NEW

MIG-MAG

FUME EXTRACTOR TORCH

Gas and water-cooled

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LORCH
smart welding

Lorch fume extractor torch

Extraction exactly where you need it.

Do you face the challenging of having to meet increasingly strict statutory limit values for A-dust* in your production? Are you also concerned about protecting the health of your welders?

When measures for welding fume extraction, such as hall extraction systems, or mobile extractor arms no longer suffice, it is time to address the problem directly where it develops. That's where the Lorch fume extractor torches come in. It is efficient, flexible and always makes an important contribution to compliance with statutory limit values where it is used.

- **Effective health protection.** In order to minimise harmful substances arising during welding, it is important to extract the fume before it can be inhaled. The most efficient method is to extract the welding fume directly where it develops so that it cannot come near the respiratory tracts.
- **Simply practical.** The extraction itself is no problem at all, even on difficult-to-access welds, e.g. inside a structure or on especially large components with long seams. The welder carries it automatically. The working radius is no longer limited by other parameters, such as the reach of the extraction arm.
- **Dependable.** The high-quality coated wire spiral of the torch reliably ensures an exact wire feed to the arc without damaging it.

- **Flexible in use.** The hose package lengths of 3 m, 4 m or 5 m enable use in a host of different working conditions.
- **Comfortable.** The ball joint between handle and hose package provides an optimal movement radius, with improved handling to ensure outstanding comfort for the welder.
- **Efficient operation.** With the Powermaster operation, you control all essential parameters of your welding jobs directly at the torch. Consequently, the welder does not have to go back to the unit and can work more efficiently.

* A-dust particles are so small that they can penetrate the air sacs in the lungs when inhaled via the respiratory passages.

Versions

		ML 2800 RAB	ML 3000 RAB	MW 5000 RAB
Welding range	A	up to 280	up to 320	up to 550
Operating concepts				
Standard		●	●	●
Powermaster		●	●	●
Cooling				
Gas		●	●	–
Water		–	–	●

Operating concepts

Standard

- Large control button for switching the machine on and off
- Suitable for 2-cycle/4-cycle operation

Powermaster

- Large control button for switching the machine on and off
- Suitable for 2-cycle/4-cycle operation
- With UpDown function for remote power source control
- Digital display for indication of welding current, material thickness, wire feed speed or arc length correction
- Mode button for toggling between the different welding parameters and selecting the welding job in Tiptronic job mode

Highlights

Fume extraction

- **Compliance with statutorily prescribed dust limit value for A-dust:** Hall extraction systems and mobile extraction arms are often not enough to comply with the statutorily prescribed limit value. The fume extraction in the torch plays an important role in compliance. It protects not only the welder, but everyone who is in the vicinity.
- **Extraction where welding fume develops:** 90 – 95 % of welding fume can be extracted directly at the source. As a result, the greatest share of fume does not even come near the respiratory tracts.
- **Robust:** A long service life in difficult conditions is essential for a tool. The robust metal neck makes the torch resistant to the hot welding fume that is extracted. The metal neck also protects the torch from the heat radiated from preheated components.

Powermaster remote control panel

- **Display:** Display of the welding current, material thickness, wire feed speed, dynamics or arc length correction (identical to the digital display of the power source).
- **Plus/minus buttons:** For changing the various welding parameters. And for changing the jobs in Tiptronic mode. The simple operation is easy and intuitive.
- **Mode button:** For changing between the various welding parameters. For selecting the job set in Tiptronic mode. The welder can easily navigate the welding parameters with only one button.
- **Tiptronic mode:** Using the Tiptronic function, you simply save the ideal setting for each weld in the required sequence. The job memory makes it quick and easy to load up to 100 work values one after the other when you need them. Work processes and reproducibility of the seams can be optimised as a result.

Technical data

		ML 2800 RAB	ML 3000 RAB	MW 5000 RAB
Type of cooling		Gas	Gas	Water
Load CO_2 | mixed gas	A	280 | 250	320 | 300	550 | 500
Duty cycle	%	100	100	100
Wire Ø	mm	0.8 – 1.2	1.0 – 1.6	1.0 – 1.6
Handle recesses		1 | 2 (PM)	1 | 2 (PM)	1 | 2 (PM)
Hose package lengths	m	3 | 4 | 5	3 | 4 | 5	3 | 4 | 5
Required extraction power (effectively measured at the torch)	m³/h	55 – 65	55 – 65	55 – 65

Extraction system recommended use

Versions

Kemper	MiniFil	VacuFil 125
Application [1] – Welding fume intensity of the application	■ ■ □ □ □	■ ■ ■ ■ □
Use [2] – Sporadic to continuous operation	■ ■ □ □ □	■ ■ ■ ■ □
Vacuum generation	Two suction turbines	Side channel compressor
Mobility	Portable	Mobile
Disposable saturation filter without cleaning	●	—
Multi-use filter with surface filtration and automatic cleaning	—	●
Use	Single-location solution	Single-location solution

Fumator	Minivac 200 D	Minivac 300 D	Minivac 400 D
Application [1] – Welding fume intensity of the application	■ ■ ■ ■ □	■ ■ ■ ■ □	■ ■ ■ ■ ■
Use [2] – Sporadic to continuous operation	■ ■ ■ ■ □	■ ■ ■ ■ □	■ ■ ■ ■ ■
Vacuum generation	Side channel compressor	Side channel compressor	Side channel compressor
Mobility	Mobile	Mobile	Mobile
Multi-use filter with surface filtration and automatic cleaning	●	●	●
Use	Single-location solution	Dual-location solution	Multi-location solution (up to four torches)

[1] the filter area, type, operating pressure and cleaning are weighted for this purpose.
[2] the extraction flow (manufacturer specification), effective extraction flow at the torch, motor output and the type of vacuum generation are weighted.

■ □ Performance in combination with Lorch fume extraction torches

Technical data

		Kemper MiniFil	Kemper VacuFil 125	Fumator Minivac 200 D	Fumator Minivac 300 D	Fumator Minivac 400 D
Filter area	m²	12	4	5	5	2 × 5
Max. extraction flow, without torch	m³/h	150	125	180	250	500
Max. operating pressure	Pa	22,000	27,000	36,000	45,000	45,000
Output	kW	2	1.5	1.5	3	6
Certification		W3	W3	W3	W3	W3
Filter cleaning		—	●	●	●	●
Mains voltage	V	230	230	230	400	400
Dimensions (L x W x H)	mm	365 × 425 × 790	885 × 635 × 1160	700 × 440 × 690	700 × 530 × 630	700 × 520 × 880

FAN-BASED RESPIRATORY PROTECTION SYSTEM AND WELDING HELMETS

Lorch e3000 fan-based respiratory protection system with Crystal 2.0 welding helmet

- **Strap it on and breathe.** High-performance fan-based respiratory protection system with safety class 3 filter and integrated, automatic air flow control.
- **Variable air flow.** The 3-stage variable air flow from 150 to 250 l/min in combination with the helmets ensures individual, comfortable air distribution. The highest level of 250 l/min provides the user with a reliable cooling effect even in the hottest conditions.
- **Welding helmet and clear-view visor in one.** With the Crystal 2.0, Lorch is offering a welding helmet equipped with the new CLT (Crystal Lens Technology) visor for the first time. The result is a view that is comparable to looking through a window. This also has a positive effect on the brightness. With a protective grade of 2.0 in interactive mode, you see your work environment as though you were not even wearing a welding visor.
- **Flexible in use.** The Lorch e3000 fan-based respiratory protection system is compatible with the Optrel fresh-air helmets Panoramaxx, e684 and Vegaview 2.5 liteflip autopilot, in addition to the Crystal 2.0.

Optrel Crystal 2.0 welding helmet without fresh-air connection	
Optrel Crystal 2.0 welding helmet with fresh-air connection	
Lorch e3000 fan-based respiratory protection system	

Technical data

		e3000 fan-based respiratory protection system
Description		Fan-based respiratory protection system with integrated air flow sensor and 3-stage variable air flow
Protection factor		Protection level TH3 (EN 12941)
Air flow stages	l/min	Stage 1: 150 | Stage 2: 200 | Stage 3: 250
Fuse		Electronic fuse
Sound level	dbA	Max. 70
Filter type		TH3P R SL filter for TH3P system (EU)
Hose length	m	0.7 (stretchable up to 1.3)
Standards		EN 12941:1998/A2:2008 | AS/NZS 1716:2012
Approvals		CE 1024
Dimensions (L×W×H)	mm	222 × 213 × 92.6
Weight	G	1,560 (incl. filter, belt and battery)

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