



# PPE and Welding Accessories for Rail Repair

*Personal protection • Welding tools and accessories  
• Special process equipment*



**STRENGTH THROUGH COOPERATION**

# Eye / face and respiratory protection

## Aristo™ Tech welding helmets and PAPR

### Equipment

The Aristo® Tech helmet has been designed for the professional welder who wants the best in protection and performance. The light weight shell and ergonomically designed headgear offers maximum comfort even when welding for long periods of time. The Aristo® Tech offers the latest in digital lens technology, with internal LCD display, providing the welder full control to adjust shade level, sensitivity and delay settings with precision for any welding application.

### Lens Technology

- Variable 5-13 Digital control for adjustment of shade level, sensitivity and delay
- Optical Class 1/1/1
- Quick Set™ allows an easy change of shade by a simple up and down flick of the switch
- Grind mode activated at lowest sensitivity

### Comfort Head Gear

- Comfortable, lightweight and fully adjustable ratchet style headgear delivers maximum comfort

### Shell

- 3 high gloss colours available – yellow, black & white
- Conforms to:  
CE, ANSI, AS/NZS, CSA



Helmet weighs only 490g



ESABs latest integrated Circuit LENS Technology, offers an internal LCD display with outstanding reliability, suitable for all manual welding processes, including plasma cutting.

- Digital Display Screen
- Lens Delay Control
- Visible Shade & Sensitivity Settings



Designed for use with a wide range of welding applications

### Front cover lens

The Aristo® Tech front cover lens offers the ultimate in Protection. This lens has been coated for increased scratch and heat resistance.

Using a specialised injection moulding process, the lens is pre moulded into a convex curve with an optical class 1. This means that the threat of duplicate ghost Arcs visible through the cartridge is eliminated.



### Head gear

- Robust head gear
- Possibility to move the helmet closer or further away from the face
- Comfortable and replaceable sweat band
- Angled front head band



### Aristo® Tech Black

Painted black shell with yellow decal design.

Aristo® Tech 5-13 Black

**0700 000 353**



## Aristo® Tech Combinations



### Aristo® Tech Helmets Prepared for Fresh Air

The Aristo® Tech helmet can be used in combination with the Aristo® Air PAPR unit and compressed air. The helmets are delivered fully assembled, incl. flame resistant head and face seal and air duct.

Aristo® Tech Black prepared for fresh air

**0700 000 356**

Aristo® Tech Yellow prepared for fresh air

**0700 000 358**

# Eye / face and respiratory protection

## Welding helmets and PAPR

### Aristo® Air

The Aristo® Air PAPR (Powered Air Purifying Respirator) system combined with the Aristo® Tech helmet, offers heavy duty protection from welding fume and dust when welding, gouging & grinding. The unit features the latest in PCB Board technology, allowing the welder to adjust the air flow from 170 L/min to 210 L/min to suit the environment and application. This is highlighted by an LED airflow indicator on top of the unit. The Aristo® Air is equipped with audio & visual blocked filter and low battery alarms, offering extra safety for the welder.

The strong physical construction of the Aristo® Air, makes it extremely robust and suitable for all heavy duty welding applications.

- User adjustable air flow  
170/210 L/min
- Li Ion battery pack (up to 8hr  
duration @ 210L/min)
- P3 filter and pre-filter
- International intelligent charger  
(interchangeable pins)
- Audio/visual blocked filter and  
low battery alarms
- LED air flow indicator
- Battery charge LED indicator
- Flat push button membrane  
switch
- Supplied with 'new style'  
comfort pad



Weighs only 1kg



### Aristo® Air

The Aristo® Air PAPR unit is delivered complete and is ready to use. Contents include: Air unit with air hose and hose cover, battery, intelligent charger, comfort pad and P3 filter.

Aristo® Air Complete

**0700 002 174**

### **Origo™ Tech 9-13**

The Origo™ Tech helmet is available in two striking high gloss colours, 'Yellow' or 'Black'. The helmet features the ESAB comfort headgear, whilst the light weight shell offers superior face, head, ear & neck protection, which allows for welding in all positions. The ESAB variable shade ADF uses the latest technology and has proven reliability. The ADF is screw retained and sits in a fully moulded light seal cradle, which also creates a slight convex curve on the front spatter lens for extra security and strength. The Helmet is delivered in an ESAB display box, fully assembled and ready to use.



#### **Origo™ Tech 9-13**

The Origo™ Tech 9-13 features an external shade adjustment between DIN 9 and DIN 13. The delay and sensitivity can be adjusted from the inside. The Origo™ Tech 9-13 is suitable for MIG/MAG, MMA and TIG (over 20 amps). Conforms to EN 175.

Origo™ Tech Black

**0700 000 296**



#### **Origo™ Tech 9-13 Prepared for Air**

The Origo™ Tech 9-13 prepared for Air is delivered fully assembled and ready to attach to the Origo™ Air Unit. The unit includes: Origo™ Tech helmet, head gear, air duct & head and face seal.

Origo™ Tech 9-13 Prepared for Air  
Black

**0700 000 300**

# Eye / face and respiratory protection

## Welding helmets and PAPR



### Origo™ Air

The Origo™ Air is a battery powered respiratory unit is designed to fit the Origo™ Tech, Globe Arc and Albatross welding helmets. The unit provides clean/filtered air to increase the comfort and safety for the welder. The Origo™ Air is delivered complete with an 8-hour battery, P3 filter, comfort pad, waist belt and an air hose with a Proban hose cover fitted. This unit is supplied with an intelligent charger, which ensures a prolonged life time of the battery, by reducing the risk of over charging. The Origo™ Air is equipped with a low flow alarm, which will give an audible signal when the filter is blocked or the battery power is running low. The complete system is comfortable, lightweight and durable.

Origo™ Air Complete (EU and UK)  
including air hose

**0700 002 100**

## Hard hats for welding helmets



Colours available

### Hard Hat Concept

The Hard Hat Concept provides the user with the lightest, strongest and most comfortable helmet available. The helmet is manufactured from ABS material and weighs only ~300g. The head gear is equipped with a ratchet adjustment for easy adjustment and comfort. Approved to EN 397. Compatible with Aristo® Tech, New-Tech™, Origo™ Tech, Albatross and Globe-Arc helmets.

Hard Hat Concept Yellow

**0700 000 052**

Hard Hat Concept White

**0700 000 135**

Hard Hat Concept Blue

**0700 000 136**

Hard Hat Concept Green

**0700 000 137**

Hard Hat Concept Red

**0700 000 138**

Hard Hat Concept Orange

**0700 000 142**



# Eye Protection

## ESAB Pro Safety Spectacles

These stylish spectacles are used for drilling, chipping and metalworking. They have a sporty style, soft to the touch, and have a lightweight wrap around, including a neck cord. They are extremely flexible and durable, and are available in four different lens configurations. All lens configurations provide protection against dangerous UV radiation. CE approved according to EN 166-F. There are 10 pairs packed per box. Not for grinding.



### ESAB Pro Clear

The clear lens is suitable when working indoors, providing general eye protection.

ESAB Pro Clear

0700 012 013

# Eye / face and respiratory protection

## Eye Protection



### ESAB Pro Smoked

The smoked lens is suitable when working in strong ambient light.

ESAB Pro Smoked

**0700 012 014**



### ESAB Pro Amber

The Amber (yellow lens) enhances the light. This is suitable when the ambient light is not sufficient.

ESAB Pro Amber

**0700 012 015**



### ESAB Pro Shade 5

The shade 5 spectacle provide protection not only against IR/UV light but also against the visible light during gas welding/cutting.

ESAB Pro Shade 5

**0700 012 016**



### Grinding Visor Complete

A strong lightweight brownguard featuring an adjustable head harness and clear polycarbonate screen.

Grinding Visor Complete

**0700 012 020**

Replacement Visor Clear

**0700 012 023**



### ESAB Flip Front Goggle Round Shade 5

Protective goggle shade 5 for gas welding, brazing and gas cutting. The goggles are ventilated and have a flip-front mechanism. CE approved according to EN 166/EN 175

ESAB Flip Front Goggle, Shade 5

**0700 012 022**





#### ESAB Goggle Clear

The special injected frame offers supreme user comfort as well as durability. Expanded Visual field. Cross Vent technology keeps air flowing in and moisture out. Moulded 2mm poly carbonate lens provides great impact protection. These goggles meet ANSI Z87.1+ impact standard and is CE certified to EN166'S'.

ESAB Goggle Clear

**0700 012 027**



#### ESAB Goggle Clear

The special injected frame offers supreme user comfort as well as durability. Expanded Visual field. Cross Vent technology keeps air flowing in and moisture out. Moulded 2mm poly carbonate lens provides great impact protection. These goggles meet ANSI Z87.1+ impact standard and is CE certified to EN166 and EN169.

ESAB Goggle Shade 5

**0700 012 026**

## Disposable masks

### Filtair Disposable Masks

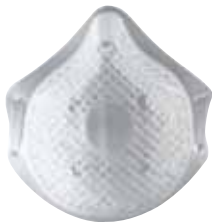
The Esab Filtair series has been developed to improve the comfort of disposable respirators whilst maintaining an excellent face fit. Colour coding the range makes identification simple when varying levels of protection may be required. The mesh shell supports the filter media and prevents collapse onto the face and the preformed nose bridge provides comfortable fit eliminating constant adjustment. The filters



use the latest filter technology to promote low breathing resistance and are approved to EN149:2001 (meeting the 120mg load testing). The Filtair is available as a pre-moulded and a flat version. Depending on the protection level needed and the breathing resistance some models are equipped with a valve. All the masks are fitted with buckle fastening which also allows the wearer to adjust the straps accordingly.

# Eye / face and respiratory protection

## Disposable masks



### ESAB Filtair Pro 8010

This mask provide P1 protection and is suitable to wear during general dusty duties.

Esab Filtair Pro P1 'White' Pk 20

**0700 002 200**



### ESAB Filtair Pro 8020V

This mask provide P2 protection and is equipped with a valve to reduce heat and moisture build up inside the respirator. Suitable to wear when sanding painted metals, powder coating and sanding cured resins.

Esab Filtair Pro P2V 'Blue' Pk 10

**0700 002 201**



### ESAB Filtair Pro 8020CV

This mask provide P2 protection and is equipped with a valve to reduce heat and moisture build up inside the respirator. The carbon layer takes out bad odours. Suitable to wear during welding, brazing, soldering, painting (brush applied), gluing (brush applied) and polyester resins (hand mix).

ESAB Filtair Pro P2CV 'Grey' Pk 5

**0700 002 202**



### ESAB Filtair Pro 8030V

This mask provide P3 protection and is equipped with a valve to reduce heat and moisture build up inside the respirator. Suitable to wear during molten metal handling, welding, machining, grinding, polishing and finishing.

ESAB Filtair Pro P3V 'Orange' Pk 5

**0700 002 203**

# Ear protection



## Hearing Protection

ESAB's hearing protectors are available in three different versions; One that can be attached to a protective helmet, one with neck support, one with head support. All of these provide effective protection at different decibel levels.

Hearing protector with neck support, SNR 26 dB

**0700 001 880**

Hearing protector with head support, SNR 26 dB

**0000 595 199**

# Clothing and gloves

## ESAB leather/Proban welding jacket



## Leather Workwear

ESAB's Leather protective range is helping to redefine welder protection, with garments that provide optimal fit, comfort, performance, style & durability, resulting in safer, more productive working environments. The products include jackets, trousers, sleeves, aprons & gaiters, all ideal for every welding application for the professional welder.



ISO EN 11612  
Flame Retardance



ISO EN 11611  
level 1 and 2

# Clothing and gloves

## ESAB leather/Proban welding jacket



### Welding Jackets

The ESAB Proban/leather jackets are designed for maximum comfort and safety. The sleeves and shoulders are made in durable grade A leather to withstand the exposure to welding spatter. The front and back is made from flame retardant Proban material. The garment feature concealed inner pockets, adjustable sleeves and a stand up collar. Kevlar stitched.

ESAB Proban/Leather welding jacket, M      **0700 010 301**

ESAB Proban/Leather welding jacket, L      **0700 010 302**

ESAB Proban/Leather welding jacket, XL      **0700 010 303**

ESAB Proban/Leather welding jacket, XXL      **0700 010 304**



### Welding Trousers

The ESAB Proban/Leather trousers are designed for maximum comfort and safety. The front of the legs are reinforced with leather to withstand the spatter and welding sparks. Kevlar stitched.

ESAB Proban/Leather welding trousers, M      **0700 010 333**

ESAB Proban/Leather welding trousers, L      **0700 010 334**

ESAB Proban/Leather welding trousers, XL      **0700 010 335**

ESAB Proban/Leather welding trousers, XXL      **0700 010 336**

## Welding apparel



### Proban Hood

Flame resistant head protection which cover not only the head but also the neck, nape and shoulders.

Proban Hood      **0000 593 269**



#### **Welding Sleeve**

Chrome leather sleeves with a total length of 47cm. Equipped with elasticated cuff and velcro arm fastening.

Welding Sleeve

**0000 595 039**



#### **Welding Aprons**

Tan side split leather welders' waist apron with Kevlar stitching and buckle attachment. Size 60cm x 70cm.

ESAB Apron

**0700 010 007**



#### **Leather Gaiters**

Leather gaiters to protect the footwear during welding. The gaiters are fastened using velcro.

Leather Gaiters

**0700 010 008**

# Clothing and gloves

## Flame retardent clothing



### ESAB FR Coverall

The ESAB FR Welders overall has been designed for the maximum comfort and safety. The garment is made from a flame retardant inherent material. The coverall features a elasticated waist for better comfort and fit, adjustable sleeves and legs, and a covered/protected zipper. The neck is protected by a stand up collar, and knee pads can be fitted. Conforms to EN ISO11612 FR, ISO11611 Welding, EN1149-5 Anti Static. Sizes Small to XX-Large.

ESAB FR Welding Coverall, S	<b>0700 010 328</b>
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ESAB FR Welding Coverall, M	<b>0700 010 329</b>
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ESAB FR Welding Coverall, L	<b>0700 010 330</b>
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ESAB FR Welding Coverall, XL	<b>0700 010 331</b>
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ESAB FR Welding Coverall, XXL	<b>0700 010 332</b>
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### FR Welding Jackets

The ESAB Black & yellow Welders Jacket has been designed to give maximum performance, yet offer extreme comfort & durability. The Garment is made from high performance Phoenix-FR fabric which is inherently flame retardant. The coverall features adjustable sleeves, two top pockets and concealed Zip front. This garment is fully CE approved to EN ISO11612 FR, ISO 11611 Welding, EN1149-5 Anti Static & EN61488 Arc protection. Sizes Small to XX-Large.

ESAB FR Welding Jacket, S	<b>0700 010 358</b>
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ESAB FR Welding Jacket, M	<b>0700 010 359</b>
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ESAB FR Welding Jacket, L	<b>0700 010 360</b>
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ESAB FR Welding Jacket, XL	<b>0700 010 361</b>
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ESAB FR Welding Jacket, XXL	<b>0700 010 362</b>
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### FR Welding Trousers

The ESAB Black & yellow Welders trousers has been designed to give maximum performance, yet offer extreme comfort & durability and compliment the FR welding Jacket. The Garment is made from high performance Phoenix-FR fabric which is inherently flame retardant. The trousers features elasticated waist with Belt loops, two side access pockets and two back pockets. This garment is fully CE approved to EN ISO11612 FR, ISO 11611 Welding, EN1149-5 Anti Static & EN61488 Arc protection. Sizes Small to XX-Large.

ESAB FR Welding Trousers, S	<b>0700 010 363</b>
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ESAB FR Welding Trousers, M	<b>0700 010 364</b>
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ESAB FR Welding Trousers, L	<b>0700 010 365</b>
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ESAB FR Welding Trousers, XL	<b>0700 010 366</b>
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ESAB FR Welding Trousers, XXL	<b>0700 010 367</b>
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### ESAB FR Fleece

ESAB Phoenix-FR Black Flame retardant, anti-static, welders Fleece. Featuring, Zip front with contrasting plackett, two side pockets and one internal zip. Conforms to EN ISO11612 FR, ISO11611 Welding, EN1149-5 Anti Static. Sizes Small to XX-Large.

ESAB FR Fleece, S	<b>0700 010 368</b>
ESAB FR Fleece, M	<b>0700 010 369</b>
ESAB FR Fleece, L	<b>0700 010 370</b>
ESAB FR Fleece, XL	<b>0700 010 371</b>
ESAB FR Fleece, XXL	<b>0700 010 372</b>



### ESAB FR Jersey

ESAB Phoenix-FR Black Flame retardant, anti static, welders Jersey polo Shirt. Featuring, Zip front with contrasting plackett, Unique ESAB Contrasting ribbed Collar. Conforms to EN ISO11612 FR, ISO11611 Welding, EN1149-5 Anti Static. Sizes Small to XX-Large.

ESAB FR Jersey, S	<b>0700 010 373</b>
ESAB FR Jersey, M	<b>0700 010 374</b>
ESAB FR Jersey, L	<b>0700 010 375</b>
ESAB FR Jersey, XL	<b>0700 010 376</b>
ESAB FR Jersey, XXL	<b>0700 010 377</b>



### ESAB FR Jumper

ESAB Phoenix-FR Flame retardant, anti static, welders Jumper. Conforms to EN ISO11612 FR, ISO11611 Welding, EN1149-5 Anti Static & EN61488 Arc protection. Sizes Small to XX-Large.

ESAB FR Jumper, S	<b>0700 010 378</b>
ESAB FR Jumper, M	<b>0700 010 379</b>
ESAB FR Jumper, L	<b>0700 010 380</b>
ESAB FR Jumper, XL	<b>0700 010 381</b>
ESAB FR Jumper, XXL	<b>0700 010 382</b>



# Clothing and gloves

## Welding and working gloves

### Glove EN standards and materials

**CE labelling – Risk Class – Categorising Personal Protective Equipment (PPE),  
EU Directive 89/686/EEC.**

The intention of this directive is to ensure that all PPE sold in Europe corresponds to the relevant EN standards. This will secure a generally identical quality standard throughout Europe. Products that meet the requirements in one or more standards must be branded with the CE logo.

#### Category 1, Simple Design:

These products protect against minimal risks and can only be used where any risk increases gradually and can be easily identified by the user in advance. The CE labelling consists of only the CE mark.

#### Category 2, Intermediate Design:

The products are tested and technically approved by an authorised test institute.

The institute also examines the manufacturers technical documentation to establish that the product is produced in accordance with the relevant EN standard. The CE labelling consists of the CE mark, the test institute approval number, year of first time approval, pictograms and test performance.

#### EN 420 (Cat 1) defines the general requirements for most protective gloves as:

- Product and packaging information and labelling
- Care and maintenance
- Size
- The product itself must present no risk to users (requirements concerning chromium content and pH)
- Storage of the products



#### EN 388 – Protection against

mechanical damage	Character
a) Abrasion resistance	0 – 4
b) Blade Cut resistance	0 – 4
c) Tear resistance	0 – 4
d) Puncture resistance	0 – 4



#### EN 12477 – Welding gloves

Thermal resistance	Character
a) Burning behaviour	0 – 4
b) Contact heat	0 – 4
c) Convective heat	0 – 4
d) Small splashes of molten metal	0 – 4

Test Criteria	Standard	Minimum performance required		Maximum performance achievable
		A	B	
Abrasion resistance	EN 388	2	1	4
Blade cut resistance	EN 388	1	1	5
Tear resistance	EN 388	2	1	4
Puncture resistance	EN 388	2	1	4
Burning behaviour	EN 407	3	2	4
Contact heat	EN 407	1	1	4
Convective heat	EN 407	2	n/a	4
Small splashes of molten metal	EN 407	3	2	4
Dexterity	EN 420	1	4	5

## Leather quality

Finding the right quality leather to meet the exacting requirements of the welding professional requires experience. ESAB have extensive knowledge and experience with tanning and finishing – important processes that determine the final quality of the leather. It is these processes that give the leather its qualities in relation to strength, softness and flexibility.

The upper skin is called “grain” and the inner skin is called “split” Grain leather is soft, durable, wear resistant and tolerates some water. It can also withstand heat up to 80°C. Split leather is porous and will therefore absorb humidity more easily than grain leather. Its naturally rough surface gives good grip properties. The thickness depends on how the skin is cut and whether it is cut in one or two layers. Without special treatment, split leather can resist heat up to 100°C.

## Ox Leather

A wear resistant grain leather which tolerates water. The leather is often thick, which in addition to its wear resistant properties makes it suitable for use in working gloves that must tolerate rough use. It also gives good protection against heat.

## Pig Leather

The surface of the leather is relatively porous which makes the breathability of the glove better than most other leathers. Pig leather is also softer.

## Goat Leather

Goat leather is the longest lasting leather. Natural lanolin content makes goat leather extremely flexible. It also has very good wear resistance. Strength and flexibility make this leather very suitable for work where good finger feel and dexterity is required.

# Clothing and gloves

## Welding and working gloves

### Welding Gloves MIG/MAG/MMA

All ESAB and Murex gloves are CE approved. The heavy duty welding gauntlets and riggers have been tested and certified by a third party notifying body. The glove is then a Cat. 2 product.



Test against mechanical stress such as abrasion, cut, tear and puncture.



Test for thermal performance such as exposure to an open flame, contact heat, convective heat, radiant heat, small and large splashes of molten metal.



#### ESAB Curved MIG Glove



These superior new welding gloves from ESAB offer a whole new approach to fit, form and function. Ergonomically designed to fit the natural curve of the hand, offering increased quality & comfort to the wearer. The MIG glove is made from heavy & fine cut leather, and is lined from hand to cuff. With the curved design the glove fits the hand perfectly, and also has a flexible wrist area which reduces friction. With welted seams, kevlar stitching & reinforced thumb, the glove is very strong and offers a very high level of protection to the wearer. EN 12477 and EN 388 Cat 2.

ESAB Curved MIG, L

**0700 005 043**

ESAB Curved MIG, XL

**0700 005 040**



#### ESAB Curved TIG Glove



These superior new welding gloves from ESAB offer a whole new approach to fit, form and function. Ergonomically designed to fit the natural curve of the hand, offering increased quality & comfort to the wearer. The Tig glove is made from thin high quality leather, with improved fit for higher dexterity. The glove is highly durable, with welted seams & kevlar stitching. The glove is also extremely light weight, which increases the comfort to the wearer.

ESAB Curved TIG Gauntlet L

**0700 005 041**

ESAB Curved TIG Gauntlet L

**0700 005 042**



#### Heavy Duty Basic



A high quality 1.2/1.3mm thick side split cow leather welding gauntlet with Wing thumb, fully Kevlar stitching, fully welted. The glove is fully lined with FR cotton to cuff and full fleece jersey liner to palm. This glove offers the welder durability, longevity and total comfort. CE approved to EN12477 and EN388 Cat 2.

Heavy Duty Basic

**0700 005 007**



### Heavy Duty Regular



A Heavy duty durable yet flexible welding gauntlet. Made from 1.3mm side split cow leather which is fully heat resistant and hard wearing. Features reinforced thumb, fully Kevlar stitched and welted with additional vein patch for added protection. The glove is fully lined with FR cotton to the cuff and fleece jersey liner to the palm. CE approved to EN12477 and EN388 Cat 2.

Heavy Duty Regular

**0700 005 008**



### Heavy Duty Black



Our most popular product, made from high performance cow split leather, high dexterity palm and fingers with wing thumb, fully welted fingers and Kevlar stitched. Ideal for areas of high mechanical stress. CE approved to EN12477 and EN388 Cat 2.

Heavy Duty Black

**0467 222 007**



### Heavy Duty Aluminium 250°C

A high temperature addition to the range. Featuring unique aluminised woven Kevlar back capable of withstanding a radiant heat of up to 1000°C with a heavy duty 1.3mm ceramic fibre supported leather palm capable of Contact palm heat up to 250°C. The glove features wing thumb, fully welted seams, Kevlar stitched with a heavy duty FR drill cotton liner which features a Thermolite treatment to the palm. The aluminium reflects all thermal radiation away from the user. CE approved to EN12477 & EN388 Cat 2.

Heavy Duty Aluminium 250°C

**0700 005 010**



### ESAB Heavy Duty Worker



A durable, hardwearing rigger style work glove made from high quality cow side split leather, featuring wing thumb, fully welted seams, vein patch, 6cm rubberised cotton cuff with finger tip protection and knuckle strap. Fully jersey lined for added comfort. CE approved to EN388 Cat 2.

Heavy Duty Worker



**0700 005 011**

# Clothing and gloves



## Safety Footwear

All ESAB welding footwear is tested and approved according to EN 345 (safety footwear). Depending on application, footwear should always provide appropriate protection, EN 345 gives the following guidelines:

Safety shoes and boots – Key to symbols:

<b>SB</b>	Safety Basic to EN345 200 joules toe protection	<b>S3</b>	Safety Basic, antistatic, energy absorbing heel, water resistant upper & steel midsole (anti penetration)
<b>S1</b>	Safety Basic, antistatic, energy absorbing heel and closed back part		Antistatic
<b>S2</b>	Safety Basic, antistatic, energy absorbing heel and water an oil resistant upper	<b>DD</b>	Dual Density
			Steel Midsole



<b>ESAB Safety Ankle Boot</b>	<b>S3</b>  <b>DD</b> 
Offers protection according to S3, and it prevents weld spatter from falling into the shoe. The special microfibre soft lining makes it very comfortable to wear. The boot is water and oil resistant and the seam is reinforced with rivets for maximum durability. The front is folded and fastened with velcro to give a flat and protected upper. The dual density sole offers a soft upper part with front and back 'bumpers' and arch support, whilst the part in direct contact with the ground offers extremely high slip resistance. The shoe is equipped with shock absorption and the TF system to prevent ankle spraining risks, also the sole is heat resistant up to 180°C. They have an elasticated tongue for wide fitting feet and high slip resistant soles.	
ESAB ankle boot, size 61/2 (40)	<b>0700 010 188</b>
ESAB ankle boot, size 7 (41)	<b>0700 010 189</b>
ESAB ankle boot, size 8 (42)	<b>0700 010 190</b>
ESAB ankle boot, size 9 (43)	<b>0700 010 191</b>
ESAB ankle boot, size 10 (44)	<b>0700 010 192</b>
ESAB ankle boot, size 101/2 (45)	<b>0700 010 193</b>
ESAB ankle boot, size 11 (46)	<b>0700 010 219</b>

# Accessories

## Welding blankets

The ESAB Welding blankets are produced using heat and flame resistant fabrics. The blankets provide excellent protection from grinding/welding sparks, slag and drops of molten metal. ESAB offer a wide range of blankets with different characteristics and in many different sizes. The blankets are colour coded.

When selecting the most suitable blanket for the application, the following factors should be considered:

**Positioning of the blanket** – All blanket are to be used on an incline of at least 15 degrees. Sparks hitting a blanket, which is positioned horizontally, will put extra stress on the material and a stronger and more heat resistant blanket should be used.

**Work application** – For light duty welding or grinding a thinner and less heat resistant blanket can be used. For heavy duty welding or cutting when the blanket is exposed to drops of molten metal then a more durable blanket should be used.



# Accessories

## Welding blankets



Light Duty Applications		
P.U. coated fibreglass blanket for light sparks and spatter. Provides an excellent vertical screen to protect equipment and personnel from the spray of sparks. Maximum temp. = 550°C, Weight = 460g, Colour = Grey.		
Welding Blanket 3001	2m x 1m	<b>0700 008 026</b>
Welding Blanket 3001	2m x 2m	<b>0700 008 027</b>
Welding Blanket 3001	1m x 25m roll	<b>0700 008 028</b>



Medium Duty Applications		
Heat treated fibreglass blanket for medium sparks and spatter. Best when used on an incline of at least 15 degrees. Very flexible. Maximum temp. = 550°C, Weight = 600g, Colour = Tan.		
Welding Blanket 1850	2m x 1m	<b>0700 008 023</b>
Welding Blanket 1850	2m x 2m	<b>0700 008 024</b>
Welding Blanket 1850	1m x 25m roll	<b>0700 008 025</b>



Medium Duty Applications		
Vermiculite coated silica welding blanket for medium duty applications. The silica fibre has a high melting temperature of 1600°C making it an excellent choice when drops of molten metal are a problem. The MD1300 blanket resists most acids. Max temp. = 1600°C, Weight = 600g, Colour = Bronze.		
Welding Blanket 2-1900	2m x 0.9m	<b>0700 008 032</b>
Welding Blanket 2-1900	2m x 1.8m	<b>0700 008 033</b>
Welding Blanket 2-1900	0.9m x 25m roll	<b>0700 008 034</b>



Heavy Duty Applications		
Fibreglass blanket with a specially formulated graphite and polyurethane solution which provides high temperature and abrasion resistance. Suitable for medium to heavy duty industrial applications. Not suitable in very oily situations. Maximum temp. = 750°C, Weight = 1020g, Colour = Black.		
Welding Blanket 906	2m x 1m	<b>0700 008 029</b>
Welding Blanket 906	2m x 2m	<b>0700 008 030</b>
Welding Blanket 906	1m x 25m roll	<b>0700 008 031</b>



# Accessories

## Welding cable



### Welding Cable <HAR> H01N2-D

ESAB welding cable is of the highest quality and has top-class performance characteristics. This cable is approved in accordance with international standards and it is harmonised <HAR>. The cable is extremely resistant to light, chemicals and mechanical damage and it maintains its flexibility even when used in a cool environment. (Certified to HD 22.6)

Nominal cross sectional area of conductor	Maximum diameter of wires in conductor	Nominal thickness of insulation	Approx. overall diameter	Approx. weight	Maximum conductor resistance at 20°C	Load Carrying Capacity - 10 Minutes		
mm <sup>2</sup>	mm	mm	mm	kg/km	Plain Ω/km	60%	35%	20%
H01N2-D								
16	0.21	2.0	8,9	197	1.21	133	144	167
25	0.21	2.0	10.1	281	0.780	182	203	244
35	0.21	2.0	11.4	379	0.554	233	268	324
50	0.21	2.2	13.2	530	0.386	303	356	439
70	0.21	2.4	15.3	735	0.272	307	400	578
95	0.21	2.6	17.5	955	0.206	478	582	734
120	0.21	2.8	19.7	1213	0.161	564	692	880

Nominal cross sectional area of conductor	Nominal cross sectional area Cooper conductor mm <sup>2</sup>	D.C Voltage Drop Per 100 A per 10m of Cable at:		
mm <sup>2</sup>		20°C	60°C	85°C
H01N2-D		V		
16	16	1.24	1.430	1.560
25	25	0.795	0.920	0.998
35	35	0.565	0.654	0.709
50	50	0.393	0.455	0.493
70	70	0.277	0.321	0.348
95	95	0.2100	0.243	0.264
120	120	0.164	0.190	0.206

### Application

**Designed for welding equipment and accessories;** retain their high flexibility even under influence of ozone, light, oxygen, protective glass, oil & petrol; resistant to flame propagation, suitable for use in dry and damp conditions, outdoors and indoors.

# Accessories

## Welding cable

Ordering Information		Technical data	
Sectional area 16mm <sup>2</sup> sold per 50m coils	0190 429 801	Conductor	Plain annealed copper stranded wires
Sectional area 25mm <sup>2</sup> sold per 50m coils	0262 613 601	Insulation	Flame retardent oil resistant
Sectional area 35mm <sup>2</sup> sold per 50m coils	0262 613 602	Colour of sheath	Black
Sectional area 50mm <sup>2</sup> sold per 50m coils	0262 613 606	Test Voltage 50Hz	1000V
Sectional area 70mm <sup>2</sup> sold per 50m coils	0262 613 603	Maximum conductor operating temp	+85°C
Sectional area 95mm <sup>2</sup> sold per 50m coils	0262 613 604	Lowest ambient temperature for fixed installation	-40°C
Sectional area 120mm <sup>2</sup> sold per 25m coils	0262 613 605	Lowest installation temperature	-25°C
		Maximum short-circuit conductor temperature	+250°C
		Pulling strength	The maximum static pulling strength may not exceed 15N/mm <sup>2</sup>
		Minimum bending radius	6 x D ; D – overall diameter of cable
		Flame propagation	EN 60332-1-2:2004, IEC 60332-1-2:2004
Tested and certified according to: HD 22.6			



Magnetic Earth Clamps	
Magnetic earth clamp 400 A (35%)	0000 500 415
Magnetic earth clamp 600 A (35%)	0000 500 416

# Drying and dry storage equipment



## DS5 Dry-Storage Container

The DS5 is a very light and portable dry-storage container for welding electrodes. The container has a multi-position handle offering numerous carrying positions, for increased comfort. The oven utilises a 150°C preset thermostat, and houses a fibreglass sleeved rope heating element, which extends along the entire oven chamber. This provides uniform heating to all rods with in the oven chamber.

Capacity	5kg
Storage temp. (°C)	150
Voltage (V) AC	120/240
Insulation	3.8cm
Outer dimension (Ø/height, mm)	150/520
Inner dimension (Ø/height, mm)	73/503
Weight (kg)	4.8

DS5 Dry-Storage Container 240V **0700 011 086**

DS5 Dry-Storage Container 110V **0700 011 088**



## PK 5 Drying Equipment

The PK 5 is a combined drying and dry-storage system for most types of electrodes. The drying time at full effect is 1-7 hours depending on the type of electrode. The temperature is thermostatically controlled and ranges from 50-300°C. The electrodes should be stored in the PK 5 without packaging. The heating element runs from the top to the bottom and the top is fully insulated.

Capacity	24kg
Storage temp. (°C)	70-300
Drying temp. (°C)	N/A
Voltage (V)	110/230
Output (kW)	0,5
Outer dimension (Ø/height, mm)	345/660
Inner dimension (Ø/height, mm)	116/460
Weight (kg)	13

PK 5 drying equipment, 110 V **0700 011 070**

PK 5 drying equipment, 230 V **0000 515 075**

# Accessories

## Drying and dry storage equipment



### DS5 Dry-Storage Container

The JS 200 is a storage silo for welding powder (flux). The JS 200 keeps the flux dry and clean and also makes it extremely easy to handle the flux. The temperature can be adjusted between 100 and 300°C.

Capacity	200 Lt
Storage temp. (°C)	100-300
Drying temp. (°C)	N/A
Voltage (V)	230
Output (kW)	2
Outer dimension (WxDxH, mm)	510 x 570 x 1755
Weight (kg)	110

JS 200 storage silo

**0000 515 090**



### JK 50 Powder Drier

The JK 50 is a container for drying and storing welding powder (flux). The JK 50 dries 50 litre flux at a maximum temperature of 500°C in around three hours. After drying, the temperature falls automatically to the pre-set dry storage temperature (150°C) within 12 hours.

Capacity	50 Lt
Storage temp. (°C)	50-250
Drying temp. (°C)	50-500
Voltage (V)	400-3
Output (kW)	3,7
Outer dimension (Ø/height, mm)	860/1600
Weight (kg)	190

JK 50, 400 V, 3-phase

**0000 515 091**

# Chemical sundries

## Nozzle protection



### ESAB Spatter Shield

The ESAB Spatter shield prolongs the lifetime of the welding shroud and contact tip. Apply the fluid by dipping the torch and let the fluid dry. The fluid creates a heat resistant layer that prevents spatter from sticking. The spatter shield should be applied 2-3 times per 8-hour shift to give protection. Unlike tip dip products, when using the ESAB spatter shield you will NOT experience any problems with porosity created by drops of anti spatter falling down into the weld.

ESAB Spatter shield, 250 ml

**0700 013 017**



### Clean Weld Welding Paste

Prevents spatter from sticking as it forms a heat-resistant coat. The hot gas nozzle on the welding torch should be dipped about 20-25mm into the paste for effective results. Odourless and contains no solvents, silicone or abrasive agents and is delivered in a 0.5kg metal can.

Clean Weld welding paste, net weight 0.5kg

**0365 560 001**



### ESAB Jig and Tool Protection

The ESAB Jig and Tool protection prolongs the lifetime of the welding shroud and contact tip as well as giving an extremely good protection to tools and jigs. The spray dries quickly and leaves a heat resistant layer (1300°C) and it does not burn off. Hardly any spatter sticks to the surface and if it does, a gentle wipe with the glove will remove it.

ESAB Jig and Tool protection, 400 ml

**0700 013 016**

## Crack detection set



### Non Destructive Testing Aerosols

The Esab NDT testing should be used to identify cracks in a weld. The process consists of 6 steps and to perform the test a cleaner, a penetrant and a developer is required. The procedure should be as follows:

1. Use ESAB cleaner and wipe dry.
2. Spray ESAB Penetrant, leave for 15 min.
3. Wipe away the penetrant from the surface.
4. Use the cleaner in a dry cloth, wiping in one direction only. Wipe dry.
5. Shake and then spray on the developer, leave for 10 min then see results.
6. Remove the developer and dye using the cleaner.

ESAB NDT Penetrant 300 ml Aerosol

**0700 013 018**

ESAB NDT Developer 400 ml Aerosol

**0700 013 019**

ESAB NDT Cleaner 300 ml Aerosol

**0700 013 020**

# Chemical sundries

## Weld markers



### Weld Marker

The ESAB weld marker marks all metal, wood, plastic, glass and hard surfaces. Low chloride colour makes it safe for marking stainless steel. Do not roll tube. Dries in five minutes.

Weld marker, whitel	0700 013 003
Metal marker, yellow	0701 415 418



### Weld Marker Kit

The weld marker kit consists of three differently coloured pens, red, green and black. The pens can be used on most types of material.

Weld marker kit	0700 013 004
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# Mobile Fume extraction



### CarryVac 2

The CarryVac 2 P150/P150 AST are two small, lightweight, portable extraction units designed to be carried to the working area. Connected to a welding torch or to an extraction nozzle, the CarryVac 2 units extract the fume directly at source. The polluted air is filtered and captured in a hygienically-packed filter. The CarryVac 2 is equipped with a filter indicator, which shows when the filter must be replaced. It is ideal for maintenance welding, low and medium-duty cycle. The filter capacity is approximately 200kg of solid wire or twelve 15kg spools. The CarryVac 2 P150 AST is equipped with an automatic start/stop function, which increases the service life of each filter and of the unit itself. Please also see ESAB Centrovac extraction torch range.



CarryVac 2 P150 220-240V	0700 003 883
CarryVac 2 P150 AST 220-240V	0700 003 884
CarryVac 2 P150 110-120V	0700 003 885
CarryVac 2 P150 AST 110-120V	0700 003 886

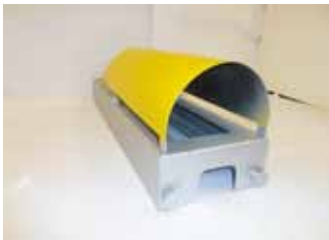
# Rail heaters

- All rail heaters are delivered with hose and regulator (ready to use).
- Max. pressure is 2 bars after the regulator.
- Short versions are manageable by 1 person.
- Long versions require 2 persons because of size.
- Works only with propane gas.
- Zinc-coated mild steel body.
- The only spare part is the injector nozzle.



## Complete rail heater

- Complete rail heater has 4 burners (two on both sides).
- Preheats the complete rail cross section in one go, so it assist actively to reduce longitudinal distortions.
- Also applicable for rail bending.
- 400 and 600 mm length burners.
- Available with adjustable (BA) or with fixed (BF) burners.
- No piezo-electric ignition.
- Preheats the rail to 400°C in less than 10 minutes.
- Weight: 20 kg.



## Standard rail head heater

- Standard rail head heater has 2 burners (one on each side of the head).
- Designed specifically for rail head and crossing tip preheating (adjustable with a pin).
- 400 mm long version for MMA repair (top image).
- 850 mm long version for Railtrac BV (bottom image).
- The only spare part is the injector nozzle (different for short and long versions).
- No piezo-electric ignition.
- Preheats the rail to 400°C in less than 10 minutes.
- Weight: 14 kg.



## Crossing nose heater

- Crossing nose heater is specially designed for preheating C-Mn crossing nose/tips.
- Its angle can be varied in wide range of angles (like a scissor).
- Preheats the crossing nose to 400°C in less than 10 minutes.
- Weight: 8 kg.



# Rail heaters



## Switch blade rail heater

- Switch blade rail heater is designed to preheat switch blades, prior to welding, and maintain the preheating temperature during the entire welding process and in the complete cross section.
- 400 mm for manual (MMA) repair.
- 1000 mm for Railtrac BV.
- Reversible for two sides application (burner and baffle).
- Preheats the switch blade to 400°C in less than 10 minutes.
- Top and bottom burners can be independently operated.
- 'Top –off' & 'Bottom – gas reduced' during welding to maintaining the proper temperature balance in the switch blade.
- Piezo-electric ignition.
- Weight: 10 kg.



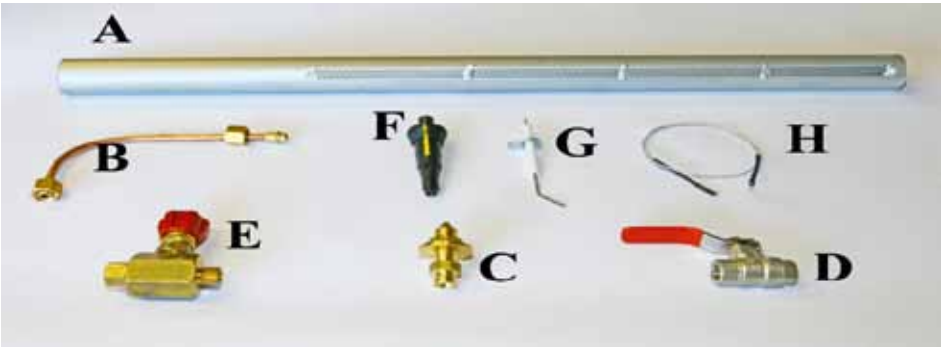
## Wing rail heater

- Wing rail heater is designed for efficient preheating of C-Mn wing rails.
- The top burner is directed to the top of the wing rail head while the two bottom burners heat the bottom of the head and the web/foot.
- Preheats the wing rail to 400°C in less than 10 minutes.
- Weight: 10 kg.

Complete RH400BF	<b>0700 003 230</b>
Complete RH600BA	<b>0700 003 231</b>
Complete RH600BF	<b>0700 003 232</b>
Standard RH400	<b>0700 003 233</b>
Standard RH850	<b>0700 003 234</b>
Crossing NH400	<b>0700 003 237</b>
Switchblade RH400	<b>0700 003 235</b>
Switchblade RH1000	<b>0700 003 236</b>
Wing RH400	<b>0700 016 730</b>
Wing RH600	<b>0700 016 731</b>

# Rail heaters

## Spare parts



A	Burner Tube 400mm	0700 003 238	C	Injector	0700 003 240
	Burner Tube 600mm	0700 003 242	E	Ball Valve	0700 003 241
	Burner Tube 1000mm	0700 016 745	D	Gas Shut off Tap	0700 016 746
B	Gas Pipework STD RANGE	0700 003 239	F	Peizo Ignition trigger	0700 016 747
	Gas Pipework Complete Range	0700 003 243	G	Peizo Electrode	0700 016 748
	Gas pipework Switchblade Range	0700 003 244	H	Peizo Ignition Cable	0700 016 749
	Gas pipework Crossing Range	0700 003 245			
	Gas pipework Wing range	0700 003 246			

# Humidity control case



- Protects the self-shielded wire against moisture pick-up and subsequent welding defects such as cracks and porosity.
- Space for one 16 kg spool (B300 basket) or two 5 kg spools (S200 baskets).
- Humidity absorbent sachet changes colour when it is filled up with humidity and can be recharged in a microwave oven.
- For spool storage after welding.
- Robust but light-weight aluminium body.
- Lid sealed by rubber ring.
- 3 sturdy fasteners ensure secure closure.
- Item nr. 0700016732.

# World leader in welding and cutting technology and systems

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ESAB operates at the forefront of welding and cutting technology. Over one hundred years of continuous improvement in products and processes enables us to meet the challenges of technological advance in every sector in which ESAB operates.

## Quality and environment standards

Quality, the environment and safety are three key areas of focus. ESAB is one of few international companies to have obtained the ISO 14001 and OHSAS 18001 standards in

Environmental, Health & Safety Management Systems across all our global manufacturing facilities.

At ESAB, quality is an ongoing process that is at the heart of all our production processes and facilities worldwide. Multinational manufacturing, local representation and an international network of independent distributors brings the benefits of ESAB quality and unrivalled expertise in materials and processes within reach of all our customers, wherever they are located.

*ESAB Sales and Support offices worldwide*



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ESAB reserves the right to alter specifications without prior notice

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