



## ME403AF MIG/MAG FUME EXTRACTION TORCH 400 Amp.



*These torches are characterized by the following features:*

- Direct extraction at the arc to protect the respiratory system
- Simple extraction control at the front of the handle
- Optimal torch cooling - high durability
- Easy installation to existing MIG/MAG workplaces
- Time-saving torch change by the MECHAFIN Euro Central Adapter System
- MECHAFIN Euro Central French-pin Adapter

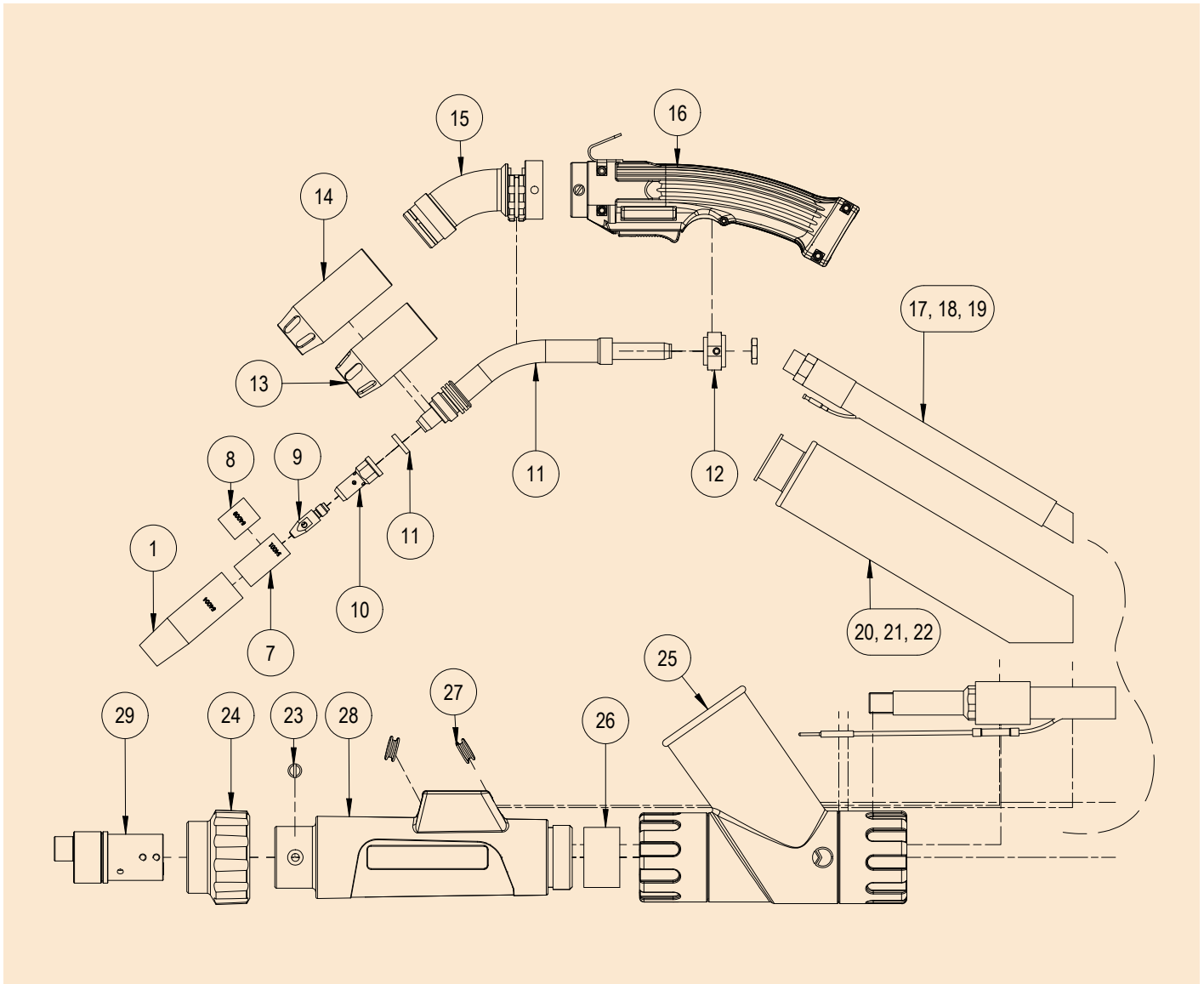
Model	ME403AF
Maximum current CO <sub>2</sub>	400 A
Duty Cycle CO <sub>2</sub>	60%
Maximum current Argon M.G.*	300 A
Duty Cycle Argon	60%
Extraction Rate	ca. 70 m <sup>3</sup> /h
Wire Ø	0.8 - 2.4 mm

\*mixed gas

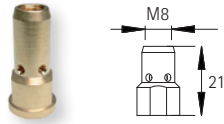
Type	Item no. - 3.0m	Item no. - 3.5m	Item no. - 4.0m	Item no. - 5.0m
ME403AF French Pin	58585	on request	58586	58587

Different lengths available upon request

## Replacement Parts:



Pos.	Item no.	Description	pcs.	Pos.	Item no.	Description	pcs.
1	54004	Nozzle Spray H.D. i.d. 15mm	1	16	119349	Handle kit fume extraction	1
2	54006	Nozzle Dip long conical i.d. 15mm	1	17	120054	Hose package complete ME403AF 3.0m	1
3	54003	Nozzle Dip short conical i.d. 15mm	1	18	120055	Hose package complete ME403AF 4.0m	1
4	54022	Nozzle Pulse H.D. i.d. 15mm	1	19	120056	Hose package complete ME403AF 5.0m	1
5	54011	Nozzle Spray H.D. long i.d. 15mm	1	20	120042	Fume extraction hose without regulation 3.0m	1
6	54007	Nozzle Parallel H.D. i.d. 19mm	1	21	120043	Fume extraction hose without regulation 4.0m	1
7	54001	Nozzle insulator Ø19x16.5x37	1	22	120045	Fume extraction hose without regulation 5.0m	1
8	54009	Nozzle insulator Ø19x16.5x24	1	23	76050	Pan-head screw with slot M4 x 9	1
9	57838	Contact tip M8, copsil for alu wire 1.0-1.2, round	1	24	57098	Adapter nut complete	1
10	54002	Gas diffuser M8	1	25	119756	Fume extraction adapter	1
11	54027	Swan Neck ME403-503 Fume A/C complete	1	26	119770	Rubber Seal	1
12	54016	Swan Neck Holder	1	27	119730	Rubber grommet 1900	1
13	119565	Extraction nozzle ME503AF/WF L: 70	1	28	119685	Central adapter housing 1900 complete	1
14	117299	Extraction nozzle ME503AF/WF L: 82	1	29	57125	2-Pin Central Adaptor M11 x 1	1
15	117305	Neck Extraction Tube complete	1				

**Gas Diffuser**


54002 M8

**Liners Hard Wire**


57195: 3.0m, blue for steel wire 0.8-1.2  
 57197: 4.0m, blue for steel wire 0.8-1.2  
 56429: 5.0m, blue for steel wire 0.8-1.2

57261: 3.0m, red for steel wire 1.4-2.0  
 57263: 4.0m, red for steel wire 1.4-2.0  
 57265: 5.0m, red for steel wire 1.4-2.0

57281: 3.0m, grey for steel wire 1.2-1.4  
 57283: 4.0m, grey for steel wire 1.2-1.4  
 56434: 5.0m, grey for steel wire 1.2-1.4

57381: 3.0m, yellow for steel wire 2.0-3.2  
 57383: 4.0m, yellow for steel wire 2.0-3.2  
 57385: 5.0m, yellow for steel wire 2.0-3.2

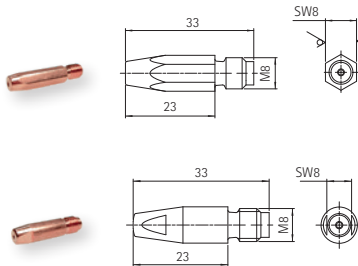
**Liners Soft Wire**


57155: 3.0m, black for alu wire 0.8-1.0  
 57157: 4.0m, black for alu wire 0.8-1.0  
 57393: 5.0m, black for alu wire 0.8-1.0

57250: 3.0m, red for alu wire 1.6  
 57252: 4.0m, red for alu wire 1.6  
 57489: 5.0m, red for alu wire 1.6

57200: 3.0m, blue for alu wire 1.0-1.2  
 57202: 4.0m, blue for alu wire 1.0-1.2  
 57204: 5.0m, blue for alu wire 1.0-1.2

114706: 3.0m, yellow for alu wire 2.0-3.2  
 114708: 4.0m, yellow for alu wire 2.0-3.2  
 114710: 5.0m, yellow for alu wire 2.0-3.2

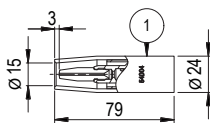
**Contact Tips**

**Contact Tip M8 hexagonal (pure copper)**  
 MOQ = 10 pcs.

57800: M8, 0.8, hexagonal  
 57802: M8, for alu wire 0.8-1.0, hexagonal  
 57803: M8, for alu wire 1.0-1.2, hexagonal  
 57804: M8, for alu wire 1.2-1.4, hexagonal  
 57805: M8, for alu wire 1.4-1.6, hexagonal  
 57834: M8, for alu wire 1.6-1.8, hexagonal  
 57806: M8, for alu wire 1.8-2.0, hexagonal  
 57807: M8, 2.4, hexagonal

**Contact Tip M8 round, copsil (copper-silver)**  
 MOQ = 10 pcs.

57835: M8, copsil (CuCrZr) 0.8, round  
 57837: M8, copsil for alu wire 0.8-1.0, round  
 57838: M8, copsil for alu wire 1.0-1.2, round  
 57839: M8, copsil for alu wire 1.2-1.4, round  
 57840: M8, copsil for alu wire 1.4-1.6, round  
 57860: M8, copsil for alu wire 1.6-1.8, round  
 57841: M8, copsil for alu wire 1.8- 2.0, round  
 57842: M8, copsil (CuCrZr) 2.4, round

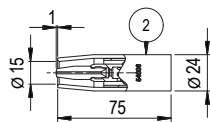
Pos.                      Item no.                      Description



1

54004

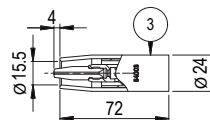
Nozzle Spray H.D. i.d. 15mm



2

54006

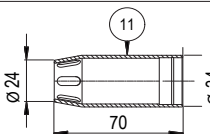
Nozzle Dip long conical i.d. 15mm



3

54003

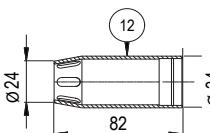
Nozzle Dip short conical i.d. 15mm



11

117299

Extraction nozzle ME503AF/WF L: 82



12

119565

Extraction nozzle ME503AF/WF L: 70

Mechafin recommends:



Kemper MiniFil



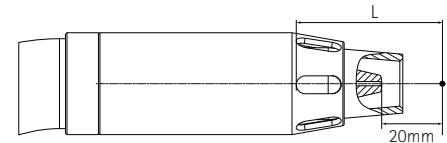
Kemper VacuFil



Extraction data Mechafin extraction torches:

The specifications of the INRS in France and the ISO standard 21 904 prescribe for extraction torches with a max. welding current of more than 200A a required detection speed of at least 0.35 m/s at the point of origin of the welding fumes (20 mm in front of the nozzle). ME403AF achieve this speed at:

ME403AF      L= 49mm     $Q_{1min} = 40 \text{ m}^3/\text{h}$  at the extraction nozzle  
 Near the connecting piece a negative pressure of approx. 8,800 Pa.  
 and a detection speed of 57 m<sup>3</sup>/h must be applied

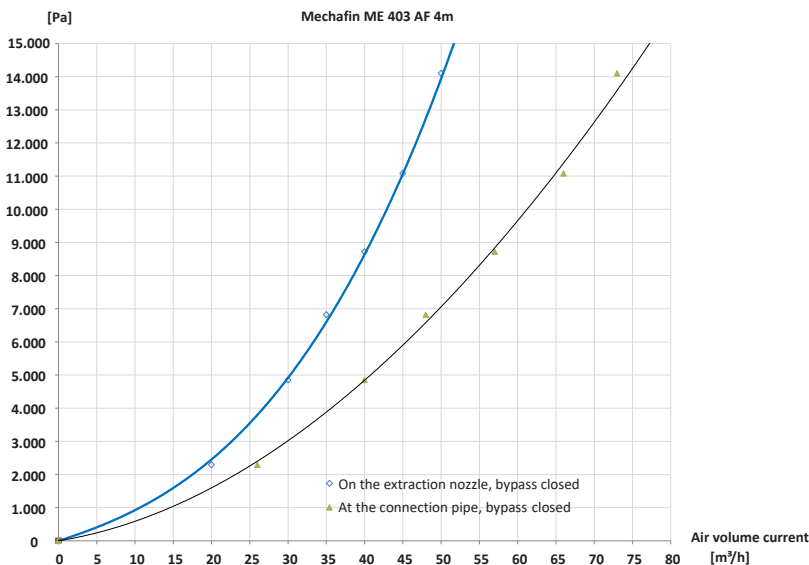


If the use of a different nozzle results in a different dimension „L“, the required extraction rates must be adjusted accordingly.

The minimum volume flow at the extraction nozzle is calculated from the dimension „L“ (in m) as follows:  $Q_1 = v * 3.600 * 4 * \pi * L^2$

Pressure loss

Negative pressure at the connection pipe



Mechafin AG  
 Chrummacherstr. 3 | CH-8954 Geroldswil | Switzerland  
 Telephone +41 44 749 30 60 | Facsimile +41 44 749 30 70  
 Mail [info@mechafin.ch](mailto:info@mechafin.ch) | Web [www.mechafin.com](http://www.mechafin.com)

Mechafin Ltd  
 Leigh Street | High Wycombe | Buckinghamshire | HP11 2QU UK  
 Telephone +44 1494 441 110 | Facsimile +44 1494 473 049  
 Mail [enquiries@mechafin.co.uk](mailto:enquiries@mechafin.co.uk) | Web [www.mechafin.com](http://www.mechafin.com)

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