

Personal health and safety measures and workplace security

Dedicated solutions for protection in processing applications with laser technology operating in open systems (class 4).

Solutions to provide eye and facial skin protection:

PRODUCT

DESCRIPTION

GLADIATOR EYEWEAR



Protective goggles with mineral glass filter in light grey are designed for protection against laser radiation in the wavelength range 915-11000 nm. They are characterised by a light transmission of 70%.

Main scope of protection according to EN 207:

- > 915 - 955 DIR LB5 (OD 5+)
- > 955 - 1000 DIR LB6 (OD 6+)
- > 1000 - 1025 DIR LB7 + M LB7Y (FROM 7+)
- > 1025 - 1400 D LB7 + IR LB8 + M LB8Y (FROM 8+)

STARLIGHT EYEWEAR



Protective goggles with mineral glass filter in light grey are designed for protection against laser radiation in the wavelength range 1025-1100 nm. The lightweight, elegant polycarbonate frames provide a wide field of vision. They feature a light transmission of 73%.

Main scope of protection according to EN 207:

- 1025-1100 D LB8 + IR LB9 + M LB9Y (FROM 9+)

Integrated helmet



The integrated system combines protection for any welding method (MIG/MAG, TIG, MMA) with protection against reflected radiation from manual laser welding, which can lead to skin cancer. The automatic self-darkening visor makes it possible to dispense with wearing safety glasses under the visor while ensuring safety for the eyes and leather and keeping the structure lightweight..

Main scope of eye protection according to EN 207:

- >880-900 D LB6 + IR LB7 + M LB5Y (FROM 7+)
- >900-1070 D LB7 + I LB8 + R LB7 + M AB8Y (FROM 8+)
- >1070-1075 DIR LB6 + M LB6Y (FROM 6+)

Protective clothing against diffuse laser radiation:

PRODUCT

DESCRIPTION

Protective apron



It is made of breathable material that protects against scattered laser radiation in the wavelength range 180-11000 nm.

Provides full upper torso protection and is equipped with numerous accessories comfort features, such as width adjustment and easy to use opening and closing with Velcro or zip.

Available in black with yellow stitching and reflective stripes, allows for customised branding on request.

The advantage is that the material is highly durable and can be washed repeatedly at 40 degrees C.

Protective jacket



It is made of breathable material to protect against scatter laser radiation with a wavelength range of 180-11000 nm.

It is equipped with numerous comfort features, such as easy opening and closing with Velcro or zip fasteners, and side pockets including for glasses and gloves.

Available in black with yellow stitching and reflective stripes, allows for customised branding on request.

The advantage is the high durability of the material and the fact that it can be washed repeatedly at 40 degrees C.

3K protective gloves



Protective gloves against mechanical hazards according to EN 388:2016+A1 and for welders according to EN 12477:2001+A1:2005 .

Made from a special skin-friendly fabric. Designed for use with diffuse laser radiation. Not suitable for protection against direct exposure to laser beams. With a thickness of approximately 0.9 mm on the inside of the hand of gloves provide improved tactile perception. Weight per unit area: approx. 350 g/m². Weight of the back of the glove: approx. 1050g/m² and a thickness of approx. 3.0mm..

Protective gloves 1K



Protective gloves against mechanical hazards according to EN 388:2016+A1 and for welders according to EN 12477:2001+A1:2005.

Made of a special skin-friendly fabric. Designed for use with diffuse laser radiation. Not suitable for protection against direct exposure to a laser beam. Basic weight: approx. 1050g/m² and a thickness of approx. 3.0mm.

Screens providing protection from reflected laser radiation:

PRODUCT

DESCRIPTION

3-panel screen



Portable safety barrier consisting of 3 panels together with a bag. It is distinguished by its high strength and smooth dirt-resistant surface.

Provides protection against reflected laser radiation in the wavelength range 180-11000 nm.

Dimensions: 3000 x 2000 mm (whole), 1000 x 2000 mm (single panel)

Main scope of protection according to EN 12254:

180-315 D AB8 + IR AB3 + M AB5Y

>315-1050 D AB5 + I AB7 + R AB6 + M AB8

>1050-1400 D AB4 + I AB7 + R AB6 + M AB8

>1400-11000 DIR AB2 + M AB3Y

Budget protective screen



A mobile curtain for protection against reflected laser radiation mounted on castors that allow quick and convenient repositioning. The rotating arms of the structure allow the space to be precisely protected as required. Curtain height: 1800 mm (2100 mm including frame)

Provides protection against reflected laser radiation in the wavelength range 180-11000 nm.

Main scope of protection according to EN 12254:

180-315 D AB8 + IR AB3 + M AB5Y

>315-1050 D AB5 + I AB7 + R AB6 + M AB8

>1050-1400 D AB4 + I AB7 + R AB6 + M AB8

>1400-11000 DIR AB2 + M AB3Y

Hightech protective screen



A mobile curtain for protection against reflected laser radiation mounted on castors that allow quick and convenient repositioning. The rotating arms of the structure allow the space to be precisely protected as required. Curtain height: 1800 mm (2100 mm including frame)

Provides protection against reflected laser radiation in the wavelength range 180-11000 nm.

Main scope of protection according to EN 12254:

180-315 D AB9 + IR AB4 + M AB5Y

>315-532 D AB7 + IR AB6 + M AB8Y

>532-1050 DIR AB7 + M AB8Y

>1050-1400 D AB6 + IR AB7 + M AB7Y

>1400-11000 D AB3 + IR AB4 + M AB3Y

We make custom designs in Budget and Hightech material to order.

Filtration systems for fumes, vapours and particles from laser processes

By absorbing the fumes and vapours that scatter laser radiation filtration systems reduce quality losses incurred during the laser process and protect the welder operator's workplace from health hazards.

PRODUCT

DESCRIPTION

LAS 260.1



The LAS 260.1 mobile cassette system provides a flexible tool for the filtration of smoke and dust generated in laser processing operations. Thanks to its high degree of purification, the filtered clean air can be routed back into the workspace and, as a result, there is no thermal loss.

Main parameters:

- Flow rate max: 360 m³/h
- Pressure value: 9,500 Pa
- Flow rate: 200/5000 m³/h/Pa; 100/7600 m³/h/Pa
- Rated power: 0.9 kW
- Degree of protection: IP 52
- Noise level (at 50-100%): 47 - 60 dB(A)
- Infinitely adjustable flow rate: yes
- Information on filter fullness: yes

LAS 1200



The LAS 1200 mobile cassette system features high suction power. The unit is suitable for the filtration of dry, non-combustible contaminants in non-explosive air mixtures generated during laser material processing. With a set of five powerful filters, it achieves a filtration efficiency of well over 99%.

Main parameters:

- Flow rate max: 1500 m³/h
- Pressure value: 3250 Pa
- Flow rate: 800/2100 m³/h/Pa
- Rated power: 0.86 kW
- IP degree of protection: 54
- Noise level (50-100%): 60 dB(A)
- Infinitely adjustable flow rate: yes
- Information on filter fullness: yes

Absorbing nozzles at source Extraction arms with flexible attachment in the laser processing area.



Local extraction - for a cleaner working environment. Installing individual fume extraction systems at the source of contamination during the working process prevents contaminated air from spreading into the environment. A local extraction system is therefore the best solution for a clean working environment.

We offer spark separators, which are recommended during laser processing of certain materials, because during this process sparks can be generated, the high energy of which can lead to oxidation or spontaneous ignition of the filtration system.