct gas readings.
- Backlight for low light conditions.
- "Go/No Go" display mode
- Peak reading indication

#### Alarms:

- User selectable low and high alarms
- Ultra-bright LEDs, loud audible alarm (95 dB) and vibrating alarm

#### Battery Run Time:

- User replaceable 3V, CR2 Lithium battery, 2,600 hour run time, typical.

#### Data Logging:

- 1-year continuous storage of data

#### Temperature Range:

- -40°C to 60°C.

#### Humidity Range:

- 0-99% RH (non-condensing) typical.

#### Event Logger:

- Continually on. Logs last 15 alarm events, stamping how long ago the event occurred, the duration of the event, and the peak reading seen during the event. Event-logger can be viewed on PC or printed directly from the instrument to an infrared printer.

### Certifications

ANZEx:	Ex ia I/IIC T4
ATEX:	Ex ia I/Ex ia IIC T4; Equipment Group/Category I M1/II 1G
CMA:	Ex ia I
CSA:	Cl I, Gr A-D, T4; Ex ia IIC T4
IECEX:	Ex ia I/IIC T4
INMETRO:	Ex ia IIC T4
KC:	Ex ia I/IIC T4
UL:	Cl I, Div 1, Gr A-D, T4; Cl II, Gr E-G

### Measuring Ranges

Sensor	Range	Increments
Carbon Monoxide	CO 0-1,500	1 ppm
Hydrogen Sulfide	H <sub>2</sub> S 0-500 ppm	1 ppm
Oxygen	O <sub>2</sub> 0-30% vol	0.1 ppm
Nitrogen Dioxide	NO <sub>2</sub> 0-150 ppm	0.1%
Sulfur Dioxide	SO <sub>2</sub> 0-150 ppm	0.1 ppm
Ammonia	NH <sub>3</sub> 0-500 ppm	0.1 ppm
Chlorine	Cl <sub>2</sub> 0-100 ppm	1 ppm
Chlorine Dioxide	ClO <sub>2</sub> 0-1 ppm	0.1 ppm
Phosphine	PH <sub>3</sub> 0-10 ppm	0.01 ppm
Hydrogen Cyanide	HCN 0-30 ppm	0.01 ppm
Hydrogen	H <sub>2</sub> 0-2,000 ppm	0.1 ppm
CO/H <sub>2</sub> low	CO/H <sub>2</sub> low 0-1,500 ppm	1 ppm

### Accessories



GasBadge Datalink



GasBadge Pro with DSX

### Application



GasBadge Pro in a Refinery



## Tango® TX2

Protect workers, reduce false alarms, and spend less time managing your gas detector fleet with the Tango TX2.

The Tango TX2 is the most accurate two-gas monitor featuring individual sensors that increase alarm accuracy.

A two-year runtime and replaceable battery simplify gas detection management by eliminating the need for charging infrastructure

### Specifications

#### Instrument Warranty:

- All other sensors are warranted for one year.

#### Display:

- Segment liquid crystal display (LCD).

#### Keypad:

- Two buttons.

#### Case Materials:

- Case top: Polycarbonate with a protective rubber overmold.
- Case bottom: Conductive polycarbonate.

#### Alarms:

- Three strobe-emitting visual alarm LEDs (two red; one blue).
- 100 decibel (dB) audible alarm at a distance of 10 cm (3.94 in). Vibration alarm

#### Dimensions:

- 99 x 51 x 35 mm.

#### Weight:

- 126 g.

#### Temperature Range:

- -40°C to +50°C

#### Humidity Range:

- 15%-95% Non-condensing (continuous).

#### Sensors:

- CO, CO/H<sub>2</sub> low, H<sub>2</sub>S, NO<sub>2</sub>, SO<sub>2</sub> - Electrochemical sensor technology.

#### Battery Pack:

- 3.6 V Primary lithium-thionyl chloride (Li-SOCl<sub>2</sub>); 1.5AH, 2/3AA; replaceable; nonrechargeable; always on; up to 2-year run time depending on operating conditions.

#### Data Logging:

- 3 months at 10-second intervals.

#### Event Logger:

- 60 alarm events.

#### IP Rating:

- IP66, IP67.

### Measuring Ranges

Sensor	Range	Increments
Carbon Monoxide	CO 1-1,000 ppm	1 ppm
Carbon Monoxide	CO/H <sub>2</sub> low 0-1,000 ppm	1 ppm
Hydrogen Sulfide	H <sub>2</sub> S 0-500 ppm	1 ppm
Nitrogen Dioxide	NO <sub>2</sub> 0-150 ppm	0.1 ppm
Sulfur Dioxide	SO <sub>2</sub> 0-150 ppm	0.1 ppm

### Certifications

Ingress protection	IP66; IP67
	-40°C TO +50°C (-40°F TO +122°F)
ATEX:	Ex ia I Ma; Ex ia IIC T4 Ga; Equipment Group/Category: I M1/II 1G
CSA:	Cl I, Gr A-D, T4; Ex ia IIC T4
IECEX:	Ex ia I Ma; Ex ia IIC T4 Ga
INMETRO:	Ex ia I Ma; Ex ia IIC T4 Ga
UL (C-US):	Cl I, Gr A-D, T4; Cl II, Gr E-G; Cl I, Zone 0, AEx ia IIC T4
	-20°C TO +50°C (-4°F TO +122°F)
CMA:	Ex ia I Ma; H <sub>2</sub> S, CO
EAC:	PO Ex ia I X; 0 Ex ix IIC T4 X
KC:	Ex ia IIC T4

### Accessories



Tango TX1 Size Comparison



Tango TX1 with DSX

### Application



Tango TX1 Application shot





## Ventis® MX4

Configured for your safety, the highly configurable and iNet-compatible Ventis™ MX4 takes your gas detection program to the next level.

- Configure for diffusion applications or with an integral sampling pump for sample draw applications.
- Detect from one to four gases with a wide range of sensor options.
- Gain visibility of the instrument in darker environments with a tough, "Safety Orange" overmold.
- Realize true portability with multi-gas protection in single gas size.
- Utilize the diffusion monitor for 20 hours with a rechargeable lithium-ion extended range battery pack.
- iNet® ready and DSX™ Docking Station compatible.

### Specifications

#### Instrument Warranty:

- One-year warranty, including sensors and battery.

#### Display/Readout:

- Backlit Liquid Crystal Display (LCD).

#### Case Materials:

- Polycarbonate w/ protective rubber overmold.

#### Alarms:

- Ultra-bright LEDs, loud audible alarm (95 dB at 30 cm), and vibrating alarm.

#### Dimensions:

- 103 mm x 58 mm x 30 mm - Without pump, lithium-ion battery.
- 172 mm x 67 mm x 66 mm - With pump, lithium-ion battery.

#### Weight:

- 182 g - Without pump, lithium-ion battery.
- 380 g - With pump, lithium-ion battery.

#### Temperature Range:

- - 20°C to + 50°C.

#### Humidity Range:

- 15%-95% non-condensing (continuous).

#### Sensors:

- Combustible gases/methane – Catalytic Bead.
- O<sub>2</sub>, CO/H<sub>2</sub> low, CO, H<sub>2</sub>S, NO<sub>2</sub>, SO<sub>2</sub> – Electrochemical.

#### Power Source/Run Time:

- Rechargeable Slim Extended Lithium-ion battery (18 hours typical @ 20 °C) without Pump
- Rechargeable Lithium-ion battery (12 hours typical @ 20 °C) without Pump
- Rechargeable Extended-Range Lithium-ion battery (20 hours typical @ 20 °C) without Pump; (12 hours typical @ 20 °C) with Pump
- Replaceable AAA Alkaline battery (8 hours typical @ 20 °C) without Pump; (4 hours typical @ 20 °C) with Pump

#### Ventis MX4 Confined Space Kits with Slide-on Pump Include:

Ventis MX4 Confined Space Kits with Slide-on Pump Include: Ventis with LEL, CO, H<sub>2</sub>S, and O<sub>2</sub> sensors, Ventis Slide-on Pump, 110 VAC desktop charger for each rechargeable instrument ordered (max of 2), calibration cup and tubing with T-fitting, dust filter/water stop, 10 feet of sample tubing, 34 liter cylinder of calibration gas, manual regulator, rugged hard plastic carrying case



#### Ventis MX4 Confined Space Kits with Integral Pump Include:

Ventis with integral pump, universal charger, soft carrying case, reference guide, calibration tubing, dust filter/water stop, calibration fitting, sample tubing, calibration gas (appropriate mix) with regulator, rugged hard plastic case



### Measuring Ranges

Sensor	Range	Increments
Combustible Gases	0-100% LEL	1%
Methane (CH <sub>4</sub> )	0-5% vol	0.01%
Oxygen (O <sub>2</sub> )	0-30% vol	0.1%
Carbon monoxide (CO/H <sub>2</sub> low)	0-1,000 ppm	1 ppm
Carbon monoxide (CO)	0-1,000 ppm	1 ppm
Hydrogen sulfide (H <sub>2</sub> S)	0-500 ppm	0.1 ppm
Nitrogen dioxide (NO <sub>2</sub> )	0-150 ppm	0.1 ppm
Sulfur dioxide (SO <sub>2</sub> )	0-150 ppm	0.1 ppm

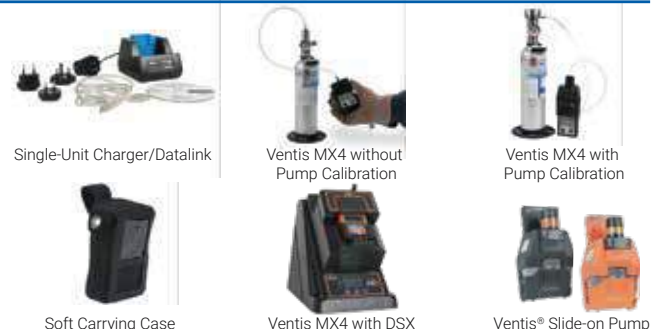
### Certifications

Ingress protection IP66/67	
ANZEx:	Ex ia s Zone 0 I/IIC T4
ATEX:	Ex ia IIC T4 Ga and Ex ia I Ma; Equipment Group and Category II 1G/I M1
CMA:	Approved for Underground Mines with CO, H <sub>2</sub> S, O <sub>2</sub> and CH <sub>4</sub> (Note: Diffusion 17144453 pack only)
CSA:	CI I, Div 1, G A-D, T4; Ex d ia IIC T4
EAC:	PBExdial X/1ExdialIIC T4 X
IECEX:	Ex ia IIC T4 Ga
INMETRO:	Ex ia IIC T4 Ga
KC:	Ex d ia IIC T4
KIMM:	Ex d ia IIC T4
MED:	Portable Multi-Gas Detector; Category 2 (MED 96/98/EC; MED 2012/32/EU Marine Directive) Li-ion
MSHA:	30 CFR Part 22; Permissible for underground mines; Li-ion
PA-DEP:	BFE 46-12 Permissible for PA Bituminous Underground Mines; Charger/docking station accessories; Category 1
SANS:	SANS 1515-1; Type A; Ex ia I/IIC T4; Li-ion
TIIS:	Ex ia IIC T4 X
UL:	CI I, Div 1, Groups A-D, T4; Zone 0, AEx ia IIC T4; CI II, Gr F-G (Carbonaceous and Grain dust)

### Application



### Accessories



Single-Unit Charger/Datalink

Ventis MX4 without Pump Calibration

Ventis MX4 with Pump Calibration

Soft Carrying Case

Ventis MX4 with DSX

Ventis® Slide-on Pump





## Ventis® Pro5

Detect up to five gases simultaneously with the rugged, wireless, Ventis® Pro5 Multi-Gas Monitor. With Ventis Pro5, safety goes beyond the gas detector whether you need team-based alarm sharing, remote monitoring with location details, or both. The monitor is also backed by a Guaranteed for Life™ warranty.

- Flexible sensor configurations detect up to five gases.
- See gas readings and alarms from connected peers using LENS™ Wireless.
- With integral pump for confined spaces or without integral pump for personal protection.
- Man-down alarm and dedicated panic button.
- User and site tracking with iAssign™ Technology.
- Rugged IP68 dust and water rating and Guaranteed for Life™ warranty.
- Dock overdue and maintenance reminders
- iNet® ready and DSX™ Docking Station compatible

### Measuring Ranges

Sensor	Ranges	Increments
<b>Catalytic bead</b>		
Combustible Gases:	0-100% LEL	1%
Methane (CH <sub>4</sub> ):	0-5% vol	0.01%
<b>Catalytic bead</b>		
Ammonia (NH <sub>3</sub> ):	0-500 ppm	1 ppm
Carbon Monoxide (CO):	0-2,000 ppm	1 ppm
Carbon Monoxide (CO/H <sub>2</sub> low):	0-1,000 ppm	1 ppm
Carbon Monoxide/Hydrogen Sulfide (CO/H <sub>2</sub> S):	CO: 0-1,500 ppm	1 ppm
	H <sub>2</sub> S: 0-500 ppm	0.1 ppm
Chlorine (Cl <sub>2</sub> ):	0-50 ppm	0.1 ppm
Hydrogen Sulfide (H <sub>2</sub> S):	0-500 ppm	0.1 ppm
Hydrogen Cyanide(HCN):	0-30 ppm	0.1 ppm
Nitrogen Dioxide (NO <sub>2</sub> ):	0-150 ppm	0.1 ppm
Oxygen (O <sub>2</sub> ) (Standard/Long-Life):	0-30% vol	0.1 %
Phosphine (PH <sub>3</sub> ):	0-10 ppm	0.01 ppm
Sulfur Dioxide (SO <sub>2</sub> ):	0-150 ppm	0.1 ppm
<b>Infrared</b>		
Carbon Dioxide (CO <sub>2</sub> ):	0-5% vol	0.01 %
Methane (CH <sub>4</sub> ):	0-5% vol	0.01 %
	5-100% vol	0.1 %
Carbon Dioxide/Combustible:	CO <sub>2</sub> : 0-5% vol	0.01 %
	LEL: 0-100% LEL	1 %
Carbon Dioxide/Methane:	CO <sub>2</sub> : 0-5% vol	0.01 %
	CH <sub>4</sub> : 0-5% vol	0.01 %
	CH <sub>4</sub> : 5-100% vol	0.1 %
Hydrocarbons:	0-100% LEL	1 %

### Certifications

Ingress protection IP68	
ANZEX:	Ex ia I Ma/Ex ia IIC T4 Ga, -40 °C ≤ Ta ≤ 50 °C Ex d ia I Mb/Ex d ia IIC T4 Gb IR sensor, -20 °C ≤ Ta ≤ 50 °C IR sensor
ATEX:	Equipment Group and Category II 1G, Ex ia IIC, Ga, T4 Equipment Group and Category II 2G, Ex d ia IIC, Gb, T4, IR sensor
CSA:	Cl I, Div 1, Gr A-D, T4; Cl I, Zone 1, Ex d ia IIC, T4   C22.2 No. 152 for % LEL reading only
IECEx:	Cl I, Zone 0, Ex ia IIC, Ga, T4; Cl I, Zone 1, Ex d ia IIC, Gb, T4, IR sensor
INMETRO:	Ex ia IIC T4 Ga, -40 °C ≤ Ta ≤ 50 °C Ex d ia IIC T4 Gb IR sensor, -20 °C ≤ Ta ≤ 50 °C IR sensor
KC:	Ex d ia IIC T4
MSHA:	30 CFR Part 22; Permissible for underground mines
PA-DEP:	BFE 46-12 Permissible for PA Bituminous underground mines
UL:	Cl I, Div 1, Gr A-D, T4; Cl II, Div 1, Gr E-G, T4 Cl I, Zone 0, AEx ia IIC, T4; Cl I, Zone 1, AEx d ia IIC, T4, IR sensor

### Accessories



### Specifications

#### Warranty:

- All other sensors warranted for one year. Pumps and batteries are warranted for one year.

#### Display/Readout:

- Backlit liquid crystal display (LCD).

#### Keypad:

- Two buttons for operation. Dedicated panic button.

#### Case Materials:

- Polycarbonate with protective rubber overmold.

#### Alarms:

- Four visual alarm LEDs (two red, two blue); 95 decibel (dB) audible alarm at a distance of 10 cm.
- Vibration alarm.

#### Dimensions:

- 104 x 58 x 36 mm without Pump
- 172 x 67 x 65 mm with Pump
- 104 x 58 x 61 mm with Wi-fi or Cellular Battery

#### Weight:

- 200 g (7.05 oz) typical, without Pump
- 390 g (13.76 oz) typical, with Pump
- 243 g (8.5 oz) typical, with Wi-fi Battery
- 244 g (8.6 oz) typical, with Cellular Battery

#### Temperature Range:

- -40°C to 50°C.

#### Humidity Range:

- 15%-95% non-condensing (continuous).

#### Data Log:

- At least 3 months at 10-second intervals.

#### Event Logging:

- 60 alarm events.

#### Ingress Protection:

- IP68 (submersion at 1.5 meters for 1 hour).

#### Supplied With Monitor:

- Calibration Cup (without Pump), Sample Tubing (with Pump), Reference Guide

#### Reference Guide Language:

- English, French, Spanish, German, Italian, Dutch, Portuguese, Polish

#### Power Source/Run Time:

- Rechargeable Slim Extended Lithium-ion battery (no Pump option) (18 hours typical @ 20 °C) with LEL (54 hours typical @ 20 °C) with IR
- Rechargeable Lithium-ion battery (no Pump option) (12 hours typical @ 20 °C) with LEL (36 hours typical @ 20 °C) with IR
- Rechargeable Extended-Range Lithium-ion battery with LEL (23 hours typical @ 20 °C) without Pump (18 hours typical @ 20 °C) with Pump
- Rechargeable Extended-Range Lithium-ion battery with IR (72 hours typical @ 20 °C) without Pump (32 hours typical @ 20 °C) with Pump
- Rechargeable Wi-fi Lithium-ion battery (no Pump option) (16 hours typical @ 20 °C) with LEL
- Rechargeable Cellular Lithium-ion battery (no Pump option) (16 hours typical @ 20 °C) with LEL

#### Sensor:

- Combustible Gases/Methane – Catalytic Bead
- O<sub>2</sub>, CO, CO/H<sub>2</sub> low, H<sub>2</sub>S, HCN, NH<sub>3</sub>, NO<sub>2</sub>, PH<sub>3</sub>, SO<sub>2</sub>, Cl<sub>2</sub> – Electrochemical
- CO<sub>2</sub>, CH<sub>4</sub>, CO<sub>2</sub>/LEL, CO<sub>2</sub>/CH<sub>4</sub>, HC – Infrared

#### Communication:

- LENS™ WIRELESS Mesh Network
- Frequency: ISM license-free band (2.405 - 2.480 GHz)
- Max Peers: 25 devices per network group
- Range: 100 m (300 ft) line of sight, face-to-face
- Encryption: AES-128
- Approvals: FCC Part 15, IC, CE/RED, others†
- CELLULAR
- LTE CAT M1
- US: AT&T, Verizon
- Canada: TBD
- Wi-Fi: 802.11 b/g/n 2.4GHz wi-fi with WPA2 security

#### Wireless Certifications:

- Ventis Pro5 Instruments: FCC, ISED – Canada, EU Radio Equipment Directive (R.E.D.) and many other countries
- Ventis Pro5 with wi-fi: FCC, ISED – Canada, EU Radio Equipment Directive (R.E.D.)
- Ventis Pro5 with LTE Cat M1 Cellular: FCC, ISED-Canada, PTCRB, AT&T and Verizon



## MX6 iBrid®

Get ready to see hazardous levels of oxygen, toxic and combustible gas, and volatile organic compounds (VOCs) like never before.

- 24 "Plug-and-Play" field-replaceable sensors including PID and Infrared options
- Up to 6 gases monitored simultaneously
- Simple, user-friendly, customizable, menu-driven navigation
- Five-way navigation button
- Durable, concussion-proof overmold
- Optional integral sampling pump with strong 30.5 meter (100 feet) sample draw
- Full-color graphic LCD is highly visible in a variety of lighting conditions
- Powerful, 95 dB audible alarm

### Specifications

#### Instrument Warranty:

- Warranted for as long as the instrument is supported by Industrial Scientific Corporation.

#### Case Materials:

- Lexan/ABS/Stainless Steel with protective rubber overmold.

#### Dimensions:

- 135 mm x 77 mm x 43 mm – without pump.
- 167 mm x 77 mm x 56 mm – with pump.

#### Weight:

- 409 g typical – without pump.
- 511 g typical – with pump.

#### Display/Readout:

- Color Graphic Liquid Crystal Display.

#### Power Source/Run Time:

- Rechargeable, Extended-Range Lithium-ion Battery (36 hours) without Pump
- Rechargeable, Extended-Range Lithium-ion Battery (20 hours) with Pump
- Replaceable AA Alkaline Battery Pack (10.5 hours) - without pump.

#### Temperature Range:

- -20°C to 55°C.

#### Humidity Range:

- 15% to 95% non-condensing (continuous).

### Certifications

Ingress protection IP64	
ANZEx:	Ex ia s Zone 0 I; Ex ia s Zone 0 IIC T4
ATEX:	Ex ia IIC T4 Ga; II 1G (or Ex d ia IIC T4 Gb IR sensor); Ex ia I; Equipment Group and Category: I M1/II 1G
CMA:	Approval for Mining Products; CH <sub>4</sub> , O <sub>2</sub> , CO, CO <sub>2</sub>
CSA:	Cl I, Gr A-D T4; Ex d ia IIC T4
EAC:	PBExiadl X; 1ExiadIIC T4 X
IECEX:	Ex ia I (Ex ia d I IR sensor); Ex ia IIC T4 Ga; Ex d ia IIC T4 Gb
INMETRO:	Ex ia IIC T4 Ga
KC:	Ex d ia IIC T4
KIMM:	Ex d ia IIC T4
MDR:	Registration of Plant Design; CH <sub>4</sub> , O <sub>2</sub> , CO, H <sub>2</sub> S, NO <sub>2</sub>
MSHA:	30 CRF, Part 22, Intrinsically safe for methane/air mixtures
PA-DEP:	BFE 114-08 Permissible for PA Bituminous Underground Mines
UL:	Cl I, Div 1, Gr A-D, T4; Cl II, Groups F G; Cl I, Zone LEL 0, AEx ia d IIC T4 (or AEx ia d IIC T4 IR sensor)

### Application



### Measuring Ranges

Sensor	Range Resolution	Increments
<b>Catalytic bead</b>		
Combustible Gas	0-100% LEL	1%
Methane (CH <sub>4</sub> )	0-5% vol	0.01%
<b>Electrochemical</b>		
Ammonia (NH <sub>3</sub> )	0-500 ppm	1
Carbon Monoxide (CO)	0-1,500 ppm	1
Carbon Monoxide (CO) (High Range)	0-9,999 ppm	1
Carbon Monoxide/Hydrogen low (CO/H <sub>2</sub> low)	0-1,000 ppm	1
Chlorine (Cl <sub>2</sub> )	0-50 ppm	0.1
Chlorine Dioxide (ClO <sub>2</sub> )	0-1 ppm	0.01
Carbon Monoxide/ Hydrogen Sulfide (COSH)	CO: 0-1,500 ppm H <sub>2</sub> S: 0-500 ppm	1 0.1
Hydrogen (H <sub>2</sub> )	0-2,000 ppm	1
Hydrogen Chloride (HCL)	0-30 ppm	0.1
Hydrogen Cyanide (HCN)	0-30 ppm	0.1
Hydrogen Sulfide (H <sub>2</sub> S)	0-500 ppm	0.1
Nitric Oxide (NO)	0-1,000 ppm	1
Nitrogen Dioxide (NO <sub>2</sub> )	0-150 ppm	0.1
Oxygen (O <sub>2</sub> )	0-30% vol	0.1%
Phosphine (PH <sub>3</sub> )	0-5 ppm	0.01
Phosphine (PH <sub>3</sub> ) (High Range)	0-1,000 ppm	1
Sulfur Dioxide (SO <sub>2</sub> )	0-150 ppm	0.1
<b>Infrared</b>		
Hydrocarbons	0-100% LEL	1%
Methane (CH <sub>4</sub> ) (% vol)	0-100% vol	1%
Methane (CH <sub>4</sub> ) (% LEL)	0-100% LEL	1%
Carbon Dioxide (CO <sub>2</sub> )	0-5% vol	0.01%
<b>Photoionization</b>		
VOC	0-2,000 ppm	0.1

### Accessories



MX6 Confined Space Kit

Easy Sensor Replacement

MX6 Chargers

SP6 Motorized Sampling Pump

MX6 with DSX



## Radius® BZ1

Detect up to seven gases simultaneously and connect your entire worksite with the rugged Radius® BZ1 Area Monitor. Radius BZ1 detects gas hazards 24/7 without the hassle of elaborate wireless setups and maintenance routines. Radius BZ1 just works, no questions asked, so your teams can focus on what's important while knowing that their area monitors are ready for whatever comes their way

- Cut through high-noise environments with alarms that sound at 108 dB
- Know what's happening at a safe distance thanks to the largest display of any area monitor and customizable alarm action messages such as "EVACUATE" or "VENTILATE"
- Keep your monitors in the field while removable SafeCore® Modules automatically bump, calibrate, and update when connected to DSX™ Docking Stations
- Forget false alarms thanks to the 360-degree gas path and all-weather sensor deployment
- Reduce battery swapping with a typical run time of 7 days (168 hours)

### Measuring Ranges

Sensor	Range	Increments
<b>Catalytic bead</b>		
Combustible Gases:	0-100% LEL	1%
<b>Electrochemical</b>		
Ammonia (NH <sub>3</sub> ):	0-500 ppm	1 ppm
Carbon Monoxide (CO):	0-1,500 ppm	1 ppm
Carbon Monoxide (CO High Range):	0-9,999 ppm	1 ppm
Carbon Monoxide (CO/H <sub>2</sub> low):	0-1,000 ppm	1 ppm
Carbon Monoxide/Hydrogen Sulfide:	CO: 0-1,500 ppm H <sub>2</sub> S: 0-500 ppm	1 ppm 0.1 ppm
Chlorine (Cl <sub>2</sub> ):	0-50 ppm	0.1 ppm
Hydrogen (H <sub>2</sub> ):	0-2,000 ppm	1 ppm
Hydrogen Sulfide (H <sub>2</sub> S):	0-500 ppm	0.1 ppm
Hydrogen Cyanide (HCN):	0-30 ppm	0.1 ppm
Nitrogen Dioxide (NO <sub>2</sub> ):	0-150 ppm	0.1 ppm
Oxygen (O <sub>2</sub> ):	0-30% vol	0.1 %
Sulfur Dioxide (SO <sub>2</sub> ):	0-150 ppm	0.1 ppm
Phosphine (PH <sub>3</sub> ):	0-5 ppm	0.1 ppm
Nitric Oxide (NO):	0-1000 ppm	1 ppm
<b>Electrochemical</b>		
Volatile Organic Compounds (VOC) (10.6 eV):	0-2,000 ppm	0.1 ppm

### Certifications

Ingress Protection IP66	
ATEX:	Ex da ia IIC T4 Ga, Equipment Group and Category II 1G
CSA:	Cl I, Div 1, G A-D, T4
	C22.2 No. 152 applies only to %LEL thermo-catalytic reading
IECEX:	Ex da ia IIC T4 Ga
INMETRO:	Ex da ia IIC T4 Ga; Ex db ia IIC T4 Gb IR sensor
KC:	Ex d ia IIC T4
UL:	Cl I, Div 1, Gr A-D, T4; Cl 1 Zone 0 AEx da ia IIC T4 Ga1

### Accessories



### How Will You Use Your Radius BZ1?

Area monitors are a highly flexible solution because they can be placed in temporary or long-term configurations based on your specific hazards. With the addition of LENS™ Wireless, networks are created out of the box and provide visibility into gas hazards that are happening in any location.

- ① Confined Space Monitoring – Know what's happening in a confined space by using the pumped SafeCore Module and tubing to draw air samples to the monitor.
- ② Perimeter Monitoring – Set up monitors around a tank, hot work, or other known hazardous areas to continuously monitor for gas leaks.
- ③ Fence Line Monitoring – Create a barrier between a safe zone and hazardous work area. Use the hopping capability of LENS™ Wireless to know what is happening up to 1.5 km away.

### LENS™ Wireless Highlights:

- No infrastructure required
- Out-of-the-box operation
- No need for IT setup
- Self-forming, self-healing networks

### Specifications

#### Instrument Warranty:

- One-year warranty, including sensors and battery.

#### Display/Readout:

- 11.2 cm monochrome backlit graphical liquid crystal display (LCD).

#### Keypad:

- Three buttons.

#### Case Material:

- Impact-resistant polycarbonate alloys.

#### Alarms:

- 108 decibel (dB) at 1 m (3.3 ft) redundant audible alarms .
- Redundant visual alarm LEDs (red and blue).

#### Dimensions:

- 29 x 29 x 55 cm.

#### Weight:

- 7.5 kg.

#### Temperature Range:

- -20°C to 55°C.

#### Humidity Range:

- 15%-95% non-condensing (continuous).

#### Data Log:

- At least 3 months at 10-second intervals.

#### Event Logging:

- 60 alarm events.

#### Reference Guide Language:

- English, French, Spanish, German.

#### Ingress Protection:

- IP66.

#### Power Source/Run Time:

- Rechargeable nickel-metal hydride (NiMH) battery pack.
- 7 days (168 hours) typical @ 20 °C, without pump, with wireless.
- 3.5 days (84 hours) typical @ 20 °C, with pump, with wireless.
- 30 days (720 hours) typical @ 20 °C, electrochemical sensors only, without pump, with wireless.
- ≤8 hour recharge time.

#### Sensors:

- Up to 6 sensors (catalytic bead, photoionization detector, and electrochemical).
- Up to 7 simultaneous readings.

#### Pump:

- Optional integral pump, up to 30.48 m sampledraw.

#### Supplied With Monitor:

- Calibration cup (without pump), sample tubing and pump inlet water barrier (with pump), product manual, hand tool, charging power supply and region-specific cord.

#### Wireless:

- Optional LENS™ Wireless, proprietary mesh network.
- Frequency: ISM license-free band (2.405 - 2.480 GHz).
- Max Peers:
  - + 25 devices per network group.
  - + 10 independent, configurable network groups.
- Range: 300 m (~1,000 ft) line of sight
- Encryption: AES-128
- Approvals: FCC Part 15, IC, CE/RED, others\*\*



- Long-range communication up to 300 m (~1,000 ft) without sacrificing run time
- View peer readings from Radius BZ1 Area Monitors and Ventis Pro Series personal monitors within a group



## DSX™

The DSX™ Docking Station easily maintains the gas detectors that keep your people safe in hazardous environments.

- Know that your gas detectors are ready for use every day, every shift, without the burden of manual maintenance routines.
- Stop worrying about calibration gas and let DSX monitor and order replacement gas cylinders when you need them.
- Effortlessly manage your fleet, data, and software updates from any web-enabled device.



### Specifications

#### Physical Specifications

##### Warranty:

- One-year warranty:
- + DSX (Standalone)
- + DSX-L (Local Server)
- Guaranteed For Life™ Program\*\* – DSXi (Cloud-connected).

##### Instruments Supported:

- GasBadge Pro, MX6 iBrid, Tango TX1, Ventis MX4, Ventis Pro Series, SafeCore

##### Dimensions:

- GasBadge Pro, Tango TX1: 22.7 x 16.9 x 27.3 cm
- Ventis MX4, Ventis Pro Series: 24.9 x 16.9 x 27.3 cm
- MX6 iBrid: 25.3 x 16.9 x 27.3 cm
- SafeCore: 27.3 x 16.9 x 29.2 cm

##### Display:

- 128 x 64 Dot Matrix LCD – Multilingual modes English, Spanish, French, German and Portuguese\*\*\*

##### Gas Inlets:

- 3-Port Version: One "fresh" air port, two calibration gas ports
- 6-Port Version: One "fresh" air port, five calibration gas ports (for Ventis, MX6 iBrid, and SafeCore only)

##### Pump Flow Rate:

- 1.2 SCFH (550 mL/min)

##### Communication:

- 10/100 Ethernet support, RJ-45 Category 5 Connection

#### Performance Specifications

##### Temperature Range:

- 0 °C to 50 °C / 32 °F to 122 °F

##### Humidity Range:

- 0% to 80% relative humidity (RH) up to 30 °C (86 °F), decreasing linearly to 50% RH at 50 °C (122 °F)

##### External Power Supply Ratings:

- Supply voltage: 100-240 VAC / 12 VDC
- Frequency range: 50-60 Hz
- Current rating: 5A

#### DSX with device



DSX Ventis for pumped and diffusion instruments



DSX Docking Station with Ventis Pro



DSX with GasBadge Pro



DSX Docking Station for SafeCore Module

## Ventis Slide-On Pump

The Ventis® Slide-on Pump is ideally suited for operators who wear their gas monitors for personal protection but occasionally require a pump for confined space entries. Available in black or safety orange and powered by its own battery pack, the slide-on pump is compatible with the Ventis™ MX4 and the Ventis™ Pro Series Multi-Gas Monitors.

- Convenient sampling - Sample draw distance of up to 50 feet provides convenient sampling in a wide range of applications.
- Easy to attach - No tools are required to attach or remove the Ventis Slide-on Pump to or from the monitor
- Uses same battery packs and chargers as Ventis - Monitor and pump each use the same battery packs, and can easily be exchanged between instruments
- Flexible battery options - Three available battery options make this pump extremely flexible in the field.



### Specifications

##### Instrument Warranty:

- One-year warranty, excluding consumables (i.e. filters).

##### Case Material:

- Polycarbonate with protective rubber overmold

##### Sample Draw Capability:

- Up to 15.2 meters.

##### Operating Temperature Range:

- -20°C to 50°C.

##### Operating Humidity Range:

- 15%-95% non-condensing (continuous).

##### Power Source/Run Time:

- Rechargeable lithium-ion battery pack, 18 hours @ 20 °C.
- Rechargeable extended range lithium-ion battery pack, 36 hours @ 20 °C.
- Replaceable AAA alkaline battery pack, 10 hours @ 20 °C.

##### Pump Fault Alarms:

- Ultra-bright LEDs
- Loud audible alarm (90 dB at 30 cm).

##### IP Rating:

- IP67.

##### Weight:

- 270 g Lithium-ion battery version.
- 316 g Extended range lithium-ion battery version.
- 284 g Alkaline battery version.

##### Dimensions:

- 143 x 81 x 73 mm Lithium-ion battery version.
- 143 x 81 x 68 mm Extended range lithium-ion battery version.
- 143 x 81 x 85 mm Alkaline battery version.

##### Certifications:

UL:	Class I, Division 1, Groups A B C D, T4 Class I, Zone 0, AEx ia IIC T4 Ga Class II, Group F G (Carbonaceous and Grain Dust)
CSA:	Class I, Division 1, Group A B C D, T4 Ex ia IIC T4
ATEX:	Ex ia I Ma and Ex ia IIC T4 Ga; Equipment Group and Category: I M1 và II 1G
IECEX:	Ex ia IIC T4 Ga
INMETRO:	Ex ia IIC T4 Ga; IP66; IP67
GOST-EAC:	0 Ex ia IIC X T4 PO Ex ia I X



## iNet® Platform

Whether you need live monitoring with real-time alerts, gas detection management with historical reports, or automatic instrument exchanges, our iNet® platform will help you to be safer and more productive

**iNet® Control** gives you the power to reduce risk by giving you critical insights and complete control over your equipment, data and worker behavior

- Spend less time updating your gas detection fleet by easily managing everything from monitor settings and firmware to calibration gas in one dashboard
- Access all historical alarm data and generate reports or calibration certificates at any time.
- Manage worker and site safety by tracking critical instrument data
- Reduce risk to your people and your site by identifying and intervening when SOPs aren't followed
- For DSXi Docking Station customers, access to iNet Control is included



**iNet® Now** live monitoring software provides real-time visibility into worker and site safety so you can proactively address hazards and respond quickly in an emergency with actionable information.

- Respond quickly and effectively in an emergency with real-time alerts that show who is in danger, where they're working and what hazards they face
- Get real-time visibility into what's happening across your site through remote monitoring
- Improve site safety and productivity by making decisions based on insights, not instincts

## RGX® GATEWAY

The portable RGX® Gateway transmits location, gas readings, and real-time alerts from anywhere, including hazardous locations, so you can respond faster and improve productivity. The RGX Gateway is suitable for permit tasks that last hours, incidents that last days, or projects that last weeks.

- Receive real-time alerts and location data from personal gas monitors and area monitors
- Monitor hazardous locations and get data out of confined spaces in real time
- Up and running in minutes without the need for costly IT infrastructure
- Compatible with LENS Wireless-enabled Ventis Pro5 MultiGas Monitors and Radius BZ1 Area Monitors
- 168 hours of continuous run time
- Cell, wi-fi, or Ethernet connectivity options
- Automatic configuration and firmware updates without taking the gateway out of the field



## iASSIGN® BEACON AND TAGS

Assign® Beacons and Tags allow you to go beyond the basic "what" and "when" data from gas detectors to understand "who" and "where".

Using a pre-programmed iAssign Tag, operators can wirelessly enter a name into a device by simply tapping it with a tag.

Now all data recorded in the instrument will be tagged with the user's name. This allows users to carry different gas monitors each day while still having a clear data record of who had an instrument when it went into alarm. When a worker (and tagged device) approaches an iAssign Beacon on your site, the beacon adds the device location to the data. iAssign

Beacons can also be set with permission levels, allowing you to send automatic alerts to workers entering restricted areas.

- Locate problem sites across your facility
- Alert workers when entering restricted areas with simple-to-program proximity alarms
- Manage worker clearances without the need for separate devices, extra signage, or physical barriers
- Intrinsically-safe beacons can be used indoors or outdoors, and cover areas as small as 1 meter or as large as 30 meters



### iAssign Tag Specifications

Tag Type	Standard Tag	Waterproof Tag	All Weather Tag	Keychain Tag
Part Number (Pack of 10)	18109417	18109418	18109419	18109420
Thickness	0.7 mm	1.5 mm	3 mm	4 mm
Adhesive Back	Yes	Yes	No	No

### iASSIGN TAG SPECIFICATIONS

Technology  
Near Field Communication (NFC)

Programming Method  
iAssign app available in Google Play store

Application  
iAssign tags may be used to track workers and locations



**LENS®  
WIRELESS**

LENS® Wireless is the first gas detection solution that allows personal monitors and area monitors to wirelessly share gas readings and alarms with one another. Now when a gas hazard, man-down, or panic situation causes an instrument to alarm, all peers in the connected group will instantly be notified of the hazard and the person in danger, allowing them to make smarter, faster, safer decisions.

- View gas readings from other peers in your group on any monitor without needing a central controller to relay the information
- Share gas readings and alarms between Ventis® Pro5 MultiGas Monitors and Radius® BZ1 Area Monitors from up to 1.5 km (about 1 mile) away with wireless hopping between instruments
- Enjoy out-of-the-box operation with no site surveys, IT setup, licenses, or additional infrastructure
- Connect up to 25 devices in a group with a simple tap
- Self-healing mesh networks always stay connected, even if a single unit drops off



Average time to deploy 25 LENS Wireless instruments  
(Joining 25 instruments into a group)

2 minutes

Average time to implement other wireless solutions  
(Instrument, IT, and central controller setup)

2 hours – 2 days

## GAS DETECTION meets CONNECTED SAFETY

With the Ventis® Pro5 Personal Gas Monitor and Radius® BZ1 Area Monitor, you have the flexibility to choose how you want your teams to connect. Whether you want peer-to-peer alarm sharing, personal monitor to area monitor connectivity, or remote live monitoring, Industrial Scientific has you covered.

### Personal Gas and Arena Monitoring

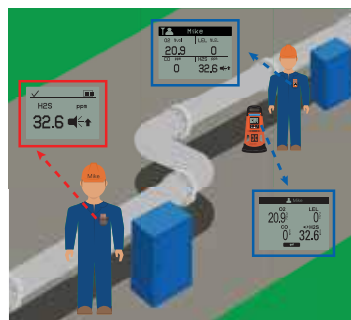
Reliable Ventis Pro 5 and Radius BZ1 gas monitors are key to protecting employees from invisible hazards.



Connect personal and area monitors across your worksite.

### Team and Site-Based Safety

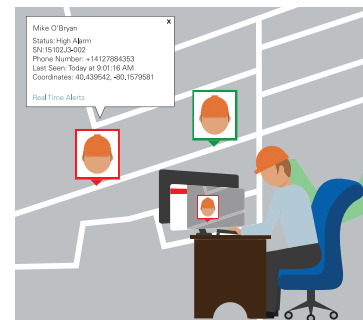
Give workers insight to their surroundings by sharing alarms and notifications between gas monitors.



When Mike is in alarm, his peers are immediately notified.

### Manager Safety and Productivity

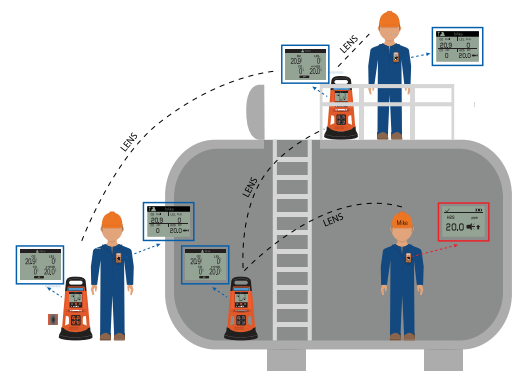
Get data out of any situation and increase productivity by knowing where your workers are and what dangers they may encounter.



With iNet® Now, the safety manager also knows that Mike is in alarm in real time.

## INSTRUMENT-TO-INSTRUMENT WIRELESS

LENS™ Wireless, exclusive to Industrial Scientific, shares hazard exposures, panic, and man-down situations, with other connected instruments using a peer-to-peer network. No central command or complicated set up required. Just turn on the instruments to connect.





## Tiger XT

Rapid, accurate detection of Volatile Organic Compounds (VOCs), within the most challenging environments. The Tiger XT's photoionisation detection (PID) technology has been independently verified as best performing on the market for speed, accuracy, resistance to humidity and contamination, thanks to its patented Fence Electrode Technology. Its patented Fence Electrode Technology and anti-contamination design ensures optimal performance within humid and heavily contaminated atmospheres, extending run time in the field. The Tiger XT is the most advanced handheld VOC detector on the market with the widest measurement range, accurately detecting gases down to 1 part per billion (ppb) up to 20,000 part per million (ppm). Tiger has the fastest response time on the market of just two seconds, and is as quick to clear down. The Tiger XT handheld VOC gas detector can detect over 750 VOCs and toxic compounds!



### Specifications

Minimum Resolution	10.6 eV: 1 ppb or 0.001 mg/m <sup>3</sup>   11.7 eV: 0.6 ppm (600 ppb)
Maximum Reading (Range)	10.6 eV: 20,000 ppm or 20,000 mg/m <sup>3</sup>   11.7 eV: 9,000 ppm
Response Time	10.6 eV: < 2 seconds   11.7 eV: < 6 seconds
Accuracy	10.6 eV: 5% or ± one digit   11.7 eV: ± 12% display reading
Lamp Lifetime	10.6 eV: 10,000 hours   11.7 eV: ≥500 hours
Battery Life	Li-ion: Typical operating time of up to 24 hours   Charge time: Typically 8 hours   Alkaline: 3 x AA, typically 8.5 hours life
Calibration	2 and 3 point calibration (via calibration kit accessory)
Alarm	Flashing LEDs Amber (low alarm) Red (high alarm)   Sounder 95 dBA at 300 mm (12") Vibration on alarm   • Pre-programmed TWA and STEL*
Data Logging	120,000 points including date and time stamp
Lamps	10.6 eV Krypton PID lamp (standard.) 10.0 eV and 11.7 eV lamps available
Communication	Direct USB 1.1 connection
Flow Rate	≥ 220 ml/min (with blocked flow alarm)
Temperature	10.6 eV: -20°C to +60°C   11.7 eV: 0°C to +60°C
Weight & Dimensions	Width: 91 x Height: 370 x Depth: 60 mm (instrument without probe) Instrument Weight: 870g
Protection	Designed to IP65   EMC tested to EN61326-1:2013 & EN50270:2015 & CFR 47:2008 Class A
Intrinsically Safe Approvals	II 1G Ex ia IIC T4 Ga Tamb = - 15°C ≤ Ta ≤ +45 °C (Khi sử dụng với pin lithium ion) Tamb = - 15 °C ≤ Ta ≤ +40 °C (Khi sử dụng với pin alkaline) ITS-I22ATEX35111X IECEX ITS 22.0025X ITS22UKEX0635X 3193491 conforms to UL Std. 913, 61010-1 Certified to CAN/CSA Std. C22.2 No. 61010-1 Class 1 Division 1. Approval for Groups A, B, C & D, T4

## Tiger XTL

Low cost Volatile Organic Compound (VOC) detector with reliable market leading accuracy! The Tiger XTL is a ground breaking low cost entry level VOC detector with all the essential functions you need to detect VOCs. The instrument has the lowest running costs on the market with inexpensive disposable parts, lamps and filters. This variant of the hugely popular Tiger XT VOC detector is low on cost but high on performance. Its revolutionary, patented PID sensor technology with resistance and anti-contamination design provides market leading accuracy and run time. Combined with 24 hour battery life, these features maximise field time by minimising erroneous readings in high humidity and drift in hard environments. The Tiger XTL portable VOC gas detector is ETL (Electrical Testing Laboratories), KGS (Korean Gas Safety), IECEX (International Electrotechnical Commission System for Certification to Standards Relating to Equipment for Use in Explosive Atmospheres) certified. It is also ATEX approved meaning the instrument is intrinsically-safe.



### Specifications

Minimum Resolution	0.1 ppm
Maximum Reading	5,000 ppm
Response Time	T90 < 2 seconds
Accuracy	± 5% display reading ± one digit
Linearity	± 5% display reading ± one digit
Data Logging	Push-to-log, 128 zones, 80,000 data points
Calibration	Standard calibration 100 ppm isobutylene   Custom calibration capability
Alarm	Flashing LED and 95 dBA at 300mm (12") audible sounder   Selectable vibrating alarm
Flow Rate	≥ 220 ml/min (with blocked flow alarm)
Battery Life	Li-ion: life up to 24 hours continual use
Lamps	10.6 eV Krypton PID lamp
Temperature	Operating: -20°C to 60°C   Humidity: 0-99% RH (non condensing)
Weight & Dimensions	Height: 370 mm x Width: 91 mm x Depth: 60 mm   870 g
Protection	Designed to IP65 (heavy rain)   CE 1180   EEMC tested to EN61326-1:2006   EN 50270:2006 & CFR 47:2008 Class A.
Intrinsically Safe Approvals	II 1G Ex ia IIC T4 Ga Tamb = - 15 0C ≤ Ta ≤ +45 0C (with lithium ion battery pack) Tamb = - 15 0C ≤ Ta ≤ +40 0C (with alkaline battery pack) ITS-I22ATEX35111X IECEX ITS 22.0025X ITS22UKEX0635X 3193491 conforms to UL Std. 913, 61010-1 Certified to CAN/CSA Std. C22.2 No. 61010-1

## Tiger XT Select

Rapidly detects Benzene & Total Aromatic Compounds (TACs) providing the most accurate reliable data available!

Utilising the high output ION Science 10.0 eV lamp, the Tiger XT Select (XTS) portable benzene gas detector is capable of detecting Total Aromatic Compounds (TACs) including Benzene, Toluene and Acetone. The instrument is supplied with a pack of benzene pre-filter tubes to detect benzene selectively. The tube can be easily attached to ensure rapid detection and selective measurement of benzene. Throughout the measurement process, Tiger XT Select benzene gas detector continuously displays real time data. Tiger XT Select can also provide 15 minute short term exposure limits (STELs) and 8 hour time weighted averages (TWAs) for Total Aromatic Compounds (TACs).

The Tiger XT Select handheld benzene gas detector can be used in standard operational mode without the use of a benzene pre-filter tube to deliver active indications of volatile organic compounds (VOCs).



### Specifications

Minimum Sensitivity (PPM model)	Standard running mode 0.1 ppm   TAC 0.01 ppm   Tube mode 0.01 ppm (res. 0.001 ppm)
Minimum Sensitivity (PPB model)	Standard running mode 0.001 ppm   TAC 0.001 ppm   Tube mode 0.01 ppm (res. 0.001 ppm)
Maximum Reading	Standard mode up to 20,000 ppm or 20,000 mg/m <sup>3</sup>   Tube mode 200 ppm or 639 mg/m <sup>3</sup> benzene
Response Time	130 seconds at 20 °C (variable) Progressive indication of benzene breakthrough is displayed in real time
Accuracy	± 10% display reading ± one digit Benzene (tube mode)
Calibration	2 and 3 point calibration (via calibration kit accessory)
Battery Life	Li-ion: life up to 24 hours, charge time 8 hours   Alkaline: 3 x AA, typically 8.5 hours life
Alarm	Flashing LEDs Amber (low alarm) Red (high alarm)   Sounder 95 dBA at 300 mm (12") Vibration on alarm   Pre-programmed TWA and STEL*
Data Logging	120,000 data log points including date and time stamp
Lamps	10.0 eV Krypton PID lamp
Communication	Direct USB 1.1
Flow Rate	≥ 220 ml/min (with blocked flow alarm)
Temperature	Operating: -20 to 60 °C, -4 to 140 °F   Humidity: 0-99% RH (non condensing)
Dimensions & Weight	Height: 370 mm x Width: 91 mm x Depth: 60 mm   870 g
Protection	Designed to IP65 EMC tested to EN61326-1:2013 & EN50270:2015 & CFR 47:2008 Class A
Intrinsically Safe Approvals	II 1G Ex ia IIC T4 Ga Tamb = - 15 oC ≤ Ta ≤ +45 oC (with lithium ion battery pack) Tamb = - 15 oC ≤ Ta ≤ +40 oC (with alkaline battery pack) ITS-I22ATEX35111X IECEX ITS 22.0025X ITS22UKEX0635X 3193491 conforms to UL Std. 913, 61010-1 Certified to CAN/CSA std. C22.2 No. 61010-1 Class 1 Division 1. Approval for Groups A, B, C & D, T4

## MVI

The Mercury Vapour Indicator utilises dual beam UV absorption technology, which means that the portable mercury vapour indicator does not saturate or need regenerating between readings – like traditional gold film detection methods – eliminating the mercury indicators downtime.

Fast and accurate, the portable mercury vapour indicator gives a real-time response and is ready to detect instantly. The Mercury Indicator provides continuous readings and offers two detection ranges: 0.1 to 199 and 1 to 1999 microgram/cubic meter.



### Specifications

Detector	Dual Beam Ultraviolet Absorption Module
Accuracy	± micrograms or ± 10 % reading
Operation	After warm up MVI gives real time mercury vapour concentrations
Instrument Range	0.1 to 199 and 1 to 1999 microgram cubic meter
Power	NiMH
Batteries	NiMH – last up to 5 1/2 hours from full charge
Alarm	Audible Alarm Factory pre-set to 20 microgram/cubic meter
Temperature	10°C to 50°C
Weight & Dimensions	3 kg, 145 x 295 x 80 mm
Repeatability	± 5% FSD @ 1 µg/m <sup>3</sup>
Response	3 seconds

## Cub VOC

Our VOC detector, Cub, has a patented photoionisation detection (PID) sensor technology has been independently verified as best performing for speed, accuracy, and humidity resistant operation.

The Cub 10.6 eV personal VOC gas detector is available as a standard instrument with 10.6 eV lamp for accurately detecting a wide range of volatile organic compounds (VOCs) to parts-per-million (ppm) levels.



### Specifications

Sensitivity	0.001 ppm (isobutylene equivalent)*   0.002 mg/m <sup>3</sup> (isobutylene equivalent)*
Range	0 ppm – 5,000 ppm
Response Time	< 13 seconds (T90)
Accuracy	±5% display reading + one digit
LCD Display	Back lit multi colour
Battery	Battery life up to 16 hours   Battery charge time 4 hours
Calibration	2 point calibration via Docking Station
Alarm	LEDs, audio and vibrate   Sounder 95 dB @ 300mm. Pre-programmed TWA & STEL   Work exposure alarm levels on all models
Data Logging	30,000 readings
PID Lamp Options	10.6 eV, 10.0 eV
Communication	USB 2.0
Resolution	PPM 0.1 ppm   PPB 0.001 ppm   TAC 0.01 ppm
Temperature	Operating: -20°C to 60°C   Certified: -20°C to 55°C
Weight & Dimensions	111 g   61 x 66 x 59 mm
Upgradeable	Upgrade ppm to ppb
IP Rating	IP65** (heavy rain)
Docking Station Options	Charge only   Charge and USB communication   Charge, USB communication and calibration
Approvals	Europe: ATEX: CE, Ex II 1G IECEX: Ex ia IIC T4 -20°C ≤ Ta ≤ 55°C IECEX: Ex ia IIC T4 -20°C ≤ Ta ≤ 55°C US and Canadian: Class I, II and III, Division I, Hazardous

## Cub TAC 10.0 eV

Cub TAC 10.0 eV personal benzene gas monitor has a dynamic benzene detection range of 0 to 5000 parts per million (ppm), with its market-leading ppb sensitivity. This personal benzene gas monitor comes with all the benefits of the Cub 10.6 eV personal VOC detector but has a 10.0 eV lamp utilising a unique light filtering technology to give a reliable aromatic hydrocarbon concentration.



### Specifications

Sensitivity	0.01 ppm (isobutylene equivalent)   0.002 mg/m <sup>3</sup> (isobutylene equivalent)
Resolution	0 ppm – 5,000 ppm
Response Time	< 13 seconds (T90)
Accuracy	±5% display reading + one digit
LCD Display	Back lit multi colour
Battery	Battery life up to 16 hours   Battery charge time 4 hours
Calibration	2 point calibration via Docking Station
Alarm	LEDs, audio and vibrate   Sounder 95 dB @ 300mm. Pre-programmed TWA & STEL   Work exposure alarm levels on all models
Data Logging	30,000 readings
PID Lamp Options	10.0 eV
Communication	USB 2.0
Flow Rate	N/A (no pump)
Temperature	Operating: -20°C to 60°C   Certified: -20°C to 55°C
Weight & Dimensions	111 g   61 x 66 x 59 mm
Upgradeable	Upgrade ppm to ppb
IP Rating	IP65** (heavy rain)
Docking Station Options	Charge only   Charge and USB communication   Charge, USB communication and calibration
Approvals	Europe: ATEX: CE, Ex II 1G, Ex ia IIC T4; -20°C ≤ Ta ≤ 55°C IECEX: Ex ia IIC T4 -20°C ≤ Ta ≤ 55°C China: Ex ia IIC T4 -20°C ≤ Ta ≤ 55°C US and Canadian approvals: Class I, II and III, Division I, Hazardous



## Gascheck G

The GasCheck handheld helium gas leak detector represents the latest in gas detection technology. Its advanced system of micro thermal conductivity enables advanced sensitivity for the rapid, effective detection of gas leaks down to cc/sec, mg/m<sup>3</sup> or ppm levels.

Designed for the search and location of gas leaks, the GasCheck handheld helium gas leak detector provides you with effective detection of almost any gas or gas mixture. Robust and reliable, the handheld gas leak detector gives stable, repeatable readings of the detected gas.



### Specifications

Detector	Micro thermal conductivity detector (MTCD)   Sensor is poison resistant with over range protection
Sensitivity (cc/sec)	He 1x10 <sup>-5</sup> , CH <sub>4</sub> 5x10 <sup>-5</sup> , R12 5x10 <sup>-5</sup> , Ar 1x10 <sup>-4</sup>
Accuracy	± 5% Displayed reading – One digit
Response	T90 = 1 second rise and clear down
Alarms	Flashing LED and 90 dBA (at 10 cm) audible sounder
Data Logging	10 data points (available for G3 only)
Operation	Battery Type: 4 x alkaline AA size or NiMH (rechargeable)   Typically 40 hours life
Flow rate	2 cc/min
Calibration	Factory calibrated to fully documented procedures in accordance with our ISO 9001:2008 Quality Management System
Weight & Dimensions	Instrument with probe: 390 x 60 x 49 mm   Case: 420 x 320 x 97 mm   Instrument: 0.45 kg. Packed 1.6 kg
Temperature	Operating: -20°C to +60°C   Storage: -20°C to +70°C   Humidity: 0 to 99% RH (non-condensing)

	G1	G2	G3
Rapid detection of gas leaks	•	•	•
Measures gas leaks (single gas)		•	
Measures gas leaks (up to 20 gases)			•
Audible sounder	•	•	•
Flashing back-lit display	•	•	•
Peak hold readings		•	•
Factory or custom calibration available		•	•
Data logging (store up to 10 readings)			•
Readings displayed in cc/sec, g/yr, ppm hoặc mg/m <sup>3</sup>			•
Selectable battery type			•
Upgradeable	•	•	

\* EMC tested EN50081-1 & EN50082-1 July 98.

## Gascheck Tesla

The GasCheck Tesla portable helium leak detector provides stable, repeatable readings. The instrument's LCD display, LED indicator and audible sounder clearly detect & indicate the helium leaks present.

The portable helium leak detector automatically zeros to the ambient air around it when switched on, and is ready to detect immediately. The portable detector has an easy to use graphical interface and intuitive keypad that allows simple function, selection, and adjustment.



### Specifications

Detector	Micro thermal conductivity detector (MTCD)   Sensor is poison resistant with over range protection
Sensitivity (cc/sec)	He 1x10 <sup>-5</sup>
Accuracy	± 5% Displayed reading – One digit
Response	T90 = 1 second rise and clear down
Alarms	Flashing LED and 90 dBA (at 10 cm) audible sounder
Calibration	Factory calibrated to fully documented procedures in accordance with our ISO 9001:2008 Quality Management System
Operation	Battery Type: 4 x alkaline AA size or NiMH (rechargeable)   Typically 40 hours life
Flow Rate	2 cc/min
Calibration	Factory calibrated to fully documented procedures in accordance with our ISO 9001:2008 Quality Management System
Weight & Dimensions	Instrument with probe: 390 x 60 x 49 mm   Case: 420 x 320 x 97mm   Instrument: 0.45 kg. Packed 1.6 kg
Temperature	Operating: -20°C to +60°C   Storage: -20°C to +70°C   Humidity: 0 to 99% RH (non-condensing)

## SF6 Leakmate

The SF6 Leakmate, portable SF6 leak detector is a great device for mobile SF6 leak detection. In practical use, it has a SF6 detection threshold of  $1 \times 10^{-6}$  mbar l/s, which makes it perfectly suitable for simple SF6 leak detection applications on SF6 switchgear. The easy to use, processor controlled portable SF6 leak detector, features both an audible alarm and an LED bar graph display, allowing estimation if a small, medium or big SF6 leak is being detected.



### Specifications

Detector	High voltage ionisation
Sensitivity	$1 \times 10^{-6}$ mbar l/s for SF6
Display	8 position LED bar
Response Time	Approximately 1 second
Audio	Sound pitch proportionally follows leak rate
Sniffing Probe	355 mm flexible pipe
Operating Temperature	-20°C to +50°C
Weight & Dimensions	2.1 kg including accessories   330 x 280 x 125 mm including transport case
EMC Rating	CE declaration of conformity

## SF6 LeakCheck P1:p

The SF6 LeakCheck P1:p is an award winning SF6 gas leak detector that uses negative Ion Capture (NIC) technology designed for location, leak testing and detection of SF6 leaks in high electrical switchgear.

The SF6 gas leak detector rapidly detects SF6 gas leaks down to  $1 \times 10^{-8}$  ml/sec with a quick clear down of less than 1 second. The SF6 gas leak detector is unaffected by the exposure to large SF6 gas leaks and will continue to remain uncontaminated even after the exposure to 100% SF6 gas.



### Specifications

Measurement Principles	Negative Ion Capture (NIC): a non radioactive, non-restricting carriage and no licensing required
Sensitivity	Standard SF6 GasCheck p1 and LeakCheck P1:p   $1 \times 10^{-7}$ ml/sec, 1 ppm, 0.01 gm/yr SF6 Highsense option   $1 \times 10^{-8}$ ml/sec, 0.1 ppm, 0.001 gm/yr SF6
Response	T90 = < 1 second rise and clear down
Operation	Lead acid battery, internal and fully protected Recharge between 85-265 AC V, 50/60 Hz
Alarm	Audio and visual with an optional handset alarm
Measurement Units	Measurement in l/sec, gm/yr and ppm Range: Each unit 1 – 500 Accuracy: $\pm 5\%$ of displayed leak rate or $\pm 2$ digits Repeatability: $\pm 1$ digit
Calibration	Via CalCheck calibration accessory
Data Logging	Over 500 data points with date and time stamp Download via RS232 to a PC
Temperature	Storage: - 10 to 60 °C (14 to 140 °F) Operating: 0 – 50 °C (32 to 122 °F)
Weight and Dimensions	Consol: 500 x 400 x 190 mm (19.7 x 15.7 x 7.5")
Docking Station Options	Shipped: 520 x 430 x 10 mm (20.5 x 6.9 x 8.3") Shipped 15 kg (33lbs)

## SF6 AreaCheck P2

This fixed SF6 gas detector utilizes relay output for immediate awareness of detected leaks and presents no cross sensitivity with any other gas or moisture in the air. The SF6 gas detector has a built-in low flow alarm and self-diagnostic testing.



### Specifications

Detection Principle	SF6: NIC
Range	0 – 2000 ppm SF6
Resolution	500 ppm SF6 / 10 ppm
Mains Power	100 – 240 VAC, 50/60 Hz
Power Consumption	18 VA
Operating Temperature	– 5 to 45 °C
Storage Temperature	– 20 to 60 °C
Operating Humidity Range	10 – 90 % non condensing
Fuse	T 1A (slow blow)
Max Load, Relay Output	2.5 A / 230 VAC
Size	H 280 x B 165 x T 125 mm
Protection Class	IP52
Audible Alarms	> 75 dbA, 1m
Weight	1.5 kg (w/o wall mounting bracket)

## Falco

Falco is the latest generation of fixed VOC detectors that continuously detect a wide range of volatile organic compounds (VOCs) using patented photoionisation detection (PID) technology.

Unique to this fixed VOC detector is its revolutionary 'typhoon technology' safeguarding the PID sensor from condensing moisture for added reliability in severe weather conditions. In addition, the PID sensor incorporates patented Fence Electrode Technology, which virtually removes the effects of airborne humidity and protects from contamination.



### Specifications

Sensor	Photoionisation with 10.6 eV lamp
Detection ranges and sensitivity	10.0 ppm - 0.001 ppm   50.0 ppm - 0.01 ppm   1,000 ppm - 0.1 ppm   3,000 ppm - 1 ppm
Detection time	T90 <<30 seconds (diffused)
User interface	Display: OLED high contrast white on black   128 (w) x 64 (h) pixels Screen, size: 35 mm (w) x 17.5 mm (h)
Buttons	5 magnetic switches with LED confirmation (up, down, left, right & enter)   Magnetic actuator supplied
Status indicator	Bright visible status indicator: Red, Amber, Green
Input power	Working voltage: 12 to 40 Vdc Max. power: 7 watts
Outputs	4 to 20 mA (active and passive)   RS485 supports Modbus® protocol Relay x 2 SPST (60 Vdc 2A) – configurable
Mounting points	2 x M8.
Environmental specification	Without pump: -40°C to 60°C   With pump: -20°C to 60°C 0-100% RH and condensing humidity
Mechanical interface	2 x cable entry points with 3/4" NPT threads (left and right)   2 x 3/4" NPT to M20 Stainless steel (supplied)
Dimensions	Without pump: 200 (H) x 190 (W) x 125 (D) mm   With pump: 290 (H) x 190 (W) x 125 (D) mm
Certification	II 2G Ex d ib IIC T4 Gb ISO9001:2008



## TVOC 2

This robust fixed continuous VOC gas detector has a selectable detection range of 0 – 10 ppm, 0 – 100 ppm or 0 – 1000 ppm and is ideal for use in manufacturing and process industries where VOCs are typically present. With a 4-20 mA analogue output, the fixed continuous VOC gas detector can be simply integrated into a Distributed Control System (DCS) to provide warnings and enable control of high VOC levels in your working environment.



### Specifications

Power	5 – 28 VDC Max 130 mA
Output	4-20 mA requires a 8-35 VDC power supply   For IS requirements 8-30 VDC power supply
Range	Diffusion (can be pumped if required using an adaptor)
Display	7 segment, 4 digit LCD, 4 colour LEDs
Response	Sensor – T90 < 5 secs
Accuracy	0 to 100 ppm: ± 5 % calibration point   100 to 1000 ppm: ± 10 % at calibration points
Calibration	Accessed via magnetic switch   100 ppm isobutylene via calibration kit accessory
Temperature	Operating: – 20 to 50 °C (- 4 to 122 °F) Humidity: 0-95% RH (non-condensing)
Weight and Dimensions	Instrument: 1.4 kg (3.1 lb) Packed: 1.6 kg (3.5 lb) Dimensions: 188 x 126 x 78 mm (7.4 x 4.9 x 3")
4 – 20 mA Alarm Levels	Selectable 2 mA & 3.5 mA options
Ingress Protection	Designed to IP65 Sensor ingress protection IP54
Approvals	II 2G Ex ia IIC T4 Gb (-20 °C ≤ Ta ≤ +50 °C) II 3G Ex nA IIC T4 (-40 °C ≤ Ta ≤ +50 °C) Baseefa05ATEX0277X IECEx BAS 06.0057X

## Titan

The fixed benzene specific gas monitor is wall-mounted with a dynamic monitor range of 0 – 20 ppm with 0.1 ppm sensitivity to benzene. Our fixed benzene gas monitor samples gas from the environment once per minute and within just 60 seconds an accurate benzene measurement is displayed. The Titan fixed benzene specific gas monitor provides an immediate warning alarm system with two operator configurable levels, ensuring your workers are kept safe and protected to the standards required on site.



### Specifications

Sensor Type	PID, 10.6 eV lamp coupled with selective filtering
Selectivity	Benzene specific within typical petrol chemical matrix
Range	0 – 20 ppm
Measuring Frequency	One minute
Lower Limit of Detection	0.1 ppm
Accuracy	± 0.1 ppm or ± 10 %, whichever is greater
Temperature Stability	Internally heated
Display	Graphical BW LCD 64 x 128 pixels with back light   Bright LEDs for normal operation, fault and alarm Two magnetic switches for menu operation
Flow Rate	≥ 160 ml/min in Ambient conditions
Ingress Protection Rating	Designed to IP65 (cable gland dependant)
Humidity	0 – 99 % RH
Minimum Service Period	6 months – Hydrophobic & carbon filter replacement 12 months – PID lamp, electrode stack, pump and column replacement
Cable Entry	Two 3/4 NPT gland threads
Power	Vin (nom) 24 V DC @ 3.2 A (recommended)   Vin (max) 32 V DC @ 2.4 A   Vin (min) 19 V DC @ 4.0 A
Communication	Isolated 4 – 20 mA output   Isolated RS 485 Modbus (simplex/half duplex or fully duplex) USB when lid removed with PC software
Data Storage	On board MMC, minimum of 6 months
Relay Output	Two isolated outputs, voltage free, 24 V DC @ 1.25 A
Weight and Dimensions	15 kg (33 lb)   219 x 219 x 17 mm (8.6 x 8.6 x 6.8 " approx)
Gas Sample Line	10 m max length, PTFE, 6 mm OD, 4 mm ID
Ingress Protection Rating	Designed to IP65 (cable gland dependant)
Ingress Protection Rating	II 2G Ex d II B+H2 T4 Gb Tamb. = -20 oC to +55 oC IECEx FTZU 140030X   ATEX, EMC Conforms to UL 61010-1, UL 60079-0, UL 60079-1 Certified to CAN/CSA-C22.2

## GasTec

Gastec Detector Tubes indicate concentrations directly by way of a calibrated scale printed on the tubes. At Gastec, we endeavour to achieve highest quality detector tubes for analysing airborne gases/vapours, as well as pollutants in soil and water through our advanced state-of-the-art research and development. Through our efforts we have acquired a solid reputation among our customers in virtually all sectors of industry, commerce and society. Tubes are now available for more than 500 different applications.



**1** Break off the both ends of the detector tube by using the built-in diamond tip breaker. Confirm the pump handle is fully pushed in. Then insert the detector tube into the rubber inlet with G mark towards the gas sampling pump.



**2** Align the guide marks on the pump shaft red (▲) 100 or 50 mL, and pull out the handle until it is locked. Wait until the sampling time has elapsed.

With an easy-to-see flow finish indicator (white disk pops out when the prescribed volume has been fully drawn), the operator is assured that the sampling is complete.



**3** The colour in the detector tube changes as the gas is drawn in.

Wait the required sampling time and read the measurement at the end of the coloured layer. (Please note the concentration or mark the colour change demarcation on the glass tube with a pen immediately).

GASTEC Set



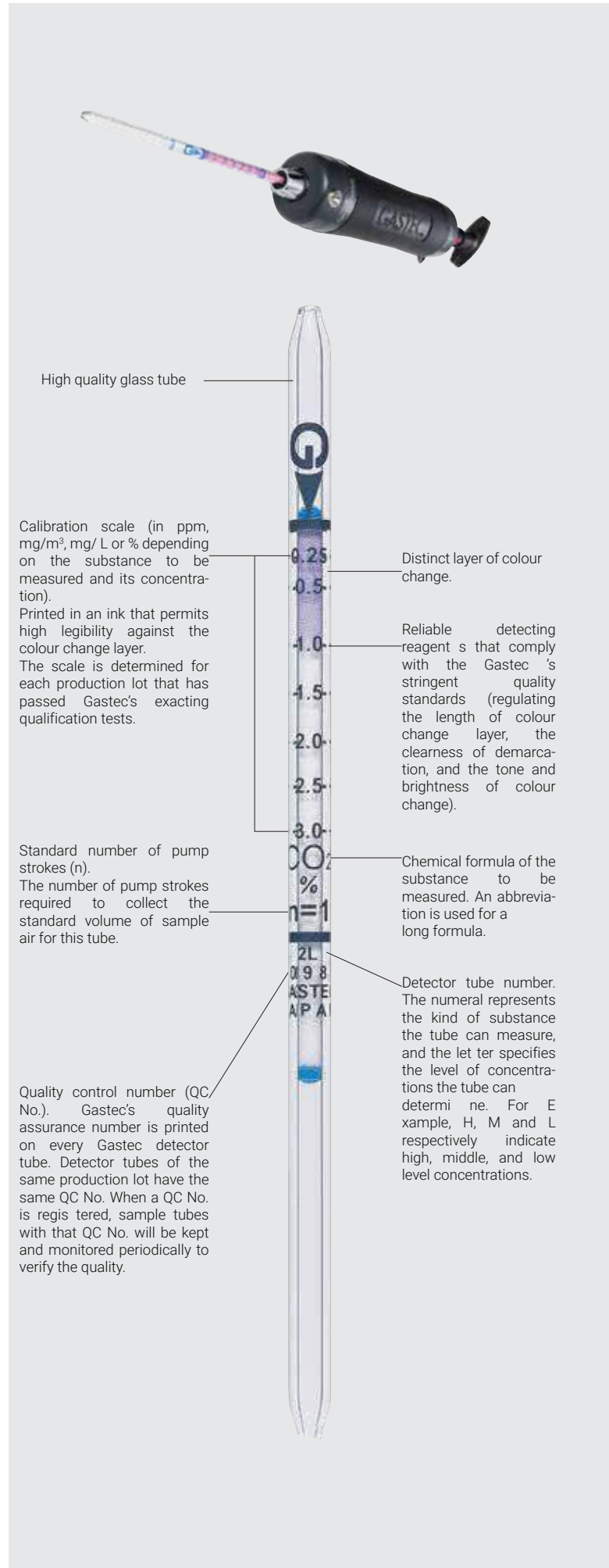
GV-100S



GV-110S

### Commonly Requested Gastec Tubes

Type	Description
121L	Benzene Tube
2L	Carbon Dioxide
8LL	Chlorine Tube
163TP	Ethylene Oxide Tube
91LL	Formaldehyde Tube
101	Gasoline (Petrol) Tube
14L	Hydrogen Chloride Tube
7LA	Phosphine Tube
27	Polytec Tube
122L	Toluene Tube
6LLP	Water Vapour Tube



High quality glass tube

Calibration scale (in ppm, mg/m<sup>3</sup>, mg/L or % depending on the substance to be measured and its concentration).

Printed in an ink that permits high legibility against the colour change layer. The scale is determined for each production lot that has passed Gastec's exacting qualification tests.

Distinct layer of colour change.

Reliable detecting reagents that comply with the Gastec's stringent quality standards (regulating the length of colour change layer, the clearness of demarcation, and the tone and brightness of colour change).

Standard number of pump strokes (n).

The number of pump strokes required to collect the standard volume of sample air for this tube.

Chemical formula of the substance to be measured. An abbreviation is used for a long formula.

Detector tube number. The numeral represents the kind of substance the tube can measure, and the letter specifies the level of concentrations the tube can determine. For Example, H, M and L respectively indicate high, middle, and low level concentrations.

Quality control number (QC No.). Gastec's quality assurance number is printed on every Gastec detector tube. Detector tubes of the same production lot have the same QC No. When a QC No. is registered, sample tubes with that QC No. will be kept and monitored periodically to verify the quality.

# Gas Leak Detection Cameras

www.panindochina.com.vn

## EyeCGas® 2.0

Fast and effective gas leak detection is essential for keeping employees, the environment and property safe. EyeCGas® 2.0 ensures quick identification of methane and volatile organic compound (VOC) leaks for rapid and effective repair, guaranteeing safety while saving time and costs.

Designed and engineered based on customer inputs and industry needs:

### Wireless

Built-in WiFi enables live video streaming and video download for better connectivity.

### Safety Certifications

CSA C22.2 No. 213-M1987, Non-Incendive Electrical Equipment for Use in Class I, Division 2  
ANSI/ISA-12.12.01 - Class I and II, Division 2, and Class III  
ATEX intrinsically safe for Zone 2 ratings as: Ex II 3 GD; Ex ic nA nC IIC T6 Gc; Ex ic IIIC T85°C Dc

### High Sensitivity

Improved sensitivity for small leak detection, 3rd party certification for EPA 0000 a compliance.

### Thermographic Imaging

Temperature measurement capabilities and color pallets for better versatility.

### Ldar Ready

Innovative built-in LDAR capabilities provide better operability.

1. Integration with leading LDAR software during inspection routes
2. Real time component tag synchronization
3. Built-in for geo-tagging
4. Patent protected integration with PID/FID Method 21 analyzers to enable Smart LDAR

### EyeCGas Backward Compatibility

Easy upgradability from older EyeCGas® cameras into EyeCGas® 2.0 enables better maintainability.

### Media Recording and Storage

Integral 64Gb solid-state memory, snapshot button, and HD color camera enable better usability.



## EyeCGas® CO

EyeCGas® CO is a handheld OGI camera for CO gas leak detection. With this camera you can safely and remotely detect and locate carbon monoxide as well as other harmful gas emissions. Whether these toxic gases are part of the manufacturing process, or a byproduct of the production line, EyeCGas® CO helps increase safety and protect the environment.

### Specialized

EyeCGas® CO is an infrared camera specially designed for high sensitivity CO detection for Steel, Chemical and Power Generation market requirements.

### Field productivity

EyeCGas® CO allows for routine and on-demand inspections in the steel manufacturing operations and other industries where CO emissions need to be closely monitored. EyeCGas® CO helps you detect and repair toxic gas leaks inside the facility, while maintaining safety.

### Powerful but simple

The EyeCGas® CO allows for fast inspection of vast areas with a simple and intuitive user interface.

### No more guesswork

The EyeCGas® CO includes a large LCD display and a digital CCD camera for fast recognition of the components being inspected or leaking.

### Safety

- UL1604 - Electrical Equipment for Use in Class I & II, Division 2, & Class III (Classified) Locations.
- CSA C22.2 No. 213-M1987 - Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations.
- ANSI/ISA-12.12.01 - Non-incendive Electrical Equipment for Use in Class I & II, Division 2 & Class III Hazardous (Classified) Locations.
- ATEX II 3G Ex nL IIC T6.



## EyeCGas® CO2

With the EyeCGas® CO<sub>2</sub> OGI camera, you can safely and easily locate very small concentrations of CO<sub>2</sub> leaks, whether as a tracer gas used to find leaks during plant and Enhanced Oil Recovery (EOR) machinery inspections, or to verify completed repairs. Save time with fast and accurate detection, and cut operating downtime to a minimum while avoiding fines and lost profits.

### Specialized

EyeCGas® CO<sub>2</sub> is an infrared camera specially designed for high sensitivity CO<sub>2</sub> detection for oil & gas, utilities, nuclear energy, and steel market requirements.

### Field productivity

Ruggedized and hazardous environment certified, the EyeCGas® CO<sub>2</sub> broadens opportunities for use within the facility limits while maintaining safety, without the need of a "hot work" permit.

### Powerful but simple

The EyeCGas® CO<sub>2</sub> allows for fast inspection of vast areas with a simple and intuitive user interface.

### No more guesswork

The EyeCGas® CO<sub>2</sub> includes a large LCD display and a digital CCD camera for fast recognition of the components being inspected or leaking.

### Safety

- UL1604 - Electrical Equipment for Use in Class I & II, Division 2, & Class III (Classified) Locations.
- CSA C22.2 No. 213-M1987 - Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations.
- ANSI/ISA-12.12.01 - Non-incendive Electrical Equipment for Use in Class I & II, Division 2 & Class III Hazardous (Classified) Locations.
- ATEX II 3G Ex nL IIC T6.





## EyeCGas® FX

Gas leak detection equipment is vital to keeping your employees, products and environment safe. EyeCGas® FX finds leaks from a safe distance and automatically alerts plant personnel. Building on the success of the handheld EyeCGas® camera, EyeCGas® FX is the next generation automatic camera for installation in factories, as well as offshore platforms and rigs. This highly reliable system responds to the demands of 24/7 monitoring. EyeCGas® FX is specially designed for the natural gas, oil and petrochemical industries.



### Automatic Leak Detection

EyeCGas® FX includes a highly sensitive IR camera and an HD color camera for fast recognition of the areas being inspected. The camera allows safe and ongoing monitoring of all areas of the plant, including remote and inaccessible areas. Video can be saved locally (on the camera) or remotely (feed sent to control room).



## EyeCGas Mini

A compact, uncooled handheld OGI camera. Available in multiple models for Methane, SF6, Ammonia, HFC Refrigerants and more. This Feature-rich OGI camera revolutionizes the way inspections are held

#### Cost-Effective

Uncooled technology makes for low maintenance.

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Uncooled technology makes for low maintenance.

#### Thermography

Thermographic imaging mode, also in the day camera

#### Automatic Gas Detection

Detecting gas in real-time overlaid on the visible image

#### Automatic Gas Detection

Detecting gas in real-time overlaid on the visible image

#### Multiple Models

Available for Methane, SF6, Ammonia & HFC Refrigerants

#### User-Friendly Interface

Simple and easy to operate with minimal training.

#### Connectivity

Wi-Fi, Bluetooth and USB C connectivity



## EyeCGas 24/7

Uncooled continuous monitoring OGI camera for Methane leak detection, with automatic alerts via a control room and dedicated EyeCSite Pro software system.

#### Continues Monitoring

24/7 monitoring with multiple functionalities tailored to each customer.

#### Pan & Tilt Mounting

Pan & Tilt mounting allows wide coverage and surveillance of multiple area with a single camera.

#### Gas Leak Detection

Quickly identifies Methane.

#### Automated Alerts (Software)

Real-time indicators using alarms and visual signal alerts

#### Smart Software (EyeCSite Pro)

Dedicated management software for logs and statistics.

#### Versatile Communication (Software)

Modbus/OPC/ONVIF/HART communication..



## EyeCGas 24/7 Pro

Cooled continuous monitoring OGI camera for Methane and over 400 VOC's, with automatic alerts via a control room and dedicated EyeCSite Pro software system. Cooled OGI technology enabling detection of small to large leaks from a far distance

#### Continues Monitoring

24/7 monitoring with multiple functionalities tailored to each customer.

#### Pan & Tilt Mounting

Pan & Tilt mounting allows wide coverage and surveillance of multiple area with a single camera.

#### Gas Leak Detection

Quickly identifies Methane.

#### Wide coverage

Monitor of multiple areas and configurations with a single PT camera from longer distances.

#### Automated Alerts (Software)

Real-time indicators using alarms and visual signal alerts

#### Smart Software (EyeCSite Pro)

Dedicated management software for logs and statistics.

#### Versatile Communication (Software)

Modbus/OPC/ONVIF/HART communication..



## EyeCSite

Quantification (QOGI) and Alert software for handled OGI cameras for the oil and gas industry

#### Quantification

Quantification in leak rate (g/hr) and max concentration (e.g. ppm) values

#### Realtime & Offline

On-location and remote quantitative measurement of leak rates for Methane and VOC's..

#### Multiple Compound Quantification

Calibrated to accurately quantify most compounds

#### Wireless

Easily connect via Wi-Fi to the EyeCGas camera

#### Plume Coloring

For optimizing of sampling scene and pin pointing leak source.

#### Logs & Reporting

Quickly pull out reports of your inspections (logs) and review the history of events.

#### Safe & Rugged

EyeCSite is available in a rugged, portable, powerful and fully certified tablet or laptop.



## EyeCSite Pro

Automated video management software for EyeCGas 24/7 Fixed OGI Solutions

#### Gas Detection

Detection of fugitive gas in a configured Region of Interest (ROI).

#### Gas Quantification

Quantifies the rate of the fugitive gas leaks into the atmosphere.

#### Gas Leak Detection

Easily integrate 3rd party lasers for increased quantification accuracy.

#### Anomalies Detection

Detection of abnormality related to movement or liquids.

#### Presets & Tour

Configure different presets positions combining them into a singular tour.

#### Multi-Camera Layout

View multiple cameras connected to the system using different viewing modes.

As you know, many of you have purchased instruments only to find out that your vendor can't service them. You have become painfully aware that the time and cost to send your instrument back to the factory are unacceptable.

**Panindochina®** being an Authorized Service Center of Industrial Scientific, our technicians are factory-trained to service all of gas detectors of Industrial Scientific.

**Panindochina®** provides the highest level of service for gas detector repairs, calibrations, and warranty sensor replacement. Our technicians are committed to quality service and offer quick and efficient turnaround for all repairs and calibrations conducted at our facility.

**Panindochina®** is always confident being a bridge between Industrial Scientific and customers in Vietnam

### Gas detector service:

- Inspection
- Calibration and certification
- Repair and replace spare parts
- Technical training
- Rental service



### Recommendations from the manufacturer when use gas detectors:

- Do zeroing before use. Zeroing must be done in the clean environment
- Do bump test before each day's use
- Do calibration before first use and monthly thereafter

### Sensor Replacement Guidelines

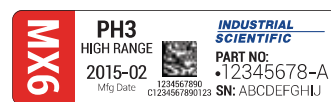
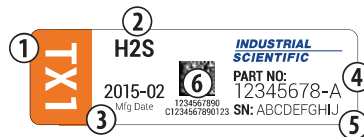
Sensor: HCN, HCl, ClO<sub>2</sub>, PH<sub>3</sub>, và Cl<sub>2</sub>:

Manufactured on or after January 1, 2014 SIN xxxxxxxx-MMY, MM= Month and Y = Year (i.e. S/N 12345678014; indicates January 2014).

Manufactured prior to January 1, 2014 S/N xxxxxxxxY-WW, Y = Year and WW = Week (i.e. S/N 12345678014; indicates the 14th week of 2010)

PID Sensors: SN YYMMxxxx-xxx, YY = Year and MM= Month (i.e. S/N 1209375681 indicates September 2012)

Infrared Sensors: S/N YYMMxxxxxxxx, YY = Year and MM= Month (i.e. S/N 1305277678 indicates May 2013)



1. Color-coded instrument name
2. Sensor gas type
3. Date of manufacture (YYYY-MM)

4. Part number/ reorder number
5. Part number/ reorder number
6. Industrial Scientific use only

### Typical Life Span Of Sensors

Combustible Sensors	All units	2-3 years normal usage
Toxic Sensors	All units	1-3 years normal usage (varies with type)
Oxygen Sensors	All units	2 years
Infrared Sensors	MX6 iBrid	5 years
PID Sensors	MX6 iBrid	Approximately 6,000 hours

### Operator's Four Steps to a Successful Gas Detection Program

#### Manual Operations

1. Turn on instrument and check battery level and type of installed sensors.
2. Zero the instrument.
3. Bump Test (functional test) instrument.
4. Clear the Peaks.

#### Docking Station

1. Dock the instrument.
2. Turn on instrument and check battery level and type of installed sensors.
3. Zero the instrument.
4. Clear the Peaks.



## Sampling Probes

Industrial Scientific sampling probes are available in many sizes and types to best fit the needs of most any remote sampling requirement. Probes are used in conjunction with Industrial Scientific sampling pumps or instruments with internal pumps.

Part Number	Description
18102111 (f)	4.5-Ft. Polycarbonate Probe w/ Tubing
18101428 (g)	4-Ft. Polycarbonate Probe w/ Tubing
18101386 (m)	6-Ft. Extendible Stainless Steel Probe
18102306 (i)	3' Stainless Steel Bar Hole Probe w/Filter
18102309 (h)	1.5-Ft. Polycarbonate Probe w/Filter
18102276 (j)	1.5-Ft. Stainless Steel Flue Gas Probe w/ Filter (to 1,500°F)
18102246 (k)	3-Ft. Extendible Probe w/ Teflon Tubing Insert
18103309	Aluminum Coiled Probe (800-900°F) (not pictured)
18104299 (l)	3-Ft. Polycarbonate Probe w/ High Capacity Filter
18105239	ATX 90° Quick Disconnect Probe Kit (not pictured)

## Sample Tubing Kits

The universal urethane sample tubing kit is for use with all gases EXCEPT:  $Cl_2$ ,  $ClO_2$ , HCl, and Volatile Organic Compounds (VOCs, measured using the MX6 PID sensor). This tubing kit will be offered in specific lengths of 10, 20, 30, 40, 50, 60, 70, 80, 90, and 100 feet. Below are the part numbers and descriptions for the 10 available versions of this universal urethane sample tubing kit.



### Universal Urethane Sample Tubing Kit

Part Number	Description
18109207-10	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 10 ft/3 m length
18109207-20	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 20 ft/6.1 m length
18109207-30	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 30 ft/9. m length
18109207-40	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 40 ft/12.2 m length
18109207-50	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 50 ft/15.2 m length
18109207-60	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 60 ft/18.3 m length
18109207-70	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 70 ft/21.3 m length
18109207-80	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 80 ft/24.4 m length
18109207-90	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 90 ft/27.4 m length
18109207-100	Universal Urethane Sample Tubing Kit with Dust Filter/Water Stop, 100 ft/30.5 m length

### Universal Teflon Lined Sample Tubing Kit

The universal Teflon lined sample tubing kit is primarily for use with specific exotic gases that are susceptible to being absorbed by certain types of tubing. These exotic gases include:  $Cl_2$ ,  $ClO_2$ , HCl, and Volatile Organic Compounds (VOCs, measured using the MX6 PID sensor). While this Teflon lined tubing kit is primarily for use with these exotic gases, it may be used to take samples of any gas. If you are unsure of the gases that your sample tubing will be used with, it is recommended that you use this tubing. Teflon lined tubing offers excellent instrument response and resistance to gas absorption, but may be difficult to attach to the pump inlet or attach filters to if the proper fittings are not available. For this reason, Industrial Scientific does not recommend using bulk Teflon lined tubing. Rather, the ISC Teflon lined tubing kits include small sections of urethane tubing at each end so the tubing can easily be attached to the pump inlet and the dust filter/water stop. The kits will be offered in specific lengths of 10, 20, 30, 40, 50, 60, 70, 80, 90, and 100 feet. Below are the part numbers and descriptions for the 10 available versions of this universal Teflon lined sample tubing kit.



Part Number	Description
18109206-10	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 10 ft/3 m length
18109206-20	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 20 ft/6.1 m length
18109206-30	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 30 ft/9.1 m length
18109206-40	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 40 ft/12.2 m length
18109206-50	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 50 ft/15.2 m length
18109206-60	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 60 ft/18.3 m length
18109206-70	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 70 ft/21.3 m length
18109206-80	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 80 ft/24.4 m length
18109206-90	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 90 ft/27.4 m length
18109206-100	Universal Teflon Lined Sample Tubing Kit with Dust Filter/Water Stop, 100 ft/30.52 m length

## Regulators

Regulators provide the proper flow rate for calibrating your Industrial Scientific instrument. Always make certain to use the appropriate regulator for the application as recommended in the Instruction Manual.



- a. 18100933 - 34 L Regulator (1/2 L/min flow)
- b. 18102509 - 58/103 L Demand Flow Regulator
- c. 18103564 - 34 L Demand Flow Regulator
- d. 18102260 - 552 L Regulator (1/2 L/min flow)
- e. 18100883 - 58/103 L Regulator (1/2 L/min flow)
- f. 18102155 - 58/103 L Ammonia Regulator
- g. 18103580 - 58/103 L Bump Test Regulator



MX6 iBrid DSX Docking Station shown (l) 18105924 - 5-port Clamp-on Gas Manifold with a Demand Flow Regulator (18105841) and cylinder connected to an iGas® Reader (18105684).



- h. 18105841 - 58/103/34L Demand Flow Regulator w/iGas Pressure Switch
- i. 18105833 - 552L Demand Flow Regulator, 590 CGA w/iGas Pressure Switch
- j. 18105858 - 650L Demand Flow Regulator, 330 CGA w/iGas Pressure Switch
- k. 18106740 - Demand Flow Regulator, 660 CGA w/iGas Pressure Switch



(l) 18105924 - 5-port Clamp-on Gas Manifold

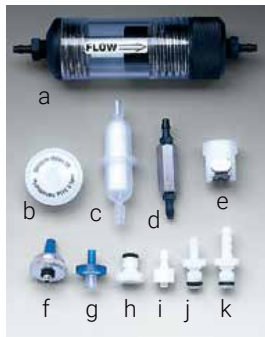
### Demand Flow Regulators

Part No.	Description
18105841	(h) 58/103/34L Demand Flow Regulator w/iGas 150 PSI Pressure Switch
18109244	(h) 58/103/34L Demand Flow Regulator w/iGas 250 PSI Pressure Switch
18105866	34L Demand Flow Regulator, 600 CGA w/iGas 150 PSI Pressure Switch
18109243	34L Demand Flow Regulator, 600 CGA w/iGas 250 PSI Pressure Switch
18105833	(i) 552L Demand Flow Regulator, 590 CGA w/iGas 200 PSI Pressure Switch
18109241	(i) 552L Demand Flow Regulator, 590 CGA w/iGas 500 PSI Pressure Switch
18105858	(j) 650L Demand Flow Regulator, 330 CGA w/iGas 200 PSI Pressure Switch
18109242	(j) 650L Demand Flow Regulator, 330 CGA w/iGas 500 PSI Pressure Switch
18106740	(k) Demand Flow Regulator, 660 CGA w/iGas 200 PSI Pressure Switch
18109246	(k) Demand Flow Regulator, 660 CGA w/iGas 500 PSI Pressure Switch
18106757	Demand Flow Regulator, 705 CGA w/iGas Pressure Switch
18101766	58/103L Regulator (1 L/min flow)

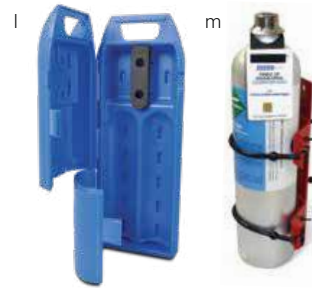
### Regulators

Part No.	Description
18100933	(a) 34L Regulator (1/2L/min flow)
18102509	(b) 58/103L Demand Flow Regulator (and 34L Aluminum Cylinders)
18103564	(c) 34L Demand Flow Regulator, CGA 600
18103549	552L Demand Flow Regulator, CGA 590
18103556	650L Demand Flow Regulator, CGA 330
18104158	Demand Flow Regulator, CGA 660
18106708	Demand Flow Regulator, CGA 705
18102260	(d) 552L Regulator (1/2 L/min flow), CGA 590
18100883	(e) 58/103L Regulator (and 34L Aluminum Cylinders) (1/2 L/min flow)
18102155	(f) 58/103L Ammonia Regulator (1 L/min flow)
18103580	(g) 58/103L Bump Test Regulator w/Trigger
18103374	650L Regulator (1/2L/min flow), CGA 330
18104695	Regulator w/Bump Test Trigger, CGA 330
18104356	Regulator w/Bump Test Trigger, CGA 590
18105924	5-Port Clamp-on Gas Manifold

Remote sampling allows employees to assess air samples from an unknown and potentially toxic or combustible atmosphere using a pumped gas monitor before they enter the area. Adequate air flow is critical for proper remote sampling. All filters should be replaced when dirt or water inhibits air flow. Quick disconnect fittings allow easy connection to secure tubing to sampling pumps.



- Additional Remote Sampling Equipment:**
- a. Inline High Capacity Water Stop
  - b. Dust Filter/WaterStop for Docking Station Fresh Air Inlet
  - c. Inline Dust Filter for iSP/SP402/SP202/SP100 Pumps
  - d. Dilution Tube
  - e. Quick Disconnect Fitting, Female
  - f. Replacement Filters (Package of 5)
  - g. Internal Dust Filter/WaterStop for MX6/ATX Series
  - h. Quick Disconnect Fitting, Male, Threaded
  - i. Luer Fitting, Male, 1/8 in or 3/16 in Barb
  - j. Quick Disconnect Fitting, Male, 1/8 in Barb
  - k. Quick Disconnect Fitting, Male, 3/16 in Barb



- l. 17037961 – Carrying Case for 2 Cylinders (58 L)
- m. 17124348 – Wall/Desk Mount Cylinder Holder for use with 34, 58, 116, and 552 liter cylinders (cylinder not included)

### Additional Remote Sampling Equipment

Part No.	Description
18102277	(a) Inline High Capacity Water Stop
17057803	Replacement Gortex Filter Insert for 18102277
17027152	(b) White Disc Filter
18109558	(b) White Disc Filter (pack of 10)
17050908	(c) Inline Dust Filter 10 micron, with adaptors for MX6 iBrid Ventis, VSP pumps
17041740	(d) Dilution Tube (for use with Sampling Pumps)
17050688	(e) Quick Disconnect Fitting, Female
17024597	(f) Replacement Filter for 6' Extendible Probe
18109559	(f) Replacement Filters for 6' Extendible Probe (Pack of 5)
17058157	(g) Internal Dust Filter/WaterStop for MX6 iBrid
17051611	(h) Quick Disconnect Fitting, Male, Threaded
17048273	(i) Luer Fitting, Male, 3.175 mm (1/8 in)
17050698	(j) Luer Fitting, Male, 3.175 mm (1/8 in) Barb
17050689	(j) Quick Disconnect Fitting, Male, 3.175 mm (1/8 in) Barb
17050775	(k) Quick Disconnect Fitting, Male, 4.7625 mm (3/16 in) Barb
17051319	Dust Filter/WaterStop for Docking Station Fresh Air Inlet
17051701	Replacement Probe Fitting for 18101386
17136540	SP6 Filter Cap (used with 18105155-X)
17152395	Internal Dust Filter/Water Stop for Ventis Slide-on Pump
17068099	3/16" To 1/8" Reducer
17129909	MX6 iBrid/Ventis Filter cap

### Universal Urethane Sample Tubing Kit With Dust Filter/Water Stop

Part No.	Length	Part No.	Length
18109207-10	3 m / 10 ft	18109207-60	18.3 m / 60 ft
18109207-20	6.1 m / 20 ft	18109207-70	21.3 m / 70 ft
18109207-30	9.1 m / 30 ft	18109207-80	24.4 m / 80 ft
18109207-40	12.2 m / 40 ft	18109207-90	27.4 m / 90 ft
18109207-50	15.2 m / 50 ft	18109207-100	30.5 m / 100 ft

NOTE: Not for use with Cl<sub>2</sub>, ClO<sub>2</sub>, HCl, or PID Sensors

### Universal Teflon Lined Sample Tubing Kit With Dust Filter/Water Stop

Part No.	Length	Part No.	Length
18109206-10	3 m / 10 ft	18109206-60	18.3 m / 60 ft
18109206-20	6.1 m / 20 ft	18109206-70	21.3 m / 70 ft
18109206-30	9.1 m / 30 ft	18109206-80	24.4 m / 80 ft
18109206-40	12.2 m / 40 ft	18109206-90	27.4 m / 90 ft
18109206-50	15.2 m / 50 ft	18109206-100	30.5 m / 100 ft

NOTE: For use with all sensors

### Probe Tubing Kits - for use with 18101386 probe

18108043	Probe Tubing Kit for MX6 iBrid/Ventis – Urethane (Not for use with Cl <sub>2</sub> , ClO <sub>2</sub> , HCl, or PID sensors)
18108093	Probe Tubing Kit for MX6 iBrid/Ventis – Teflon lined (For use with all sensors)



## Bump Test Where The Work Is

Bump testing gas detectors before each day's use is the only way to be sure that the sensors respond to gas. But if your team works on the go, they might not have access to a docking station or calibration gas to check their monitors. By the time they enter hazardous areas, they may not even realize something is wrong with the monitor, until it is too late. Your team needs a solution that goes where the work is, so they can test their gas detectors regardless of location.

## Introducing the Ultra-Portable Bump-N-Go™

- Bump test anytime, anywhere with the pocket-sized gas cylinder.
- Get 250 bumps out of one bottle, at a lower cost-per-bump, thanks to a pushbutton regulator that eliminates wasted gas.
- Enjoy lower shipping costs because there are no hazardous material fees for ground shipments
- Save time and money by ordering the six-pack option.



### INDIVIDUAL CYLINDERS

Part No.	Description
18109566	Bump-N-Go Cylinder, 100 ppm CO
18109567	Bump-N-Go Cylinder, 40 ppm H <sub>2</sub> S
18109568	Bump-N-Go Cylinder, 100 ppm CO, 75 ppm H <sub>2</sub> S, 15% O <sub>2</sub> , 25% LEL (Methane)

### SIX-PACK CYLINDERS

18109579	Bump-N-Go Cylinder, 6-pack, 100 ppm CO
18109578	Bump-N-Go Cylinder, 6-pack, 40 ppm H <sub>2</sub> S
18109577	Bump-N-Go Cylinder, 6-pack, 100 ppm CO, 75 ppm H <sub>2</sub> S, 15% O <sub>2</sub> , 25% LEL (Methane)

### REGULATOR

18109565	Pushbutton regulator for use with Bump-N-Go Cylinders
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Calibration gas ensures that your gas detector is functioning properly and responding to gas exposures as expected. Gas detection equipment should be calibrated monthly to ensure the sensors in your gas detector are functioning properly. All Industrial Scientific calibration cylinders are manufactured to the highest quality standards and include NIST-traceable blend techniques, analytical leak testing of every cylinder, certified component concentrations, and clearly marked lot numbers and expiration dates. Replacement cylinders are available in a variety of sizes and concentrations for all gases detected by Industrial Scientific instruments.



**DEMAND FLOW REGULATORS**

PART NO.	DESCRIPTION	Vol	0.5LPM Regulator	Demand Flow	with iGas Pressure Switch
18105825	CYL, 200 ppm CO, 75 ppm H2S, 15% O2, 25% LEL Methane (For bump testing only)	11L	18100883	18102509	18105841
18109173	CYL, 18% O2, 25% LEL Pentane	103L	18100883	18102509	18105841
18109174	CYL, 100 ppm CO, 18% O2, 2.5% Methane	103L	18100883	18102509	18105841
18109187	CYL, 100 ppm CO, 18% O2, 2.5% Methane	552L	18102260	18103549	18105833
18109199	CYL, 100 ppm CO, 18% O2, 2.5% Methane	4,000L	n/a	18103556	18105858
18109165	CYL, 100 ppm CO, 18% O2, 25% LEL Pentane	103L	18100883	18102509	18105841
18109161	CYL, 100 ppm CO, 18% O2, 25% LEL Pentane	552L	18102260	18103549	18105833
18109156	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 2.5% Methane	58L	18100883	18102509	18105841
18109158	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 2.5% Methane	116L	18100883	18102509	18105841
18109160	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 2.5% Methane	650L	18103374	18103556	18105858
18109198	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 50% LEL Methane	4,000L	n/a	18103556	18105858
18109155	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane	58L	18100883	18102509	18105841
18109157	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane	116L	18100883	18102509	18105841
18109159	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane	650L	18103374	18103556	18105858
18109194	CYL, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane	4,000L	n/a	18103556	18105858
18109176	CYL, 100 ppm CO, 2.5% CO2, 18% O2, 25% LEL Pentane	103L	18100883	18102509	18105841
18109186	CYL, 100 ppm CO, 2.5% CO2, 18% O2, 25% LEL Pentane	552L	18102260	18103549	18105833
18109269	CYL, 250 ppm CO, 2.5% CO2, 18% O2, 50% LEL Methane	103L	18100883	18102509	18105841
18109251	CYL, 100 ppm CO, 25 ppm H2S, 2.5% CO2, 18% O2, 2.0% (40% LEL) Methane	116L	18100883	18102509	18105841
18109363	CYL, 100 ppm CO, 25 ppm H2S, 2.5% CO2, 18% O2, 2.0% (40% LEL) Methane	650L	18103374	18103556	18105858
18109250	CYL, 100 ppm CO, 25 ppm H2S, 2.5% CO2, 18% O2, 25% LEL Pentane	116L	18100883	18102509	18105841
18109362	CYL, 100 ppm CO, 25 ppm H2S, 2.5% CO2, 18% O2, 25% LEL Pentane	650L	18103374	18103556	18105858
18109236	CYL, 100 ppm CO, 5 ppm NO2, 18% O2, 25% LEL Pentane	116L	18100883	18102509	18105841
18109235	CYL, 100 ppm CO, 5 ppm NO2, 18% O2, 25% LEL Pentane	650L	n/a	n/a	18106740
18109184	CYL, 100 ppm CO, 5 ppm NO2, 18% O2, 2.5% Methane	58L	18100883	18102509	18105841
18109324	CYL, 5 ppm SO2, 18% O2, 2.5% Methane	116L	18100883	18102509	18105841



## Automatic Calibration Gas Replenishment Program

By joining the Auto Replenishment Program, you ensure that you and your team are never without calibration gas and therefore never without a properly calibrated instrument. For those who register for the program, a new cylinder of gas will automatically be sent when iNet Control detects a low gas cylinder.

NOTE: Calibration gas cylinder expiration times vary due to gas type. Please contact Panindochina for detailed information.



PART NO.	DESCRIPTION	Vol	0.5LPM Regulator	Demand Flow	with iGas Pressure Switch
18102151	CYL, 25 ppm Ammonia (NH3)	58L	18100883	18102509	18105841
18109081	CYL, 25ppm Ammonia (NH3)	116L	18100883	18102509	18105841
18106658	CYL, 25 ppm Ammonia (NH3)	650L	n/a	n/a	18106740
78103868	CYL, 50 ppm Ammonia (NH3)	58L	18100883	18102509	18105841
18109106	CYL, 50 ppm Ammonia (NH3)	116L	18100883	18102509	18105841
18109392	CYL, 50 ppm Ammonia (NH3)	650L	n/a	n/a	18106740
18102913	CYL, 2.5% Carbon Dioxide (CO2)	103L	18100883	18102509	18105841
18104208	CYL, 5.0% Carbon Dioxide (CO2)	103L	18100883	18102509	18105841
18102163	CYL, 100 ppm Carbon Monoxide (CO)	103L	18100883	18102509	18105841
18103101	CYL, 100 ppm Carbon Monoxide (CO)	552L	18102260	18103549	18105833
18101758	CYL, 10 ppm Chlorine (Cl2)	58L	18100883	18102509	18105841
18109082	CYL, 10 ppm Chlorine (Cl2)	116L	18100883	18102509	18105841
18106955	CYL, 10 ppm Chlorine (Cl2)	650L	18103374	18103556	18105858
18102996	CYL, 500 ppm Hydrogen (H2)	103L	18100883	18102509	18105841
18102154	CYL, 10 ppm Hydrogen Chloride (HCl)	58L	18100883	18102509	18105841
18109088	CYL, 10 ppm Hydrogen Chloride (HCl)	116L	18100883	18102509	18105841
18106963	CYL, 10 ppm Hydrogen Chloride (HCl)	650L	18103374	18103556	18105858
18100859	CYL, 25 ppm Hydrogen Sulfide (H2S)	58L	18100883	18102509	18105841
18109078	CYL, 25 ppm Hydrogen Sulfide (H2S)	116L	18100883	18102509	18105841
18106633	CYL, 25 ppm Hydrogen Sulfide (H2S)	650L	18103374	18103556	18105858
18109132	CYL, 25 ppm Hydrogen Sulfide (H2S)	4,000L	n/a	18103556	18105858
18102152	CYL, 10 ppm Hydrogen Cyanide (HCN)	58L	18100883	18102509	18105841
18109085	CYL, 10 ppm Hydrogen Cyanide (HCN)	116L	18100883	18102509	18105841
18107839	CYL, 10 ppm Hydrogen Cyanide (HCN)	650L	n/a	n/a	18106740
18102939	CYL, 100 ppm Isobutylene	103L	18100883	18102509	18105841
18107375	CYL, 100 ppm Isobutylene	552L	18102260	18103549	18105833
18101378	CYL, 2.5% Methane (CH4)	103L	18100883	18102509	18105841
18104778	CYL, 99% Methane (CH4)	34L	18100883	18102509	18105841
18102153	CYL, 25 ppm Nitric Oxide (NO)	58L	18100883	18102509	18105841
18109091	CYL, 25 ppm Nitric Oxide (NO)	116L	18100883	18102509	18105841
18107722	CYL, 25 ppm Nitric Oxide (NO)	650L	n/a	n/a	18106740
18102219	CYL, 5 ppm Nitrogen Dioxide (NO2)	58L	18100883	18102509	18105841
18109087	CYL, 5 ppm Nitrogen Dioxide (NO2)	116L	18100883	18102509	18105841
18105882	CYL, 5 ppm Nitrogen Dioxide (NO2)	650L	n/a	n/a	18106740
18101477	CYL, 25 ppm Nitrogen Dioxide (NO2)	58L	18100883	18102509	18105841
18109084	CYL, 25 ppm Nitrogen Dioxide (NO2)	116L	18100883	18102509	18105841
18107730	CYL, 25 ppm Nitrogen Dioxide (NO2)	650L	n/a	n/a	18106740
18104059	CYL, 1.0 ppm Phosphine (PH3)	58L	18100883	18102509	18105841
18102222	CYL, 5 ppm Sulfur Dioxide (SO2)	58L	18100883	18102509	18105841
18109086	CYL, 5 ppm Sulfur Dioxide (SO2)	116L	18100883	18102509	18105841
18108126	CYL, 5 ppm Sulfur Dioxide (SO2)	650L	n/a	n/a	18106740
18101220	CYL, 10 ppm Sulfur Dioxide (SO2)	58L	18100883	18102509	18105841
18109079	CYL, 10 ppm Sulfur Dioxide (SO2))	116L	18100883	18102509	18105841
18105817	CYL, 10 ppm Sulfur Dioxide (SO2)	650L	n/a	n/a	18106740
18109414	CYL, 10 ppm Sulfur Dioxide (SO2)	4,000L	n/a	n/a	18106740
18101584	CYL, Zero Grade Air (20.9% Oxygen)	103L	18100883	18102509	18105841
18102320	CYL, Zero Grade Air (20.9% Oxygen)	552L	18102260	18103549	18105833
18109247	CYL, Zero Grade Air (20.9% Oxygen)	4,000L	n/a	18103549	18105833

NOTE: Calibration gas cylinder expiration times vary due to gas type. Please contact Panindochina for detailed information.

Industrial Scientific Calibration Kits come equipped with everything you need to keep your gas monitoring devices operating accurately and reliably. Kits contain certified NIST-traceable (National Institute of Standards & Technology) span gases for safe, reliable instrument calibration. Complete kits are available for all installed sensors and include:

- Convenient carrying case
- Non-refillable cylinders
- Flow regulator



PART NO.	DESCRIPTION	Vol
18102269	KIT, 100 ppm CO, 18% O2, 25% LEL Pentane	103L
18102270	KIT, 100 ppm CO, 19% O2, 2.5% Methane	103L
18109137	KIT, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane	116L
18109139	KIT, 100 ppm CO, 25 ppm H2S, 18% O2, 25% LEL Pentane with Demand Flow Regulator	116L
18109138	KIT, 100 ppm CO, 25 ppm H2S, 18% O2, 2.5% Methane	116L
18103317	KIT, 100 ppm CO, 2.5% CO2, 18% O2, 25% LEL Pentane	103L
18102147	KIT, 25 ppm Ammonia (NH3)	58L
18103275	KIT, 5.0% Carbon Dioxide (CO2)	34L
18102162	KIT, 100 ppm Carbon Monoxide (CO)	103L
18101741	KIT, 10 ppm Chlorine (Cl2)	58L
18102148	KIT, 10 ppm Hydrogen Chloride (HCl)	58L
18102149	KIT, 10 ppm Hydrogen Cyanide (HCN)	58L
18109135	KIT, 25 ppm Hydrogen Sulfide (H2S)	116L
18101303	KIT, 2.5% Methane	34L
18102491	KIT, 99% Methane	34L
18102150	KIT, 25 ppm Nitric Oxide (NO)	58L
18102238	KIT, 5 ppm Nitrogen Dioxide (NO2)	58L
18101469	KIT, 25 ppm Nitrogen Dioxide (NO2)	58L
18101261	KIT, 25% LEL Pentane	34L
18102239	KIT, 5 ppm Sulfur Dioxide (SO2)	58L
18101212	KIT, 10 ppm Sulfur Dioxide (SO2)	58L

## Glossary of Occupational Safety and Health Terms

**dB:** Decibel – A unit used to measure the relative power of sound. A 3 dB increase in sound output power represents a doubling of the perceptible volume.

**eV:** Electron Volt – A measurement of energy equal to the amount of energy it takes to move 1 electron through 1 volt of potential.

**IDLH:** Immediately Dangerous to Life and Health - The maximum concentration of gas (in ppm) from which a worker could escape within 30 minutes with-out experiencing any escape-impairing or irreversible health effects.

**LEL/LFL:** Lower Explosive Limit/Lower Flammable Limit - The minimum concentration at which a gas will explode. A common unit of measurement is a percent of the LEL

**mA:** Milliamp - A unit of electric current expressed in amperes.

**PEL:** Permissible Exposure Limit - Level of gas (in ppm) a worker can be exposed to 8 hours a day/40 hours a week for the rest of their life with no long term health effects.

**PID:** Photoionization Detector – An instrument that utilizes ultra-violet light energy to ionize and detect the presence of an unknown gas or vapor.

**ppm:** Part Per Million - A common unit of measurement for toxic gases. This term literally means one part out of one million possible parts.

**TLV-STEL:** Short Term Exposure Limit - The average amount of gas (in ppm) a worker can be exposed to in a 15 minute period with no long term health effects. This may occur 4 times a shift with one hour between 15 minute exposures.

**TLV-TWA:** Time Weighted Average - The average amount of gas (in ppm) a worker can be exposed to over a certain time period. This time is defined as 8 hours to represent a normal work day.

**TLV:** Threshold Limit Value – A term used to signify limits in gas exposure. TLV is used as a prefix for TWA and STEL.

**UEL/UFL:** Upper Explosive Limit/Upper Flammable Limit – The maximum concentration at which a gas will explode.

**VAC:** Volts Alternating Current – An electric current that reverses direction at regular intervals.

**VDC:** Volts Direct Current – An electric current of constant direction.

**VOC:** Volatile Organic Compound – Any compound containing carbon, except methane, that can be readily vaporized.

## Lower Explosive Limits of Combustible Gases

The following are the lower explosive limits of selected gases which should be useful:

Aceton	2.5% of volume	Hydrogen	4.0% of volume
Aceylene	2.5% of volume	Isopropyl Alcohol (Isopropanol)	2.0% of volume
Benzene	1.2% of volume	Methane	5.0% of volume
Butane	1.9% of volume	Methyl Alcohol (Methanol)	6.0% of volume
Butyl Alcohol (Butanol)	1.4% of volume	n-Pentane	1.4% of volume
Diethyl Ether	1.9% of volume	Propane	2.1% of volume
Ethane	3% of volume	Propylene	2.0% of volume
Ethyl Alcohol (Ethanol)	3.3% of volume	Styrene	0.9% of volume
Ethylene	2.7% of volume	Toluene	1.1% of volume
Ethylene Oxide	2.7% of volume	Xylene	1.1% of volume
Hexane	1.1% of volume		

Gas	Low	High	TWA	STEL	Gas	Low	High	TWA	STEL
O <sub>2</sub>	19.5% vol	23.5% vol	N/A	N/A	H <sub>2</sub>	50 ppm	100 ppm	N/A	N/A
CO	35 ppm	70 ppm	35 ppm	200 ppm	NH <sub>3</sub>	25 ppm	50 ppm	25 ppm	35 ppm
H <sub>2</sub> S	10 ppm	20 ppm	10 ppm	15 ppm	SO <sub>2</sub>	2 ppm	4 ppm	2 ppm	5 ppm
CH <sub>4</sub>	1% vol	1.5% vol	N/A	N/A	PID	100 ppm	200 ppm	N/A	N/A
LEL	10% LEL	20% LEL	N/A	N/A	CO <sub>2</sub>	0.5% vol	1% vol	0.5% vol	3% vol
NO <sub>2</sub>	3 ppm	6 ppm	3 ppm	5 ppm	PH <sub>3</sub>	0.3 ppm	0.6 ppm	0.3 ppm	0.1 ppm

## Sensor Cross Interference Table

### SENSOR

GAS	SENSOR											
	Carbon Monoxide	Hydrogen Sulfide	Sulfur Dioxide	Nitrogen Dioxide	Chlorine	Chlorine Dioxide	Hydrogen Cyanide	Hydrogen Chloride	Phosphine	Nitric Oxide	Hydrogen	Ammonia
Carbon Monoxide	100	1	1	0	0	0	0	0	0	0	20	0
Hydrogen Sulfide	5	100	1	-40	-3	-25	10	300	25	10	20	25
Sulfur Dioxide	0	5	100	0	0	0	-	40	-	0	0	-40
Nitrogen Dioxide	-5	-25	-165	100	45	-	-70	-	-	30	0	-10
Chlorine	-10	-20	-25	10	100	60	-20	6	-20	0	0	-50
Chlorine Dioxide	-	-	-	-	20	100	-	-	-	-	-	-
Hydrogen Cyanide	15	10	50	1	0	0	100	35	1	0	30	5
Hydrogen Chloride	3	0	5	0	2	0	0	100	0	15	0	0
Phosphine	-	-	-	-	-	-100	425	300	100	-	-	-
Nitric Oxide	25	1	1	5	5	-	-5	-	-	100	30	0
Hydrogen	22	0.03	0.5	0	0	0	0	0	0	0	100	0
Ammonia	0	0	0	0	-	0	0	0	0	0	0	100
Acetylene	150	<1	15	<1	-	-	-	-	-	<1	-	-



## Hazardous Gases Found in Common Industrial Environments

(All values listed are established by HSE unless otherwise noted.)

### Ammonia: NH<sub>3</sub>

Colorless toxic gas with a pungent suffocating odor.

PEL/TWA: 25.0 ppm                      STEL: 35.0 ppm  
IDLH: 300.0 ppm                      LEL: 15.0 % of volume

- Fertilizer Plants
- Water and Wastewater Treatment Plants
- Refrigeration Facilities and Cold Storage
- Semiconductor Industry

### Carbon Dioxide: CO<sub>2</sub>

Colorless, odorless gas.

PEL/TWA: 5,000.0 ppm                      STEL: 30,000.0 ppm  
IDLH: 40,000.0 ppm

- Breweries and Wineries.
- Carbonated Beverage Bottling Plants.
- Food Processing Plants.
- Landfills.

### Carbon Monoxide: CO

Colorless, odorless gas – most abundant toxic gas.

OSHA PEL/TWA: 50.0 ppm                      NIOSH PEL/TWA: 35.0 ppm  
STEL: 200.0 ppm                      IDLH: 1,200.0 ppm

LEL: 12.5% of volume

- Fire Fighting.
- Steel Mills.
- Mining and Minerals.
- Parking Garages.

### Chlorine: Cl<sub>2</sub>

Green-yellow gas with a pungent, irritating odor.

PEL/TWA: 0.5 ppm                      STEL: 1.0 ppm  
IDLH: 30.0 ppm

- Pulp and Paper Mills.
- Water Treatment Plants.
- Swimming Pools and Chlorination Plants.
- Nuclear Reactors.

### Chlorine Dioxide: ClO<sub>2</sub>

Red-yellow or orange-green, irritating odor.

PEL/TWA: 0.1 ppm                      STEL: 0.3 ppm  
IDLH: 5.0 ppm

- Pulp and Paper Mills.
- Wastewater Treatment Plants.

### Hydrogen: H<sub>2</sub>

Colorless, odorless gas.

PEL/TWA: No limit set by OSHA                      STEL: N/A  
IDLH: No limit set by NIOSH                      LEL: 4% of volume

### Hydrogen Chloride: HCl

Colorless to slight yellow corrosive gas with a pungent, irritating odor.

OSHA PEL/TWA: 5.0 ppm                      STEL: N/A  
LEL: 12.5 % vol                      IDLH: 50.0 ppm

- Vinyl Production.
- Cotton Production.
- Petroleum and Gas Wells.
- Steel Manufacturing.

### Hydrogen Cyanide: HCN

Colorless toxic gas with a bitter, almond-like odor.

OSHA PEL/TWA: 10.0 ppm                      ACGIH PEL/TWA: 4.7 ppm  
STEL: 35.0 ppm                      IDLH: 50.0 ppm

LEL: 5.6% of volume

- Gold Plating Industries.
- Precious Metal Mining and Recovery.
- Nylon Manufacturing.

### Hydrogen Sulfide: H<sub>2</sub>S

Colorless toxic gas with a strong odor of rotten eggs.

PEL/TWA: 10.0 ppm                      STEL: 15.0 ppm  
IDLH: 100.0 ppm                      LEL: 4.0% of volume

TWA value by the ACGIH: 1 ppm

STEL value by the ACGIH: 5 ppm

- Oil Fields and Refineries.
- Mining and Metals Industries.
- Paper Mills and Leather Tanneries.
- Water Treatment and Sewer Maintenance.

### Nitric Oxide: NO

Colorless toxic gas.

PEL/TWA: 25.0 ppm                      STEL: 5.0 ppm  
IDLH: 20.0 ppm

- Diesel Emissions.
- Underground Mining.
- Agriculture – Silos.
- Semiconductor Plants.

### Nitrogen Dioxide: NO<sub>2</sub>

Reddish-brown toxic gas with a pungent odor.

PEL/TWA: 3.0 ppm                      STEL: 5.0 ppm  
IDLH: 20.0 ppm

- Boilers and Furnaces.
- Diesel Emissions.
- Underground Mining.
- Semiconductor Plants.

### Ozone: O<sub>3</sub>

Colorless, blue gas with a very pungent odor.

PEL/TWA: 0.1 ppm                      STEL: 0.3 ppm  
IDLH: 5.0 ppm

- Wastewater Treatment Plants.
- Power Generation
- Welding.

### Phosphine: PH<sub>3</sub>

Colorless gas, garlic-like odor.

PEL/TWA: 0.3 ppm                      STEL: 1.0 ppm  
IDLH: 5.0 ppm                      LEL: 1.79% vol

- Pesticides-Agricultural Fumigant.
- Doping Agent.

### Sulfur Dioxide : SO<sub>2</sub>

Colorless toxic gas with a pungent odor.

PEL/TWA: 2.0 ppm                      STEL: 5.0 ppm  
IDLH: 100.0 ppm

STEL value by the ACGIH: 0.25 ppm

- Pulp and Paper Mills
- Coal Fired Generation Stations
- Water Treatment.
- Circuit Board (Etching) Industry

## Volatile Organic Compounds Detected by a PID <10.6 eV

10.6 eV lamp	Dimethylamine	Methyl Bromide	Not Detected by a PID
Acetaldehyde	Dimethylaniline	Methyl Cellosolve Acetate	Acetonitrile
(Acetic acid)	Dimethylformamide	Methyl Ethyl Ketone	Carbon Dioxide
Acetic Anhydride	Dimethylhydrazine	Methyl Hydrazine	Carbon Monoxide
Acetone	Dimethyloacetamide	Methyl Iodide	Ethane
Acrolein	Dimethylphthalate	Methyl Mercaptan	Freons
Acrylamide	Dinitrotoluene	Methyl Methacrylate	Hydrogen
Allyl Alcohol	Dinitro Cresol	Methyl Methacrylate	Hydrogen Bromide
Allyl Chloride	Dinitro Aniline	Methyl Styrene	Hydrogen Chloride
Allyl Glycidyl Ether	Dinitro Benzene	Methylamine	Hydrogen Cyanide
Allyl Propyl Disulfide	Dioxane	Methylcyclohexane	Hydrogen Fluoride
Amino Pyridine	Diphenyl	Methylcyclohexone	Methane
Amyl Acetate	Dipropylene Glycol Methyl Ether	Methylcyclohexanol	Nitric Acid
Aniline	(Epichlorohydrin)	Monomethylaniline	Nitrogen
Benzene	(Ethanol)	Morpholine	Oxygen
Benzyl Chloride	Ethanolamine	Naphthalene	Ozone
Bromoform	Ethoxyethyl Acetate	Naphthylamine	Sulfur Dioxide
Butadiene	Ethyl Acetate	Nitroaniline	Water
Butoxyethanol	Ethyl Acrylate	Nitrobenzene	
Butyl Acetate	Ethyl Amyl Ketone	Nitromethane	
Butyl Alcohol	Ethyl Benzene	Nitrosodimethylamine	
Butyl Mercaptan	Ethyl Bromide	Nitrotoluene	
Butylamine	Ethyl Butyl Ketone	Octane	
Butyl Glycidyl Ether	Ethyl Ether	Pentaborane	
Butyl Toluene	Ethyl Mercaptan	Pentane	
Camphor Vapor	Ethyl Silicate	Pentanone	
Carbon Disulfide	Ethylamine	Perchloroethylene	
Chloroacetaldehyde	Ethylene Dibromide	Phenol	
Chloroacetophenone	Ethylenediamine	Phenyl Ether	
Chlorobenzene	Ethyleneimine	Phenylene Diamine	
Chloromethyl Methyl Ether	Furfural	Phenylhydrazine	
Chloronitropropane	Furfuryl Alcohol	Propyl Acetate	
Chloroprene	Gasoline	Propyl Alcohol	
Chrysene	Glycidol	Propylene Dichloride	
Cresol	Heptane	Propylene Imine	
Crotonaldehyde	Hexane	Propylene Oxide	
Cumene	Hexanone	Pyridine	
Cyclohexane	Hexone	Quinone	
Cyclohexanol	Hexylacetate	Stibine	
Cyclohexanone	Hydroquinone	Stoddard Solvent Vapor	
Cyclohexene	Isoamyl Acetate	Styrene	
Cyclopentadiene	Isobutyl Acetate	Terphenyls	
Di-ethylhexyl Phthalate	Isobutyl Alcohol	Tetrachloroethylene	
Diacetone Alcohol	Isophorone	Tetrachloronaphthelene	
Diazomethane	Isopropyl Acetate	Tetrahydrofuran	
Dibutylphthalate	Isopropyl Alcohol	Tetramethyl Lead	
Dichlorobenzene	Isopropyl Ether	Toluene	
Dichloroethyl Ether	Isopropylamine	Toluidine	
Dichloroethylene	Isopropyl Glycidyl Ether	Toner Fluid Vapor	
Dichlorvos	JP 4, 6, 8	Trichloroethylene	
Diesel	Ketene	Triethylamine	
Diethylamino Ethanol	Mesityl Oxide	Turpentine Vapor	
Diethylamine	Methyl Acetate	Vinyl Chloride	
Diglycidyl Ether	Methyl Acetylene	Vinyl Toluene	
Diisobutyl Ketone	Methyl Acrylate	White Spirit	
Diisopropylamine	Methyl Amyl Ketone	Xylene	







# Fire-Fighting & Rescue Equipment





# Self-Contained Breathing Apparatus

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## SIGMA 2 TYPE 2



Approved to EN137:2006 Type 2, the Scott Sigma 2 Type 2 Self Contained Breathing Apparatus combines the highest level of respiratory protection in a simple to operate, cost effective piece of equipment that meets the needs of Industrial and Marine firefighters.

Sigma 2 Type 2's proven durability, reliability and appeal is confirmed by an extensive user base who demand a combination of maximum performance and true operational simplicity.

### Features & Benefits:

- Proven high performance pneumatic system.
- Compact first breath activated demand valve with bypass.
- Ergonomically designed lightweight backplate and type 2 harness.
- Kevlar blend flame retardant webbing with Kevlar cylinder band.
- Wide choice of facemasks from the Vision 3, Promask PP and Panaseal ranges.
- Corrosion resistant Nickel plated components.
- Simple operation for users.
- All components are user serviceable, low cost and easy to maintain.
- Will accept wide range of 200 and 300 bar cylinders.

Approved to EN137:2006 Type 2, MED.

## PROPAK



The Scott Safety Propak is a lightweight self contained breathing apparatus from Scott Safety. Offering the highest levels of protection Propak builds upon the proven performance of the Contour SCBA.

### Features & Benefits:

- Proven Tempest Demand Valve.
- Trusted high performance pneumatics.
- 100% Kevlar webbing.
- Easy adjust parachute style buckles.
- Rapid adjust cylinder band design.
- Easy upgrade path.

Approved to EN137:2006 Class II.

## PROPAK-SIGMA (V2)



The ProPak-Sigma has been designed specifically for use as a compliance set in Marine or Industrial fire-fighting environments. The entire ProPak range has been approved to EN137:2006 Type 2, incorporating the stringent Full Flame Engulfment Test, and to the 9th amendment of the MED meaning that it has the latest approval for the Marine market.

### Features & Benefits:

- Easily removable pneumatics.
- Rigid backframe construction.
- Simple to service and maintain.
- Quick pull forward action allows easy in-transit adjustment of shoulder strap.
- Adjustable shoulder straps
- Kevlar blend wrap around harness.
- Waistband featuring large buckles for easy operation with gloved hands and fast donning and doffing.

Approved to EN137:2006 Type 2; MED; AS1716

## PROPAK EZ FLO



The Propak-EZ-Flo has been designed specifically to meet the demands of the Professional Fire Service offering an unequalled level of performance and user comfort. Propak-EZ-Flo provides firefighters a simple to use SCBA which is easily upgraded to include communications and situational awareness.

### Features & Benefits:

- ProPak-EZ-Flo available in F and FX variants.
- Adjustable padded shoulder straps (ProPak-f & ProPak-fx only).
- Reflective thread for extra visibility (ProPak-f & ProPak-fx only).
- Kevlar blend webbing with wrap-around harness.
- Adjustable waistband features large buckles for quick and easy donning and doffing.
- Rapid connect cylinder band allows adjustment or change out of cylinder in seconds.
- Ergonomically designed, strong and lightweight injection moulded back plate.
- Swivelling waistbelt (ProPak-fx only).
- Adjustable back plate allows the unit to be altered to the users height increasing user comfort (ProPak-fx only).

Approved to EN137:2006 Type 2, AS1716.

## PROPAK-i (V2)



High performance, rugged dependability, trusted technology.

The ProPak-i has been designed for use as a fire fighting set in the Industrial, Professional Fire Fighting or Oil & Gas markets.

The entire ProPak range has been approved to EN137:2006 Type 2, incorporating the stringent Full Flame Engulfment Test, and to the 9th amendment of the MED meaning that it has the latest approval for the Marine market.

### Features & Benefits:

- Compliance set for Industrial Professional Fire Fighting or Oil & Gas markets.
- Rigid backframe construction.
- Easily removable pneumatics.
- Simple to service and maintain.
- Kevlar blend wrap around harness.
- Side arms for increased user comfort.
- Reflective webbing

Approved to EN137:2006 Type 2; MED; AS1716

## PROPAK-f (V2)



PROPAK-f-AC

High performance, rugged dependability, trusted technology.

The ProPak has been designed for use by the Fire Service or as a fire fighting set in the Oil & Gas fire fighting market. The entire ProPak range has been approved to EN137:2006 Type 2, incorporating the stringent Full Flame Engulfment Test, and to the 9th amendment of the MED meaning that it has the latest approval for the Marine market.

### Features & Benefits:

- Designed for use by the Fire Service or the Oil & Gas market.
- Rigid backframe construction.
- Easily removable pneumatics.
- Simple to service and maintain.
- Adjustable padded shoulder straps.
- Kevlar & Pyrogard blend wrap around harness.
- Side arms for increased user comfort.
- Reflective webbing.

Approved to EN137:2006 Type 2; MED; AS1716

## PROPAK-fx (V2)



PROPAK-fx-SDC

High performance, rugged dependability, trusted technology.

The ProPak-fx has been designed specifically to meet the demands of the Professional Fire Service offering an unequalled level of performance and user comfort through the adjustable backplate.

The entire ProPak range has been approved to EN137:2006 Type 2, incorporating the stringent Full Flame Engulfment Test, and to the 9th amendment of the MED meaning that it has the latest approval for the Marine market

### Features & Benefits:

- Designed for use by the Professional Fire Service.
- Rigid backframe construction with adjustable backplate
- Easily removable pneumatics.
- Simple to service and maintain
- Adjustable padded shoulder straps.
- Kevlar & Pyrogard blend wrap around harness.
- Side arms for increased user comfort.
- Reflective webbing.
- Adjustable backplate for increased wearer comfort
- Swivel waistbelt

Approved to EN137:2006 Type 2; MED; AS1716



ELSA



ELSA SPRINT



ELSA MUSTER

The ELSA is an escape breathing apparatus which provides a constant supply of air for rapid escape from hazardous industrial and marine environments. The ELSA is simple and quick to operate, reliable and robust in use, ensuring maximum protection in an escape situation.

The ELSA is available in durations of 10 or 15 minutes in high visibility PVC or black anti-static polyurethane materials. The ELSA apparatus consists of a cylinder with combined cylinder valve and reducer, supply hose to constant flow hood and stowage bag. The ELSA is activated upon opening the bag whereby a pin which is attached to the bag via a strap is released.

- 10 or 15 minute versions
- Standard Hi Vis or black anti-static bag
- Automatic quick fire activation
- Unique cubic hood design
- CE marked in accordance with EN1146
- MED (Shipswheel) approved
- Corrosion resistant Nickel plated components
- Standard breathing air charging adaptor
- 10 year service interval

The Sabre ELSA Sprint is a positive pressure escape set providing air on demand for situations where the escape route may require a lot of physical exertion or where the maximum levels of protection are required.

The ELSA Sprint is available in durations of 10 or 15 minutes in high visibility PVC or black anti-static polyurethane materials. The ELSA Sprint apparatus consists of a cylinder with combined cylinder valve and reducer, supply hose to constant flow hood or positive pressure facemask and stowage bag. The ELSA Sprint is activated upon opening the bag whereby a pin which is attached to the bag via a strap is released.

- Robust and simple to use
- Available in 400 and 600 litres breathing air capacity
- 10 and 15 minute durations available
- Flame retardant cuboid hood for all-round vision
- Lightweight PanaSeal positive pressure facemask
- High visibility carrying bag can be worn in chest or bandolier mode
- CE marked to EN402

The ELSA Muster is a positive pressure escape set providing air on demand for situations where the escape route may require a lot of physical exertion or where the maximum levels of protection are required. The ELSA Muster has an ancillary air in attachment for use at Muster stations.

The ELSA Muster is an open circuit, positive pressure airline breathing apparatus consisting of; AntiStatic bag, high pressure reducing valve, automatic positive pressure demand valve and coupling for airline supply hose.

The ELSA Muster is supplied with either a Positive Pressure Facemask or with Positive Pressure Hood.

- Maximum level of respiratory protection
- Ancillary air in for enhanced safety
- Available in hooded and facemask versions
- High performance reducer
- Easy to maintain, low through life costs
- Low training requirement
- Automatic activation 10 & 15 minute options available
- Variety of couplings for wide range of airline systems

## SuperPASS® 2

The SuperPASS® 2 is an audible only lone worker man-down alarm for industrial applications. Grace Industries PASS devices give the Lone Worker confidence in knowing that a very loud audible alarm will sound if he or she becomes unresponsive and motionless. PASS alarms can be used as a means of accountability by providing verbal and visual indication of any distressed team members. The loud audible alarm and flashing light indicators will alert other individuals on the scene of the situation so they can help to evacuate their coworkers.

The device includes 9 V Battery for up to 100 hours of operation and an estimated 4-6 hours in Full Alarm Mode.

- Smallest, lightest, and loudest standalone audible PASS
- 98 dBA loud alarm
- Intrinsically safe PASS device
- Temperature sensing option



## TPASS® Micro

The TPASS® Micro Repeater is a radio signal repeater that supports Grace Telemetry systems by receiving and retransmitting RF PASS signals. Repeating RF PASS signals enhances system performance in large, complex buildings and difficult environments.

- Retransmits All Radio Signals
- Extends Coverage by Repeating RF PASS Signals
- Portable, Lightweight, Easy to Deploy
- Certified Intrinsically Safe for Hazardous Locations
- Highest Performance In-Building RF Penetration
- Rechargeable Li-Ion Battery
- Visual LED and Audio Activity Indicators
- Meets FCC Part 15 and Industry Canada Requirements
- No FCC license Required





# Respiratory Mask & Communication

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## VISION 3

Vision 3 positive pressure, left quick fit full face mask features a unique Toroidal visor for unparalleled and improved vision.

The Vision 3 features a multi-curvature visor made of scratch and impact resistant polycarbonate material with a scratch resistant coating providing excellent panoramic vision. The face mask features a left hand side bayonet connection for the demand valve with an option of an additional right quick fit port to take a communications interface if required.

- Left Quick Fit demand valve connection.
- Rubber and net head harness options.
- Non-dermatitic liquid silicone outer mask.
- TPE inner mask.
- Hard coated anti-scratch visor.
- Excellent speech transmission.
- Voice amplifier and radio comms available.
- Variety of sizes for improved fit.
- High Temperature visor is available

Approved to AS/NZS 1976:2012, EN:136:Class III



## PROMASK PP

Promask PP (Positive Pressure) LQF (Left Quick Fit) full face mask is manufactured from halo-butyl (nondermatitic). The Promask features a wide lens for extended field of vision. The front mounted speech diaphragm provides easy communication with colleagues.

The Promask PP is suitable for the Scott Safety range of SCBA and airline apparatus.

- Halo-Butyl positive pressure full facepiece.
- Non-dermatitic.
- Hard coated lens.
- Standard rubber harness.
- Voice amplifier and radio comms available.
- LQF (Left Quick Fit) standard demand valve connection.
- Variety of sizes for improved fit
- High Temperature visor is available.

Approved to AS/NZS 1716:2012, EN:136:Class III.



## AV-3000 HT

AV-3000 HT facepiece meets all requirements established in the NFPA 1981:2013 Edition standard, with state-of-the-art material technology to provide enhanced thermal durability and voice intelligibility performance for added safety. It is approved as a component of NFPA 1981:2002 Ed. Air-Pak Fifty and NxG2, 2007 Ed. Air-Pak 75 and NxG7 SCBAs, and 2013 Ed. Air-Pak X3 and Air-Pak 75 SCBAs. The new AV-3000 HT facepiece utilizes the proven SureSeal technology, Scott Safety's reverse-reflex sealing surface to provide excellent comfort and superior fit.

- Approved with 2013 Edition Air-Pak X3 and Air-Pak 75 SCBAs
- Approved with NFPA 1981:2002 edition and 2007 edition Air-Pak SCBAs
- State-of-the-art materials and design for enhanced performance
- Proven SureSeal facepiece for excellent fit and comfort
- ANSI Z87.1-2010 Impact Rated
- Compatible with EPIC 3 Communication System
- Right and left communication installation options
- Designed for Top Down Convertibility
- Compatible with Scott Sight In-Mask Thermal Imager
- Available in four and five strap configurations.

Approved to NFPA 1981:1:2013.

## EPIC 3

The EPIC 3—the smartest, most durable and safest voice amplification communication system in the market.

The EPIC 3 audible and visual operational indications make this system the safest in the market, earning STI scores above .65 and providing louder, clearer and more effective communication than other voice amplifiers .

The EPIC 3 best-in-class battery life, at over 50 hours, more than doubles that of the most popular models in the market.

Scott Safety developed the EPIC 3 RI Voice Communication System — Voice amplifiers, lapel speaker microphones, specialized accessories, and programming utilities..

### EPIC 3 Voice Amplifier Communication Device

- The EPIC 3 Voice Amplifier meets NFPA 1981 2002, 2007, and 2013 Edition standards for SCBA communications. ATEX/ IECX certifications include Ex ia IIB T3 Ga IP66/67 and complies with IEC standards IEC 60079-0: 2007-10 Edition 5; and IEC 60079-11: 2011 Edition 6.0.
- Automatic Shutoff Amplifier reduces costs of battery replacement and improves equipment readiness.
- Intrinsically safe for use with commercially available alkaline and NiMH AAA batteries
- Durable, rugged design is robust enough to withstand day-to-day demands, even in the most extreme applications
- Ribbed, textured surface establishes more secure handling even with gloved hands
- On/Off button with tactile surface makes it easy to recognize activation with a gloved hand or in a noisy environment
- Angled directional speaker projects an amplified voice in the direction the user is facing
- Meets NFPA 1981 2002 Edition, 2007 Edition, and 2013 Edition standards for SCBA communications.
- IP 66 and IP 67 Rating
- Compatible with Promask, Vision 3 and AV3000 positive pressure facemasks
- ATEX/IECX certifications: Ex ia IIB T3 Ga IP66/67 Complies with IEC standards IEC 60079-0: 2007-10 Edition 5; and IEC 60079-11: 2011 Edition 6.0

### EPIC 3 Radio Interface (RI) Voice Communication System

Communicate clearly and effectively on the fireground and easily switch from non-tactical to tactical communications with the EPIC 3 Radio Interface (RI) Voice Communication System.

The EPIC 3 RI system to address the changing communication needs of firefighters and emergency personnel. The lack of clear fire scene voice communications is a leading concern for fireground situational awareness and safety.

Enhances SCBA facepiece voice communication intelligibility and loudness  
Advances safety through easy-to-use wireless communication interoperability with mobile field radios

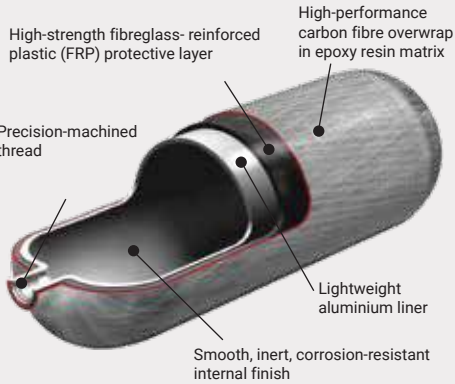
Provides easy transition from non-tactical to tactical communication modes  
Ensures operational compatibility with both legacy and new Scott SCBA and PPE  
Consolidates device functionality to reduce technology costs  
Improves user communications from the incident scene to remote locations.



Feature	Benefit
Clear Voice Communication	Enhances mask voice intelligibility and loudness
Easy Operation	Preprogrammed acoustics and single button operation provides easy use with any compatible mask
Rugged and Reliable	Robust, high-heat resistant design and construction provides reliable, long term operation and performance
Compatible with a variety of masks	Designed for use with Vision 3, Promask, Vision AMS and AV3000HT
Supports mask Top-Down-Convertibility	Compatible for use with a wide range of SCBA, Supplied Air, APR, and PAPR breathing apparatus
Advanced Power Management	Extends run time to 50 hours while reducing battery replacement costs
Easy to use programming tools	Allows devices to be easily adjusted to meet specific use case requirements

# Cylinder for Breathing Apparatus

www.panindochina.com.vn



## CARBON FIBRE CYLINDERS\*

Scotts carbon fibre cylinders provide a light-weight solution for containing the air required by a Scott breathing apparatus. Available in a range of sizes in both 200 and 300 bar pressure to meet all your operational requirements.

### Key Features:

- Available in both 200 and 300 bar.
- Available in 32, 41, 45 and 61 minute durations.
- 3 year hydrostatic re-test period.
- Unpainted body with black and white quartering
- Valves feature locking handwheel to avoid inadvertent closure.

Approved to Europe (CE)

\* Cylinder for use with ACS, Propak (V2) series breathing apparatus, use right angular valve (RA).



## STEEL CYLINDERS\*

Scott steel cylinders offer a cost effective way to contain air for use with a Scott breathing apparatus. Available in a range of sizes in both 200 and 300 bar working pressures.

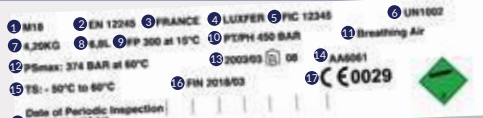
### Key Features:

- Available in durations of 15, 20, 30, 41, and 45 minutes.
- Available in 200 or 300 bar
- Valves feature locking handwheel to avoid inadvertent closure.
- 5 years hydrostatic re-test period.
- Painted grey body with black and white quartering.
- CE marked in accordance with the PED Approved to Europe (CE)

\* Cylinder for use with ACS, Propak (V2) series breathing apparatus, use right angular valve (RA)



## WHAT YOUR LABEL TELLS YOU



1. Cylinder thread identity
2. The design specification (eg EN 12245)
3. Country of manufacture
4. Manufacturer's mark
5. The cylinder serial number
6. UN number (referencing gas content)
7. Empty weight of cylinder
8. Minimum water capacity in litres
9. Filling pressure in bar
10. Test pressure in bar
11. Gas content
12. Maximum developed pressure
13. Date (month and year) of the first hydrostatic pressure test
14. The aluminium alloy of the liner
15. Operating temperature range
16. End of the life
17. Mark of conformity and notified body reference number according to the pressure equipment directive (97/23/EC)
18. Luxfer part number

\*Please note to maintain the cylinder valve handwheel on the normal right hand side of the SCBA please order the cylinders fitted with the right angled valve. These cylinders have the suffix -RA

## CARBON CYLINDERS

• Scott Safety's Carbon Cylinders are built to DOT and TC specifications

• 2216, 3000, 4500 and new 5500 psig working pressures

- Lightweight, composite cylinder consisting of an aluminum alloy inner shell with a total overwrap of carbon fiber, fiberglass and an epoxy resin
- Rated for 30', 45', 60' and 75' (5.5 only) durations based on **TOSH** breathing rates
- Luminescent band provides greater visibility
- 75' cylinder is ideal for RIT and extended duration operations
- Hydrostatic testing to be performed every five years



## ST7 TOUGH CYLINDERS

• Scott Safety's ST7 Tough Cylinders are built to DOT and TC specifications

- Built extremely tough and durable
- Provides added protection against abrasion and abuse
- 4500 psig working pressure
- Rated for 30', 45', and 60' durations based on **TOSH** breathing rate
- Luminescent band provides greater visibility
- Hydrostatic testing to be performed every five years
- 15-year life expectancy



## MAINTENANCE/CLEANING

Scott Safety recommends that these basic regular maintenance procedures be followed for all composite cylinders:

- Ensure lubricants, if used, and components are compatible with both the cylinder and the gas mixture
- Keep the inside of the cylinder free from moisture, oil, dirt and other contaminants.
- Avoid completely discharging your cylinder
- Never artificially heat your cylinder
- Never remove, obscure or alter cylinder labels or markings
- Never use corrosive, caustic or acidic paint strippers or solvents to remove paint.
- Never repaint the cylinder with paints that require curing at elevated temperatures.
- Do not fill cylinder if damaged

## STORAGE

The cylinder must be stored in a dry, cool, clean place free from acids, oils, grease, or highly combustible materials.

Store away from direct heat and sunlight, storage temperature should not exceed -10°C to +40°C. Do not store the cylinder in a place where welding operations are likely to take place.

## PERIODIC INSPECTION AND TESTING

Cylinders shall be subjected to periodic inspection and testing by an approved test station according to the requirements of AS 2030.1-2009.

## DISPOSAL

Empty cylinders should be treated as special waste and disposed of according to local and state guidelines.

Description		Breathing time Minute (at 40 lpm)	Volume of breathing air Liters	Volume of water Liters	Dimensions		Weight Full charge (kg)
Part No.	Pressure (bar)				Diameter (mm)	Length (mm)	
<b>Carbon cylinder</b>							
CYL-FWC-1300	300	32	1300	4.7	136	576	5.2
CYL-FWC-1800	207	45	1800	9	172	630	6.8
CYL-FWC-1860	300	46	1860	6.8	160	600	6.8
CYL-FWC-2460	300	61	2460	9	178	640	8.8
<b>Steel cylinder</b>							
CYL-1200	300	32	1300	4.7	136	576	5.2
CYL-1640	207	45	1800	9	172	630	6.8
CYL-1800	300	46	1860	6.8	160	600	6.8



\*Please contact supplier if you require other cylinders with volume and pressure.\*

# SCBA in Confined Space

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## MODULAIR TROLLEY

The Scott Safety Modulair range of Airline Trolley Systems provide a portable compressed air supply system for the users of airline breathing apparatus. The Modulair is available in 2 and 4 cylinder versions, 2 and 4 wearer versions and with optional extras such as airline filter units and electronic low pressure alarms.

- Ideal when working in restricted access areas
- Pressure reducer systems utilise the same robust and proven technology as Scott Safety SCBA.
- Welded stainless steel tubular frame for robustness and corrosion resistance
- Compact and portable
- High performance pneumatics
- Hose reel will hold 90 metres of PVC or 60 metres of Anti-static hose
- Hose, cylinder, face masks and breathing apparatus sets purchased separately

Certified to AS/NZS 1716:2012

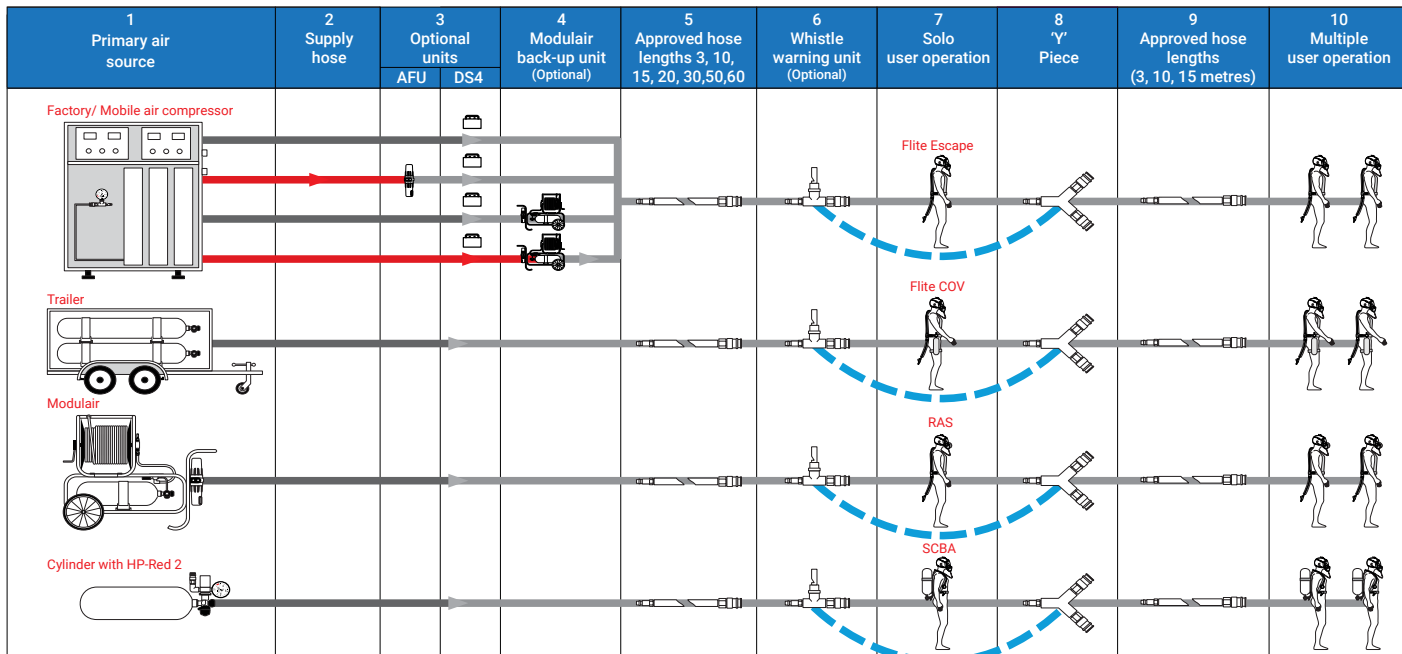


## FLITE COV

FLITE COV is a positive pressure Supplied Air Respirator that also provides emergency respiratory protection and escape capability allowing the user to enter hazardous atmospheres including those identified as immediately dangerous to life or health (IDLH). If needed, the switch to the emergency air supply cylinder is accomplished by an automatic change over valve greatly simplifying response to a stressful situation.



- In the event of an interruption of air flow from the primary supply source switchover to emergency cylinder air supply is immediately activated by the automatic change over valve to facilitate safe egress. Warning whistle informs user switch has been made to cylinder air.
  - Combined cylinder and pressure reducing valve features a locking hand wheel that remains locked in the open position against inadvertent shutting and a pressure gauge.
  - Compressed air steel cylinders are provided in 10 and 15 minute durations with a 10 minute superlight carbon composite version also offered
  - CEN type coupling as standard; other connections available.
  - Features the time-proven Scott Tempest Demand Valve with low inspiratory resistance, automatic first breath activation and responsive dynamic performance
  - The unit is comfortable and extremely simple to operate and maintain
- The FLITE COV meets all requirements and is certified to current EN 14593-1:2005 and EN 402:2003 standards (AS/NZS1716:2012)3

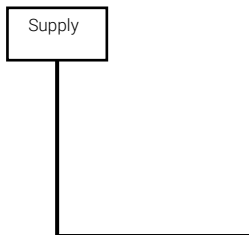


## 'Y' Piece



Constructed from nickel-plated brass, with 2 Female Socket CEN type couplings and 1 male coupling, the Y-piece allows a single length of hose to be split into two branches.

A Y-piece is usually used at the end of a long length of hose and then followed by 3 metre or 15 metre lengths of hose



## Airline Hose



All supply hoses are CE marked to EN 139 and are approved with the full range of Airline Breathing Apparatus. Available in 3, 10,15, 20,30, 50, 60 and 90 metre lengths. Each hose is fitted with a male (stainless steel) and a female (Plated brass body with Stainless Steel Bearings) CEN double action type coupling; Hoses can be connected together to increase airline length.

### Options:

- Anti-Static Airline Hose
  - Constructed from Neoprene (CR), the hoses are suitable for general industrial use as well as specialist work eg, tank cleaning work, oil and gas etc.
  - Antistatic NBR material.
  - Working Pressure 1.8 Mpa
  - Burst Pressure 5.0 Mpa
- PVC Airline Hose
  - Constructed from PVC, these hoses are suitable for general industrial use
  - Working Pressure 1.5 Mpa
  - Burst Pressure 4.5 Mpa

## Flite COV



### Cylinder Options:

- 10-minute 200 bar alloy steel; 400 litre free air capacity, empty weight 3.5 kg
- 15-minute 200 bar alloy steel; 600 litre free air capacity, empty weight 5.6 kg
- 10-minute 300 bar superlight carbon fibre; 540 litre free air capacity, empty weight 2.3 kg

Part #	Description
2031535	200 bar 10 minute charged steel cylinder complete with pouch and reducer/hose
2031536	
2031537	200 bar 15 minute charged steel cylinder complete with pouch and reducer/hose
2031538	
2031539	300 bar 10 minute charged superlight carbon fibre composite cylinder complete with pouch and connection hose
2031540	



Today's firefighters operate in extreme conditions, where temperatures are capable of rising faster and where visibility is reduced in seconds.

Conditions within these environments can put firefighters in situations where their safety is compromised and they must have a complete understanding of the environment. The V206, featuring a 206x156 sensor, and equipped with extended battery life, provides firefighters with enhanced situational awareness that enables firefighters to make better decisions in extreme conditions.



- 206x156 Resolution Sensor

Provides clear images enabling firefighters to navigate through limited-visibility conditions.

- Extended Battery Life

Up to Eight-hour runtime with a removable rechargeable battery.

- Single Button

Single button ON/OFF provides easy deployment. No menus required.

- 3.5" High-Contrast Display

Ensures the image on the display can be seen in multiple light conditions.

- Fast Startup Time

Ready for use within five seconds of activating the power button – without the use of a standby mode!

- Lightweight, Durable Design

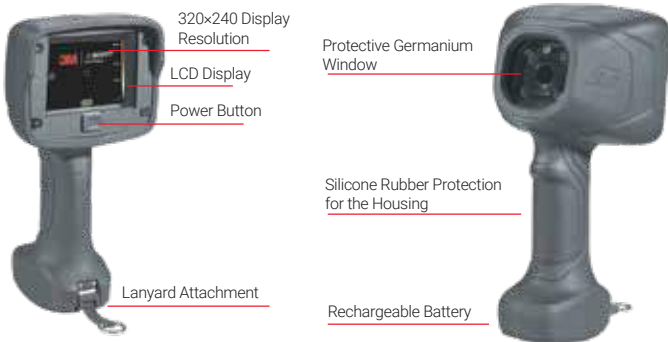
Designed to withstand the extreme conditions.

- Ergonomics

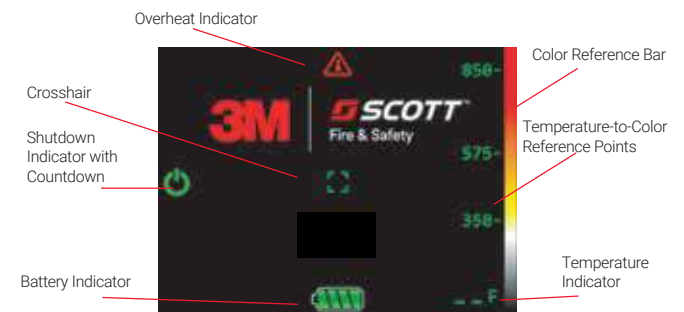
Ergonomically designed and balanced for comfort with a gloved hand.



### Tactical Thermal Imaging Camera



### LCD User Interface



## SCOTT SIGHT

When you wear Scott Sight, you get more than constant thermal vision. You get your hands back. That's because unlike other hand held thermal imaging cameras, Scott Sight combines a camera with a display in the face piece without the need for reaching down and lifting a camera up.

Firefighters now have both hands free for effective communication, victim extraction and carrying tools.

- **NEW!** Simultaneous Power Off
- Power off both the IMD & TIC by a single button press on the IMD..
- **NEW!** IMD instantaneous On
- Power the IMD on with a 1 second push on the IMD power button.
- **NEW!** Standby Mode
- Activate Standby Mode with a single push of the TIC power button.
- Enhanced situational awareness
- Improved hot zone accountability.
- Powerful and light
- At 8 1/2 ounces you won't even know it's there.
- Fits any AV-3000 HT facepiece
- Buy altogether as a completed kit or upgrade your current AV-3000 HT facepiece.
- In-mask Display
- See a clear image unobstructed by the environment.
- Adjustable display
- Configurable to your line of sight
- Minimum four-hour battery life
- Powered by simple, everyday AAA batteries

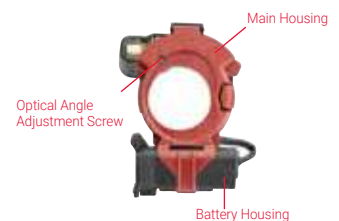
NIOSH Certified to NFPA 1981, 2013 ed, NIOSH 42CFR Part 84, UL 913 6th ed, ATEX, IECEx and IP 66/67.

Provides baseline, hands-free thermal intelligence

Compatible with AV-3000 HT facepiece



Provides optimal focus and unobstructed field of view



# Breathing Apparatus Compressor

www.panindochina.com.vn

## LW 100 E1

The LW 100 ECO compressors are lightweight, reliable and ideal for mobile use. They are made of 100% proven elements from our successful LW 100 series. The main components such as e.g. Motor, compressor block, filter system and filling device are used completely from this series. The steel piston rings in the compressor stages provide long term consistent delivery performance (fill time).

### Specifications

- Petrol compressor c/w pull start and auto cut off at low oil level
- Aluminium frame
- Manual condensate drain
- Pressure maintaining and non return valve
- 1x Filling hose c/w filling valve and pressure gauge
- Intermediate coolers
- Oil- / Water separators after 2nd and 3rd stage
- Safety valves after for each stage
- All pistons with piston rings
- Filling pressure to your choice (200 or 300 bar)
- Connections to your choice
- (DIN 200 bar or 300 bar, CGA 200 bar or 300 bar and INT)

Breathing air purification an accordance to EN 12021



## LW 100 B

The gasoline-powered LW 100 B is a particularly lightweight and reliable air compressor. It's a very low maintenance compressor and ideal for mobile use. Due to the seawater resistant stainless steel frame and the painted block it is very popular in seawater environments. The steel piston rings in the compressor stages provide long term consistent delivery performance (fill time).

### Specifications

- Petrol compressor c/w pull start and auto cut off at low oil level
- Stainless steel frame
- Manual condensate drain
- Pressure maintaining and non return valve
- 1x Filling hose c/w filling valve and pressure gauge
- Intermediate coolers
- Oil- / Water separators after 2nd and 3rd stage
- Safety valves after for each stage
- All pistons with piston rings
- Filling pressure to your choice (200 or 300 bar)
- Connections to your choice
- (DIN 200 bar or 300 bar, CGA 200 bar or 300 bar and INT)

Breathing air purification an accordance to EN 12021



## LW 160 E / E1

Portable compressors without compromising power and capacity. The L&W 160 E/E1 compressors are compact and extremely easy to operate, the units have established themselves over the years as reliable compressors. The compressors are ready to run and come with a cable, plug and phase selector switch for easy direction of rotation control. Ideal for small applications or sporadic filling operations.

### Specifications

- Electro motor ((E-Motor / 230V / single phase / 50Hz for 160 E and E-Motor / 400V / three phase / 50Hz for 160 E1)
- Power cable with plug
- Start/Stop Switch
- Stainless steel frame
- Manual condensate drain
- Pressure maintaining and non return valve
- 1x Filling hose c/w filling valve and pressure gauge
- Intermediate coolers
- Oil- / Water separators after 2nd and 3rd stage
- Safety valves after for each stage
- All pistons with piston rings
- Filling pressure to your choice (200 or 300 bar)
- Connections to your choice
- (DIN 200 bar or 300 bar, CGA 200 bar or 300 bar and INT)

Breathing air purification an accordance to EN 12021



## LW 225 E

A portable compressor without compromising power and capacity. The 225 E is small and light enough for mobility, yet powerful enough for stationary applications. The compressors are ready to run and come with a cable, plug and phase selector switch for easy direction of rotation control

### Specifications

- Fully wired, ready to start with cable, plug and phase selector
- 1 Filling hose with filling valve and pressure gauge
- Steel frame with carrying handles
- GRP fan belt guard
- 2 oil/water separators, safety valve for each stage
- Stainless steel cooling pipes and inter-coolers
- Breathing air purification in accordance with EN 12021
- Pressure maintaining valve for extended filter duration



## LW 245 B

User-friendly compressor with 4-stroke power and in a compact design. The portable LW 245 B is ideal for mobile applications or occasional filling operations. He is a popular compressor for expeditions and safaris.

### Specifications

- 4 stroke drive motor c/w pull start and auto cut off at low oil level
- Steel frame c/w carrying handles
- Manual condensate drain
- Inclusive air intake pipe
- Pressure maintaining and non return valve
- 1x Filling hose c/w filling valve and pressure gauge
- Intermediate coolers
- Stainless steel pipes
- Oil- / Water separators after 2nd and 3rd stage
- Safety valves after each stage
- Filling pressure to your choice (200 or 300 bar)
- Connections to your choice  
(DIN 200 bar or 300 bar, CGA 200 bar or 300 bar and INT)
- Breathing air purification an accordance to EN 12021



## LW 280 ES

The LW 280 ES is ideal for dive shops, diving clubs and diving schools, as well as medium-sized breathing air filling station. The three-stage compressor is sound insulated and operates at low speed. It is also suitable for continuous operation. It offers long service intervals, low maintenance costs and, through the oversized industrial components maximum reliability. It comes fully wired with star/delta start cycle.

### Specifications:

- Electro motor (E-Motor / 400V / 3 Phase / 50 Hz)
- Painted steel housing (RAL 6026)
- Sound insulated housing
- Automatic condensate drain
- Automatic stop at final pressure
- Hour counter
- Operating panel with start/stop and condensate test button, as well emergency stop switch
- 2 x Filling hose c/w filling valve
- Motor protection switch
- Pressure maintaining and non return valve
- All pistons c/w steel piston rings
- Low pressure oil pump and filter
- Oil- / Water separators in stainless steel
- Safety valves after each stage
- 3x concentric suction/pressure valves
- Filling pressure to your choice (200 or 300 bar)
- Connections to your choice (DIN 200 bar or 300 bar, CGA 200 bar or 300 bar and INT)
- Breathing air purification an accordance to EN 12021





# Breathing Apparatus Compressor

www.panindochina.com.vn

## LW 300 ES III

Discover the new LW 300 ES III. Robust, dynamic and powerful. The soundproofed compressor is suitable for demanding breathing air and high pressure applications and convinces with very low maintenance intervals and service costs. The industry-proven, new lubrication system, as well as reinforced compressor components are the main points of the optimized compressor block and improve sustainably the lifetime of the compressor.

### Specifications

- Electro motor (E-Motor / 400V / 3 Phase / 50 Hz)
- Painted steel housing (RAL 6026)
- Sound insulated housing
- NEW - Heavy duty compressor block components
- Automatic condensate drain
- Automatic stop at final pressure
- Hour counter
- Operating panel with start/stop and condensate test button, as well emergency stop switch
- Phase monitoring c/w shut down at wrong direction of rotation
- Motor protection switch
- Safety switch
- Pressure maintaining and non return valve

### All pistons c/w steel piston rings

- 3 x concentric suction/pressure valves
  - NEW - Improved lubrication system c/w oil filter
  - Low pressure oil pump and filter
  - Oil- / Water separators in stainless steel
  - Safety valves after each stage
  - 0.8 ltr. Prefilter (Enlarged the lifetime of the filter by approx. 5 h)
  - Condensate-Stop-Valve
  - 10 Litre Condensate tank with venting silencer
  - Maintenance door on both sides
  - High pressure outlet with 1500 mm hose
  - Filling pressure of your choice (200 or 300 bar)
- Breathing air purification an accordance to EN 12021



## LW 320 ES III

The LW 320 ES is ideal for dive shops, diving clubs and diving schools, as well as medium-sized breathing air filling station.

The three-stage compressor is sound insulated and operates at low speed. It is also suitable for continuous operation. It offers long service intervals, low maintenance costs and, through the oversized industrial components maximum reliability.

### Specifications

- Electro motor (E-Motor / 400V / 3 Phase / 50 Hz)
- Painted steel housing (RAL 6026)
- Sound insulated housing
- Automatic condensate drain
- Automatic stop at final pressure
- Hour counter
- Operating panel with start/stop and condensate test button, as well emergency stop switch
- Phase monitoring c/w shut down at wrong direction of rotation
- 2 x Filling hose c/w filling valve
- Motor protection switch
- Pressure maintaining and non return valve

- All pistons c/w steel piston rings
  - Low pressure oil pump and filter
  - Oil- / Water separators in stainless steel
  - Safety valves after each stage
  - 3 x concentric suction/pressure valves
  - Filling pressure to your choice (200 or 300 bar)
  - Connections to your choice (DIN 200 bar or 300 bar, CGA 200 bar or 300 bar and INT)
- Breathing air purification an accordance to EN 12021



## LW 570 ES

The sound insulated LW 570 ES is a very slow running compressor with very low maintenance intervals and main- tenance costs. It is suitable for continuous operation and comes fully wired with star / delta connection. The 4-stage compressor block is very reliable and is used for large and professional applications.

### Specifications:

- Electro motor (E-Motor / 400V / 3 Phase / 50 Hz)
- Painted steel housing (RAL 6026)
- Sound insulated housing
- Automatic condensate drain
- Automatic stop at final pressure
- Hour counter
- Operating panel with start/stop and condensate test button, as well emergency stop switch
- Motor protection switch
- Safety switch
- Maintenance doors on both sides

- Pressure maintaining and non return valve
  - All pistons c/w steel piston rings
  - Low pressure oil pump and filter
  - Oil- / Water separators in stainless steel
  - Safety valves after each stage
  - 4 concentric suction/pressure valves
  - High pressure outlet 10L
  - Connections to your choice (DIN 200 bar or 300 bar, CGA 200 bar or 300 bar and INT)
- Breathing air purification an accordance to EN 12021



## LW 450 E III

The new 450 E III is a slow-rotating compressor with low maintenance intervals and service costs.

It is suitable for continuous running and for being used in three-shift operations at breathing air and high-pressure applications.

A new, industry-proven lubrication system and reinforced components form the core of the advanced LW 450 compressor block and improves the lifetime of the compressor unit. The innovative condensate system along with the new Condensate Stop Valve further optimizes the efficiency of the compressor and includes a 10 litre collection tank as well as a highly effective pre-separator for prolonging filter lifetime



### Specifications

- Electro motor (E-Motor / 400V / 3 Phase / 50 Hz)
- Painted steel housing (RAL 6026)
- NEW - Heavy duty compressor block components
- Automatic condensate drain
- Automatic stop at final pressure
- Hour counter
- Operating panel c/w start/stop and condensate test buttons, as well as emergency stop switch
- Phase monitoring c/w shut down at wrong direction of rotation
- 4x Filling hose c/w filling valve
- Motor protection switch
- Safety switch
- Pressure maintaining and non return valve
- All pistons c/w steel piston rings
- NEW - Improved lubrication system c/w oil filter
- Low pressure oil pump and filter
- Oil- / Water separators in stainless steel
- Safety valves after each stage
- NEW - 0.8 ltr. Prefilter
- NEW - Condensate-Stop-Valve
- NEW - 10 Litre Condensate tank
- 3 concentric suction/pressure valves
- Filling pressure of your choice (200 or 300 bar)
- Connections to your choice (DIN 200 bar or 300 bar, CGA 200 bar or 300 bar and INT)
- Breathing air purification an accordance to EN 12021

## Storage Cylinders

Storage tanks are frequently used to provide extra filling capacity during peak periods (with or without cascade filling panels).

Ideally, the storage pressure should be higher than the filling pressure. A fully automatic control system for compressors is recommended (e.g. ECC). L&W provides different storage systems in modular design, starting from 10 m<sup>3</sup> storage volume up.

Our cascade filling panels are available for one to four stages operation. Tell us your requirements and we will calculate your individual system.

### Specifications

- Stationary steel tanks 10 year hydro test, powder coated in accordance with EN 1089/3
- Powder coated according to EN 1089/3
- Special paintings on request
- 50 l tank size
- Operation pressure: up to 350 bar
- Operation pressure: 420 and 500 bar on request
- Painted steel housing (RAL 6026)
- Connected according to customer's specifications
- Modular construction to accommodate future expansions



## Pressure Reducing Stations

Ideal for safe reducing storage pressure down to the required filling pressure. The pressure reducing stations are available for various inlet and outlet pressures and volumetric flows



Pressure reducing station with safety valve



Pressure reducing station with TÜV/ CE safety valve

## Pressure Reducers



Inlet: 100 - 420 bar | 2 x 1/4" NPT  
Outlet: 27 - 300 bar | 2 x 1/4" NPT  
Gas: Air, Inert gases



Inlet: 100 - 420 bar | 1 x 1/4" NPT  
Outlet: 27 - 300 bar | 1 x 1/4" NPT  
Gas: Air, Inert gases



Inlet: 0 - 6 bar | 1 x 1/2"  
Outlet: 150 mbar - 6 bar | 1 x 1/2"  
Gas: Air, Inert gases



Inlet: 100 - 300 bar | G5/8" DIN 477  
Outlet: 0 - 50 bar | G1/4"  
Gas: Air

Inlet: 0 - 200 bar | W 24,3 x 1 /14 LH  
Outlet: 0 - 20 bar | G1/4"  
Gas: Nitrogen

Inlet: 0 - 200 bar | W 21,8 x 1 /14 LH  
Outlet: 0 - 20 bar | G1/4"  
Gas: Hydrogen, Helium

# Personal Fire Protection

www.panindochina.com.vn

## DENVER



Coat – 50708

Structural fire-fighting jacket "DENVER 7N" Coat, to EN- 469:2005 technical specification composed of 4 layers:

- Out-shell: Nomex Delta T/A®, weight 195gr/m<sup>2</sup>.
- Waterproof moisture barrier: Breathable FR polyurethane
- Padding and lining: FR lining 130gr./m<sup>2</sup> quilted with Nomex/Kevlar®-Felt, total weight about 280gr/m<sup>2</sup>.
- Fluorescent/ retroreflective FR bi-colour bands are placed on the jacket by stitching, in the following positions.
- All seams made of Nomex® high tenacity yarns.



Pant – 49769

Material:

- Outer shell: Nomex® Delta-T/A 195 gr/m<sup>2</sup>.
- Moisture barrier: Breathable polyurethane membrane.
- Isolation and lining: Flame resistant lining 130gr./m<sup>2</sup> quilted with fire resistant isolation felt.
- Reflective fabric: Fire resistant fluorescent/ retroreflective yellow/ silver trim strip, 7.5cm width.
- Reflective fabric: Fire resistant fluorescent/ retroreflective yellow/ silver trim strip, 5.0 cm width.

Certified according to EN 469:2005 as III category PPE

## INNOe 4000



An EN469-certified turnout for high performance. Equipped with the most recent innovations for noticeable comfort & enhanced mobility.

**Đặt tính:**

- Inverted "L" shaped stormflap with integrated throat closure. Faster donning, Eliminates gaps around throat
- 3" collar
- Radio pocket and microphone loop
- Optional pockets available in Patch or Semi-Bellow styles in various sizes

Fully customizable for your needs

- Various styles of Black Nomex® wristlets
- 84 cm style jacket / regular waist trouser
- Vislon® zipper with hook & loop Jacket and trouser closure
- Optional pockets available in Semi-Bellow or Full-Bellow styles in various sizes

Fully customizable for your need

- Preformed multi-panel legs Improved range of motion and better fit

Certified to EN 469

## INNOTEX® RDG10



Based on the INNO5172 with an outer shell of Brigade®.

**Composite:**

- Outer Shell: Brigade® Yellow
- Moisture Barrier: Stedair® 3000
- Thermal Barrier: Q-8™

**Standard Features:**

- Basic Configuration:
  - 32" style coat / regular waist pant
  - NFPA style 3M Scotchlite® 3" triple trim
  - Snap-in liner attachment
  - 3" BR-1 Collar
  - Patented BR-1™ collar
  - 3"
  - INNO5000™ Series
  - 4 layers

- Brass Zipper closure on coat
  - Hook & Dee closure on pants
  - 8" x 4" x 2" Radio pocket with mic loop: Left Chest
  - 8" x 10" Semi Bellow Pockets on coat
  - 10" x 10" Semi Bellow Pockets on pants
  - Regular Knees:
    - Knees reinforced with gray Polymer Coated Aramid
    - Includes extra padding in the knee (14 oz Nomex® felt).
  - Waist Adjustment & Suspenders
    - Two adjustment straps with thermoplastic buckles
    - H-style suspenders with neoprene padding
  - White Nomex wristlet with thumb hole
  - Inspection port: On coat and pants.
- Certified to UL & NFPA 1971:2013

## INNOTEX® RDG20



Based on the 5222, with a new combination of fabrics.

**Composite:**

- Outer Shell: Pioneer™ Khaki
- Moisture Barrier: Stedair® 3000
- Thermal Barrier: Defender® M NP Brass

**Standard Features:**

- Basic Configuration
  - 32" style coat / regular waist pant
  - NFPA style 3M Scotchlite® 3" triple trim
  - Snap-in liner attachment
  - 3" BR-1 Collar
  - Patented BR-1™ collar
  - 3"
  - INNO5000™ Series
  - 4 layers

- Brass Zipper closure on coat
  - Hook & Dee closure on pants
  - Flashlight Holder: Right Chest.
  - 8" x 4" x 2" Radio pocket with mic loop: Left Chest
  - 8" x 10" Semi Bellow Pockets on coat
  - 10" x 10" Semi Bellow Pockets on pants
  - Regular Knees:
    - Knees reinforced with gray Polymer Coated Aramid.
    - Includes extra padding in the knee (14 oz Nomex® felt).
  - Waist Adjustment & Suspenders
    - Two adjustment straps with thermoplastic buckles
    - H-style suspenders with neoprene padding
  - White Nomex wristlet with thumb hole
  - Inspection Port: On coat and pants.
- Certified to UL & NFPA 1971:2013



## G-XCEL®

Being lightweight and flexible are hallmarks of this all-new chassis. With a longer back and shorter front, you get more overlap where you need it with less where you don't. So everything about this contemporary design feels just right.



### G-XCEL™ Jacket

Contoured Sleeves are ergonomically curved to work with you—not against you.  
Shorter Contoured Collar for easy interface with helmets.  
Generous LinerPocket is lined with moisture barrier.  
Double-Stitched Seams with 8 – 10 stitches per inch for a longer service life.

### G-XCEL™ Pants

Expansion Cargo Pockets are reinforced with KEVLAR® fabric inside.  
Independent Stretch Waistband for unrestricted fit and no-gap protection with liner.  
Diamond Crotch Gusset distributes stress in both shell and liner for durability.  
Reverse Boot Cut is shorter in the back to avoid premature cuff wear.  
Trimtrax® Thread Protection cording lasts far longer on sewn on trim than conventional stitching.  
Double-Stitched Seams with 8 – 10 stitches per inch for longer service life.

## CLASSIX® METRO™

This metro-inspired option set includes an extended back for additional overlap and lettering below the SCBA, expansion pockets, and telescoping sleeve band with two wrists – one on the outer shell and one on the liner with a thumb loop. And the jacket includes a host of standard CLASSIX® features.



### CLASSIX® METRO™ Jacket

6" Extended Back with lower trim band.  
Drop Shoulder Design moves seam beyond the shoulder for improved reach and reduced coat ride up.  
Liner Access Opening for easy access between the layers.  
Double-Stitched Seams with 8 – 10 stitches per inch for a longer service life.

### CLASSIX® METRO™ Pants

Independent Stretch Waistband for unrestricted fit and no-gap protection with liner.  
Liner Access Opening for easy access between the layers.  
Reverse Boot Cut is shorter in the back to avoid premature cuff wear.  
Trimtrax® Thread Protection cording lasts far longer on sewn on trim than conventional stitching.  
Double-Stitched Seams with 8 – 10 stitches per inch for longer service life.

## CLASSIX® SE

Our most affordable turnout gear, CLASSIX® delivers Globe quality at a value price. The drop-shoulder design jacket and roomy, low-rise pants come with a long list of standard features to make this far more than basic gear.



### CLASSIX® SE Jacket

Drop-Shoulder Design moves seam beyond the shoulder for improved reach and reduced coat ride up.  
Shorter Collar for better interface with helmet.  
Double Sleeve Wells with NOMEX® wrists to keep water out and interface with all glove styles.  
Extended Back option allows you to choose to extend the back by 3" or 6" for additional overlap and lettering below the SCBA.  
Liner Access Opening for easy access between the layers.  
Double-Stitched Seams with 8 – 10 stitches per inch for longer service life.

### CLASSIX® SE Pants

Independent Waistband for unrestricted fit and no-gap protection with liner.  
Reverse Boot Cut is shorter in the back to avoid premature cuff wear.  
Liner Access Opening for easy access between the layers.  
Trimtrax® Thread Protection cording lasts far longer on sewn on trim than conventional stitching.  
Double-Stitched Seams with 8 – 10 stitches per inch for longer service life.

# Personal Fire Protection

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## REV 301

Super Armor Rev 301 Ultra Light Firefighting Suit got the best balance between light weight and protection. Except EN469 Level 2 compliance, Rev 301 is also proved to be blood-borne pathogen resistance. Usually fabrics resist 20,000 rubs could be a qualified outer shell of firefighting suits. Rev 301 Abrasion Resistance higher than 30,000 rubs obviously surpasses most of the brands in the market. Moreover, total weight of complete suit less than 3kg makes Rev 301 firefighting suit comfortable and breathable.

### Features:

- Lightweight and comfortable, fireman can move with more freedom.
- Suit has good water-repellent, air permeability, thermal layer and inner layer.
- The outer layer is resistant to Flashover and Fire Spread, does not burn, melt or shrink.
- Excellent abrasion resistant and anti-static outer shell, it passed EN ISO 12947-3 and EN 1149-3.
- High air permeability even with four layer structure, the water-vapor resistance is 30% lower than EN469 (Lower water-vapor resistance equals better breathability)
- Moisture barrier is blood and pathogen resistant, passed ASTM F1671 test.

### Color Options:



## REV 502

Super Armor Elite 502 looks after both performance and parity. Even though it doesn't look as gorgeous as Premium series, the performance is equivalent. 3 layers assembly fabrics are originally from Kanox and Mazic inherently fire resistant fabrics. Auxiliaries such as 3M reflective tape, Velcro, sewing thread, meet EN469 flame requirements. Taiwan K.K. Corporation is monitored by Article 11B – EC Quality System Certificate, to be a qualified manufacturer of EN469 firefighting suits. So, we can get CE Certificate and put CE mark at Super Armor firefighting suits.

### Features:

- Good water-repellent, air permeability, thermal layer and inner layer.
- The outer layer is resistant to Flashover and Fire Spread, does not burn, melt, or shrink.
- High tensile outer shell is more tear resistant than EN 469, protects firemen from sharp objects.
- High air permeability even with four layer structure, its water-vapor resistance is 30% lower than EN469 (Lower water-vapor resistance equals better breathability) D35
- Moisture barrier is blood and pathogen resistant, passed ASTM F1671 test.
- Anti-static outer shell passed EN 1149-3 test.

### Color Options:



## REV 702

Super Armor Premium 702 is the most advanced and protective firefighting suit. Strong and robust, this is the suit to be reckoned with. 3 layers assembly fabrics are originally from Kanox and Mazic inherently fire resistant fabrics. Auxiliaries such as 3M reflective tape, Velcro, sewing thread, meet EN469 flame requirements. Taiwan K.K. Corporation is monitored by Article 11B – EC Quality System Certificate, to be a qualified manufacturer of EN469 firefighting suits. So, we can get CE Certificate and put CE mark at Super Armor firefighting suits. In short, Super Armor Premium 702 provides ergonomic designs, comfort, and mobility to firefighters.

### Features:

- Extra reinforced FR padding in areas that are highly susceptible to fire damage. Shoulders, elbows, knees, and trouser bottom are just some of the areas that get extra protection.
- Extra protective padding made of super-abrasion resistant fabrics, making this one of the strongest fire suits on the market.
- Moisture barrier is blood and pathogen resistant, passed ASTM F1671 test.
- Anti-static outer shell, passed EN 1149-3 test.

### Color Options:



## 10150N

Aluminised one piece overall lined inside with wool fabric with pouch for holding and protection of breathing apparatus  
Front fastening by metal zipper protected by flap closed by metal snaps

The boots, fixed to the overalls, are provided with adjustable straps and back regulation system by metal snaps

The soles made of high temperature resistant material covered in the inner part with wool and in the outer part with an anti-skid and against cutting KEVLAR bouclette

Five finger gloves gauntlet style with inner electrical insulation woollen fabric, total length 500 mm

Adjustable inner safety helmet according EN-397

The hood can be used with a full face mask and with the breathing apparatus

The suit is EC approved on the ground of EN-469 EN-1486 TYPE 2 for PROXIMITY SPECIALIZED FIRE-FIGHTING.

Available sizes S-M-L.



## 10173N

Aluminised 5- piece overall, internally lined with woollen fabric. It is provided with pouch for breathing apparatus

Wide shape, frontal opening fastened by press stud covered by flap  
Elastic round lower sleeves and legs

Trousers provided with adjustable braces and elasticised waist

The boot soles are made of high temperature resistant material

Five -finger gloves with long cuff and split leather reinforcements on the palm

Wide hood allowing the use of a mask for breathing apparatus

The overall is a 3rd category safety equipment, EC approved according to EN 1486 Type 2 standards as proximity specialised firefighting suit.

The overall is available in S-M-L size

## 10900

Two pieces fire entry suit with external aluminised fabric style FIRETEX and 6 insulation layers.

Jacket with pouch on shoulders, raglan sleeves and front fastening by means of metal snaps protected by flap closed by metal snaps, high Korean style collar.

Trousers with elasticised adjustable suspenders, and adjustable strap at the bottom

Booties with adjustable straps, full grain leather thickness 5mm. sole lined with Kevlar outside and wool inside; the sole is connected to the upper by metal nails.

Two finger gloves insulated as the other components

Hood wide shaped to allow the use of a full-face mask with breathing apparatus without hampering head movements

The suit is available in S-M-L size



## E2050-10\*

EN 1486 compliant coverall in FIRESHIELD complex consisting of a jacket, trousers, overboots, hood and gloves for interventions in the immediate vicinity of the fire. With or without a back pocket on the hood to cover an SCBA cylinder, with standard overboots or with basic overboots.

- Aluminised jacket with velcro fastener under flap, snap buttons, fully lined with cotton, flame-retardant treatment and aluminised fleece interlayer.
- Aluminised trousers with straps, fully lined with cotton, flame-retardant, aluminised fleece interlayer, 20-cm slit with velcro fastener at the bottom of each leg for putting on boots
- Aluminised hood with a 3-mm clear polycarbonate screen and a 1-mm gold polycarbonate screen
- Fibreglass helmet integrated into the hood and front of the hood adapted for the use of a respirator with valve on demand.
- Aluminised overboots with aluminised upper, lined with 100% flame-retardant cotton, multi-layer soles for walking on floors up to 400°C
- Overboots opened at back, under flap
- One ankle strap on each overboot
- Standard overboots for packs E2050-10\*



# Personal Fire Protection

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## FIRE HT 05

New, modern design and excellent protection properties. Optimal relationship between protection and comfort with a broad spectrum of optional upgrades. Structural firefighting has never been safer.

- Extreme temperature resistance (up to 1,000°C in a 10 second flash over flames)
- Long-term temperature resistance (radiant heat test 14 kW/m<sup>2</sup>)
- High resistance to mechanical impacts
- Low-temperature classification -30°C

Certified to EN 443:2008, EN 14458:2018, EN 16471:2014, EN 16473:2014, MED



## PACIFIC F6

- Lightweight composite shell
  - Full polyurethane impact liner
  - Head band with merino, leather or vinyl sweat padding.
  - 6 point ribbon suspension with mesh cradle. Ratchet size adjustment 52 to 64 cm
  - 2 point Nomex chin strap, Pacific quick release buckle. Rapid fit postman slide buckle
  - External 3 mm face shield. Internally retracting polycarbonate one touch eye guard
  - Lightweight: 1.20kg
  - Low centre of gravity reduces "wobble" modularity and durability. Rear hanger. Double layer flame retardant neck curtain
- Certified to AS/NZS 4067; NFPA 1971:2013



## R5SL

The R5SL Helmet's lightweight Kevlar®/fiberglass reinforced composite shell withstands temperatures up to 500°F without distorting and resists harmful UV rays. The helmet features a 6-point ribbon suspension harness and a ratchet headband with an easy-to-adjust dial that can accommodate a variety of head sizes (52-64 cm) for a comfortable fit.

The nylon webbing cradle system and the 3-point polyester chinstrap provide additional comfort and enable easy donning and doffing. The helmet is also equipped with built-in ESS Goggle mounts and earmuff mounting clips, which allow you to easily customize the helmet to provide enhanced eye and ear protection.

The R5SL Helmet has been type-tested according to EN397:1995, CE marked to PPE Directive 89/686/EEC, and certified to AS/NZS1801:1997 (Type 1 & 2) and NFPA 1951 to ensure its high-quality construction and protection.



## F18

The Pacific F18 is the latest addition to the Pacific Range, a traditional style structural firefighting helmet with a modern interior. The Pacific F18 combines the latest interior designs from Pacific helmets with popular features from the traditional style. Pacific's Generation 2 Liner is fitted to the F18 which optimises the feel of the helmet on your head. It comes with a 2 point chinstrap with Postman's buckle to allow quick adjustment, and can be fitted with a leather front shield and holder.

- Fibreglass Reinforced Composite Shell
- Unique Full Cranium Polyurethane Liner. Ratchet Adjustable Headband
- 2-Point Nomex® Chinstrap with Quick. 6-point Ribbon Cradle Harness
- Internal Eye Protector. Flame Resistant Neck Protector
- Rear Hanger

Certified to NFPA 1971:2018 Structural Firefighting, NFPA 1951:2013 Technical Rescue; ANSI Z87.1, NFPA 1971:2018



## Cairns® 360S

Its lightweight design makes the 360S Fire Helmet the perfect search and rescue helmet for confined space and EMS work alike.

- High-temperature foam cap increases thermal and impact protection
- Non-corroding, high-temperature glass-filled faceshield/goggle hardware
- Rugged, high-temperature (TPR) edge trim will not melt or drip
- Through-color, Ultem high temperature plastic resists cracking and chipping
- Soft black Nomex chinstrap features one-hand quick-release buckle and postman slide for quick removal and adjustment
- Nomex or PBI/Kevlar earlap for increased neck/ear coverage and protection
- Three-position rear ratchet height adjust for a secure and comfortable fit
- SCBA interface front headband adjustment matches the fit of any SCBA mask
- Removable flannel or leather cushion liners

Certified to NFPA 1971-2018



## Gallet F1 XF

Developed with firefighters from around the globe, the Gallet F1 XF sets the new standard for structural firefighting helmets. It enters a new dimension of protection, functionalities integration, comfort of use and modularity. The configurable design makes the Gallet F1 XF fire helmet the perfect fit for various interventions such as structural and outdoor fires, technical rescue operations and road traffic accidents.

- Ergonomic, well balanced design
- 2 helmet sizes ensuring an optimal fit for both small and large head sizes.
- Unique adjustable ocular visor - fitting over prescription glasses while providing gap-free enclosure
- Comfortable, high-performance face protection
- Fully integrated lighting module with unique distribution of light and weight

Certified to EN 443:2008, EN16471 & EN16473, type B, EN 14458:2004 Face guard and Eye guard, MED/SOLAS approval for use on ships



## INNO333™

A classic fit, high-performance hood providing excellent protection to the neck and face areas.

- 8 oz Nomex® (100%)
- Unique 3-Piece Seamless Chin - Enhances comfort
- TRU-FLAT™ Seam - Thinner seams compared to most competition. Practically eliminates pressure points under helmet for additional comfort.
- Heavy-Duty 1/2" Elastic - Keeps snug fit around SCBA facepiece
- Enhances durability - Sewn with Nomex® thread

Certified to NFPA 1971



## INNO373™

A deluxe model, these premier hoods provide the best protection for firefighters with full shoulders, chest and back coverage.

- 8 oz Nomex®
- Unique 3-Piece Seamless Chin - Enhances Comfort.
- TRU-FLAT™ Seam - Thinner seams compared to most competition. Practically eliminates pressure points under helmet for additional comfort
- Heavy-Duty 1/2" Elastic - Keeps snug fit around SCBA facepiece
- Double-needle banded bottom seam - Enhances durability
- Sewn with Nomex® thread

Certified to NFPA 1971

## INNOTEX815™ & INNOTEX810™

Noticeable flexibility and reduced hand fatigue. Proudly manufactured in the U.S.A. Proven protection and abrasion resistance.

### Outer Shell

Black Eversoft split cowhide palm and back for proven protection and abrasion resistance

### Moisture Barrier

PRO-TECT™ glove inserts for added thermal protection

### Lining

EF thermal lining

### Wristlet Style

Also available as INNTEXO810™ using 2 layers of black Nomex® knit for additional protection



Front  
INNOTEX815™



Back  
INNOTEX815™

## INNOTEX855™ & INNOTEX850™

Lightweight yet tough. Proudly manufactured in the U.S.A. Minimal water absorption.

### Outer Shell

Lightweight yet tough Kangaroo shell delivers increased dexterity and cut resistance. Secure grip, wet or dry with minimal water absorption.

### Lining

Nomex®/Kevlar® lining for superior heat and slash protection/

### Moisture Barrier

CROSSTECH® glove inserts for long lasting protection against hot water, blood, body fluids and common chemicals by resisting damage due to flexing, abrasion and heat exposure.

### Wristlet Style

Also available as INNOTEX850™ using 2 layers of black Nomex® knit for additional protection



Front  
INNOTEX855™



Back  
INNOTEX855™

## "RANGER" 14755

Five-finger protective glove developed according to: EN-659 standard for fire-fighting gloves EN-407 for gloves with a specific protection from thermal risks EN-388 for gloves with a specific protection from mechanical risks. The glove is composed of 2 layers as follows:

### External Layer

External layer manufactured in full grain leather  
Cuff is manufactured in full suede leather black colour

### Inner Layer

Palm and the back are made of Nomex/Kevlar/Viscose FR knitted fabric.  
Cuff lining is manufactured in flame retardant cotton.



Front  
"RANGER"



Back  
"RANGER"

## 95398



- Upper: Full grain waterproof leather, chrome tanned, aniline finishing, softly and breathable.
- Lining: 4 layer membrane, breathable and waterproof, bootie construction
- Toe-Cap: Steel toe cap
- Heel counter: Thermoplastic, guarantees anatomical
- Foot-bed: Anti-static, made of cellulose fibre
- Outsole: Nitrile rubber sole, anti-static, anti-oil, anti-slipping, guarantees the maximum flexibility also in cold environments  
Certified to EN 15090



## 807-6003

- Upper material: Flame/Heat resisting rubber.
- Construction: Vulcanized.
- Lining: Felt.
- Insole: Removable Superknit covered, polyurethane insole.
- Midsole: Stainless steel.
- Shank: Steel Triple-rib ladder shank.
- Outsole: Hellfire™ traction lug.
- Toe protection: Steel Safety Toe, Abrasion-resisting rubber T-toe  
Certified to NFPA 1971 structural & 1992 splash over hazmat

## SUPREME™



Step into a pair of SUPREME™ boots and you will know instantly why these boots have taken the market by storm. The combination of the cushioned and contoured sole, the flexible athletic footwear construction, and the internal fit system make this boot fit like a pair of sneakers. And the specially designed and formulated outsole gives you the best grip in the business in wet, dry, and ice. Certified to NFPA 1971 (Structural Fire Fighting), NFPA 1992 (Liquid Splash) CSA certified version available



## SHADOW™

SHADOW™ shares the remarkably flexible platform, cushioned and contoured sole, and internal fit system that makes Globe FootGear fit better, grip better, and feel broken-in right out of the box. The all-black SHADOW™ has also been designed with a lower profile collar with flexible NOMEX® webbing pull-straps to slide more easily under narrower turnout gear pants. Certified to NFPA 1971 (Structural Fire Fighting), NFPA 1992 (Liquid Splash)

# FireFighting Equipment

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## MOBILE FOAM UNIT - MFS SERIES

The Mobile Foam is highly deployable fire protection apparatus designed for operation by on person. Connection to a suitable water source, such as fire pump or pressurized fire hydrant valve using a fire hose connected to inlet of inductor while another to the inlet of the low expansion foam branchpipe.

- Trolley: Steel EPE Powder Coating
- Tank: Fibre Glass or Stainless Steel
- Inductor: 0% - 6% at 225 lire/min
- Foam Branchpipe: Aluminum alloy male instantaneous
- Hose: Two length of 38mm x 15 m fire hose



## PORTABLE WATER/ FOAM MONITOR M-COMMANDO

- Lightweight hard anodized construction
- Dual application for use as a portable monitors or Stand-post mounting, hot dipped galvanised
- Safety butterfly valve, auto drain facility
- Safety lock at 300 above horizontal
- Weight: 41.8 lbs
- Nozzle flow up to 100 psi gpm: 1250
- Dimension (inch): 20 X 8.5 X 8.5



## LONG RANGE HIGH VOLUME WATER/ WATER FOAM MONITOR-M-LRHV

- Standpost mounted type
- Horizontal 360o & vertical 90o & 45o rotator
- Hand-wheel for rotation of swivel joint
- Gun metal swivel joint with ball bearing
- Coated with anti-corrosive coating
- 3% or 6% foam induction
- Used AFFF, ARFFF & Fluoroprotein foam
- Aqua-foam nozzle with S.S/PVC pick up tube
- Flanged inlet 4"-6" or 8"



## FIRE HOSE - PREMIER EXTRA

- Conforming to BS 6391 Type 2, UL 19, prEN 1924, IS 636 Type A. ISI marked
- Jacket is made up of 100% polyester for extra strength
- Special quality EPDM rubber as internal lining to withstand and polluted water
- An external coat of synthetic elastomer give protection against moisture and fungus
- Heat and arasion resistance



## FOAM BRANCHPIPE & INDUCTOR - LOW EXPANSION

The low expansion foam branchpipes are suitable for use in hydrocarbon fire and come with adjustable variable valve from 0% to 6%. There are two type: one is with integral inductor, pick up tube and piercer, and another is without the pick up tube for premix foam. This product is suitable for polar solvent, AFFF and protein foam.

General Specifications

Material: Aluminium alloy

Expansion ratio: 15X

Inlet: 2 1/2" (65 mm) male instantaneous to BS336

Working pressure: 5-10 bar

450 Lt foam branchpipe c/w pick up tube and stainless steel piercer  
FB 450 SI



225 Lt premixed foam branchpipe at 7 bar  
FB 225



225 Lt foam branchpipe c/w up tube and stainless steel piercer  
FB 225 SI



225 Lt foam branchpipe c/w pick up tube and stainless steel piercer and adjustable Variable valve  
FB 225 XP



225/40 Lt variale foam inductor c/w pick Up tube & stainless steel piercer  
VI 225/450



## AQUAJET MULTIPURPOSE NOZZLE

Solid jet and fog facilities simultaneously or independently

- Specially designed gives low back pressure
- Durable light hard anodized construction
- Straight stream to dense fog & flush without shut off
- Ball valve for flow control.
- Anti-slip rubber moulded pistol grip
- Female inlet with instantaneous Male Coupling.



## SUPERFIRE NOZZLE

- Specially designed gives low back pressure
- Constant selectable gallonage nozzle with multiple flow setting. Flow remains the same in all pattern.
- Durable light hard anodized construction
- Straight stream to dense fog & flush without shut off
- Ball valve for flow control
- Anti-slip rubber moulded pistol grip
- Female inlet with instantaneous Male Coupling



## FIRE - FIGHTING FOAM

### FOAMGARD 3% AFFF



Foamgard AF3-20	Pail	20 Lires (5.28 gallons)
Foamgard AF3-30	Pail	30 Lires (7.92 gallons)
Foamgard AF3-200	Drum	200 Lires (52.8 gallons)

### Typical Chemical and Physical Properties at 27°C

Appearance	Light yellow
Specific gravity	1.02 +/- 0.01
pH	7.5 +/- 0.5
Viscosity (maximum)	less than 0.3
Spreading Coefficient	more than 4.5
Slude Content (% v/v)	less than 0.1%
Surface Tension	less than 17 dyne/cm
Approvals	U.L.Listed

### Option:

### FOAMGARD 3% FLOUROPROTEIN AFFF



### FOAMGARD 6% AFFF



Foamgard AF6-20	Pail	20 Lires (5.28 gallons)
Foamgard AF6-30	Pail	30 Lires (7.92 gallons)
Foamgard AF6-200	Drum	200 Lires (52.8 gallons)

### Typical Chemical and Physical Properties at 27°C

Appearance	Light yellow
Specific gravity	1.00 to 1.15
pH	6.5 to 8.5
Viscosity (maximum)	3.0 to 10cps
Spreading Coefficient	more than 3.0
Slude Content (% v/v)	less than 0.1%
Surface Tension	less than 17 dyne/cm
Approvals	U.L.Listed

### FOAMGARD 6% FLOUROPROTEIN AFFF





# Technical Service Center



### Air filling service

Air filling procedure is followed to European standard with the monitoring of our technical team. And the modern air compressor that ensure air quality meet EN 12021:2014.

### SCBA functional testing

Be authorized from Scott Safety for doing the inspection of SCBA, ELSA and Air-line systems by using Sabretest III.

Technical service will be done annual or periodically to ensure the equipment is always in ready to use.

### Repairing and replacing spare part for the breathing apparatus

The technical procedure will be followed as regulation of manufacturer with the original spare parts and special tools that are supplied by manufacturer.

The breathing apparatus will be services by our technical team who trained and certified by manufacturer to ensure the equipment is safest and the best quality after doing service.

### Rental service

In order to meet the needs of customer in short-term for using, we supply the rental service for the breathing apparatus.

Please contact directly our technical or sales team for more information.

### Training service

In order to ensure the safety and effectiveness when using the equipment, we supply to customers the training courses for using the breathing apparatus and other safety equipment that is supplied by Panindochina.

Please contact directly our technical or sales team for more information.



AUTHORISED SERVICE CENTRE



## SCBA Service Schedule

No	Part code/ Commodity	Year 1 & 2	Year 3	Year 4 & 5	Year 6	Year 12	
1	Airline Hose	Leak Test and Inspect	Leak Test and Inspect	Leak Test and Inspect	Leak Test and Inspect	Renew	
2	Full face mask	PP Test & Inspect	PP Test & Inspect	PP Test & Inspect	Renew	Renew	
3	Demand Valve	PP Test & Inspect	PP Test & Inspect	PP Test & Inspect	Renew	Renew	
4	Manifold	Leak Test at every year			Service	Renew	
5	Reducer Valve	R.P.Test + Leak Test	R.P.Test + Leak Test	R.P.Test + Leak Test	Renew	Renew	
6	Cylinder Connector	Leak Test and Inspect	Leak Test and Inspect	Leak Test and Inspect	Renew	Renew	
7	Pressure Gauge,Whistle	Leak Test and Inspect	Leak Test and Inspect	Leak Test and Inspect	Renew	Renew	
8	Airline attachment	Leak Test and Inspect	Leak Test and Inspect	Leak Test and Inspect	Renew	Renew	
9	Backplate & Harness	Inspect	Inspect	Inspect	Inspect	Inspect	
10	Replace Sinter Filter	Each year					
11	Cylinder & Valve	Leak Test and Inspect	Leak Test and Inspect	Leak Test and Inspect	Renew	Renew	
	Steel Air Cylinder	Hydraulic Test at every 5 years					
	Aluminum/ Carbon Cylinder	Hydraulic Test at every 5 years, and give away at the end of shelf-life					

### Contact:

**Xuyen Dong Duong Trading & Services Co., Ltd**  
 131, Tan Cang Street, 25 Ward, Binh Thanh District, Ho Chi Minh City  
 Tel: (+84) 28.3512.7509 - Fax: (+84) 28.3512.7510  
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 Website: www.panindochina.com.vn





# Environmental Control Devices





## Features and Benefits

### New Features

#### • Heavy Duty Packaging

The unique fully enclosed heavy duty honeycomb core cardboard packaging is mounted on a custom made wooden pallet, providing greater protection of cabinets during storage and transport.

#### • Powder Coated Paint Finish

Internal and external powder coated finish for improved chemical resistance.

#### • Recessed Handle

New recessed handle with key lock to eliminate potential damage from heavy knocks.

#### • Keyed Alike

2 Keys supplied with each cabinet. (Cabinets with locking handles only)

#### • Self Latching Door

Spring loaded 3 point self latching door mechanism for fault free latching action.

#### • Slide Control Arm

All single door cabinets now include a slide control arm to prevent the door from being over extended.



### Shelves

- **Heavy Duty Perforated Steel**  
1.6mm thick perforated galvanised steel shelves provide added strength and free air movement within the cabinet. (All shelves are pre-fitted to cabinets and additional shelves are available if required).
- **Fully Adjustable Shelves**  
90mm shelving increments for large cabinets and 45mm for medium and small cabinets.

### General Structure

- **50mm Vent Bungs**  
Fitted into side walls for venting of cabinets where required. Also includes a proven flash arrester in each vent with sealed enclosure in cavity between walls. Each vent is supplied with resealable metal caps.
- **Double Steel Walls**  
Constructed using 1.2mm thick, double steel walls with 40mm air gap between walls to provide thermal insulation.
- **150mm Deep Liquid Tight Sump**  
For containment of leakage or spillage.
- **Static Earthing Connection**  
Now also including earthing wire with each cabinet to help reduce the potential buildup of static electricity, a known source of ignition.
- **Classification Labels**  
All appropriate class labels, capacity labels, identification and instruction labels are applied to each cabinet.

### Doors

- **Self Closing Doors**  
All two door cabinets incorporate Pratt's unique and improved sequential self-closing door action, providing hands free closing and ensures doors close in the correct sequence.
- **Hydraulic Door Closures**  
With speed control adjustment for a gentle closing action.
- **Continuous Piano Hinge**  
Continuous piano hinges for reliability of action.
- **Rounded Corners**  
All doors have rounded corners for added safety.



## Flammable Liquid Storage Cabinets

Pratt Indoor Flammable Liquid Storage Cabinets comply with the Australian Standard AS 1940 "The Storage and Handling of Flammable and Combustible Liquids".

This range of cabinets is for the storage of flammable or combustible liquids as classified by the United Nations criteria and the ADG Code for Dangerous Goods. These include flammable liquids such as Paints, Solvents, Petrol, Thinners, Kerosene, Turpentine, White Spirits, Alcohol and Ethanol. Also combustible liquids such as Diesel, Linseed Oil and Pine Oil.



5516AS

5530AS

Model	Capacity	Doors	Shelves	Extra Shelf	External (mm)			Internal (mm)		
					Height	Width	Depth	Height	Width	Depth
5516AS	30 L	1	1	5517-29	770	515	465	525	420	370
5517AS	60 L	1	2	5517-29	1065	515	465	820	420	370
5530AS	160 L	2	2	5545-29	1295	1115	500	1015	1020	415
5555VS	205 L	1	Roller Set	-	1825	865	865	1580	770	775



## Corrosive Storage Cabinets-Metal

Corrosive Substance Storage Cabinets comply with AS 3780 "The Storage and Handling of Corrosive Substances".

This range of cabinets is for the storage of corrosive substances in liquid or solid form as classified by the United Nations criteria and the ADG Code for Dangerous Goods. These include chemicals such as Acids, Alkalis, Caustics, Sodium Hydroxide Solution and Hypochlorite Solution.

Special Features:

- Cabinet doors are fitted with an all stainless steel piano hinge for added protection.
- Internal door opening latch (as required by the Standards).
- Each shelf is supplied with plastic spill trays to contain small spills and leakage.
- Additional powder coating of the shelving and closing assembly for added protection.



5535ASPH

5545ASPH

Model	Capacity	Doors	Shelves	Extra Shelf	External (mm)			Internal (mm)		
					Height	Width	Depth	Height	Width	Depth
5517ASPH	60kg or L	1	2	5517PH-29	1065	515	465	820	420	370
5535ASPH	100kg or L	2	1	5535PH-29	770	935	620	495	840	530
5545ASPH	250kg or L	2	3	5545PH-29	1825	1115	500	1545	1020	415
5590ASPH	425kg or L	2	3	5590PH-29	1825	1115	865	1545	1015	775



## Toxic Storage Cabinets

Indoor Toxic Substance Storage Cabinets comply with the Australian & New Zealand Standard AS/NZS 4452 "The Storage and Handling of Toxic Substances".

This range of cabinets is for the storage of toxic substances in liquid or solid form as classified by the United Nations criteria and the ADG Code for Dangerous Goods. These include chemicals such as Alkaloids, Arsenic, Aniline, Cyanides, Mercury, Phenol – Solid and Trichloroethylene.



5530AST



5535AST

Model	Capacity	Doors	Shelves	Extra Shelf	External (mm)			Internal (mm)		
					Height	Width	Depth	Height	Width	Depth
5516AST	30 L	1	1	5517-29	770	515	465	525	420	370
5535AST	100 L	2	1	5535-29	770	935	620	495	840	530
5530AST	160 L	2	2	5545-29	1295	1115	500	1015	1020	415
5545AST	250 L	2	3	5545-29	1825	1115	500	1545	1020	415



## Oxidizing Agent Storage Cabinets

Indoor Oxidizing Agent Storage Cabinets comply with the Australian Standard AS 4326 "The Storage and Handling of Oxidizing Agents".

This range of cabinets is for the storage of Oxidizing Agents in liquid or solid form as classified by the United Nations criteria and the ADG Code for Dangerous Goods. These include chemicals such as Hypochlorite/inorganic, Hydrogen Peroxide, Perchlorites/inorganic and Potassium Nitrate.

Special Features:

- Cabinets are fitted with a non latching door/s.
- Includes recessed handle without key lock facility.
- Includes magnetic catch that will release in the event of a build-up of pressure within the cabinet (as required by this Standard).



5530AOA



5545AOA

Model	Capacity	Doors	Shelves	Extra Shelf	External (mm)			Internal (mm)		
					Height	Width	Depth	Height	Width	Depth
5516AOA	30kg or L	1	1	5517-29	770	515	465	525	420	370
5535AOA	100kg or L	2	1	5535-29	770	935	620	495	840	530
5530AOA	160kg or L	2	2	5545-29	1295	1115	500	1015	1020	415
5545AOA	250kg or L	2	3	5545-29	1825	1115	500	1545	1020	415



## Organic Peroxide Storage Cabinets

Indoor Organic Peroxide Storage Cabinets comply with the Australian Standard AS 2714 "The Storage and Handling of Organic Peroxides".

This range of cabinets is for the storage of organic peroxides in liquid or solid form as classified by the United Nations criteria and the ADG Code for Dangerous Goods. These include chemicals such as Acetyl Acetone Peroxide, Methyl Ethyl Ketone Peroxides and Dibenzoyl Peroxide.

Special Features:

- Cabinets are fitted with a non latching door/s.
- Includes recessed handle without key lock facility.
- Includes magnetic catch that will release in the event of a build-up of pressure within the cabinet (as required by this Standard).



5530APO



5545APO

Model	Capacity	Doors	Shelves	Extra Shelf	External (mm)			Internal (mm)		
					Height	Width	Depth	Height	Width	Depth
5516APO	30kg or L	1	1	5517-29	770	515	465	525	420	370
5535APO	100kg or L	2	1	5535-29	770	935	620	495	840	530
5530APO	100kg or L	2	2	5545-29	1295	1115	500	1015	1020	415
5545APO	100kg or L	2	3	5545-29	1825	1115	500	1545	1020	415



## Class 4 Dangerous Goods Cabinets

Indoor Class 4 Storage Cabinets comply with the new Standard AS/NZS 5026 "The Storage and Handling of Class 4 Dangerous Goods".

This range of cabinets is for the storage of Class 4 chemicals in liquid or solid form as classified by the United Nations criteria and the ADG Code for Dangerous Goods. Please refer to the Standard.

These include the following divisions:

- Flammable Solids
- Spontaneously Combustible
- Dangerous When Wet



5530AC4

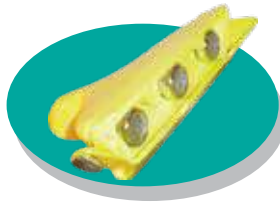


5545AC4

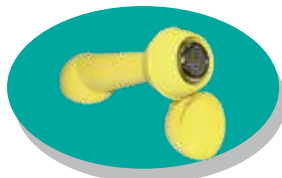
Model	Capacity	Doors	Shelves	Extra Shelf	External (mm)			Internal (mm)		
					Height	Width	Depth	Height	Width	Depth
5516AC4	60kg or L	1	2	5517-29	770	515	465	525	420	370
5535AC4	100kg or L	2	1	5535-29	770	935	620	495	840	530
5530AC4	160kg or L	2	2	5545-29	1295	1115	500	1015	1020	415
5545AC4	250kg or L	2	3	5545-29	1825	1115	500	1545	1020	415

## Features include:

- Comprehensive range of models  
To suit wide variety of applications.
- Structural components made of 304 stainless steel  
For strength and durability.
- 316 stainless steel stay-open valves  
For dependable operation and performance.
- Shower head made of ABS plastic or optional 316 stainless steel  
With a unique conical water pattern to gently deliver large volumes of water ensuring complete decontamination.
- Shower flow control regulator  
Limiting shower output to 90 LPM.
- Interchangeable nozzles  
For converting from an eye wash to an eye-face wash.



Aerostream Eye-Face Wash Nozzle



Aerostream Eye Wash Nozzle

Showers & Eye Wash Stations are made of high quality stainless steel & durable plastic materials for a long & dependable life.

- Showers & Eye Wash Stations are made of high quality stainless steel & durable plastic materials for a long & dependable life.
- Whether manufacturing, handling or storing chemicals, it is essential to have the right emergency safety equipment available. Emergency Showers & Eye Wash Stations are recommended by Medical Practitioners, Standards and Workplace Regulations .
- All Emergency Showers and Eye Wash Stations designed and manufactured to comply and exceed the requirements of Australian Standard AS4775. This also makes them compliant to American ANSI Z358.1 Standards.

## Aerostream Technology

Eye-Face Wash and Eye Wash Nozzles deliver a gentle cascade of aerated water to rinse away contaminants without further damaging delicate eye and skin tissue.

- The Eye/Face Wash nozzle (top right) includes 3 aerators with a self closing dust cover. This acts as a deflector creating a sheet of aerated fluid which covers the whole face and eyes together. A nozzle is positioned on each side to provide full facial coverage.
- The Eye Wash nozzle (bottom right) includes 1 aerator with a protective dust cover. This provides a stream of aerated fluid which is directed at the eyes for maximum irrigation. A nozzle is positioned on each side to provide full coverage to both eyes..
- Note that the nozzles are interchangeable if required, as the base has the same mounting connections



Deluge Plastic Shower Head



Deluge Stainless Steel Shower Head



Aerostream Triple Nozzle (Aerated)



Aerostream Single Nozzle (Aerated)





▲ SE 505



▲ SE 480



▲ SE 545



▲ SE 546

## Eye Wash Stations

Eye Wash Stations provide a soft flowing, single stream of aerated fluid to the eyes.

Eye Wash Stations are available in wall or pedestal mounted units, with or without bowl assembly, and with or without foot treadle activation. Each nozzle has a flip off dust cover.

Stainless steel construction provides superior long-life and reliability.



SE592A

SE590A

SE591A



▲ SE 5050



▲ SE 5000

## Portable Units

With Pratt's Portable Units, you can have a safe workplace no matter where you are.

These portable units provide immediate on site water first aid treatment and are ideal for worksites without plumbing capabilities, as well as for fire and emergency teams, vehicles carrying dangerous substances and those working in remote places such as mining, agriculture and construction.

## Pressurised Portable Eye and Body Wash Stations

With Pratt Pressurised Portable Eye and Body Wash Stations, you can have a safe workplace no matter where you are.

Pratt pressurised portable self-contained eye wash stations are essential for fire and emergency teams, drivers carrying dangerous substances, and those working in remote places in mining, agriculture and construction where plumbed water supply is unavailable.

These pressurised portable solutions help minimise an injury by providing an initial flush/ spray to the eyes, face and body.

## Combination Showers & Eye Wash Stations

Convenience of one unit incorporating both a deluge shower and with an eye or eye-face wash with only one water supply connection required.

Shower and Eye Wash or Eye-Face Wash Stations, combine all of the features and benefits of the individual showers and eye washes in a single stand alone unit. Only one fluid supply connection is required. These are our most popular 9 models offering a comprehensive selection of 9 models in different configurations including eye wash or eye-face wash, with or without bowl and with or without foot treadle operation.

### Shower Flow Control Regulator

Combination Shower Units are fitted with a flow control regulator, which limits the flow output to 90LPM. This ensures the shower will exceed the minimum required flow rate and allow the eye wash to operate simultaneously as required by the Standards.

### Adjustable Eye Wash Flow Control

Eye-Face Wash and Eye Wash Stations incorporate an adjustable flow control. Other than model SE620, all units include an individual flow adjustment screw, located in the mounting base, which allows for the fine tuning of the flow output. Model SE620 features a central adjustable flow control, due to the twin nozzle design.



▲ SE 607T316



▲ SE 607

▲ SE 612



▲ SE612T316

### EXP-SD-18G/85G

### EXP-SD-18GS/85G

## Outdoor Self-Draining Emergency Safety Shower

Self-draining emergency safety shower with open 316L stainless steel eye/face wash, suitable for hot climates. The design allows standing water to drain away from the standpipe to ensure the delivery of tepid water.

The valve is situated directly above the water inlet; the bleed pipe is fitted above this so standing water can drain into the ground preventing stagnant water overheating from solar radiation and removing the risk of further injury to the operator. Available with galvanised mild steel or 316L stainless steel pipework.



### EXP-AH-5G/45G

### EXP-AH-5GS/45G

## Outdoor Self-Draining Emergency Safety Shower

Floor mounted unheated emergency safety shower with eye/face wash unit.

Eye/face wash orientation can be varied to suit clients' requirements. This ANSI compliant model is ideal for use in indoor applications not subject to the possibility of freezing or overheating. Available with either galvanised mild steel or stainless steel pipework.



## BUILT FOR HEAVY LOADS AND CONVENIENT HANDLING

- High load capacity
- 100% polyethylene construction
- Compatible with a broad range of chemicals including acids, corrosives, fuels and oils
- Nestable design allowing multiple pallets to be shipped or stored.
- Removable grate allows easy access to clean bund sump
- Forkliftable

1011

### SPILL PALLET STANDARD 2 DRUM

Sump: 249 litres  
Max load: 1,364 kg  
Height: 419 mm  
Width: 1,346 mm  
Depth: 737 mm  
Weight: 29 kg  
Storage: 2 drum



1235

### SPILL PALLET STANDARD 4 DRUM

Sump: 249 litres  
Max load: 2,727 kg  
Height: 254 mm  
Width: 1,295 mm  
Depth: 1,295 mm  
Weight: 36 kg  
Storage: 4 drum



## ECONOMICAL AND PORTABLE CONTAINMENT FOR IBCs

- Suitable for intermediate bulk containers (IBCs), drums or other large vessels. All substances stored must be compatible.
- 100% polyethylene construction
- Removable grate allows easy access to clean bund sump
- Built for heavy loads and convenient handling
- High load capacity
- Forkliftable

1158

### IBC SPILL PALLET 1 TANK

Sump: 1,362 litres  
Max load: 3,864 kg  
Height: 660 mm  
Width: 1,570 mm  
Depth: 1,570 mm  
Weight: 115 kg  
Storage: 1 Tank



1144

### IBC SPILL PALLET TWIN SIDE BY SIDE 2 TANK

Sump: 2,022 litres  
Max load: 3,636 kg  
Height: 559 mm  
Width: 1,565 mm  
Depth: 3,162 mm  
Weight: 206 kg  
Storage: 1 Tank



## COMPATIBLE WITH A BROAD RANGE OF CHEMICALS INCLUDING ACIDS, CORROSIVES, FUELS AND OILS

- 100% polyethylene construction
- Forkliftable
- Removable grate allows easy access to clean bund sump
- Nestable design allowing multiple pallets to be shipped or stored.

1321

### SPILL PALLET PLUS 1 DRUM

Sump: 42 litres  
Max load: 700 kg  
Height: 150 mm  
Width: 680 mm  
Depth: 680mm  
Weight: 5.5 kg  
Storage: 1 Drums



1072

### SPILL PALLET PLUS 4 DRUM

Sump: 167 litres  
Max load: 2,722 kg  
Height: 146 mm  
Width: 1,321 mm  
Depth: 1,321 mm  
Weight: 32 kg  
Storage: 4 Drums



## 2AA PROPOLYMER® HAZ-LO

This small handheld flashlight is durable, waterproof and intrinsically safe. It also uses affordable, easy-to-find alkaline batteries.

Approvals:

- Safety Ratings: ATEX, IECEx, SGS, Division 1, MSHA, Intrinsically Safe
- C-SGS-US Class I, II, Division 1, Groups A, B, C, D, E, F, G; Class III; T-Class: T4 (approved for use with Energizer E91, Duracell MN1500 and Rayovac NO.815).
- MSHA Permissible Flashlight. Approval No. 20-A140002-0. Tested for Intrinsic Safety in Methane-Air mixtures only. (approved for use with Energizer E91, Duracell MN1500 and Rayovac NO.815)
- Most models meet applicable European Community Directives.



Specification	
High Lumens	65 lumen
Run Time on High	24 hours
Run Time on Low	
Beam Distance	96 m
Max Candela	2,300 candela
Battery Styles	Non-Rechargeable
Battery Types	AA Alkaline
Battery Quantity	2
Length	16.26 cm
Weight	102.06 g
Colors	Yellow, Black

## DUALIE® 3AA

See what's ahead of you and right in front of your feet with the Dualie Rechargeable. Its bright light, which shines both ahead of you and downward, helps you avoid slips, trips and falls.

Approvals:

- IPX7 rated; waterproof to 1 meter for 30 minutes; 2m impact resistance tested.
- Class I, II, Division 1, Groups A, B, C, D, E, F, G; Class III; CL I, ZN 0, IIC; Exia; T-Code: T4
- Permissible Handheld Flashlight. Approval No. 20-A160001-0 - Tested for Intrinsic Safety in Methane-Air mixtures only.



Specification	
High Lumens	245 lumen
Run Time on High	18 hours
Run Time on Low	
Beam Distance	171 m
Max Candela	7,300 candela
Battery Styles	Non-Rechargeable
Battery Types	AA Lithium, AA Alkaline
Battery Quantity	3
Length	17.78 cm
Weight	192.78 g
Colors	Yellow, Black

## PROTAC® HL-X

ProTac HL-X is available two ways: The ProTac HL-X USB is a complete rechargeable system that includes our new 18650 USB battery with an integrated USB charge port. The ProTac HL-X includes two CR123A lithium batteries. Both feature MULTI-FUEL innovation that allows them to accept Streamlight's 18650 USB battery or CR123A lithium batteries, ensuring you'll always have a beam when you need it.

Approvals:

- IPX7 waterproof.
- Most models meet applicable European Community Directives.



Specification	
High Lumens	1,000 lumen
Run Time on High	20 hours
Run Time on Low	
Beam Distance	96 m
Max Candela	27,100 candela
Battery Styles	Non-Rechargeable
Battery Types	CR123A Lithium, 18650 Lithium Ion
Battery Quantity	1-2
Length	13.79 cm
Weight	161.59 g - 175.77 g
Colors	Black

## 3C PROPOLYMER® HAZ-LO

This feature-laden, safety approved flashlight was designed to meet the stringent requirements of ANSI/UL 913 CAN/CSA C22.2 No. 157-92 intrinsically safe equipment for use in hazardous locations.

Approvals:

- Safety Ratings: ATEX, IECEx, Canada UL Listed, UL Listed, Division 1, MSHA, InMetro, Intrinsically Safe
- C-UL-US Classified Class I, Division 1, Groups A,B,C,D; Class II, Division 1, Groups E,F,G; Class III; Exia; Temperature Code T4. Most models meet applicable European Community Directives
- MSHA Permissible Flashlight. Approval No. 20-A130003-0 Tested for Intrinsic Safety in Methane-Air mixtures only.
- ATEX: FTZU 11 ATEX 0183X; II 1G Ex ia IIC T4 G4; II 1D Ex ia IIIC T99C Da.
- IECEx: IECEx FTZU 14.0011X; Ex ia IIC T4 G4; Ex ia IIIC T99°C Da.
- InMetro UL-BR 12.0516X; Ex ia IIC T4 G4; Ex ia IIIC T99°C.



Specification	
High Lumens	150 lumen
Run Time on High	18 hours
Run Time on Low	
Beam Distance	167 m
Max Candela	7,000 candela
Battery Styles	Non-Rechargeable
Battery Types	C Alkaline
Battery Quantity	3
Length	23.62 cm
Weight	192.78 g
Colors	Orange

## 4AA PROPOLYMER® LUX DIVISION 1

Provides a longer reaching, brighter beam that's 10 times brighter than a high-intensity LED. Ergonomically shaped for maximum hand comfort.

Approvals:

- IP67 Ingress Protection.
- Most models meet applicable European Community Division 1:
- UL Listed Class I, Division 1, Groups C & D; Class I, Division 2, Groups A,B,C,D; Class II, Division 1, Groups F & G; Class III; Exia; Temperature Code T4. MSHA: Permissible Flashlight; Approval No.20-A060002-0; Tested for use in Methane-Air mixtures only.
- Division 2:
- UL Listed Class I, Division 2, Groups A, B, C & D; Class II, Division 2, Groups F & G; Class III; Temperature Code T3C.



Specification	
High Lumens	100 lumen
Run Time on High	6 hours
Run Time on Low	
Beam Distance	130 m
Max Candela	4,200 candela
Battery Styles	Non-Rechargeable
Battery Types	AA Alkaline
Battery Quantity	4
Length	17.78 cm
Weight	213.19 g
Colors	Yellow, Black

## STINGER DS® LED

Dual switch technology provides both a tail cap and a head-mounted switch. Switches operate independently.

Approvals:

- IPX4 water-resistant; 1 meter impact resistance tested.
- Most models meet applicable European Community Directives.



Specification	
High Lumens	350 lumen
Run Time on High	2 giờ
Run Time on Low	7.25 hours
Beam Distance	310 m
Max Candela	24,000 candela
Battery Styles	Rechargeable
Battery Types	Nickel-Cadmium, Nickel-metal Hydride
Battery Quantity	1
Length	22.48 cm
Weight	362.87 g
Colors	Black



## PROTAC® 2AA

Using two alkaline batteries, the ProTac 2AA is a versatile personal carry light the size of a marker that now produces 250 lumens of bright light.

Approvals:

- IPX7 waterproof to 1 meter for 30 minutes; 2 meter impact resistance tested
- Meets applicable European Community directives.



Specification	
High Lumens	250 lumen
Run Time on High	43 hours
Run Time on Low	
Beam Distance	130 m
Max Candela	4,250 candela
Battery Styles	Non-Rechargeable
Battery Types	AA Alkaline
Battery Quantity	2
Length	15.60 cm
Weight	96.19 g
Colors	Black

## SURVIVOR® - ATEX

Rated for Zone 0 with a low-profile bezel that doesn't interfere with gear and equipment. The clip securely grabs onto gear, and the reinforced D-ring allows your light to hang forward.

Approvals:

- Safety Ratings: ATEX, IECEx, InMetro, Intrinsically Safe
- ATEX/IECEX FTZU 15 ATEX 0046X; IEC Ex FTZU 15.0029X II 1G Ex ia IIB T3/T4 Ga; II 2G Ex ia IIC T3/T4 Gb
- InMetro DNV 16.0014X Ex ia IIB T3/T4 Ga; Ex ia T3/T4 Gb (T-Class T4: Streamlight pack 90316, AA type Energizer L91 Lithium, Rayovac 815 or Duracell MN1500. T-Class T3: AA type Energizer E91 Alkaline, Panasonic LR6XP or Panasonic LR6XWA)
- Charger meets requirements of NFPA 1901-14.1.10.2 (2016) mounted in any position



Specification	
High Lumens	175 lumen
Run Time on High	10 hours
Run Time on Low	
Beam Distance	405 m
Max Candela	41,000 candela
Battery Styles	Non-Rechargeable, Rechargeable
Battery Types	AA Alkaline, AA Lithium, Cell Pack, Lithium Ion
Battery Quantity	1-4
Length	17.93 cm
Weight	354.37 - 388.39 g
Colors	Orange

## VULCAN® LED-ATEX

ATEX-rated for Zone 2 gas and Zone 22 dust locations. This rechargeable LED lantern is lightweight, weighing only 875 grams. Its tight beam is optimal for firefighting applications.

Approvals:

- ATEX: II 3G Ex ic nA IIC T5 Gc II 3D Ex tc IIIC T54°C Dc FTZU 08 ATEX 0139X.
- IECEX: Ex ic nA IIC T5 Gc Ex tc IIIC T54°C Dc IECEx FTZU 15.0038X.
- InMetro Ex n A ic IIC T5 Gc Ex tc IIIC T54° C Dc IP66 DNV 16.0076X.
- Rack meets requirements of NFPA 1901-14.1.11.2 (2003) mounted in any position.



Specification	
High Lumens	180 lumen
Run Time on High	7,5 hours
Run Time on Low	
Beam Distance	632 m
Max Candela	100,000 candela
Battery Styles	Rechargeable
Battery Types	Lithium Ion
Battery Quantity	2
Length	19.76 cm
Weight	875.43 g
Colors	Orange

## STYLUS® PENLIGHT

This bright, long-running LED penlight has a long battery life, and goes anywhere you need it.

Approvals:

- Class I, Division 1, Groups A, B, C, D, T3C Exia
- II 2G Ex ia op is IIB T2 Gb - FTZU 11 ATEX 0057X
- Ex ia op is IIB T2 Gb - IECEx FTZU 15.0026X
- Most models meet applicable European Community Directives.



Specification	
High Lumens	11 lumen
Run Time on High	24 hours
Run Time on Low	
Beam Distance	24 m
Max Candela	140 candela
Battery Styles	Non-Rechargeable
Battery Types	AAAA Alkaline
Battery Quantity	3
Length	15.77 cm
Weight	28.35 g
Colors	Black

## FIRE VULCAN® LED

This lightweight rechargeable LED lantern is a critical firefighting tool that will even float in water! Its bright beam of light reaches long distances while still providing optimum peripheral illumination to aid navigation, and two blue taillight LEDs make certain you can be seen by your partners in thick smoke.

Approvals:

- Safety Ratings: SGS, IPX7.
- USTC Class I, Div. 2, Grps. A,B,C,D; Class II, Div. 2, Grps. F,G; Class III T-Code: T4
- Most models meet applicable European Community Directives.
- Rack meets requirements of NFPA 1901-14.1.10.2 (2016) mounted in any position.



Specification	
High Lumens	145 lumen
Run Time on High	6 hours
Run Time on Low	
Beam Distance	566 m
Max Candela	80,000 candela
Battery Styles	Rechargeable
Battery Types	Lithium Ion
Battery Quantity	1
Length	19.05 cm
Weight	839.15 g
Colors	Orange

## VULCAN® 180 LED

The lightest portable lantern of its kind, the Vulcan 180 is designed to burn brighter and run longer to keep you covered on the job site. This rechargeable, waterproof lantern has a 180 degree tilting head which allows you to direct the light where you need it. Three C4 LEDs bring you extreme brightness along with two blue taillight LEDs for visibility from behind.

Approvals:

- IPX7 waterproof to 1m submersion; 2m impact resistance tested
- Class I, Division 2 Groups A, B, C, D; Class II Division 2 Groups F, G; Class III; Temperature Class T4.
- Rack meets requirements of NFPA 1901-14.1.10.2 (2016) mounted in any position
- Meets applicable European Community Directives



Specification	
High Lumens	1,200 lumen
Run Time on High	12 hours
Run Time on Low	
Beam Distance	
Max Candela	75,000 candela
Battery Styles	Rechargeable
Battery Types	Lithium ion
Battery Quantity	3
Length	18.87 cm
Weight	1120.37 g
Colors	Yellow

## SIEGE® AA

A low-profile, Zone 0 rated headlamp. Three lighting modes cover a variety of tasks: spot for a focused beam, flood for soft area illumination that won't tire your eyes and spot/flood combo for even more light output.

Approvals:

- Class I, II, Division 1, Groups A, B, C, D, E, F, G; Class III; Class 1, Zone 0, Group IIC, Exia; T-Code: T4 (approved for use with Energizer E92, Duracell MN2400, Rayovac NO.824, and Panasonic LR03PA) Permissible Flashlight, Approval No. 20-A190001-0. Tested for Intrinsic Safety in Methane-Air mixtures only. (approved for use with Energizer E92, Duracell MN2400 and Rayovac NO.824)
- ATEX: II 1G Ex ia op is IIC T4 Ga – FTZU 18 ATEX 0101X IECEX: FTZU 19.0003X
- Meets applicable European Community Directives.



Specification	
High Lumens	235 lumen
Run Time on High	4.75 hours
Run Time on Low	5.00 hours
Beam Distance	73 meters
Max Candela	1,320
Battery Styles	Non-Rechargeable
Battery Types	AAA Alkaline
Battery Quantity	3
Length	5.56 cm
Weight	99.22 g
Colors	Orange

## 3AA HAZ-LO®

We engineered this compact, long-running, high-performance headlight to meet the stringent requirements of Division 1 hazardous locations while maintaining exceptional light output and a long run time.

Approvals:

- UL, C-UL Classified Class 1, Division 1, Groups A,B,C,D, Class II, Division 1, Groups E,F,G Class III, Temperature Code: T4.
- Safety Ratings: Canada UL Listed, UL Listed, Division 1, MSHA, Intrinsically Safe. MSHA: Permissible Portable Headlight Assembly; Approval No. 20-A070001-0. Tested for use in Methane-air mixtures only.
- Most models meet applicable European Community Directives. Optional ATEX Standard



Specification	
High Lumens	50 lumen
Run Time on High	11 hours
Run Time on Low	
Beam Distance	165 m
Max Candela	6,800 candela
Battery Styles	Non-Rechargeable
Battery Types	AAA Alkaline
Battery Quantity	3
Length	7.82 cm
Weight	201.28 g
Colors	Orange

## PROTAC HL® USB

The HL® Series now has a hands-free, USB rechargeable lighting solution! When your task requires both hands and a bright light with a wide, flood beam, reach for the ProTac HL USB Headlamp. Charge on-the-go using almost any USB source, and since it accepts multiple battery sources as a backup, you'll always have power when you need it.

Approvals:

- IPX4 water-resistant; 2m impact resistance tested
- Most models meet applicable European Community Directives.



Specification	
High Lumens	1,000 lumen
Run Time on High	20 hours
Run Time on Low	
Beam Distance	232 m
Max Candela	13,500 candela
Battery Styles	Non-Rechargeable, Rechargeable
Battery Types	Lithium Ion Cell Pack, 18650 Lithium Ion
Battery Quantity	1
Length	23.37 cm
Weight	654.87
Colors	Yellow

## 3AA PROPOLYMER® HAZ-LO

Universal lighting kit fits both traditional and modern style firefighting helmets. It is a low-profile, lightweight, economical alternative for securely mounting a flashlight to almost any style fire helmet.

Approvals:

- Safety Ratings: ATEX, IECEX, Canada UL Listed, UL Listed, Division 1, MSHA, InMetro, Intrinsically Safe
- C-UL-US Classified Class I, Division 1, Groups A,B,C,D; Class II, Division 1, Groups E,F,G; Class III; Exia; Temperature Code T4.
- Most models meet applicable European Community Directives



Specification	
High Lumens	120 lumen
Run Time on High	6.5 hours
Run Time on Low	
Beam Distance	237 m
Max Candela	14,000 candela
Battery Styles	Non-Rechargeable
Battery Types	AA Alkaline
Battery Quantity	3
Length	17.78 cm
Weight	212.62 g
Colors	Yellow

## Scene Light II RECHARGEABLE HIGH LUMEN SCENE LIGHT

- Produces a high lumen flood pattern
- Five intensity levels correspond to desired run time
  - 100%: 10,000 lumens; runs 2 hours
  - 80%: 8,300 lumens; runs 2.75 hours
  - 60%: 6,300 lumens; runs 3.75 hours
  - 40%: 4,500 lumens; runs 5.75 hours
  - 20%: 2,300 lumens; runs 11 hours
- Multi-level illumination for scene lighting; head swivels 360° to aim the beam where you need it
  - Stackable for "light tower" capability
  - Lithium ion batteries charge in 6 hours
  - Batteries will continue to charge while in use when plugged in; runs indefinitely using AC or DC power cord
- IP67 rated; dust-tight and waterproof to 1m for 30 minutes
- High-impact, thermoplastic housing mounted in a virtually indestructible alloy steel frame
- Hooked feet for hanging over doors, guard rails, fences, etc.
- Compact size (16x11x12 in; 40.6x28.9x30.5 cm); 15.38 lbs. (6.1 kg)



## Scene Light EXT PORTABLE, RECHARGEABLE SCENE LIGHT

- Produces a uniform flood pattern; selectable diffuser settings for two beam widths; three user-selectable outputs:
  - High for a super-bright flood beam: 5,300 lumens; 410m beam; runs 4 hours
  - Medium for an intense beam and longer run time: 2,500 lumens; 292m beam; runs 9 hours
  - Low for when a less intense beam is ideal and for longer run times: 1,300 lumens; 215m beam; runs 18 hours
- Optimum peripheral illumination for scene lighting; head swivels 90° to aim the beam where you need it for task lighting
- Sealed lead acid batteries rechargeable up to 500 times
- Batteries will continue to charge while operating from dedicated power source; runs indefinitely using AC or DC power cord
- Balanced design and easy setup; less than 30 seconds for full deployment; pole extends to 84" (213.36 cm)
- IP67 rated; dust-tight and waterproof to 1m for 30 minutes.
- Designed to resist 40mph wind continuous in all directions with head fully extended
- 25.5 lbs (11.6 kg) provides weight stabilization, but is light enough to carry
- Packs to a compact size (25.5"; 64.8 cm) for easy stowage



## COPPUS CADET® Vaneaxial

These versatile, rugged and economical ventilators deliver exceptional air flow in a compact, lightweight design—and their non-corrosive injection-molded housing is nearly indestructible. They are ideal for utility underground and light manufacturing confined space ventilation and are available in a variety of models.

### Features / Advantages:

- Flame-resistant injection-molded housing
- Glass-filled, polyester resin, spark-resistant fan blade
- Accommodates 8 in (203 mm) flexible duct
- 60Hz/50Hz AC motors
- Hazardous location motors NEC Class/Div1



Model VAC



Model VEP

Vaneaxial Model								Performance Through 90-Degree Bend(S)					
Model	Drive (Electric)	Motor	HP	Weight		Free Air		1-90 degree		2-90 degree		3-90 degree	
				lbs	kg	cfm	m³/hr	cfm	m³/hr	cfm	m³/hr	cfm	m³/hr
VAC1	115V/60Hz	TE	1/2	35	16	867	1,465	776	1,318	766	1,301	756	1,284
VAC2	110V/50Hz	TE	1/2	35	16	804	1,358	730	1,240	720	1,223	710	1,206
VAC3	230V/60Hz	TE	1/2	35	16	867	1,465	776	1,318	766	1,301	756	1,465
VAC4	220V/50Hz	TE	1/2	35	16	804	1,358	730	1,240	720	1,223	710	1,206
VEP1	115V/60Hz	PE	1/2	40	19	867	1,465	776	1,318	776	1,301	756	1,284
VEP2	110V/50Hz	PE	1/2	40	19	804	1,358	730	1,240	720	1,223	710	1,206
VEP3	230V/60Hz	PE	1/2	40	19	867	1,465	776	1,318	766	1,301	756	1,284
VEP4	220V/50Hz	PE	1/2	40	19	804	1,358	730	1,240	720	1,223	710	1,206

## COPPUS AIR MAX 12

This 12 in (305 mm), lightweight, rugged blower delivers up to 2,200 cfm (3,740 m³/hr) for confined space ventilation and fresh air supply.

### Features / Advantages:

- Free air: 2,200 cfm (3,740 m³/hr).
- Weight: 44 lbs (18.14 kg).
- Rugged, all-steel housing construction.
- Integral on/off motor switch.
- Fixed guide vanes for improved performance.
- Glass-reinforced, polypropylene, non-sparking fan blade.
- 20 ft (6.1 m) cord.
- Anti-vibration foot pads.
- Available with TE motors only; not for use in hazardous areas.



### FREE AIR DECIBEL LEVEL

Model	dBA
Air Max 12	74

### Air Flow Through Duct (Straight Runs)

Model	Free Air		10 foot (3 m)		20 foot (6 m)		30 foot (9 m)		
	cfm	m³/hr	cfm	m³/hr	cfm	m³/hr	cfm	m³/hr	
Air Max 12	50 Hz	1,827	3,105	1,247	2,770	1,191	2,650	1,112	2,470
	60 Hz	2,200	3,740	2,120	3,602	2,025	3,440	1,890	3,211

## COPPUS TA16

The unique fan blade design not only allows exceptionally high air volume but also maximizes static pressure for better performance through longer runs of air duct. Typical ventilation applications include large tanks, tunnels, towers, and shipboard compartments; this fan is also ideal for product and process cooling.

### Features / Advantages:

- TE or EP motor
- Thermal overload protection
- Powder-coated, heavy-gauge steel housing
- Cast-aluminum fan blade provides spark-resistance
- Skid-mounted for stability (optional casters available)
- Duct can be connected at inlet and outlet ends
- Optional caster kit available



### FREE AIR DECIBEL LEVEL

Model	dBA
TA16	96

### Air Flow Through Flexible-Duct (Straight Runs)

Model	Free Air		10 foot (3 m)		20 foot (15 m)		30 foot (30 m)		
	cfm	m³/hr	cfm	m³/hr	cfm	m³/hr	cfm	m³/hr	
TA16-5500-2HP	50 Hz	4,583	7,788	4,029	6,846	3,617	6,149	3,229	5,488
TA16-5500-2HP	60 Hz	5,500	9,345	4,835	8,215	4,340	7,379	3,875	6,585



## COPPUS

### VANO® 175CV & 250CV

COPPUS ventilators revolutionized air moving equipment more than 60 years ago with the introduction of the VANO models. The VANO models offer a fixed guide vane design that delivers high volumes of air while maintaining static pressure for exhausting fumes and delivering fresh air. A rugged, durable, high-performance design makes the VANO models ideal for ventilating tanks, process vessels, tank cars, manholes and other confined spaces.

#### Features / Advantages:

- Straightening fixed guide vanes for improved static pressure performance.
- Accepts ducting at inlet and outlet ends.
- Converts to exhaust fumes from bottom of tanks.
- Available with totally enclosed (TE) or explosion-proof (EP) motors and compatible switch, all models supplied with 15 ft (4.572 m) power cord.
- Heavy-gauge, powder-coated steel and cast aluminum construction.
- Spark-resistant fan blades.
- Automatic thermal overload protection standard on VANO 175CV and 250CV models.
- Optional tripod and transport cart.



#### Hazardous Location Models

VANO models are available with hazardous location (EP\*) motors that meet NEC Class I, Division I, Group D and Class II, Division I, Groups E, F, G specifications.

FREE AIR DECIBEL LEVEL	
Model	dBA
VANO 175CV	90
VANO 250CV	92

#### Air Flow Through Duct (Straight Run)

Model		Free Air		10 foot (3 m)		20 foot (3 m)		30 foot (15 m)		50 foot (30 m)	
		cfm	m³/hr	cfm	m³/hr	cfm	m³/hr	cfm	m³/hr	cfm	m³/hr
175CV	60 Hz	1,500	2,549	1,400	2,379	1,300	2,209	1,200	2,039	1,080	1,835
250CV	60 Hz	3,000	5,098	2,940	4,995	2,620	4,452	2,480	4,214	2,300	3,908
175CV	50 Hz	1,250	2,124	1,167	1,983	1,083	1,841	1,000	1,699	900	1,529
250CV	50 Hz	2,500	4,248	2,450	4,163	2,183	3,710	2,067	3,512	1,917	3,257

## COPPUS

### DOUBLE-DUTY HEAT KILLER

With airflows up to 17,000 cfm (28,890 m³/hr) the Double-Duty™ Heat Killer (DDHK) is one of the most powerful and versatile portable air movers on the market today. The patented, adjustable guide vane design allows air flow control—from a gentle breeze for personnel cooling, to a concentrated jet blast for product and process cooling.

#### Features / Advantages:

- Adjustable guide vanes allow varied air movement from a gentle breeze to a jet blast
  - Available in 24 in (610 mm) and 30 in (762 mm) models
  - Available in floor stand or wall mount models
  - Heavy-duty, rugged steel housing and frame
  - Protective screens meet OSHA guidelines
  - Available with TE and EP motors
  - Hazardous location switches and motors meet NEC Class I, Division I, Group D and Class II, Division I, Groups F and G specifications
  - Thermal overload protection on motors
- \* Note: All model do not include plug



#### ADJUSTABLE GUIDE VANES

Adjustable guide vanes create a number of airflow patterns from gentle breeze to jet blast. Most efficient air flow can be determined by positioning guide vanes during operation.

FREE AIR DECIBEL LEVEL	
Model	dBA
24K07D	79
24K10D	85
30K30D	92

#### Air Flow Through Duct (Straight Run)

Model		Free Air		10 foot (3 m)		30 foot (9 m)		50 foot (15 m)		70 foot (21 m)		90 foot (27 m)	
		cfm	m³/hr	fpm	m/min	fpm	m/min	fpm	m/min	fpm	m/min	fpm	m/min
24K10D JB		7,997	13,595	1,410	428	707	215	471	143	295	89	156	47
24K10D DF	50 Hz	7,997	13,595	564	171	316	96	236	72	194	59	-	-
30K30D JB		15,988	27,180	2,116	645	940	286	846	258	658	200	447	136
30K30D DF		15,988	27,180	1,204	367	489	150	320	98	292	89	-	-

## COPPUS

### JECTAIR HP STANDARD

The unmatched performance of the COPPUS Jectair® HP is recognized throughout the industry. When compared with older-style air horns, the patented air mixing chamber of the Jectair® HP can produce up to a 40:1 air flow conversion and up to 26 percent savings on compressed air consumption.

#### Features / Advantages:

- Available in five sizes: 3S-HP, 3-HP, 6-HP, 8, or 9 Standard
- High-performance (HP) and Hornet models available in three sizes: 3S-HP, 3-HP and 6-HP
- Air flows range from 1,370 to 8,900 cfm (2,328 to 15,121 m³/hr)
- Induction ratios up to 40:1
- Multiple expansion nozzles machined into housing
- High static pressure capabilities
- Diffuser material available in steel, aluminum or shock-resistant polymer (Hornet HP)
- No moving parts (virtually maintenance-free)
- Static bonding cable (standard on all models) with spring tension grip and replaceable contact tips



## COPPUS

### JECTAIR HORNET

The Jectair Hornet HP features a lightweight, shock-resistant, conductive polymer diffuser that is virtually indestructible.

#### Features / Advantages:

- Available in three sizes: 3S-HP, 3-HP and 6-HP. Polymer safely dissipates static electricity charges
- Diffuser is constructed of linear low-density polyethylene, rated UL 94 with maximum operating temperature of 160° Fahrenheit (93° Celsius)



#### Efficiency At Select Inlet Pressures

Inlet Pressure	Model	Air Flow cfm (m³/hour)	Air Consumed (cfm)	Induction Ratio
60 psig 4.2 kg/cm²	3S-HP	1,370 (2,328)	47 (80)	29.1
	3-HP	1,520 (2,595)	47 (80)	32.3
	6-HP	3,980 (6,762)	98 (167)	40.6
	8	5,600 (9,515)	178 (302)	31.5
	9	6,880 (11,096)	265 (450)	25.8

#### Efficiency At Select Inlet Pressures

Inlet Pressure	Model	Air Flow cfm (m³/hour)	Air Consumed (cfm)	Induction Ratio
100 psig 7 kg/cm²	3S-HP	1,660 (2,820)	72 (122)	23.0
	3-HP	1,860 (3,160)	72 (122)	25.8
	6-HP	4,870 (8,274)	153 (260)	31.8
	8	6,750 (11,469)	282 (479)	23.9
	9	8,900 (15,121)	410 (697)	21.7

#### Efficiency At Select Inlet Pressures

Inlet Pressure	Model	Air Flow cfm (m³/hour)	Air Consumed (cfm)	Induction Ratio
80 psig 5.6 kg/cm²	3S-HP	1,530 (2,600)	61 (104)	25.1
	3-HP	1,700 (2,888)	61 (104)	27.8
	6-HP	4,500 (7,645)	126 (214)	35.7
	8	6,250 (10,620)	233 (396)	26.8
	9	8,000 (13,592)	366 (571)	23.8

## COPPUS

### CP 20

This powerful fan is designed for fast and thorough degassing, ventilating or cooling of large process vessels such as columns, towers, reactors, scrubbers, furnaces, and storage tanks.

#### Features / Advantages:

- Delivers air flow up to 11,200 cfm (19,029 m<sup>3</sup>/hr)
- Can be used as blower or exhauster
- Fits 20 in (508 mm) API tank opening
- Cast aluminum housing and fan blade
- Stainless steel turbine buckets
- Separate stainless steel nozzles for high- or low-pressure operation
- Fan assembly shaft rotates on permanently sealed ball bearings
- Stationery expansion nozzles



#### AIR AND STEAM DRIVEN

ITEM	PSIG	dBA
CP 20	80	108
CP 20	60	107
CP 20	40	105

## COPPUS

### REACTION FAN

Rugged, cast aluminum housing and fan blade make these fans ideal for hazardous locations and demanding ventilation projects. The RF design uses action-reaction principles; compressed air is discharged through nozzles located at the tip of the fan blade providing extremely efficient, high-volume, low-maintenance air movers.

#### RF-12, RF-16

#### Features / Advantages:

- 2,100 to 5,100 cfm (3,566 to 8,665 m<sup>3</sup>/hr) at 80 psig
- Use for fresh air supply or fume exhaust
- Low compressed air consumption
- Spark-resistant, cast-aluminum housing and fan blade
- Virtually maintenance free
- Permanently lubricated bearings eliminate line oiler
- Cast-in handles and feet
- Cast-in bead to accept 12 in (305 mm) and 16 in duct (406 mm)
- Bolt holes allow optional adapter plates attachment



#### RF-20, RF-24

#### Features / Advantages:

- 11,000 to 16,900 cfm (18,689 to 28,713 m<sup>3</sup>/hr) at 80 psig\*
- Use for fresh air supply or fume exhaust
- Can be carried or rolled to job site
- Spark-resistant cast aluminum housing and fan blade
- Permanently lubricated bearings
- Flanges mate with 20 in (508 mm) and 24 in (610 mm) API tank openings

Air Flow Through Flexible Duct At 80 psig. Unit:cfm (m <sup>3</sup> /hr)							Free Air Operating Data						
Model	Duct Dia. (inch)/(mm)	Straight Length Of Duct					Inlet Pressure		Air Consumption		Total Air Flow		Delivery Ratio
		20 ft(6m)	30 ft(9m)	40 ft(12m)	50 ft(15m)	100 ft(31m)	(psig)	(kg/cm <sup>2</sup> )	(scfm)	(m <sup>3</sup> /hr)	(scfm)	(m <sup>3</sup> /hr)	
RF-12	12/305	2,020 (3,433)	1,960 (3,331)	1,910 (3,246)	1,870 (3,178)	1,680 (2,855)	80	5.6	61	104	2,140	3,636	35
RF-16	16/406	4,850 (8,241)	4,750 (8,071)	4,600 (7,816)	4,550 (7,731)	4,150 (7,052)	80	5.6	144	246	5,100	8,665	35
RF-20	20/508	-					60	4.2	160	271	7,000	11,893	59
							80	5.6	210	375	11,000	18,689	53
RF-24	24/610	-					60	4.2	324	550	14,600	24,804	45
							80	5.6	400	680	16,900	28,713	42

#### Swing-out assembly for RF-20/24 and CP-20

Personnel and equipment egress or entrance to tanks and vessels can be achieved quicker, easier and safer with the RF-20/24 and CP-20 swing-out models; mounts to standard API 20 in (508 mm) or 24 in (610 mm) tank openings. Swing-out gate (constructed of cast aluminum) is held in closed position with industrial strength hook and loop fastener that can be opened and closed easily by pulling or pushing.



## Accessories



#### Duct Canister

Extend the life of your duct with the protection of a COPPUS high-density, light-weight polyethylene canister; makes transporting and storage easier and safer.

Canisters for available duct sizes:

- 8 in x 25 ft (203 mm x 7,500 mm)
- 12 in x 20 ft (305 mm x 6,000 mm)
- 16 in x 30 ft (406 mm x 9,000 mm)



#### Flexible Air Duct

A large selection of flexible air duct for a variety of ventilation applications is available. Our most popular heavy-duty duct features impregnated polyester material designed for harsh, industrial environments. Other options include economical light-duty duct, source capture duct and hazardous location, antistatic duct.



#### Jectair Tripod

For stationary, long-term use; rotates 360 degrees for precise direction of air-flow and accommodates 3-HP and 6-HP Jectair sizes. Installs quickly and easily with two quick-release clamps. Large feet provide stability during operation, and spring-loaded legs fold up for easy transport and storage.



#### Transport Cart

Heavy-duty cart allows easier transportation of VANO 175CV and 250CV ventilators (which can remain on cart during operation); includes crane-lifting loop.

Weight: 25 lbs (11kg)



#### Vano Tripod

Attaches to VANO 175CV or 250CV model; makes positioning of units and direction of airflow easier by rotating 360 degrees on a 45-degree plane; spring-loaded legs fold up for easy transport and storage.

Weight: 19 lbs (9kg)



## WV-10 WORK VEST

**Durability:** The closed-cell floatation foam will not absorb water if cut or punctured. The tough, glexible vinyl coating resists caustics, acids, UV lights, hydrocarbons, mildew, fading, drilling mud, tears and abrasions. Reflective Tape is the option.  
**Safety:**  
 USCG approval no. 160.053/70/0



## RB30S TYPE IV RING BUOYS

RB30S meets SOLAS requirements with International orange and reflective tape. The shell is made of tough high density polyethylene that is U.V. stabilized. With 100% foam filling, the buoy will not absorb water if torn or punctured. The floating polypropylene grab line can be easily replaced in the field. Buoys are available in international orange only.



## DECKVEST 5D PRO SENSOR

The complete lifejacket harness for all sailors, the 5D has been ergonomically designed to fit comfortably and sit on the shoulders, keeping away from the neck and waist for full freedom of movement. Includes everything sailors require for offshore sailing including sprayhood, red lifting strop, approved lifejacket light and award winning bladder illumination lights.



## DECKVEST 6D LIFEJACKET

- 170N Buoyancy
- One Size
- UML Pro Sensor Elite activation system
- Improved front opening buckle with smooth body adjuster system
- Enhanced shoulder fit system for the perfect fit – every time – all day
- Enhanced back profile for clean, unobtrusive look and fit
- Hard-wearing coated fabrics in key areas
- New sprayhood design with large clear structured visor – stored away from neck



## DURO SOLAS LIFEJACKET

DURO SOLAS life jacket – 275N Twin chamber lifejacket that is often used commercially in wind farms, superyachts and oil rigs where SOLAS approved lifejackets are required. Designed to be worn together with most fall arrest harnesses, the DURO SOLAS lifejacket fits comfortably over layers of workwear, the unique shape allows freedom of movement and reduced bulk.



## NM102 NOISE METER

- Large, clear display with back-light
- 30 to 130 dB(A) Auto Ranging
- Fast and Slow time weighting
- Maximum and Minimum sound level readings
- Hold button holds the currently displayed level
- Includes Wind Shield, Carrying Case and Battery
- Display: 4 Digit LCD with back light, update rate 0.5s.
- Frequency Weighting: A and C
- Time Weighting: Fast (125ms) and Slow (1s)
- Dynamic Range: 50 dB
- Battery Life: About 50 hours (alkaline battery)
- Temp. & Humidity: 5°C to 40°C, below 80% RH
- Dimensions: 200 x 55 x 38, 170g (including battery)

## Windsock



Marine grade stainless steel swivel snap clip



Marine grade stainless steel mouth rings and wire rope harnesses



Type C



Type D

### Windsock Applications

Aviation: Airports; aerodromes; private landing strips; helicopter landing platforms; air ambulance locations; parachute schools; microlight clubs.

Safety: Oil, gas and petrochemical industry; emergency planning equipment; power stations; water and sewage treatment works; ports and marinas; bridges and motorways; general weather observation.

Other : Windsocks can be used as an alternative form of advertising or decorative art feature with designs and logos applied.

### Sizes

Our standard stock range of C type fitting windsocks are shown on page 3 and highlighted in orange. All other sizes and variations not highlighted and shown on pages 3 to 6 are made to order. Due to the requirements of global sourcing we manufacture windsocks in both imperial and metric dimensions - reflected in the many sizes shown on the following pages.

## Windsock Type C

### Fittings & Fixings

Our C type fitting comes complete with a harness and shackle. It consists of a stainless steel ring sewn into the mouth of the windsock. Four brass eyelets are used to attach a four way flexible stainless steel wire harness. Attached to the end of the harness is a stainless steel swivel shackle as shown in the pictures on the right. The swivel shackle is the most secure way of attaching a windsock to the rotating arm system at the top of your windsock mast. The C type fitting is suitable for onshore, coastal and offshore applications where the equipment is being regularly exposed to harsh conditions.

### Material

Our standard windsocks are made in durable polyester with polyurethane coating, total weight of 200 gsm tested to ISO 105 (4), EN 471 and EN 343.

### Colour

Our standard windsocks are high visibility, fluorescent orange. Other colours are available.

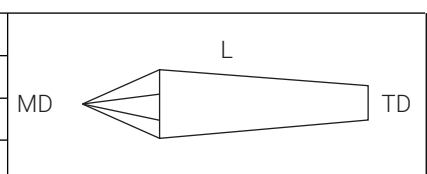
### Specification

Part number, length, mouth diameter tail diameter: see table; Material: polyester, polyurethane coated, 200 gsm; Colour : high visibility, fluorescent orange; Fixings: integral sewn in mouth ring of stainless steel, four way flexible stainless steel wire harness, swivel shackle of stainless steel.

### Conformity

1. ICAO Annex 14 Vol I; 2. ICAO Annex 14 Vol II surface level heliports; 3. ICAO Annex 14 Vol II elevated heliports and helidecks; 4. CAP 1264; 5. EASA CS-ADR-DSN; 6. Defence Safety Authority MADS (issue 8); 7. CAP 168  
 NB conformity types 1 to 6 above are recommended minimum sizes.

Part number	Type	Length (L)	Mouth diameter (MD)	Tail diameter (TD)
WIDA-048-018-009-AAP-AA	D	4 feet	15 inch	8 inch
WICA-060-015-008-AAP-AA	C	5 feet	15 inch	8 inch
WIDA-072-024-012-ACS-AA	D	6 feet	24 inch	12 inch



## Windsock Type D

### Fittings & Fixings

Our D type fitting comes complete with fitted brass eyelets and cable ties. It consists of a reinforced mouth fitted with a single row of brass eyelets. We supply heavy duty black uv resistant cable ties as a quick and easy way of securing the windsock to your windsock frame. The D type fitting is suitable for most applications where the windsock is being fitted to a windsock frame.

### Material

Our standard windsocks are made in durable polyester with polyurethane coating, total weight of 200 gsm tested to ISO 105 (4), EN 471 and EN 343.

### Colour

Our standard windsocks are high visibility, fluorescent orange. Other colours are available.

### Specification

Part number, length, mouth diameter tail diameter: see table; Material: polyester, polyurethane coated, 200 gsm; Colour : high visibility, fluorescent orange; Fixings: reinforced mouth fitted with a single row of brass eyelets and supplied with uv resistant cable ties.



## Circuit Breaker Lockouts

Lockout Devices for all types of Circuit Breakers. Universal Circuit Breaker Lockouts as well as breaker specific Lockouts.

- Will Lock Out most Types of Miniature Circuit Breakers
- Lock Out 1 - 4 pole Circuit Breakers



Model	Description
UCL-1	8 mm padlock hole - max clamping 8 mm
UCL-2	8 mm padlock hole - max clamping 13 mm
UCL-3	8 mm padlock hole - max clamping 8 mm
UCL-4	7 mm padlock hole - max clamping 8 mm
UCL-5	8 mm padlock hole - clamping toggle 12 to 19 mm
UCL-2-EL	8 mm padlock hole - max clamping 11 mm
UCL-7	7 mm padlock hole - max clamping 8 mm



UCL-7



UCL-1



UCL-2



UCL-3



UCL-4



UCL-5



UCL-2-EL

### CBL-1 Circuit Breaker Lockout - Universal

Permanently mounted to eschuteon plate  
 Suitable for most large circuit breakers (universal type)  
 Made from strong ABS plastics  
 Includes 5mm spacer disc - arm length 126mm  
 Suitable for padlocks with up to 6.5mm shackle diameter



SPLD-LCB



CBL-1



CBL-3

### CBL-3 Toggle Blocking Lockout Hasp

Suitable for Schneider and Merlin Gerin Moulded Case CB's  
 Large Side for NS80, NSX100-250, NSE75-100, NSF150-250  
 Small side for NS/NSX400-630, NSJ 400-600  
 Made from powdercoated mild steel  
 3 padlock holes suitable for padlocks with up to 6.5mm shackle diameter

### SPLD-LCB Moulded Case Circuit Breakers

Ideal for situations where lockout of individual breakers is required.  
 Moulded from Re-Inforced Nylon  
 Fitted to Circuit Breaker Cover

Model	Description
CBL-1	Large Circuit Breaker Lockout
CBL-3	Circuit Breaker Toggle Lockout
SPLD-LCB	Lockout Device for Moulded Case Circuit Breakers

## Universal Lockout Device for Fuse Holders

### UFL-2 Universal Lockout Device for Fuse Holders

Will Lock Out most Types of Fuse Holders - One size fits all  
 Lock out 20 Amp to 400 Amp Fuse Holders  
 Made from sturdy Nylon Plastics  
 Dimensions: 60x35x15 mm wide  
 8mm padlock hole - max clamping 5mm



UFL-2



UFL-NZ

### UFL-NZ Lockout for Fuse Holders

Made from sturdy PVC  
 Dimensions 60 x 25mm  
 7mm padlock hole  
 Will prevent insertion of fuse in NZ01 and NZ02 fuses

## Lockout Hasps

Lockout Hasps enable up to 6 workers to lock out the same point of machinery.

Model	Shackle Diameter	Padlock Holes	Jaw Size
SLH-30	8 mm	6	30 mm
SLH-31	9 mm	6	30 mm
SLH-42	9 mm	6	25 mm
SLH-44	9 mm	6	38 mm
SLH-52	9 mm	6	28 mm
SLH-40	9 mm	6	25 mm
SLH-41	9 mm	6	38 mm
SLH-12	9 mm	12	25 mm
SLH-24	9 mm	24	28 mm
SLH-70	8.5 mm	6	-



## Cable Lockouts

Thread the cable into and or around device, continue pulling cable until tight, close the red lockout handle and place up to 4 padlocks and tags as needed.



### MFL-2P - Cable Lockout Device

Lockout several Points, Gate Valves, Steering Wheels & other equipment

Plastic Housing with 5mm PVC coated Steel Wire Cable  
Extra Cables available - 2, 6 and 15 metre (other sizes on request)

### MFL-2P - 5mm Non Conductive/Plastic

Use where metal parts are not wanted eg inside electrical cabinets  
Made from durable plastics with 5mm Cable

### MFL-3 - 3mm Thin Steel Cable

Thin Cable Lockout for devices with small lockout holes.  
Coated Steel Wire Cable - 1 metre or 2 metre  
Made from durable plastics with 3mm cable



Model	Description
MFL-2	Extra Cables available - 2, 6 and 15 m
MFL-2P	Cable Lockout with 1 and 2 m plastic Cable
MFL-3	Thin Cable Lockout with 1 and 2 m Steel Cable

## Plug Lockouts

Place Electrical Plug or Hose End into case, close and lock with padlock

### PLD-1 - Plug and Hose Lockout Bag

Heavy Duty Vinyl Bag with Steel Wire closing cord. Simple to use, place cord or hose end in bag, tighten cord around plug/hose with the attached cord clasp. Close cord clasp and place padlock and tag in holes provided.

### PLD-12 - Plug Lockout Device - Large

Made from spark resistant high impact ABS plastic.  
Suitable for 3 phase plugs and air hoses of various sizes  
NOTE: Not suitable for Clipsal 33A plug, use PLD-2.

### PLD-13 - Plug and Hose Lockout (240 Volts)

Made from spark resistant high impact ABS plastic.  
Suitable for 240v size plugs and air hoses of various sizes



Model	Shackle Diameter	Padlock Holes
PLD-1	8 mm	4
PLD-12	7 mm	4
PLD-13	7 mm	4

## Valve Lockouts

### Gate Valve Lockouts

Wrap around valve handle and lockout out with Padlock

### GVL-1a - Gate Valve Lockout - Adjustable

Can Lock Out Gate Valves up to 165mm (1" t o 6 1/2")  
4 padlock holes up to 8.5mm shackle  
Made from durable polypropylene  
Covers and rotates freely around the valve handle

### GVL-2-10 - Gate Valve Lockouts - Individual

Available in 5 different sizes  
Chemical and heat resistant - made from strong Polyurethane  
Once locked they swivel freely around Gate Valve handle  
Available for handle diameter 50mm (2") t o 350mm (14")  
Can be purchased individually or in a pack including on of each size





## Ball Valve Lockout

Lockout the valve with a padlock attached to the Ball Valve Lockout.

### BVL-1 - Ball Valve Lockout

Can Lock Out most Ball Valves 10 - 32mm (3/8" - 1 1/4")  
 Will also lock Valve in Open position on most Ball Valves  
 Great chemical resistance - made from tough Polypropylene plastic  
 Accommodates padlocks up to 6.5mm shackle diameter  
 'One-Piece' design - very easy to use - simply slide on handle and squeeze  
 NOTE: BVL-1 will only lock out valves with handles opening anti-clockwise  
 Can accommodate handles with a width of maximum 25mm



BVL-1



BVL-2



BVL-3

### BVL-2 - Ball Valve Lockout

Can Lock Out most Ball Valves 10mm -32mm (3/8" to 1 1/4") Left or Right turning  
 Great chemical resistance - made from tough Polyurethane plastic  
 Accommodates padlocks up to 7mm shackle diameter  
 Can lock in On & Off position

### BVL-3 - Ball Valve Lockout

Can Lock Out most Ball Valves 10mm -32mm (3/8" to 1 1/4") Left or Right turning  
 Great chemical resistance - made from tough Polyurethane plastic  
 Accommodates padlocks up to 7mm shackle diameter

Model	Ball Valves
BVL-1	10 - 32mm (3/8" - 1 1/4")
BVL-2	10mm -32mm (3/8" to 1 1/4")
BVL-3	10mm -32mm (3/8" to 1 1/4")

## Safety Lockout Padlocks

Padlocks are Keyed Individually as standard. Keyed Alike and Master Keyed also available (except for in the SLP-150 series).



Brass Body With Coloured Sleeve  
50mm Shackle



Nylon Body, 38mm Shackle  
(Stainless Steel)



Nylon Body 50mm Shackle  
(Stainless Steel)



Nylon Body, 38mm Shackle  
(Non Conductive)

Model	Description
SLP-150-XXX	Economy Padlock - Keyed Differently - Single Pack
SLP-150-XXX-2 KEY	Economy Padlock - Keyed Differently - Single Pack - 2 Keys
SLP-438-XXX	Safety Padlock - Keyed Differently - Single Pack
SLP-438-XXX-KA	Safety Padlock - Keyed Alike - Single Pack
SLP-438-XXX-MK	Safety Padlock - Master Keyed - Single Pack
SLP-450-XXX	Safety Padlock - Keyed Differently - Single Pack
SLP-450-XXX-KA	Safety Padlock - Keyed Alike - Single Pack
SLP-450-XXX-MK	Safety Padlock - Master Keyed - Single Pack
SLP-550-XXX	Safety Padlock - Keyed Differently - Single Pack
SLP-550-XXX-KA	Safety Padlock - Keyed Alike - Single Pack
SLP-550-XXX-MK	Safety Padlock - Master Keyed - Single Pack

## Group Lock Box

Ensures lockout of energy sources on largers projects until all workers have removed their locks.

### Group Lock Box - 16 Padlocks

Sturdy Metal Construction  
 Size 155mm x 255mm x 105mm  
 Lockout holes for up to 13 padlocks  
 Use as Group Lock Box, and/or for Padlock Storage  
 Available in Red as standard - other colours available upon request  
 Has convenient carry handle.



GLB-6-RED

### Group Lock Box - 29 Padlocks

Made from tough ABS Plastics  
 Clear sliding lid, can view keys inside  
 Holes for Wall Mounting  
 Standard in High Visibility Yellow  
 Dimensions: 330mm w x 280mm h x 90mm



GLB-8-YLW



## KLEVER XCHANGE Safety Knife



Innovative Plastic Tape Splitter  
Available in the yellow handle ONLY.



Available in Red, Orange, Yellow, and Blue.

### Safety and Convenience

- Recessed blade reduces cut injuries and damaged goods.
  - Cuts boxes, film, tape, and thousands more applications.
  - Ergonomic 'Soft Touch' handle reduces hand fatigue and stress.
  - Innovative Metal Tape Splitter
  - Advanced Plastic Polymers - Soft grip handle.
  - Highest Safety Level.
  - Interchangeable, replaceable head.
- (1 pre-loaded per handle. Additional sold separately.)

Product	Description
KCJ-XC-20 Klever X-Change (narrow cut head)	Available in Yellow, Orange, Red, Blue
KCJ-XC-20 Klever X-Change (narrow cut head)	Available in Yellow, Orange, Red, Blue
KCJ-XC-30 Klever X-Change (wider cut head)	Available in Yellow, Orange, Red, Blue
KCJ-XC-30 Klever X-Change (wider cut head)	Available in Yellow, Orange, Red, Blue
KCJ-XC-35 Klever X-Change (Wider cut head with Scraper)	Available in Yellow, Orange, Red, Blue
KCJ-XC-35 Klever X-Change (Wider cut head with Scraper)	Available in Yellow, Orange, Red, Blue



### KLEVER XCHANGE REPLACEMENT BLADE HEADS™

Interchangeable, snap-in heads built for use with our entire line of XChange™ safety cutters.



### KLEVER HOLSTER™

Safely store and carry Klever XChange™ safety cutters and replacement blade heads

# Customer



EVN



NSRP



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AkzoNobel



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Masan  
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JOTUN



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HYUNDAI



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VINFAST



HOA PHẬT



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Suntory PepsiCo Vietnam Beverage



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GOLDWIND

SIEMENS

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RENEWABLE ENERGY

Vestas



ENERCON ENERGY FOR THE WORLD



DAM CÀ MAU HẠT NGỌC MÙA VÀNG

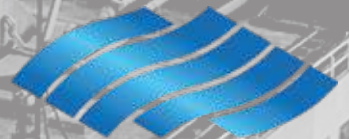


SCG



Uni-President

Cargill



BLUESCOPE



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