

# Solid As A Rock

Electrofusion Unit

MSA 315

MSA 330

MSA 340



# The Benefits

Reliable and easy to use – these are the main characteristics of the MSA 315/330/340. These MSA enhance your daily operations tremendously thanks to numerous features which support safety, speed and accuracy.

## + Everything needed

### Ergonomy

Comfortable handle, cable holder to quickly wrap the cables

### Safety

Automatic thermal switch, fuse, internal temperature check to reduce issues in field

### Communication

USB port to easily export fusion protocols and download software updates

### Geolocation

GPS receiver (MSA 340 only) to identify the trench

### Intuitiveness

Work flow and error messages on LCD display, acoustic tones to signal welding completion, errors, data consistency, large keypad to make the job easier

### Durability

Die-cast aluminum, high quality parts to protect from water, dust and prolong the equipment life

### Flexibility

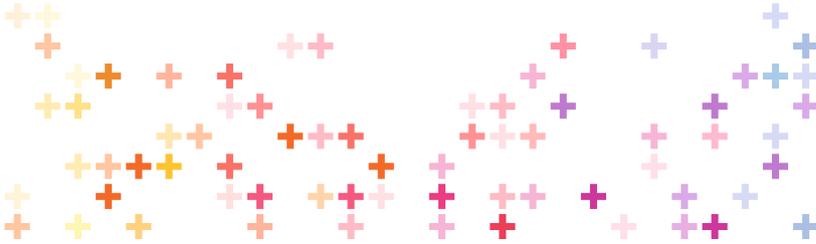
Bar code reader, manual data input to be always able to complete the jointing



# The System

The right solution for everyone thanks to different types.

The MSA 315 is the entry level which allows the installer to weld fittings up to 315mm; the MSA 330 enables a larger range, while the MSA 340 includes the ability to record automatically traceability and GPS coordinates. All encompass an easy and intuitive handling.



## Easy and intuitive

Easy and intuitive operation on site is given by the practical electronic keypad, to navigate through a clearly structured work flow. With one-button (START) operation, the user is guided from preparation to the finalization of the fusion process. Steps and language can be adjusted to the personal requirements. At the beginning of each welding, additional information like operator ID (ISO 12176-3) and job number can be entered, to be part of the final fusion record.



## Automatic data mode

All MSA have a barcode scanner as standard, to simplify the work to the installer, even in cramped, difficult spaces. Based on an USB interface, the scanner is either connected to the USB port on the rear (MSA 315) or, via extension cable, as closer as possible to the joint (MSA 330/340). Obviously manual entry is also possible, in case of emergency.

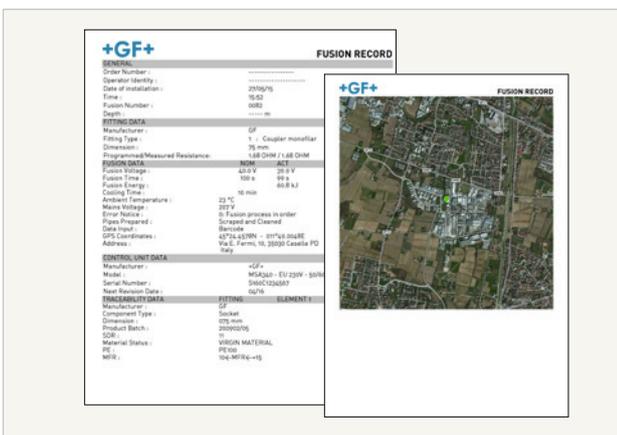


## Robust design

The robust design of the aluminum housing preserves the electrical components, giving an outstanding protection factor, in its category, against dust and water. The die casted enclosures contribute to reduce the overall weight and provide an excellent heat dissipation to enable welding in series. The fusion unit is ideally balanced in weight ensuring ergonomic handling and transportation. The professional storage box – suitable for even the roughest conditions – may complete the package.

# The Details

To ensure high quality fusion cycles, the MSA units automatically adjust the welding time. The entire fusion process is supervised, in case of anomalies – like inadequate input voltage – a specific error message will pop up. Depending on the ambient temperature, the machine automatically adjusts the welding time for the correct distribution of energy to the fitting. When the fusion process has been completed, the cooling time of the joint is displayed.



## Comfortable handling

The housing, handle and feet have been designed to adjust to the needs of the end users, e.g. for comfortable cable winding, ergonomic transport and ground separation. The power cord and the fusion cable, flexible and made of high quality material, are stored securely and tidily on top. Angle pin adapters are supplied in the pouch of the barcode scanner. No annoying sharp edges on the housing get in the way when using, especially under rough conditions.

## Easy data transfer

All machines allow fusion data recording to the internal memory; the data are easily transferred via standard USB memory key, to a personal computer for print out or import to a digital archive, like the WeldinOne. No additional data management software must anyway be installed, as the fusion protocols are already available in PDF format.

## Greatest scope of recorded data

Each protocol may contain up to 40 different data fields, including fusion parameters, operator ID, job number and monitored values. The MSA 340 stores the GPS coordinates of the jointing, thanks to its built-in receiver, to identify the geographical location (i.e. with Google Earth) and the traceability codes of fitting and pipeline components (according to ISO 12176-4).

# The Applications

The polyvalent electrofusion machines facilitate the job on all construction, providing quality and efficiency.

## + Versatile



### Transport and distribution

The MSA 315/330/340 electrofusion units are used in all applications you have to weld PE and several PP fitting types. No matter if they are new installations, renovation, repair or extension of existing water and gas lines. If your installations are dealing with transportation lines, then the MSA 330/340 are capable of welding large diameters. For distribution lines down to house connections, where you have smaller diameters, these electrofusion units offer an unbeatable price-performance ratio.



### Building technology and industrial treatment

The MSA 315/330/340 control boxes feel comfortable in a large variety of other applications, too. Big infrastructures set up, like a stadium or an airport terminal. Waste treatment pipelines in harsh environment or sewage network under the river. Everywhere, these reliable electrofusion units contribute to leak proof connections.



# Technical Overview

The MSA family gives you the freedom to choose the appropriate tool for your day-to-day business – a significant cost benefit for you. MSA 315 offers you a solid base machine, MSA 330 supports more functionalities, both in 230V and 115V versions, while MSA 340 offers, in addition, geolocalization and traceability features.



MSA 3 family overview	MSA 315	MSA 330	MSA 340
Fittings dimension range (Ø mm)	20÷315		
Multiple weldings in sequence	✓	✓	✓
<b>Operating procedures check</b>			
Automatic temperature compensation	✓	✓	✓
Fusion current monitoring (short/interrupt)	✓	✓	✓
Electrical (thermal and fuse) protection	✓	✓	✓
<b>Data input</b>			
Barcode scanner	✓	✓	✓
Manual fusion input	✓	✓	✓
Welder pass	✓	✓	✓
<b>Data recording</b>			
Documentation of fusion (number of protocols)	✓ (500)	✓ (1000)	✓ (1000)
Traceability documentation (ISO 12176-4)	-	-	✓
GPS support (GPS accuracy)	-	-	✓ (3m)
<b>Operations control</b>			
Display brightness configurable	✓	✓	✓
Acoustic alert	✓	✓	✓
Different levels of access (admin/user)	-	✓	✓
Configurable languages	16	11	11
<b>Serviceability</b>			
Programmable maintenance interval	-	✓	✓
Programmable rental time interval	-	✓	✓
Software upload via USB memory stick	✓	✓	✓
<b>Usability</b>			
Configurable workflow	-	✓	✓
Problem recognition (fittings, generators)	✓	✓	✓
Clear messages to the operator in the display	✓	✓	✓
User guidance	✓	✓	✓
Indication of energy, fusion and cooling time	✓	✓	✓
Data protocol format	PDF,CSV	CSV,PDF	CSV,PDF
Transport box	Optional	Optional	✓

# Specifications

Engineering at its best: high-end components in liaison with the possibility of individual configuration support your work flow perfectly. Depending on the power supply range (230V or 115V), the MSA330 and MSA 340 offer distinguishing traits to comply with national standards.



Technical specifications	MSA 315 230V	MSA 330/340 230V	MSA 330/340 115V
<b>Operating conditions</b>			
Working temperature range	min. -10 °C, max. +45 °C	min. -10 °C, max. +45 °C	min. -10 °C, max. +45 °C
<b>Electrical data</b>			
Input voltage range (Vac)	190 – 265	180 – 265	90-135
Frequency range (Hz)	50 - 60	50 - 60	50 - 60
Current consumption (Max, A)	13 A	16 A	32 A
Output voltage (V ac)	8 – 42	8 – 48	8 – 48
Output current (max, A)	70	90	90
Input power (kW)	3.0	3.6	3.6
Type of protection	IP64	IP64	IP54
Electrical switch type	ON / OFF	ON / OFF	Emergency switch
<b>Data and operation control</b>			
Communication interface	USB Type A	USB Type A	USB Type A
Buttons	2+Start+Stop	5+Start+Stop	5+Start+Stop
Display	LCD16x2 s	LCD20x4 s	LCD20x4 s
<b>Mechanical data</b>			
Dimensions (mm)	280x480x220	280x480x220	280x480x320
Weight (Kg)	17	19	22
Case material	Aluminum	Aluminum	Aluminum
Mains cable length	4m	4m	4m
Fusion cable length	3m	4m	3m
Detachable fusion cable	-	-	✓
Mains plug	Schuko 16A	Schuko 16A	IEC 60309
Connectors	4mm	4mm	4mm
Adapters (90°)	4.0 – 4.0 mm	4.0 – 4.0 mm / 4.0 – 4.7 mm	4.0 – 4.0 mm / 4.0 – 4.7 mm
<b>Norms compliance</b>			
EMC (EN61000)	✓	✓	✓
Safety (EN60335)	✓	✓	✓
ISO12176-2/3	✓	✓	✓
<b>Electrofusion unit code</b>			
	<b>230 V</b>	<b>230 V</b>	<b>115 V</b>
MSA 315	790 128 041	-	-
MSA 330	-	790 160 005	790 160 017
MSA 340	-	790 160 007	790 160 014

# Worldwide at home

Our sales companies and representatives ensure local customer support in more than 100 countries.

[www.gfps.com](http://www.gfps.com)

## Argentina / Southern South America

Georg Fischer Central Plastics Sudamérica S.R.L.  
Buenos Aires / Argentina  
Phone +54 11 4512 02 90  
gfcentral.ps.ar@georgfischer.com  
www.gfps.com/ar

## Australia

George Fischer Pty Ltd  
Riverwood NSW 2210  
Phone +61 (0) 2 9502 8000  
australia.ps@georgfischer.com  
www.gfps.com/au

## Austria

Georg Fischer Rohrleitungssysteme GmbH  
3130 Herzogenburg  
Phone +43 (0) 2782 856 43-0  
austria.ps@georgfischer.com  
www.gfps.com/at

Georg Fischer Fittings GmbH  
3160 Traisen  
Phone +43 (0) 2762 90300  
fittings.ps@georgfischer.com  
www.fittings.at

## Belgium / Luxembourg

Georg Fischer NV/SA  
1600 Sint-Pieters-Leeuw / Belgium  
Phone +32 (0) 2 556 40 20  
Fax +32 (0) 2 524 34 26  
be.ps@georgfischer.com  
www.gfps.com/be

## Brazil

Georg Fischer Sist. de Tub. Ltda.  
04571-020 São Paulo/SP  
Phone +55 (0) 11 5525 1311  
br.ps@georgfischer.com  
www.gfps.com/br

## Canada

Georg Fischer Piping Systems Ltd  
Mississauga, ON L5T 2B2  
Phone +1 (905) 670 8005  
Fax +1 (905) 670 8513  
ca.ps@georgfischer.com  
www.gfps.com/ca

## China

Georg Fischer Piping Systems Ltd  
Shanghai 201319  
Phone +86 21 3899 3899  
china.ps@georgfischer.com  
www.gfps.com/cn

Chinaust Plastics Corp. Ltd.  
Songliandian, Zhuozhou city,  
Hebei province, China, 072761  
Phone +86 312 395 2000  
Fax +86 312 365 2222  
chinaust@chinaust.com  
www.chinaust.com.cn

## Denmark / Iceland

Georg Fischer A/S  
2630 Taastrup / Denmark  
Phone +45 (0) 70 22 19 75  
info.dk.ps@georgfischer.com  
www.gfps.com/dk

## Finland

Georg Fischer AB  
01510 Vantaa  
Phone +358 (0) 9 586 58 25  
Fax +358 (0) 9 586 58 29  
info.fi.ps@georgfischer.com  
www.gfps.com/fi

## France

Georg Fischer SAS  
95932 Roissy Charles de Gaulle Cedex  
Phone +33 (0) 1 41 84 68 84  
fr.ps@georgfischer.com  
www.gfps.com/fr

## Germany

Georg Fischer GmbH  
73095 Albershausen  
Phone +49 (0) 7161 302 0  
info.de.ps@georgfischer.com  
www.gfps.com/de

## India

Georg Fischer Piping Systems Pvt. Ltd  
400 083 Mumbai  
Phone +91 22 4007 2000  
Fax +91 22 4007 2020  
branchoffice@georgfischer.com  
www.gfps.com/in

## Italy

Georg Fischer S.p.A.  
20063 Cernusco S/N (MI)  
Phone +39 02 921 861  
it.ps@georgfischer.com  
www.gfps.com/it

Georg Fischer TPA S.r.l.  
IT-16012 Busalla (GE)  
Phone +39 010 962 47 11  
tpa.ps@georgfischer.com  
www.gfps.com/it

## Japan

Georg Fischer Ltd  
530-0003 Osaka  
Phone +81 (0) 6 6341 2451  
jp.ps@georgfischer.com  
www.gfps.com/jp

## Korea

Georg Fischer Korea Co. Ltd  
Unit 2501, U-Tower  
120 Heungdeok Jungang-ro  
(Yeongdeok-dong)  
Giheung-gu, Yongin-si, Gyeonggi-do  
Phone +82 31 8017 1450  
Fax +82 31 217 1454  
kor.ps@georgfischer.com  
www.gfps.com/kr

## Malaysia

George Fischer (M) Sdn. Bhd.  
41200 Klang, Selangor Darul Ehsan  
Phone +60 (0) 3 3122 5585  
Fax +60 (0) 3 3122 5575  
my.ps@georgfischer.com  
www.gfps.com/my

## Mexico / Northern Latin America

Georg Fischer S.A. de C.V.  
CP 66636 Apodaca, Nuevo Leon / Mexico  
Phone +52 (81) 1340 8586  
Fax +52 (81) 1522 8906  
mx.ps@georgfischer.com  
www.gfps.com/mx

## Middle East

Georg Fischer Piping Systems (Switzerland) Ltd  
Dubai / United Arab Emirates  
Phone +971 4 289 49 60  
gcc.ps@georgfischer.com  
www.gfps.com/int

## Netherlands

Georg Fischer N.V.  
8161 PA Epe  
Phone +31 (0) 578 678 222  
nl.ps@georgfischer.com  
www.gfps.com/nl

Georg Fischer Waga N.V.  
NL-8160 AG Epe  
Phone +31 (0) 578 678 378  
waga.ps@georgfischer.com  
www.waga.nl

## New Zealand

Georg Fischer Ltd  
5018 Upper Hutt  
Phone +04 527 9813  
Fax +04 527 9834  
nz.ps@georgfischer.com  
www.gfps.com/nz

## Norway

Georg Fischer AS  
1351 Rud  
Phone +47 67 18 29 00  
no.ps@georgfischer.com  
www.gfps.com/no

## Poland

Georg Fischer Sp. z o.o.  
05-090 Sekocin Nowy  
Phone +48 (0) 22 31 31 0 50  
poland.ps@georgfischer.com  
www.gfps.com/pl

## Romania

Georg Fischer Piping Systems (Switzerland) Ltd  
020257 Bucharest - Sector 2  
Phone +40 (0) 21 230 53 80  
ro.ps@georgfischer.com  
www.gfps.com/int

## Russia

Georg Fischer Piping Systems (Switzerland) Ltd  
Moscow 125040  
Phone +7 495 748 11 44  
ru.ps@georgfischer.com  
www.gfps.com/ru

## Singapore

George Fischer Pte Ltd  
528 872 Singapore  
Phone +65 6747 0611  
Fax +65 6747 0577  
sgp.ps@georgfischer.com  
www.gfps.com/sg

## Spain / Portugal

Georg Fischer S.A.  
28046 Madrid / Spain  
Phone +34 (0) 91 781 98 90  
es.ps@georgfischer.com  
www.gfps.com/es

## Sweden

Georg Fischer AB  
117 43 Stockholm  
Phone +46 (0) 8 506 775 00  
info.se.ps@georgfischer.com  
www.gfps.com/se

## Switzerland

Georg Fischer Rohrleitungssysteme (Schweiz) AG  
8201 Schaffhausen  
Phone +41 (0) 52 631 3026  
ch.ps@georgfischer.com  
www.gfps.com/ch

## Taiwan

Georg Fischer Co. Ltd  
San Chung Dist., New Taipei City  
Phone +886 2 8512 2822  
Fax +886 2 8512 2823  
www.gfps.com/tw

## United Kingdom / Ireland

Georg Fischer Sales Limited  
Conventry, CV2 2ST / United Kingdom  
Phone +44 (0) 2476 535 535  
uk.ps@georgfischer.com  
www.gfps.com/uk

## USA / Caribbean

Georg Fischer LLC  
92618 Irvine, CA / USA  
Phone +1 714 731 88 00  
Fax +1 714 731 62 01  
us.ps@georgfischer.com  
www.gfps.com/us

Georg Fischer Central Plastics LLC  
Shawnee, OK 74801 / USA  
Phone +1 (405) 273 63 02  
gfcentral.ps@georgfischer.com  
www.centralplastics.com

## Vietnam

Georg Fischer Pte Ltd  
Representative Office  
Ho Chi Minh City  
Phone +84 28 3948 4000  
Fax +84 28 3948 4010  
sgp.ps@georgfischer.com  
www.gfps.com/vn

## International

Georg Fischer Piping Systems (Switzerland) Ltd  
8201 Schaffhausen / Switzerland  
Phone +41 (0) 52 631 3003  
Fax +41 (0) 52 631 2893  
info.export@georgfischer.com  
www.gfps.com/int

The information and technical data (altogether "Data") herein are not binding, unless explicitly confirmed in writing. The Data neither constitutes any expressed, implied or warranted characteristics, nor guaranteed properties or a guaranteed durability. All Data is subject to modification. The General Terms and Conditions of Sale of Georg Fischer Piping Systems apply.