Vizor 4000 Crystal Vizor 4000 Air/3X Crystal

Our Solution

Crystal clear view before, during and after welding

Optimal view through the welding helmet is essential to make everyday welding as efficient and comfortable as possible. State of the art welding helmets provide reliable darkening, but are often limited in their color perception and brightness level.

By means of the latest developments in glare protection, it is not only possible to provide the welder with an improved color perception and a high-contrast view of the weld pool, but also to provide an almost unobstructed view in the open state.

Customer benefits:

– More efficiency

– More comfort

– More safety

Optimized Glare Protection
„Crystal Lens Technology"

Vizor Crystal

Vizor 4000 Crystal

Vizor 4000 Crystal

Crystal Lens Technology

Crystal clear view before, during and after welding

Sensor slider

Adjustment of the detection angle of ambient light from 80° to 60°

Autopilot

Fully automatic detection and adjustment of the protection level in the range 4 to 12

Exterior control unit

Setting of protection levels and grind mode directly on the outside of the welding helmet

Shade level 2.0

31% light transmission resulting in brighter vision in open state and in grinding mode

Crystal Lens Technology

Extended color spectrum

Advances in the **A**uto-**D**arkening-**F**ilter-technology (ADF)
→ improved color perception

More contrast & clarity

Detailed and high-contrast view of the weld pool

Brighter view

Protection level 2.0 in the open state
→ Brightest visibility for pre- and post-work

2.0
protection level in open state

Protection level 2.0 in the open state provides the welder an almost unobstructed and crystal-clear view of his working environment.

Control Unit

Continuous shade level adjustment
(Level of protection 4 - 12)

Protection level switch
Manual mode (4 - 8 and 8 - 12)

Program selector switch
(Manual and auto mode)

Sensitivity regulator
(To adjust to the ambient light)

Grinding mode button
(To activate / deactivate grinding mode)

Technical Data

Vizor 4000 Crystal

Level of protection	Autopilot: 2.0 (light condition) 4 < 12 (dark condition) Autopilot inactive: 2.0 (light condition) 4 – 12 (dark condition)
Eye protection	Ultraviolet/infrared protection: Maximum protection over the entire protection level range
Switch time from light to dark	0.100 ms (23°C / 73°F) 0.070 ms (55°C / 131°F)
Switching time from dark to light	0.1 – 2.0 s (Twilight function)
Classification according to EN 379	Optical class: 1 Scattered light: 1 Homogenity: 1 Angular dependence: 2
Weight	0.5 kg / 1.1 lb
Standards	CE, ANSI Z87.1, complies with CSA Z94.3

Fields of Application

- MMA electrode welding

- MIG/MAG/TIG

- GMAW high performance welding

- Flux-cored wire welding

- Plasma (cutting/welding)

- Microplasma arc welding

- Gas welding

- Grinding work in grinding mode

- **Not suitable for laser welding**

Product Overview

Vizor 4000 Crystal

42,0510,0479

Vizor 4000 Air/3X Crystal

42,0510,0480

Vizor 4000 Air/3X Fresh-Air Helmet Crystal

42,0510,0538

Vizor 4000 Air/3X Ergo Crystal

42,0510,0536

Product Portfolio

Item number	Description	Info
42,0510,0479	Vizor 4000 Crystal	Helmet
42,0510,0547	Cartridge Vizor 4000 Crystal	Spare part
42,0510,0538	Vizor 4000 Air/3X Fresh-Air Helmet Crystal	Air/3X helmet
42,0510,0480	Vizor 4000 Air/3X Crystal	Air/3X system + Air/3X helmet
42,0510,0536	Vizor 4000 Air/3X Ergo Crystal	Air/3X system + Air/3X helmet incl. shoulder strap
42,0510,0023	Front cover lens Vizor (2 pcs per set)	Spare part
42,0510,0024	Front cover lens Vizor (5 pcs per set)	Spare part
42,0510,0092	Inside cover lens Vizor Professional / Plus / Fazor (5 pcs per set)	Spare part
42,0510,0117	Inside cover lens Vizor/Fazor 1.00 Diopter	Accessories
42,0510,0118	Inside cover lens Vizor/Fazor 1.50 Diopter	Accessories
42,0510,0115	Inside cover lens Vizor/Fazor 2.00 Diopter	Accessories
42,0510,0116	Inside cover lens Vizor/Fazor 2.50 Diopter	Accessories
42,0510,0100	Inside cover lens Vizor Professional / Plus / Fazor; shade level 1.0 (5 pcs per set)	Accessories
42,0510,0101	Inside cover lens Vizor Professional / Plus / Fazor; shade level 1.5 (5 pcs per set)	Accessories
42,0510,0102	Inside cover lens Vizor Professional / Plus / Fazor; shade level 2.0 (5 pcs per set)	Accessories
42,0510,0026	Head band Vizor / Fazor complete	Spare part
42,0510,0018	Front head band Vizor / Fazor (2 pcs per set)	Spare part
42,0510,0200	Headband back (2 pcs per set)	Spare part
42,0510,0050	Vizor Air face seal (Professional/Plus)	Spare part
43,0007,0028	Button cell battery CR2032	Spare part

Vizor
Product portfolio

Overview | Helmets

	Vizor Crystal	Vizor Connect	Vizor 4000 Crystal	Vizor 4000 Professional	Vizor 4000 Plus
Bluetooth technology		x			
Weight	0.61 kg	0.55 kg	0.5 kg	0.5 kg	0.48 kg
Level of protection	2.0/7-12 (man.) 2.0/4-12 (auto)	2.5/7-12 (man.) 2.5/5-12 (auto)	2.0/4-12 (man.) 2.0/4-12 (auto)	4/5-13 (man.) 4/5-13 (auto)	2.5/8-12
Cartridge size [LxBxH]	58x125mm	58x125mm	90x110x7mm	90x110x7mm	90x110x7mm
Classification	1/1/1/2 EN379	1/1/1/2 EN379	1/1/1/2 EN379	1/1/1/1 EN379	1/1/1/2 EN379

Vizor Product Portfolio

	Vizor Crystal	Vizor Connect	Vizor 4000 Crystal	Vizor 4000 Professional	Vizor 4000 Plus
Classification (EN379)	1/1/1/2	1/1/1/2	1/1/1/2	1/1/1/1	1/1/1/2
Level of protection (light condition)	2.0	2.5	2.0	4	2.5
Level of protection (dark condition)	4-12 (auto) or 7-12 (man.)	5-12 (auto) or 7-12 (man.)	4-12 (auto / man.)	5-13 (auto / man.)	8-12
Field of View	Panorama 58x125mm	Panorama 58x125mm	50x100mm	50x100mm	50x100mm
Weight	610 g	550 g	495 g	500 g	482 g
Bluetooth® Low Energy Technology		x			
Sensor mode	x	x	x	x	x
Solar cells	x	x	x	x	x
Exchangeable batteries			x	x	x
Rechargeable battery	x	x			
Auto Pilot (automatic protection level control)	x	x	x	x	
True color LCD	x	x	x	x	x
Sensor slide/bracket			x	x	x
Delay-function (delay the ADF from opening)	x	x	x	x	x
Adjustable sensitivity	x	x	x	x	x
Grind mode	x	x	x	x	x

Protection Level Range

	Level of protection												
	2	2.5	3	4	5	6	7	8	9	10	11	12	13	14
Vizor 4000 Professional				light condition	dark condition									
Vizor 4000 Plus		light condition						dark condition						
Vizor Connect		light condition			dark condition									
Vizor 4000 Crystal	light condition				dark condition									
Vizor Crystal	light condition				dark condition									

Vizor 4000 Air/3X Crystal

Airflow through the Air/3X System

Leather belt

Fan-filter device

Pre-filter

Spark protection grid

Battery

Cover

Main particle filter TH3P with cover
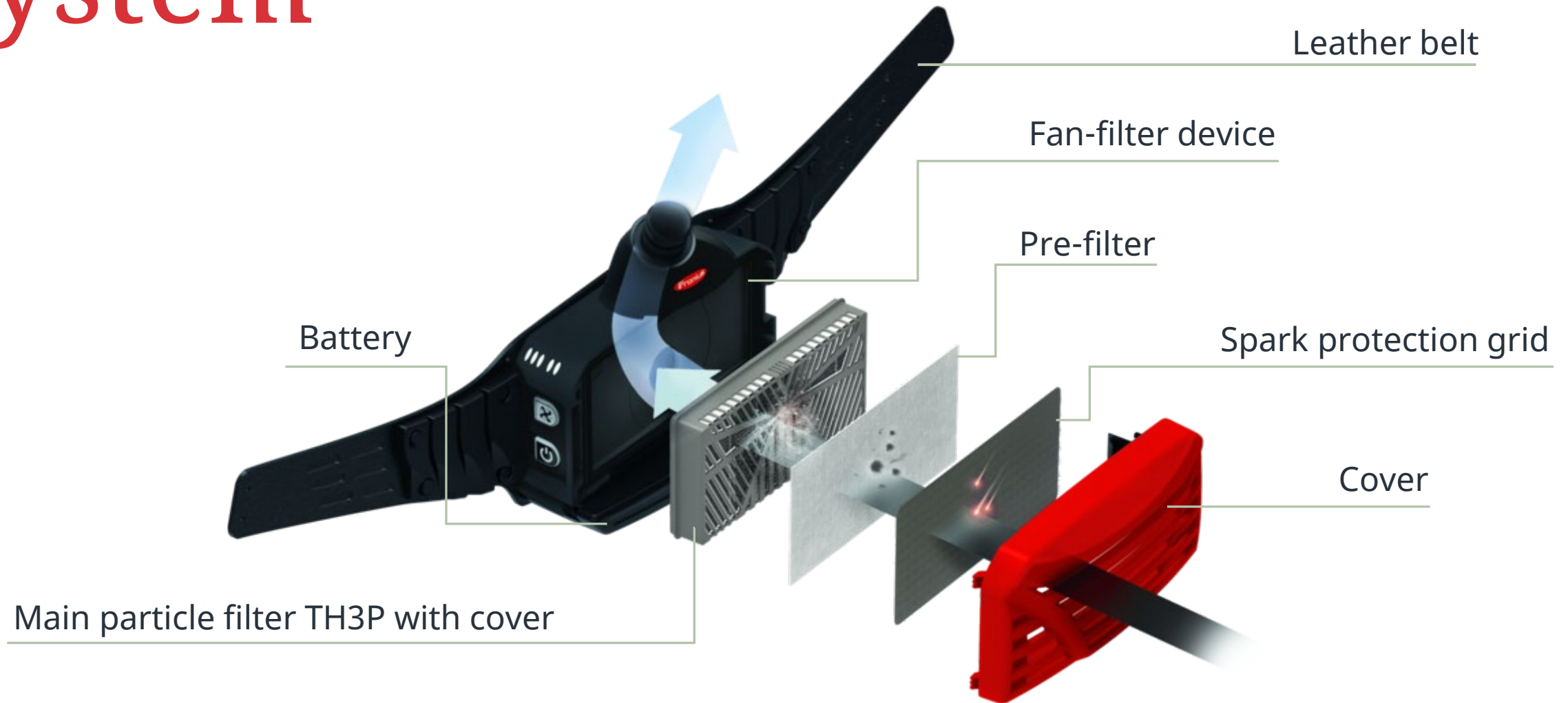
Highlights
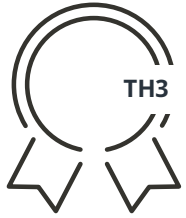
TH3 certified

The complete system is certified in TH3 (EN12941)
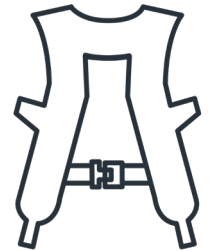
Operating time

Powerful lithium-ion technology
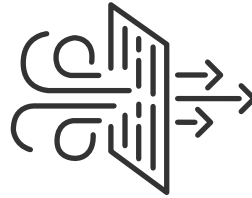
Filter status

The Vizor Air/3X system detects, if the particle filter is missing or clogging
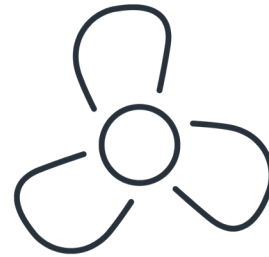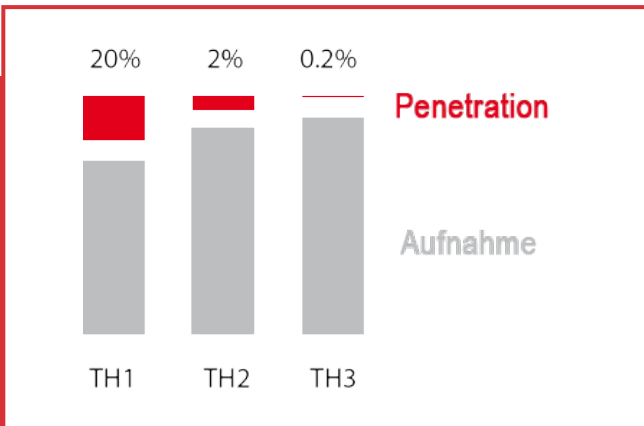
Three airflow levels

– 170 nl/min
– 210 nl/min
– 240 nl/min

Optional Ergo harness

4-point shoulder carrying system to ensure even weight distribution

Vizor Air/3X Powered Air Purifying Respirator

Highest filter quality TH3P

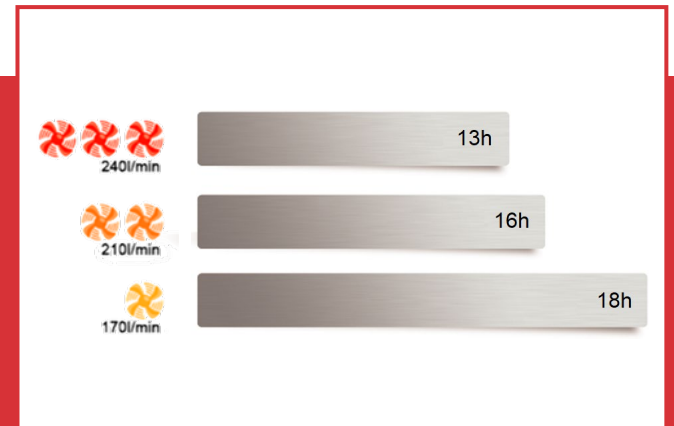More than 99.8% of particles are filtered out.

Constant air flow
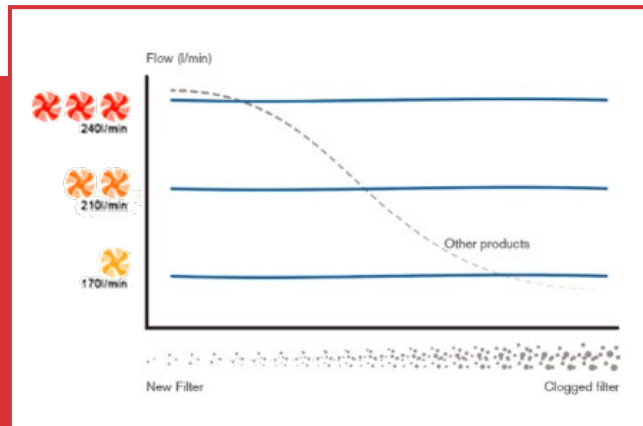
Thanks to a built-in sensor, the set air volume always remains constant.
When the filter is saturated, a controlled change to the next lower blower level takes place.
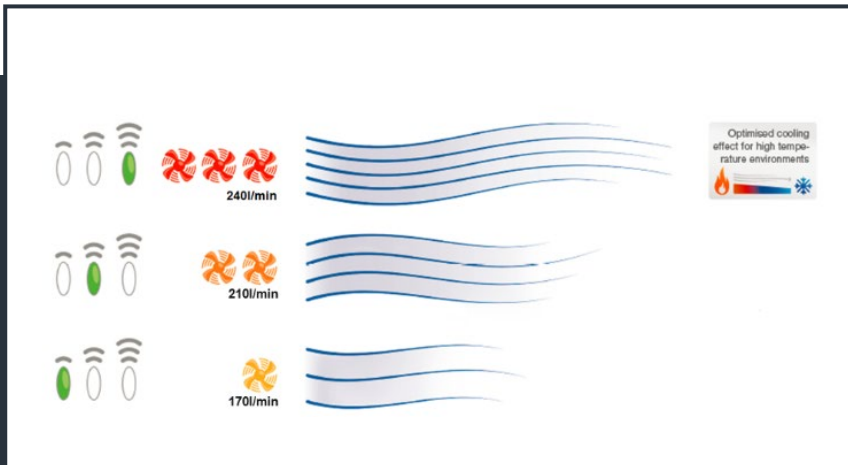
Battery operating time

High-performance lithium-ion battery with long operating time reduces battery replacement.

– Operating time up to 18h*.

(* min. Operating time stage 1, new filter, at room temperature)
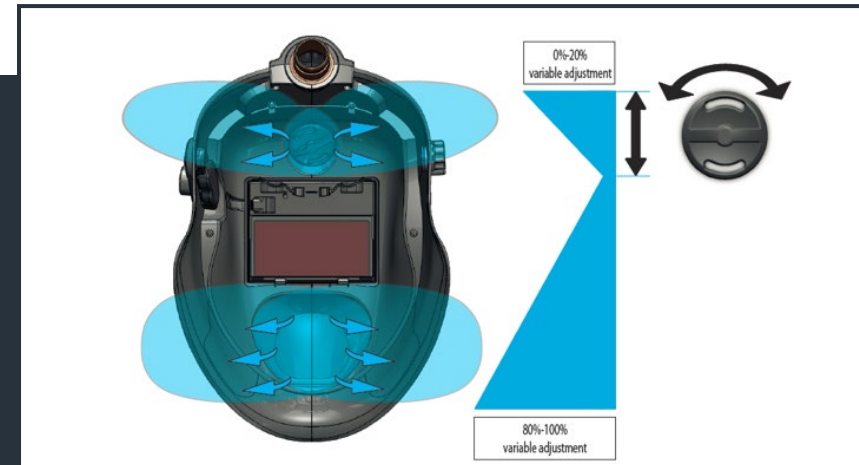
Vizor Air/3X Powered Air Purifying Respirator

High performance airflow

Air distribution in the helmet

Easy selection of three different air flows from 170l/min to 240l/min:

– Best cooling effect through air flow selection up to 240l/min

– Individual adjustability increases the comfort

– The unique air distribution inside the welding helmet creates a comfortable working environment.

– This system also provides pleasant cooling for the welder.

Technical Details & Portfolio

Vizor Air/3X	
Flow rates	
Level 1:	min. 170 nl/min
Level 2:	min. 210 nl/min
Level 3:	min. 240 nl/min
Filter	TH3P R SL Filter for TH3P System (EU)
Battery	
– Voltage / capacity	14,8 V / 3,25 Ah
– Charging cycles	> 500
– Charging time	approx. 8h
Noise level	max. 70 dB(A)
Total weight	1575 g (without Helm)
Standard	EN 12941:1998 TH3
Certification	CE

Part number	Description
42,0510,0350	Vizor Air/3X fan-filter unit in the hard-top case
42,0510,0399	Vizor Air/3X Crystal
42,0510,0403	Vizor Air/3X Ergo Crystal
42,0510,0351	Vizor Air/3X Connect
42,0510,0352	Vizor Air/3X Ergo Connect
42,0510,0480	Vizor 4000 Air/3X Crystal
42,0510,0536	Vizor 4000 Air/3X Ergo Crystal
42,0510,0353	Vizor 4000 Air/3X Professional
42,0510,0354	Vizor 4000 Air/3X Ergo Professional
42,0510,0355	Vizor 4000 Air/3X Plus
42,0510,0356	Vizor 4000 Air/3X Ergo Plus
42,0510,0185	Vizor Air/3 TH3P Particle filter with prefilter
42,0510,0188	Vizor Air/3 Prefilter (50 pcs. per set)
42,0510,0362	Vizor Air/3X odor filter kit incl. push-on frame
42,0510,0363	Vizor Air/3X odor filter