



Fit for work, sports and games.

Take a deep breath ...

Fresh air keeps fit. This is why the new fume extraction torches RAB GRIP are on the road to success. Combined with the high vacuum extraction unit FES-200 the contaminants get extracted directly at their source - the arc.



MIG/MAG Fume Extraction Torches RAB GRIP

air and liquid cooled

Optimum protection ...

Over the past decades, gas metal arc welding has become one of the primary joining processes in almost all fields of industrial manufacturing. Thanks to the increasing availability of special wire electrodes, this particularly applies to the MIG/MAG arc welding method.

Technically, this is extremely positive, but also conceals risks. Initial consideration of a welder "in action" would suggest that he can optimally cope with welding loads thanks to his protective equipment. Leather gloves, apron and gaiters protect the body from sparks and process heat. And a welder's helmet and visor pulled down over the eyes provide protection from the aggressive arc.

Yet one aspect is often forgotten: the air that welders and welding process have to share very closely – usually on account of tight spots.

Alongside the vapours originating from work-piece surfaces which have often not been cleaned sufficiently, it is mainly metal oxides that are released in welding fumes. Floating particles and ultra-fine micro-particles rise and contaminate the air the welder is breathing in.

ABICOR BINZEL took on this potentially hazardous "safety risk" in the mid-1970s with the production of the fume extraction torches of the RAB line, and it has become impossible to imagine the ABICOR BINZEL product portfolio without it since.

Innovations in detail

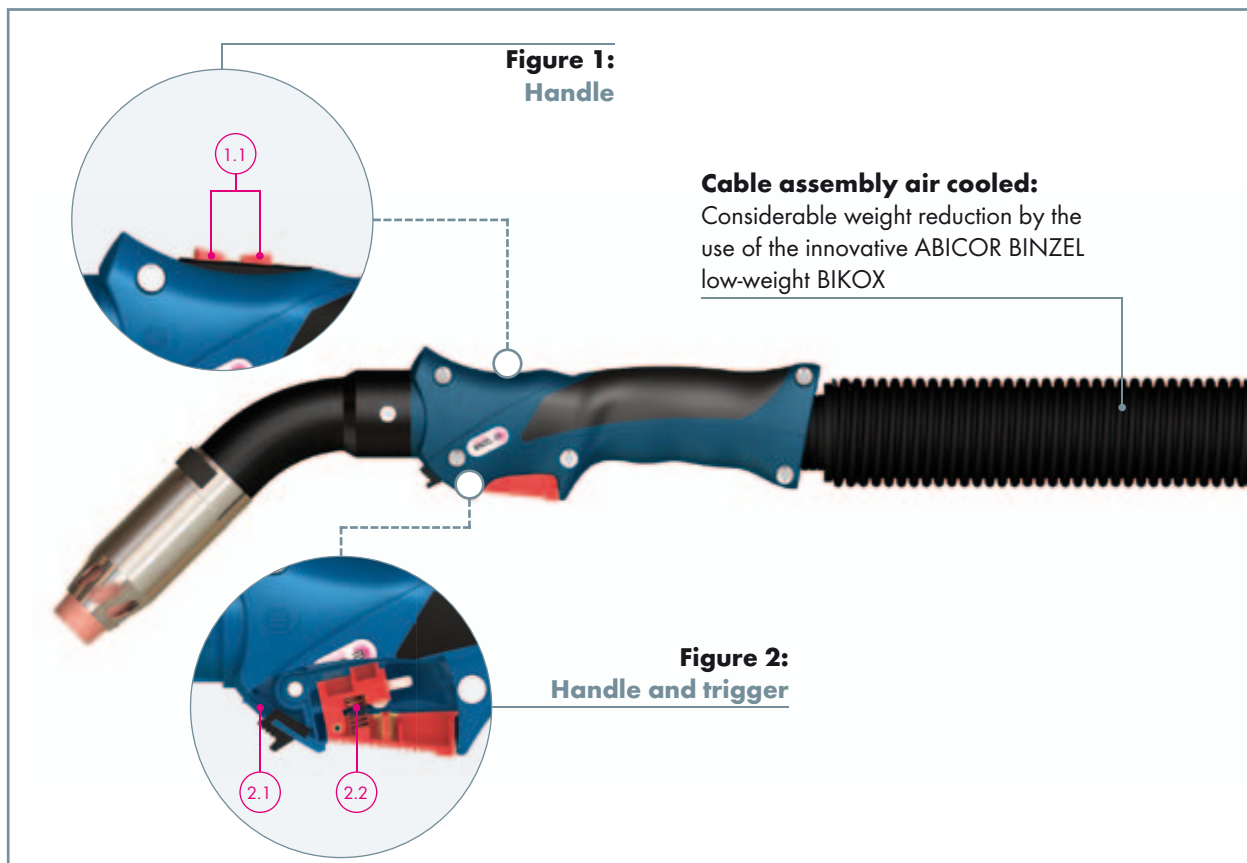


Figure 1:
Handle

Cable assembly air cooled:

Considerable weight reduction by the use of the innovative ABICOR BINZEL low-weight BIKOX

Figure 2:
Handle and trigger

Figure 1:
Handle

- 1.1 **Remote modul (optional)**
 - e.g. integrated up-down-function

Figure 2:
Handle and trigger

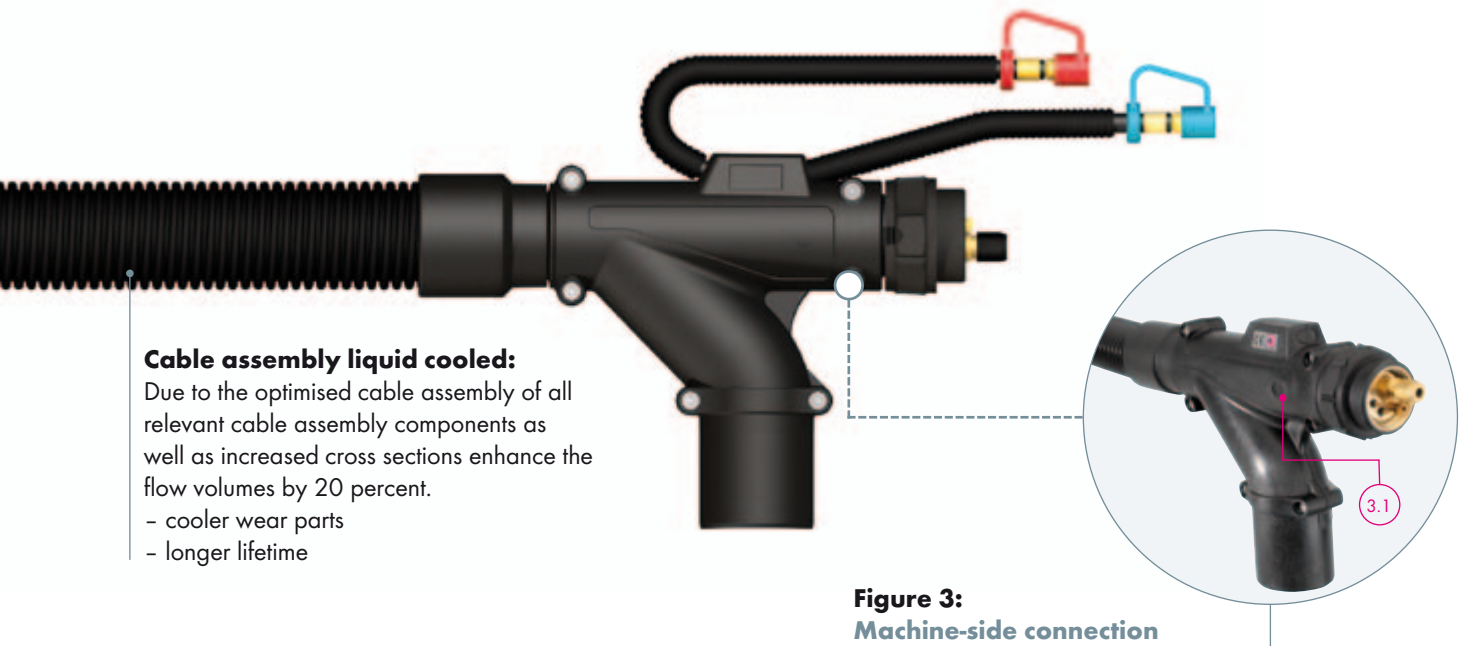
- 2.1 **External air regulation**
 - ergonomically placed
- 2.2 **Completely encapsulated mechanic trigger**
 - optimum protection against contamination from welding fume particles

We have completely revised this torch line based on years of experience and our claim of continually optimising our products in terms of capacity, service life and efficiency. The result is the RAB GRIP.

At first glance, the now "typical" blue ABICOR BINZEL handle with the black GRIP inserts is particularly striking and reflects the ergonomic requirement in terms of handling and balance of our successful model MB GRIP. The soft-grip component is not only for safe torch guiding, it is also used as a reliable seal for both halves of the grip shell, in order to prevent any unwanted loss of extraction power during the process. If the extraction power is too high, the feed air quantity can easily be regulated using a finger, without having to interrupt the welding process. The feed air slide is now loca-

ted in front of the trigger on the front of the handle. The trigger itself is safely located in an encapsulated area of the handle. This not only makes it easy to use, but means that welding fumes and smoke residue will not impair the switch function.

There is a selection of the most popular remote control modules available on request, which can easily be integrated in the handle design. All in all an ergonomically and technically perfectly designed handle!



Cable assembly liquid cooled:

Due to the optimised cable assembly of all relevant cable assembly components as well as increased cross sections enhance the flow volumes by 20 percent.

- cooler wear parts
- longer lifetime

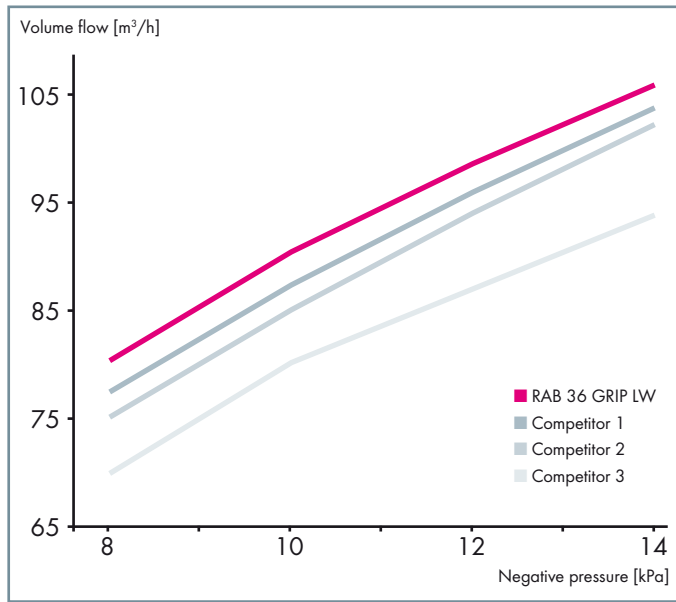
Figure 3:
Machine-side connection

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Machine-side connection

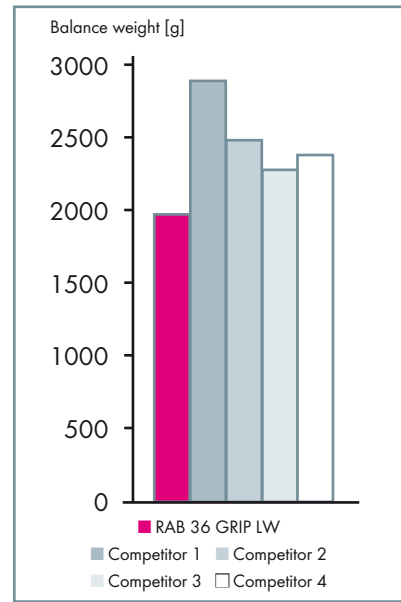
3.1 Air-optimised machine-side central connection

- Increase of suction output >10 % due to optimised flow channels and cross sections
- adjustable in 180° steps to assimilate the position of the outgoing extraction hose

RAB GRIP competi- tive comparison



Suction output with the high vacuum extraction unit FES-200 >100 m³ from approximately 14 kPa.



Up to 27 percent less balance weight in comparison to competitors.



Technical data

Type	Cooling	Rating		Duty cycle (%)	Wire-Ø (mm)
		CO ₂	Mixed Gases		
RAB GRIP 15 AK	air	180 A	150 A	60	0.6–1.0 mm
RAB GRIP 24 KD	air	250 A	220 A	60	0.8–1.2 mm
RAB GRIP 25 AK	air	230 A	200 A	60	0.8–1.2 mm
RAB GRIP 36 KD	air	300 A	270 A	60	0.8–1.2 mm
RAB GRIP 240 D	liquid	300 A	270 A	100	0.8–1.2 mm
RAB GRIP 501	liquid	550 A	500 A	100	1.0–1.6 mm
RAB GRIP 501 D	liquid	500 A	450 A	100	1.0–1.6 mm

***Hint for liquid cooled torches:** To protect the cable assembly components against overheating, we recommend an post cooling time of at least four minutes.

Part numbers complete torches

Type	Part-No.		
	3 m	4 m	5 m
RAB GRIP 15 AK; central connection KZ-2	602.3001.1	602.3002.1	602.3003.1
RAB GRIP 24 KD; central connection KZ-2	612.3001.1	612.3002.1	612.3003.1
RAB GRIP 25 AK; central connection KZ-2	604.3001.1	604.3002.1	604.3003.1
RAB GRIP 36 KD; central connection KZ-2	614.3001.1	614.3002.1	614.3003.1
RAB GRIP 240 D; central connection WZ-2	623.3003.1	623.3004.1	623.3005.1
RAB GRIP 501; central connection WZ-2	632.3003.1	632.3004.1	632.3005.1
RAB GRIP 501 D; central connection WZ-2	634.3003.1	634.3004.1	634.3005.1

Fume Extraction System

FES-200

Take a deep breath ...

The new Fume Extraction Torches RAB GRIP are 100% compatible with the high vacuum extraction unit FES-200 from ABICOR BINZEL. Its low weight is perfectly suited for mobile applications. The unit comes complete with an auto start-stop function standard, so it "operates" only when welding is being done. This minimises unnecessary noises, reduces energy consumption and increases the service life of the motor.

Advantages that speak for themselves:

- Solid compact construction, low in weight – ideally suited for mobile applications
- Automatic start-stop – minimises noise, reduces energy consumption and increases the service life of the motor
- Efficient integrated manual cleaning – increases filter service life
- Fully equipped with suction hose and adapter – just connect the torch and weld, plug & play
- Low pressure indicator for monitoring the contamination of the permanent filter cartridge – effective maintenance

Fume Extraction System FES-200 cpl.

Technical data:

Weight:	23 kg
Dimensions (LxWxH):	500 x 210 x 500 mm
Max. airflow:	200 m ³ /h
Connection inner ø:	50 mm
Max. negative pressure:	19.000 Pa
Voltage:	230 V (115 V)
Motor:	1.1 kW
Filter surface:	0.8 m ²



1



Pos.	Description	Details	Part-No.
1	Fume Extraction System FES-200 (exhaust casing optional)	230 V	601.0001.1
	Fume Extraction System FES-200 (exhaust casing optional)	115 V	601.0002.1

Fume Extraction System

FES-200

Wear parts



Pos.	Description	Part-No.
2	Carbon brush 230 V Carbon brush 115 V	601.0005.1 601.0017.1
3	Filter cartridge D = 150 x 325 mm	601.0008.1
4	Hose with sleeves L = 5.00 m	601.0015.1
5	Adapter ring FES-200 / RAB Plus (50/44 mm)	601.0031.1
6	Start/Stop probe	601.0020.1
7	Plastic bag (w./o. drawer)	601.0021.10
8	Exhaust casing (optional)	601.0023.1



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