

Designed to make your job easier

Electrofusion Units
MSA 2.0 and MSA 2.1



Your challenges are our drive

Customers are asking for high efficiency, low cost of ownership, low weight and ease of use. These requirements have driven our engineering team in designing the new MSA 2 family. The MSA 2.0 and MSA 2.1 electrofusion units are the results of our effort.

+ Strong in details

Comfortable, anti-shock plastic handle with hooks to quickly wrap the cables

Functional graphical display

Emergency switch, to interrupt the on-going process in case of problems (MSA 2.1)

Fast USB port for software updates and protocols export (MSA 2.1)

Long lasting and easy-to-operate keypad, ISO12176-2 compliant

Sturdy aluminum die-cast housing to protect the unit against dust, splash and spray water

Plastic feet to keep the electronic core out of mud and dust

Self-protected from accidental damage during the fusion process, thanks to sensors for controlling the internal heating

Active cooling, with radial air flow solution to keep the unit safer



Our innovative electrofusion units for welding in all conditions

+ Intuitive, cost effective and state-of-the-art



The MSA 2.0 and MSA 2.1 electrofusion units are the right choice. Maximum performance in all weather conditions from -20°C to +50°C.

Intuitive

- Easy to use interface, based on international standards
- Quick user guide, language independent, in addition to the user manual, for operating the machine in a snap
- Clear error messages and audible signals
- Remote START/STOP commands on a badge, to interact from 3m away
- USB type A port for fusion record transfer (MSA 2.1 only)
- Operator code and job number input via barcode scanner (MSA 2.1 only)

Cost effective

- Barcode scanner as standard
- High power efficiency to weld with small power generators
- Very compact
- Mechanical parts exchange done by the customer himself to save time and costs

Delivering state-of-the-art solutions

- Inverter technology inside, with forced ventilation to weld large couplers in series
- Fast USB connectivity
- Functional graphical display

We make your work easy

MSA 2.0 and MSA 2.1 greatly enhance your daily operations. These units encompass numerous features which support safety, speed and reliability. From automatic temperature compensation to a detailed fusion report, the machines work hand in hand with the operator on the construction site. And when training and after-sales service are needed, you can rely on our experts and worldwide service center network.



Simply handy

The entire fusion process is automatically supervised by the MSA 2.0/MSA 2.1. The installer just has to connect the leads to the fitting, scan the fusion parameters and leave the control to the machine. Depending on the ambient temperature, the welding time is automatically adjusted for the correct distribution of energy to the fitting, a soft start is applied to minimize the load on the power generator and fusion is carried out to completion.

In case of anomalies, like inadequate input current or fitting wires fault, the machine stops immediately and informs the operator with a specific error message.

In case of a damaged barcode label on the fitting, the installer can switch right away to manual mode by pressing the START button and then inserting fusion time and voltage.



Simple handling

The cables are wound on separate sides of the machine and can be quickly wrapped when moving from joint to joint. Two hooks are integrated in the handle for convenient storage of fusion and power cables. The fusion unit is ideally balanced in weight and the design of the handle ensures ergonomic handling and transportation. The robust design of the long-lasting aluminum housing protects the electronics of the MSA 2.0 and MSA 2.1, providing excellent heat dissipation to weld in series. All annoying sharp edges have been eliminated and thanks to the compact housing, usage in cramped spaces is facilitated. The professional storage box – suitable for even the roughest conditions – completes the package.

Our electrofusion units track your success

An automatic record of the fusion data ensures traceability and long term quality of the MSA 2.0 and 2.1 weldings.

+ Memory and universal communication



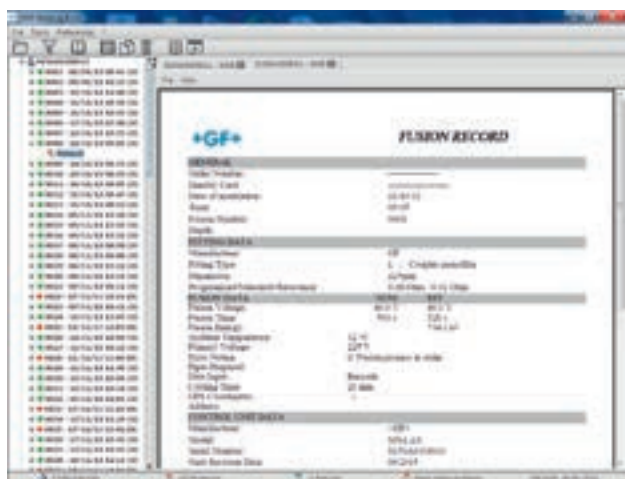
Fusion data recording

Both machines records fusion data automatically to an internal memory. Fusion data can be browsed by just pressing MENU and the arrow buttons. Data sets are in compliance with ISO 12176-2, using the same symbols of ISO 13950 (Automatic recognition systems for electrofusion joints).



Data printout

The MSA 2.1 allows data to be easily copied on a standard USB memory stick. Files can be read with any personal computer, Windows or macOS based and exported in a simple PDF format.



Compatible with WeldingOne

MSA 2.1 data can be included in a digital archive based on a Welding Book. There the user can prepare extended PDF files, in different languages, including protocols belonging to many electrofusion units. Furthermore, fusion data captured by the MSA 2.1 can be combined with pictures taken during the pipe preparation process, using the functionalities of the Welding Book.

Overview

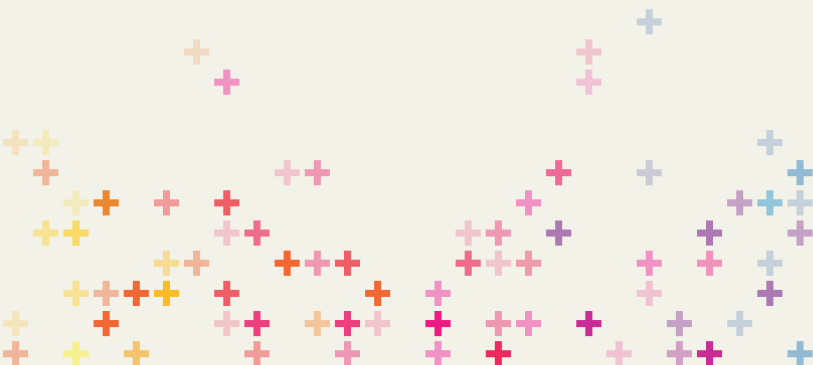
The MSA 2 family gives you the freedom to choose the appropriate type for your daily business – a significant cost advantage.



MSA 2 Family Overview	MSA 2.0	MSA 2.1
Fittings dimension range (Ø mm)	20–1200	20–1200
Multiple weldings in sequence	✓	✓
Operating procedures check		
Automatic ambient temperature compensation	✓	✓
Fusion current monitoring (short/interrupt)	✓	✓
Emergency switch		✓
Job details		
Operator badge		✓
Job number		✓
Fusion data		
Barcode scanner (ISO 13950 format)	✓	✓
Manual fusion input	✓	✓
Data recording		
Documentation of fusion	✓	✓
Fusion protocol export		✓
Welding Book Software		✓
WeldinOne		optional
Operations control		
Display brightness configurable	✓	✓
Acoustic alert	✓	✓
Serviceability		
Programmable maintenance interval	✓	✓
Software upload via USB memory stick	✓	✓
Usability		
Problem recognition (fittings, generators)	✓	✓
Clear messages to the operator in the display	✓	✓
START/STOP via barcode scanner	✓	✓
User guidance	✓	✓
Indication of energy, fusion and cooling time	✓	✓
Data protocol format (bin, pdf) Windows® independent		✓
Separate cable winding support	✓	✓
Transport box	✓	✓

Specifications

Engineering at its best: High-quality components and materials combined with effective work flow.



Technical specifications	MSA 2.0	MSA 2.1
Operating conditions		
Working temperature range	min. -20 °C, max. +50 °C	min. -20 °C, max. +50 °C
Electrical data		
Input voltage range (Vac)	190 – 265	190 – 265
Frequency range (Hz)	40 – 70	40 – 70
Current consumption (Max, A)	16 A	16 A
Output voltage (V ac)	8 – 42 (48)	8 – 42 (48)
Output current (max, A)	90	90
Input power (KW)	3.5	3.5
Type of protection	IP65	IP65
Protection class	I	I
Unit fuse	20A slow blow	20A slow blow
Data and operation control		
Data recording capacity (Number of protocols)	350	1000
Communication port	USB Type A	USB Type A
Buttons	5+Start+Stop	5+Start+Stop
Display	graphical LCD	graphical LCD
Mechanical data		
Dimensions (mm)	280x280x420	280x280x420
Weight (Kg)	11.9	11.9
Case material	Aluminium	Aluminium
Mains cable length	4 m	4 m
Fusion cable length	3 m	4 m
Mains plug	Schuko 16A	Schuko 16A
Connectors	4 mm	4 mm
Adapters (90°)	4.0 – 4.0 mm	4.0 – 4.0 mm/4.0 – 4.7 mm
Norms compliance		
EMC (EN61000)	✓	✓
Safety (EN60335)	✓	✓
ISO12176-2	✓	✓

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