

MIG-O-MAT®

Micro Brazing and Welding units with gas production

*Quality
that connects*



- Melting and thermal treatment of metal
- Soldering, brazing and welding– manually or automatically operated
- Melting and tampering of glass
- Smoothing of acrylic glass

Low operation costs!

No bottled gas necessary!

High industrial safety!

No exchange of electrolyte; no mineral cotton needed!

The MIG-O-MAT micro brazing and welding units programme:

Model/Type		Lötstar 80	Lötstar 145	Lötstar 171	Lötstar 175	Lötstar 245	MSG 361	MSG 501
Mains voltage	V	230	230	230	230	230	400	400
Mains fuse	A	10	10	16	16	16	16	16
Max. gas production	l/h	80	140	180	180	240	380	500
Max. nozzle size		0,9 (G20)	1,1 (G19)	1,2 (G18)	1,2 (G18)	1,5 (G17)	2,0 (G14)	2,0 (G14)
Number of workstations		1	1-3	1-4	1-4	1-8	1-12	1-15
Width	mm	390	395	430	515	515	935	935
Depth	mm	210	275	350	375	375	475	475
Height	mm	290	445	515	515	515	755	755
Weight	kg	20	25	42	48	48	100	125

MIG-O-MAT[®] micro brazing and welding units, models MSG and Lötstar, are producing a hydrogen/oxygen mixture on the basis of the electrolysis of demineralised water, which is burning in a microflame without any residues if conditioned accordingly before.

The temperature and the energy of the micro flame can be adapted by the nozzle size and the kind of the evaporating liquid, according to the job required.

The micro flame's high temperature gradient allows working next to temperature-sensitive components. The light micro burner combined with a highly flexible gas tube ensures agreeable working without any symptoms of fatigue.

Our main users are craftsmen like goldsmiths, jewellers, technicians in dental labs, opticians, makers of musical instruments, repair in workshops, electrical technicians, model makers, etc.

There are multiple applications in research and development. For many years, **MIG-O-MAT**[®] brazing units are also used in training and education centres of opticians, goldsmiths and dental lab technicians.

The variety of applications in the industry is great. Our units are used by manufacturers of transformers, ventilators, electronic control devices, circuit elements, fuses, in the filter production, in medical technology, glass industry and for processing of textiles.

More than 30 years experience in production and application in the industry are the basis for a very long life time and reliability of the **MIG-O-MAT**[®] units.

Design and production of the **MIG-O-MAT**[®] appliances comply with the German industrial safety standards DIN 32 508 and accident prevention regulations.

The high operational reliability is guaranteed also by the fact, that the gas is only produced when needed. If the burner valve is closed, the gas production stops automatically.

Extraordinary low energy consumption and low material costs (distilled water, methanol) result in unrivalled low operational costs.

Another important factor is of course, that distilled water can be provided much easier than compressed gas and oxygen bottles.

Only after many years of operation is, if at all, an exchange of electrolyte necessary. Mineral cotton packages for drying gas are not needed.

The extensive range of appliances matches all the different requirements of our customers. For multi-station applications appliances with a gas production up to 600 liters/hour are available. The delimitation to 600 litres is due to safety requirements.

The Lötstar 80 is a compact appliance. But this compact construction can have several disadvantages when used intensively.

Therefore, the **MIG-O-MAT**[®] appliances, from Lötstar 145, are equipped with a special upper part. With this special gas

flow control, operation, maintenance and operational check are facilitated very much and a condensate production inside the unit is avoided. This results in higher reliability and a longer product life time.

For applications with changing conditions or in case of several working places and for an automatic brazing process, the Lötstar 145, Lötstar 175 and Lötstar 245 are equipped with a very fast analogue pressure control device. The pre-selectable working pressure is stabilized with high precision also in case of utilization of multiple burners.

The temperature-dependent whispering cooling device provides a nearly noiseless operation of the device. It is standard for appliances with micro controller control. The Lötstar 171 can be equipped with a low noise cooling option additionally.

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Knautz GmbH & Co. KG

Diepenbrucher Strasse 39
DE-42697 Solingen
Germany

Phone: +49 (0) 212 23362-0

Fax: +49 (0) 212 23362-22

E-mail: info@tool-factory.com

Shop: www.tool-factory.com