

FLEX 3000C / FLEX 3000 DUO

INTELLIGENT MIG WITH THE MOST SIMPLE CONTROL PANEL IN THE WORLD



**"Switch on,
press and weld"**

**Pulse welding
and MIG brazing
as standard**

Quattro Pulse™

**ERGO welding
hose or advanced
MIG Manager®**

**Options: Compact
or DUO with two
wire feed units**

**DUO version:
quick change
between brazing
and welding**

micatronic

The FLEX 3000 range can be equipped with the ergonomically correct MIG Manager® torch.

Intelligent and user-friendly MIG/MAG machines for sheet metal welding and MIG brazing

Switch on, press and weld

The Migatronix FLEX 3000 range of welding machines has been developed for competitive quality welding sheet metals in the increasingly complex steels and aluminium alloys. Intelligent, compact MIG/MAG pulse welding machines with user-friendly control panel allowing the welder to focus on the welding operation.

One press on a keypad will activate the programme for a specific welding operation and allow the welder to read all necessary data in the large green display. Pulse welding stainless steels or light alloy metals down to approx. 1 mm, MIG brazing high tensile steels with galvanised or primed surfaces, specific Quattro programmes with a minimum of heat input to the work piece. The FLEX 3000C and FLEX 3000 DUO are tailored to all welding operations and live up to the Migatronix vision: Switch on, press and weld.

MIG brazing

Migatronix's experiences from the cooperation with leading automotive manufacturers - and development projects regarding the joining of special alloy sheet metals - are incorporated in both FLEX 3000 machines. This also applies to MIG brazing galvanised steel plates; a process for optimum maintenance of corrosion and strength properties of the material and a minimum of after-treatment.

Quattro Pulse™

The FLEX 3000C and FLEX 3000 DUO are equipped with Migatronix's revolutionary

Quattro Pulse™. One press on the Quattro keypad gives access to a complete set of Quattro settings that can also form part of sequences. Quattro Pulse™ is based on the fact that the machine software produces the optimal droplet pinch-off of the wire. The result is a shorter arc and a colder weld pool. Especially at low current intensities in thin materials, the full effect is achieved with a minimum of heat input to the workpiece which, consequently, maintains its mechanical properties in the best possible way. At the same time you will get a TIG-like weld.

Quattro Pulse™ contributes to the first-rate welding performance of the FLEX 3000 range with a minimum of weld spatter.

Full digital control

The FLEX 3000 range, with full digital control, is the fourth generation of Migatronix's advanced power sources with eco-friendly standby facilities. Developed for companies in the light industry and automotive trade where heavy demands are made on welding quality and compliance with welding procedures.

Six to ten times faster than TIG

The machines master MIG/MAG welding on a high level. In fact, they have been developed specifically for this process and MIG pulse welding is notoriously six to ten times faster than TIG welding similar materials.

Always updated with MigaCARD®

The integrated MigaCARD® will allow the welder to adjust settings of the FLEX 3000C and FLEX 3000 DUO. Continuously updated data from Migatronix's large programme data bank will always provide the welder with the latest news in materials, wires and gases.

The MigaCARD® is a further development of the Migatronix Smartcard technology and holds a large number of welding programmes and machine software. Both are being updated the moment the welder inserts the card into the card reader, which is placed behind a protective cover.

The MigaEDITORTM system allows copy of welder's own welding programmes.





The simple and user-friendly control panel from which all facilities of the machine are controlled. Just switch on, press and weld.

FLEX 3000C with cooling unit.

SPECIALS

- Large display with every useful piece of information
- History menu for data collection for the latest welding current
- Quattro Pulse™ allows storage in sequences
- MIG brazing as standard
- Standby facilities



Flex 3000 DUO – two “welding machines” in one cabinet.

The FLEX 3000 range is the most universal welding machine in the market – with most automotive approvals

Low weight, high performance

The compact FLEX 3000C weighs well over 30 kilograms and performs a total of 300A. The DUO version weighs more but in return, it performs 300A from any of the welding hoses. Both machines are available in air-cooled as well as watercooled versions.

The optimal air cooling flow prevents sensitive components from being exposed to grinding dust and other impurities in the intake air.

Compact is the basic version. DUO is the double version with two wire feed units in the cabinet

The FLEX 3000 is the obvious choice for sheet metal welding and MIG brazing in the industry. Developed on the basis of many years of cooperation with leading automotive manufacturers – and recognized as the welding concept with most automotive approvals in the trade.

Flex 3000C has already stood the test as an efficient and compact multi-machine in the automotive and car body industry. In the name of flexibility, Migatronik has now added the Flex 3000 DUO to the machine range: the DUO version has two outlets for two different wire feed units – and room for two cylinders on the trolley.

The Flex 3000 DUO makes it quicker and easier to alternate between MIG brazing and welding processes. And the welder escapes the trouble of changing hoses, wires, spools, and gas over and over again.

The Flex 3000 DUO features quick switch from brazing to welding and room for two cylinders for two different wires.



The advanced ergonomically correct MIG Manager® allows the welder access to vital functions and readings from the torch handle.



Remote control with the revolutionary MIG Manager® ERGO torch

The FLEX 3000C and the new FLEX 3000 DUO can be equipped with the newly developed MIG Manager® torch.

The MIG Manager® torch allows the welder to control all vital functions and communicate them directly to the power source, such as:

- Adjustment of welding current
- Trim of arc length
- Change between current settings
- Quattro Pulse™ on/off

Large range of accessories

In addition to the advanced torch, Migatronik offers a comprehensive range of accessories for the FLEX 3000 range:

- Cooling unit
- Trolley with or without cylinder holder
- Ergonomic torches with or without watercooling
- Torches with or without adjustment from the torch handle
- Push Pull torch (C only)
- Intermediary station for large operating range (C only)
- Kit for adjustment of shielding gas flow (C only)
- MigaEDITOR™ for copy of user's own MigaCARD®



The Migatronik MIG Manager® covers a special requirement when it comes to welding operations that involve frequent changes between different welding operations where the welder does not have "eye contact" with the machine, such as welding below or inside car bodies and tanks or other difficult-to-access work pieces.

SPECIALS

- Transfer of machine software and welding programmes with MigaCARD®
- MigaEDITOR™ for copy of user's own welding programmes
- Future-safe-guarding for new materials and gas combinations
- Prepared for operation with asynchronous generator
- 300A welding current with only 16 A slow fuses
- Reset of user's own settings with MigaCARD®

The FLEX 3000 is a range of versatile, future-safeguarded MIG/MAG welding machines which has been developed for use in the light industry and for modern car body work where heavy demands are made on readjustment of processes and high quality welding operations are vitally important.

Construction of a wheel house in seawater-resistant aluminium of the type AlMg4.5Mn. The FLEX 3000C is equipped with Push Pull wire feed unit and 8 m welding hose for long operating range.



Construction of large aluminium tanks in hardening material. The welding machine is configured with watercooling and Push Pull torch for up to 1.2 mm wire diameter.



MIG brazing is used on a large scale for the construction of car bodies and other transport vehicles in galvanised high tensile steel to maintain strength properties in the steel and to protect the anti-rust zinc coating.



Welding of a stainless bearing construction element for the process industry. Quattro Pulse™ is often used for sheet metals down to 1 mm to ensure a minimum of heat input.





A multitude of programmes, such as ...

	Gas	Synergy	Syn. Pulse	Quattro Pulse™
Fe				
0.6 - 1.0 mm	CO ₂	●		●
0.6 - 1.0 mm	ArCO ₂	●		●
0.8 - 1.0 mm	ArCO ₂		●	
FCW (rutile) 1.2 mm	ArCO ₂	●		
FCW (metal) 1.2 mm	ArCO ₂	●		
FCW (basic) 1.2 mm	ArCO ₂	●		
CrNi 316				
0.8 - 1.0 mm	ArCO ₂	●	●	●
1.2 mm	ArCO ₂	●		
AlMg5				
0.8 - 1.2 mm	Ar	●	●	●
AlSi5				
0.8 - 1.2 mm	Ar	●	●	●
CuSi3				
0.8 - 1.0 mm	Ar	●	●	●
CuAl8				
0.8 - 1.0 mm	Ar	●	●	●

We reserve the right to make alterations in the programmes.

The FLEX 3000C in all its simplicity.



FLEX 3000C / FLEX 3000 DUO

Technical data

POWER SOURCE	FLEX 3000C	FLEX 3000 DUO
Mains voltage	400 V +/- 15 %	400 V +/- 15 %
Fuse	16 A	16 A
Open circuit consumption	40 VA	40 VA
Power	7.9 kVA	7.9 kVA
Mains current max.	15.5 A	15.5 A
Efficiency	0.85	0.85
Power factor	0.90	0.90
Open circuit voltage	15 – 68 V	15 – 68 V
Duty cycle 100% at 40°	220 A	220 A
Duty cycle 100% at 20°	250 A	250 A
Duty cycle 60% at 40°	250 A	250 A
Duty cycle 60% at 20°	300 A	300 A
Duty cycle 25% at 40°	300 A	300 A
Current range DC	15 - 300 A	15 - 300 A
Application class	S	S
Protection class	IP 23	IP 23
Norm	EN/IEC60974-1 EN/IEC60974-5 EN/IEC60974-10	EN/IEC60974-1 EN/IEC60974-5 EN/IEC60974-10
Dimensions L x W x H	69 x 27 x 63 cm	69 x 27 x 88 cm
Weight (excl. mains cable and trolley)	30 kg	51 kg
Wire feed speed	0.5-24 m/min	0.5-24 m/min
Wire reel diameter	300 mm	300 mm

COOLING UNIT	MCU 1250
Supply voltage	400 V +/- 15 %
Max. open circuit consumption	5 W
Cooling efficiency	1250 W
Tank volume	4 l
Flow at 1.2 bar/60°C	1.75 l/min.
Pressure max.	2.5 - 3.0 bar
Norm	EN/IEC60974-2
Dimensions H x W x L, cm	70 x 30 x 22 cm
Weight (excl. cooling liquid)	16 kg

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England

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