

# MACHINE RANGE

SWITCH ON | PRESS | WELD



MIG/MAG



TIG



MMA



**MICATRONIC**

# SWITCH ON, PRESS AND WELD



## Migatronik

Being a global supplier of professional welding solutions, Migatronik focuses on creating added value for the individual customer in terms of quality and competition. Living up to the Migatronik motto "Switch on, press and weld" is an important parameter in our endeavours to make the welding machine as user-friendly as possible.

It is important for Migatronik to leave its mark on development and to stay in touch with reality through close dialogue with customers and their welders regarding actual needs and future possibilities.

New possibilities within welding technology, metallurgy and data communications create almost unlimited challenges.

## Focus on quality management

The welding business sees the development of ever thinner materials with increased strength, such as high-tensile steels and aluminium alloys. This makes increased demands on controlling the heat supply, for instance. There are lots of challenges and no room for welding errors.

Migatronik focuses on energy consumption, ergonomics, environment and service throughout the life of the welding machine and lives up to the EU's RoHS directive on production without certain hazardous substances, such as lead, mercury and cadmium. Migatronik is certified according to ISO 9001 and thus focuses not only on the quality of the welding machines but also on the quality of the whole process from idea to implementation at the customer's.

To ensure the longest possible service life of a welding machine at the customer's, Migatronik

offers service concepts not only to prevent mechanical break-down but also if misfortune strikes.

## The machine-range catalogue gives you a quick overview

This catalogue describes Migatronik's "families" of machines for the MIG/MAG, TIG and MMA welding and plasma cutting processes. From mono-phase welding machines weighing less than five kilograms to large specialised industrial machines featuring data collection for automated devices and robots.

To make it easy to get a quick overview, we have marked the machine families with the lines of business and processes for which they have primarily been developed, viz.:

- Trades and assembly
- Automotive
- Industry
- Heavy industry
- Automation

In addition, the respective welding properties of the individual machine family for steel, aluminium and stainless are characterised as follows:

**Machine profile** according to material

### ★★★ Excellent

The welding machine is primarily designed and optimised for welding in this material.

### ★★ Good

The welding machine is secondarily designed for welding in this material.

### ★ Applicable

The welding machine is applicable for simple welding operations using this material.



## Appetiser

Use this machine range to find out which machines match the relevant welding requirements. And get more information in Migatronik's pamphlets available for each individual machine family.

To order brochures, please contact your local distributor or Migatronik.

## Glossary

On page 22 you will find a glossary explaining special terms and abbreviations.

## Machine accessories

Page 23 provides an overview of accessories available for select machines within each family.



# CONTENTS



## You are always welcome...

...to visit [www.migatronik.com](http://www.migatronik.com) where you will also find information and documentation on Migatronik's complete product portfolio.

|                                                        |    |
|--------------------------------------------------------|----|
| <b>SIGMA</b><br>Inverter-based MIG/MAG with MMA        | 4  |
| <b>FLEX</b><br>Inverter-based MIG/MAG with pulse       | 6  |
| <b>KMX</b><br>Thyristor-regulated MIG/MAG              | 8  |
| <b>MEW</b><br>Welding generators                       | 9  |
| <b>MIG</b><br>Step-regulated industrial MIG/MAG        | 10 |
| <b>AUTOMIG</b><br>Step-regulated MIG/MAG               | 12 |
| <b>PI</b><br>Inverter-based TIG/MMA and MMA            | 14 |
| <b>NAVIGATOR</b><br>Mobile TIG and MMA inverter        | 16 |
| <b>SCOUT &amp; MAMBA</b><br>Portable TIG/MMA inverters | 18 |
| <b>ZETA</b><br>Plasma cutters                          | 20 |
| <b>GLOSSARY</b>                                        | 22 |
| <b>MACHINE ACCESSORIES</b>                             | 23 |
| <b>MIGATRONIC WORLDWIDE</b>                            | 24 |

# SIGMA

## Inverter-based MIG/MAG with MMA

Sigma embodies innovative thinking throughout: a new generation of user-friendly MIG/MAG inverters, also applicable for MMA welding. Sigma features high duty-cycle and infinitely variable adjustment of the logical and simple control panel with advanced functions.

### A flexible solution

The Sigma range consists of three power sources (300, 400 and 500 A), freely combinable with four control panels – with or without pulse:

**Basic** for simple and routine welding jobs.

**Advanced** featuring DUO Plus™ and sequence spaces for user-defined parameter settings and the possibility of individualised fine-tuning.

**Synergic** with DUO Plus™, more than 50 welding programs and full synergy between the parameters chosen.

**Pulse** featuring DUO Plus™ and more than 50 welding programs. One of the most user-friendly control panels on the market for advanced pulse machines.



### Designed to meet future requirements:

The control panel chosen can be replaced if requirements change.

#### MACHINE PROFILE/WITHOUT PULSE

Steel: ★★★  
Aluminium: ★★  
Stainless: ★

#### MACHINE PROFILE/WITH PULSE

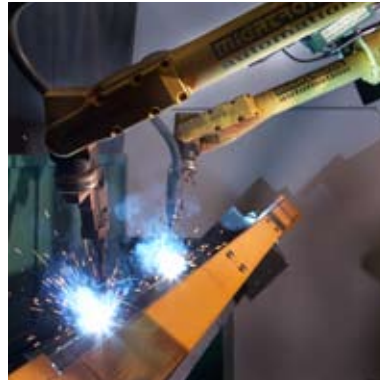
Steel: ★★★  
Aluminium: ★★★  
Stainless: ★★★



| MACHINE TYPE                    | Sigma 300 C | Sigma 400 C | Sigma 400 STB | Sigma 500 C | Sigma 500 STB |
|---------------------------------|-------------|-------------|---------------|-------------|---------------|
| Mains voltage +/- 15% (50-60Hz) | 3 x 400 V   | 3 x 400 V   | 3 x 400 V     | 3 x 400 V   | 3 x 400 V     |
| Current range                   | 15-300 A    | 15-400 A    | 15-400 A      | 15-500 A    | 15-500 A      |



**“Why be content with a step-regulated MIG/MAG welding machine, when a Migatronica Sigma based on inverter technology is just as easy to operate?”**



- Trades and assembly
- Automotive
- Industry
- Heavy industry
- Automation

**Sigma welding machines:**

**Sigma 300 C** (C for compact): aircooled and primarily for dip-transfer welding using solid wires in moderate wall thicknesses. Also suitable as a MMA welding machine for the service van.

**Sigma 400** is supplied as a C or STB (STB for separate wire-feed unit) model and with the possibility of an extra wire-feed unit to avoid reconfiguration if the welder switches from one wire to another between welding operations.

**Sigma 500** is supplied as a C or STB model. A heavy-duty machine accommodating wire diameters of up to 1.6 mm and suitable as a power source for automated units.

For the Sigma range, Migatronica has developed the MWF 41 wire-feed unit featuring industrial wire-feeding and built-in user-friendliness when inserting and adjusting a new wire.

**User-friendly, ergonomic design**

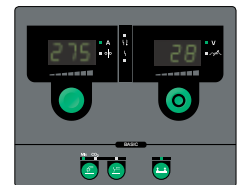
All STB versions have an integrated “backbone” for suspension of the wire-feed unit. The “backbone” can also be used for a double version with two separate wire-feed units or a triple version with Pi (TIG welding machine) or Zeta (plasma cutter).

The machines are available with large-wheeled trolleys, making them easy to move around.

**Examples of accessories**

- MIG Manager® torch
- Robot interface
- MigaMONITOR™
- Autotransformer 230-500 V
- Relief arm

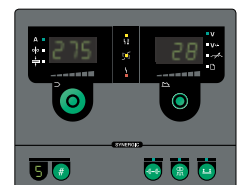
See page 23 for more details.



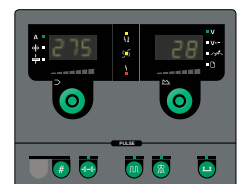
Basic



Advanced



Synergic



Pulse

# FLEX

## Inverter-based MIG/MAG with pulse

With complete flexibility regarding the choice of materials and welding consumables, Flex extends the limits for welding jobs that can be done in the MIG/MAG process. "Switch on, press and weld". The fully digital, user-friendly Flex welding machines are equipped with synergy and pulse functions and MIG brazing as standard.

### The Flex range consists of:

**Flex 3000 C** (C for compact) is used by a number of Europe's leading auto manufacturers for sheet-metal welding of both aluminium and high-tensile steel, and MIG brazing of galvanised steel.

Flex 3000 is programmed using the integrated MigaCARD® which holds both program data and machine software. This makes it possible to reprogram the machine for changed setups in new materials, wires and gases.



**Flex 3000 DUO** has outlets for two MIG torches and two possibilities of wire-feeding but still only one control panel.

Flex 3000 DUO makes it both faster and easier to switch between processes – e.g. MIG brazing and welding.

#### MACHINE PROFILE/WITHOUT PULSE

Steel: ★★★  
Aluminium: ★★  
Stainless: ★

#### MACHINE PROFILE/WITH PULSE

Steel: ★★★  
Aluminium: ★★★  
Stainless: ★★★



| MACHINE TYPE                    | Flex 3000 C | Flex 3000 DUO | Flex 4000 | Flex 5000 |
|---------------------------------|-------------|---------------|-----------|-----------|
| Mains voltage +/- 15% (50-60Hz) | 3 x 400 V   | 3 x 400 V     | 3 x 400 V | 3 x 400 V |
| Current range                   | 15-300 A    | 15-300 A      | 15-400 A  | 15-500 A  |



**"In sheet-metal welding of stainless steels and aluminium alloys, the pulse MIG process increases the welding speed up to sixfold compared to TIG. Migatronic Flex features Quattro Pulse™ function which ensures full power with minimum heat input."**



**Flex 4000 and Flex 5000** have a separate wire-feed unit and can be configured for a robot. The machines are programmed by means of a SmartCard®. The card controls the desired process and has data from Migatronic's program database. Editing and replacements can be carried out without changing the hardware of the machine.

The advanced MIG Manager® ERGO torch can be used together with Flex 3000/4000/5000.

The powerful Flex 5000 with 100% duty cycle at 400 A utilises the high amperage for optimising demanding welding jobs and functions together with automated units and robots.

#### Examples of accessories

- Robot interface
- MIG Manager® kit
- Dialog torch
- MigaEDITOR™
- Kit for gas control
- Card with special programs

See page 23 for more details.

Trades and assembly

Automotive

Industry

Heavy industry

Automation



# KMX

## Thyristor-regulated MIG/MAG

“Even heavyweight welding machines have to be mobile in the long production lines of the manufacturing industry. The KMX 550 is mobile – with heavy-duty wheels and up to 70 metres of interconnecting cable or with a wire-feed unit in an advanced position and Dialog torch for even the most remote welding jobs.”

- Trades and assembly
- Automotive
- Industry
- Heavy industry
- Automation

**KMX 550** is among the strongest thyristor-regulated MIG/MAG and MMA machines in the market for demanding welding operations in shipyards and production, such as welding of boilers, wind-turbine towers and other thick materials using solid and flux-cored wires or covered electrodes in steel, stainless steel and aluminium. In addition, the machine is powerful enough for carbon arc gouging.

Control panel and digital output of welding data, such as wire-feed speed and volt/voltage, are placed in the separate wire-feed unit featuring the stable four-pool drive.

**KMX 550 Sync.** As a supplement to the infinitely variable adjustment of current and voltage, it is possible to equip the machine with a synergy kit with 11 synergy lines.



### Robust and service-friendly

Being a heavy-duty workhorse with a service-friendly replacement system for wearing parts, breakdowns of the KMX 550 are reduced to a minimum.

### Standby functions

KMX has energy-saving and eco-friendly standby functions, based on an automatic idling function of the fan and cooling unit, for instance.

### Examples of accessories

- Open or closed wire-feed units
- Cooling unit
- Synergy kit
- Yard unit

See page 23 for more details.

#### MACHINE PROFILE/METALS

|            |     |
|------------|-----|
| Steel:     | ★★★ |
| Aluminium: | ★★  |
| Stainless: | ★   |



| MACHINE TYPE                    | KMX 550  | KMX 550 Sync |
|---------------------------------|----------|--------------|
| Mains voltage +/- 15% (50-60Hz) | 400 V    | 400 V        |
| Current range                   | 40-550 A | 40-550 A     |

**“The Migatronic MEW range includes both welding generators and independent power-supply units for outdoor welding applications: powered by petrol or diesel, robust and silent-running.”**

Migatronic’s range of mobile welding generators for outdoor use, powered by petrol or diesel, cover a wide range of use within MMA welding and power supply for tools. All machines meet the latest noise level requirements and eco standards, and the selection of globally used types of quality motors enables world-wide after-sales service.

### The range includes:

**MEW Chopper 150**, a compact (only 34 kilograms) petrol-powered DC welding generator for welding with most types of electrodes up to 3.2 mm. The generator can also serve as a source of power for electric tools and lamps consuming up to 2kW/230 V. The generator is powered by a Honda GX 200 industrial engine with low-fuel alarm and shut-down of revolutions after a short time without current consumption.

**MEW 2000 G**, an industrial machine with an output of 170 A and a petrol-powered welding generator which is also applicable for 12 V emergency start of vehicles and tractors.

**MEW 3000 D**, a diesel-powered welding generator with an output of 300 A functions as a DC welding generator using electrodes up to 5 mm. During welding, the generator can also supply three-phase and mono-phase auxiliary current.



**MEW 4000 D**, is the heavy-weight of Migatronic’s welding generators. The machine is powered by a diesel engine with an electric starter and electronic control of the welding current. With a maximum output of 400 A, the machine can weld using electrodes up to 6 mm.

### Examples of accessories

- 230/400 V CEE outlet – 50/60 Hz
- Battery-booster (emergency starter)
- Kit for cellulose electrodes
- Remote control

See page 23 for more details.

Trades and assembly ●

Automotive ○

Industry ○

Heavy industry ○

Automation ○

### MACHINE PROFILE/METALS

Steel: ★★★

Stainless: ★★



| MACHINE TYPE  | MEW Chopper 150 | MEW 2000 G | MEW 3000 D | MEW 4000 D |
|---------------|-----------------|------------|------------|------------|
| Current range | 30-150 A        | 20-170 A   | 30-300 A   | 30-400 A   |
|               |                 |            |            |            |

# MIG

## Step-regulated industrial MIG/MAG

MIG is a range of robust, step-regulated, user-friendly and all-round machines for MIG/MAG dip-transfer or spray-transfer welding, from sheet metal and light structures to thick walls. Primarily developed for mild steel but also applicable for stainless steel and aluminium.

### Many variants

There is always a MIG machine with high duty cycle for intensive quality welding day after day. Some models are supplied as C (compact) versions, others as STB versions (STB for separate wire-feed unit) and with optional air-cooling or water-cooling.

The many variants are designed based on the four primary models: MIG 305, 385, 445 and 545. The largest models feature four choke connections and up to 36 voltage steps.



#### MACHINE PROFILE/METALS

|            |     |
|------------|-----|
| Steel:     | ★★★ |
| Aluminium: | ★   |
| Stainless: | ★   |



| MACHINE TYPE                    | MIG 305 C       | MIG 385 C       | MIG 445 C       | MIG 305 STB     |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|
| Mains voltage +/- 15% (50-60Hz) | 3 x 230 V/400 V | 3 x 230 V/400 V | 3 x 230 V/400 V | 3 x 230 V/400 V |
| Current range                   | 40-300 A        | 40-385 A        | 40-445 A        | 40-300 A        |





**“Back in 1970 Migatronik delivered its first welding machine to a car repair shop, developed and produced according to the mechanic’s specific demands for a robust and easy-to-operate machine. That’s how it has been ever since. The professional automotive trade is developing continuously. So is Automig.”**



**MIG brazing**

Multimotive 220 is designed specifically for the gentle MIG brazing process used for galvanised and primed plates in the continuously more complex steel alloys.

But Multimotive 220 is also an all-round machine featuring 20 voltage steps and spot and interval facilities suitable for MIG brazing steel and high-tensile steel. A special choke with two outlets makes it easy to switch between the brazing and welding processes.

**Multimotive DUO.** At the request of the automotive trade, Migatronik has developed Multimotive DUO with two welding outlets.

A configuration for two wires, e.g. a MIG braze-wire on one coil and a mild solid wire on the other, increases the machine’s flexibility. Switching between the two torches is done using the function switch on the control panel.

**Examples of accessories**

- Dialog torch
- Additional control panels
- Tool tray
- 230 V outlet for electric tools

See page 23 for more details.

- Trades and assembly ●
- Automotive ●
- Industry ●
- Heavy industry ○
- Automation ○



| Automig 231 | Automig 271 | Automig 273 | Multimotive 220 | Multimotive DUO |
|-------------|-------------|-------------|-----------------|-----------------|
| 1 x 230 V   | 1 x 230 V   | 3 x 400 V   | 3 x 400 V       | 3 x 400 V       |
| 20-200 A    | 20-250 A    | 20-250 A    | 20-200 A        | 20-200 A        |

# PI

## Inverter-based TIG/MMA and MMA

Pi 200 and Pi 250 are for quality welding operations in TIG AC/DC and MMA. You have never seen such a variety of readily accessible facilities for TIG welding: increased programming, simple operation and user-friendly design, as well as inverter technology combined with innovative operation and communication possibilities.

### Mono-phase and three-phase

A high-performance mono-phase or three-phase Pi machine is always available and perfect for a wide range of TIG and MMA welding operations. Both the Pi 200 and the Pi 250 are available in three versions, all of which have easy-to-use control panels:

**Pi DC** for MMA welding with simple TIG LIFTIG®.

**Pi DC HP** - TIG with pulse and Synergy Plus™ as standard features.

**Pi AC/DC** - featuring all functions plus TIG for aluminium, etc.

### Three optional pulses

Pi offers three optional pulse versions: traditional manual pulse, quick pulse, and Synergy Plus™ for DC welding which automatically adjusts all overarching pulse parameters. Another advantage of Synergy Plus™ is that the traditional sound in pulse welding has been replaced by a sound that does not cause stress.

Pi 200 HP and Pi 200 AC/DC, the two mono-phase machines, feature PFC (Power Factor Correction), a function that makes it possible to weld with up to 200 A if only 16 A mains fuses are available.

### Controlled cleaning zone

All Pi AC/DC machines – including the mono-phase version – are fitted with the D.O.C.® system, Migatronik's revolutionary dynamic oxide control. In welding aluminium, D.O.C.® ensures a controlled cleaning zone along the weld, increases the welding speed by up to 30% and reduces the consumption of energy and tungsten electrodes correspondingly.



#### MACHINE PROFILE/DC

Steel: ★★★

Stainless: ★★★

#### MASKINPROFIL/AC/DC

Steel: ★★★

Aluminium: ★★★

Stainless: ★★★



| MACHINE TYPE                    | PI 200 TIG (MMA)      | PI 250 TIG (MMA)   |
|---------------------------------|-----------------------|--------------------|
| Mains voltage +/- 15% (50-60Hz) | 1 x 230 V (3 x 400 A) | 3 x 400 V          |
| Current range                   | 7-200 A (15-200 A)    | 7-250 A (15-250 A) |

"High product and service quality and commitment to innovation were the reasons for rewarding Migatronik's new design line with the iF Product Award 2006."



**More advantages**

Pi has up to 40 program options, depending on the model.

The Pi is available with or without trolley.

Pi TIG is available with a water-cooled TIG welding cable.

Pi features tack-welding function with a short response time for the torch from triggering to ignition.

**Trades and assembly** ●

**Automotive** ○

**Industry** ●

**Heavy industry** ○

**Automation** ●

**Examples of accessories**

- Dialog torch
- Remote control
- Foot control unit
- MMA cable

See page 23 for more details.



Pi AC/DC



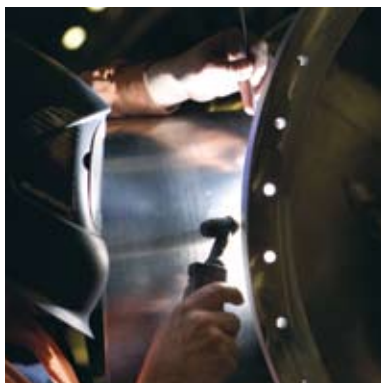
Pi DC HP



Pi MMA



“Back in the 1990s, Migatronik took out a patent for D.O.C.® (Dynamic Oxide Control) and set new quality standards for welding aluminium. Since then, full digitising and more program options have provided more user advantages. The present generation of Navigator machines is stronger than ever.”



Trades and assembly

Automotive

Industry

Heavy industry

Automation

#### Examples of accessories

- Trolley for water-cooled or air-cooled machines
- Additional control panels
- Dialog torch
- Remote control

See page 23 for more details.



# SCOUT & MAMBA

## Portable TIG/MMA inverters



Migatronic Scout is a range of three lightweight (6.5–12 kilograms) mono-phase inverters, two of which are MMA machines, while the third is a TIG machine with pulse.

### Scout 130

Using covered electrodes in dimensions up to 3.25 mm, Scout 130 E welds steel and stainless steel with a maximum output of 130 A by the use of 15 A mains fuses.

Scout 130 E weighs only 6.5 kilograms, has built-in Hot Start and Arc Power functions and emits no acoustic noise. Suitable for power supply from asynchronous generator.

### Scout 160

Scout 160 has the same functions as Scout 130 E, but with a maximum output of 160 A. Another feature are large dinse plugs which make the cables especially robust.

Scout 160 HP, Migatronic's smallest TIG machine with pulse, was developed for welding in thin wall thicknesses in both mild and stainless steels. The function switch on the control panel allows the operator to choose from TIG and MMA.

Scout 160 HP performs infinitely variable pulse welding in the current range 10-160 A. Digital output of welding current. Remote control from Migatronic Dialog torch or known remote controls.



### MACHINE PROFILE/METALS

Steel: ★★★  
Stainless: ★★



| MACHINE TYPE                    | SCOUT 130 | SCOUT 160 | SCOUT 160 HP | 151 E MAMBA |
|---------------------------------|-----------|-----------|--------------|-------------|
| Mains voltage +/- 15% (50-60Hz) | 1 x 230 V | 1 x 230 V | 1 x 230 V    | 1 x 230 V   |
| Current range                   | 25-130 A  | 30-160 A  | 10-160 A     | 7-150 A     |



**“Busy professional welders doing mounting and repair jobs are uncompromising when it comes to welding quality. Even the smallest welding machines must be powerful enough for a wide variety of welding operations in addition to being robust and reliable.”**



**Trades and assembly**

**Automotive**

**Industry**

**Heavy industry**

**Automation**

### **Migatronik Mamba**

One of the strongest mono-phase 230 V welding machines in the market with an output of 150 A. Professional hand luggage weighing 4.6 kilograms. The Mamba welds with electrodes up to 3.25 mm and its LIFTIG® ignition also makes it applicable for simple TIG welding operations.

### **Examples of accessories**

- Remote control (Scout)
- Foot control unit (Scout)
- Shoulder strap (Mamba)
- CEE mains plug (depending on the market)

See page 23 for more details.



# ZETA

## Plasma cutters

The Migatronc Zeta plasma cutters featuring operational comfort, automatic pilot-arc control, and adjustable gas flow are suitable for both stationary use and on-site repairs. Zeta uses compressed air as the plasma gas, thereby enabling it to be connected to existing compressors.

### Precise cuts

The two Zetas have stable ignition of the pilot arc and perform precise cuts in all conductive metals. The machines are prepared for use with generators and come with various sizes of nozzles for high-quality cuts.

**Zeta 40** (weighing 19 kilograms) is mono-phase and makes precise cuts in plate thicknesses up to 8 mm. Zeta 40 has PFC (Power Factor Correction) function for full output by means of 16 A mains fuses.

**Zeta 60** is three-phased and makes quality cuts in materials up to 12 mm.

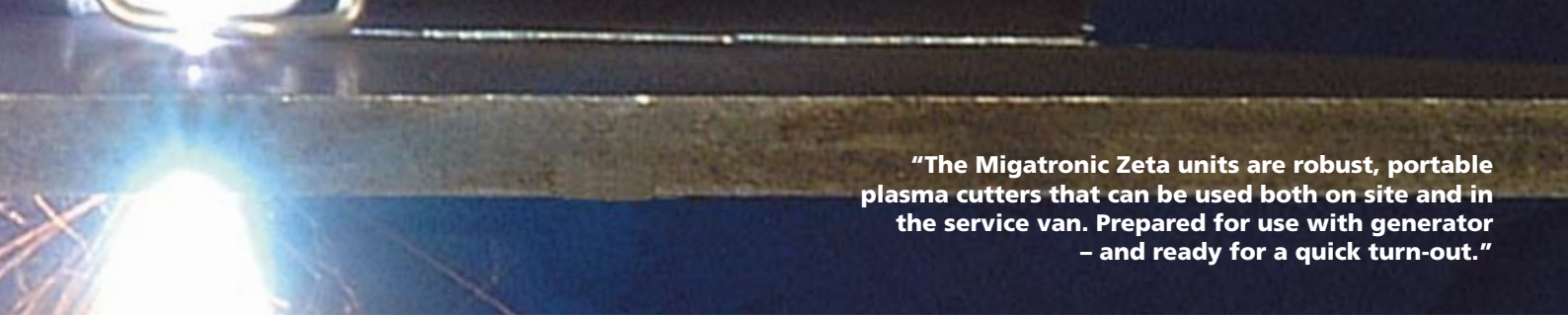


### MACHINE PROFILE/METALS

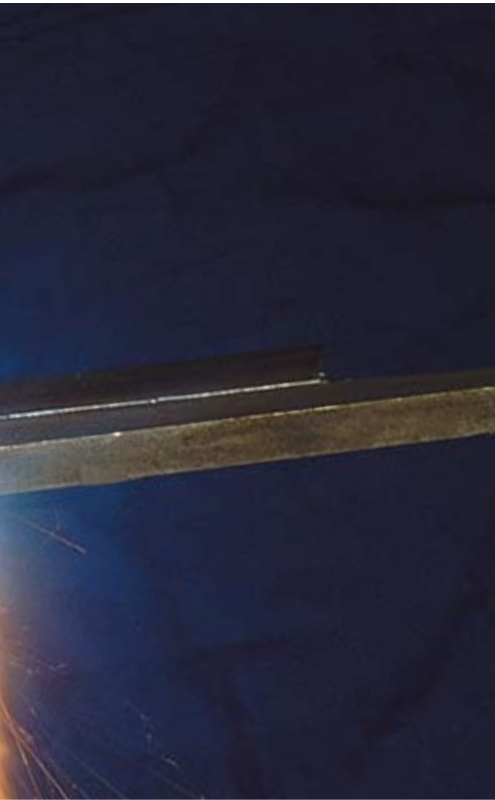
|            |     |
|------------|-----|
| Steel:     | ★★★ |
| Aluminium: | ★★★ |
| Stainless: | ★★★ |



| MACHINE TYPE                    | Zeta 40   | Zeta 60   |
|---------------------------------|-----------|-----------|
| Mains voltage +/- 15% (50-60Hz) | 1 x 230 V | 3 x 400 V |
| Current range                   | 20-45 A   | 20-60 A   |



"The Migatron Zeta units are robust, portable plasma cutters that can be used both on site and in the service van. Prepared for use with generator – and ready for a quick turn-out."



Trades and assembly

Automotive

Industry

Heavy industry

Automation

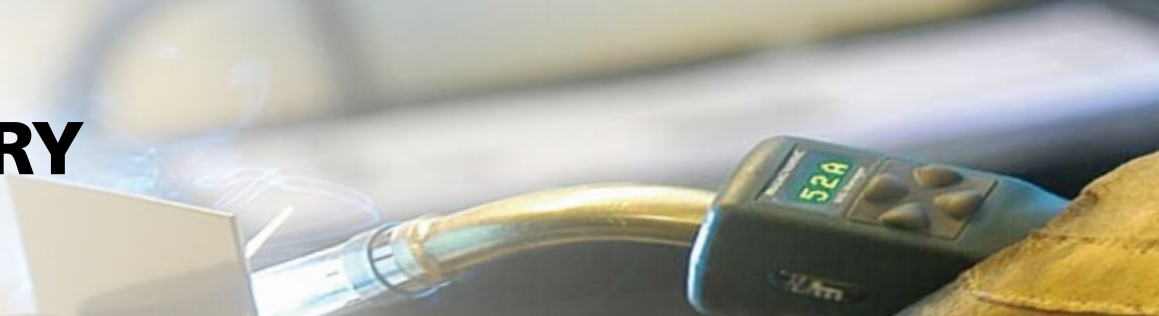
#### Examples of accessories

- Roller guide
- Trolley
- Nozzles and electrodes for a variety of wall thicknesses
- CEE mains plug

See page 23 for more details.



# GLOSSARY



## Arc Power

Keeps the arc going and prevents weld spatter from sticking to the workpiece.

## C

An abbreviation for compact.

## Dialog torch

A (MIG or TIG) torch with a control knob at the torch handle for adjusting wire-feed speed/welding current or other synergic parameters (depending on the machine).

## D.O.C® (Dynamic Oxide Control)

A patented system that automatically increases the welding speed by up to 30% and decreases the consumption of both energy and tungsten electrodes correspondingly.

## DUO Plus™

A function for automatic connection of two welding sequences set in MIG/MAG with or without pulse. The function gives better control of the weld pool and a TIG-like appearance of the weld. All Migatronic Sigma machines are equipped with this function.

## Flow control

A cooling-unit device that stops the machine if water is not circulating in the system. Prevents melting/overheating of the torch and intermediary cables.

## Gas control kit

A gas regulator for individual adjustment of gas flow on the control panel. The function contributes to safe arc ignition by means of a built-in gas-saver regulator.

## Hot Start

Helps to establish the arc in MMA welding if the electrodes are difficult to ignite.

## Interface kit

Preparation of a welding machine for communication with an automatic device or robot.

## MigaCARD

Data-carrying card for loading or updating MIG inverter machines with welding programs. MigaCARD is for Flex 3000.

## MigaEDITOR™

A system for copying a MigaCARD/SmartCard, consisting of SW and a HW card burner. Programs can be received by e-mail from Migatronic.

## MIG Manager® torch

Advanced torch for remote control of the most important welding parameters. The adjustable parameters depend on the machine's control panel.

## MIG Manager kit

Preparation of the machine for support of MIG Manager® torch.

## MigaMONITOR™

A data collection program for use with Flex 4000-5000 and Sigma. Welding data can be saved and printed.

## MMA kit

Prepares a wire-feed unit for the installation of a MMA welding cable.

## Switchable

A function that allows the operator to switch between mains voltages when using the machine.

## Pilot arc

For contact-free ignition. When the plasma cutter torch reaches a hole, the plasma arc extinguishes automatically and reignites after passing the hole.

## PFC (Power Factor Correction)

Electronic circuit that makes it possible to weld with up to 200 A for use with only 16 A mains fuses. Gives better utilisation of the energy consumed. The function is used for 230 V (mono-phase) machines only.

## Pulse MIG process

A welding process in which pulsating currents (A) ensure control of the weld pool and makes spatter-free welding possible, using currents in the normal dip transfer range (20-200 A). The function is typically used in sheet-metal welding of aluminium and stainless materials.

## Push-pull kit

For preparing a MIG machine to weld with soft wires (aluminium). The kit makes it possible to connect a push-pull torch (MIG torch with feeding of the wire from the torch handle).

## Quattro Puls™

For automatic connection of two welding sequences set in MIG/MAG with or without pulse. The function gives better control of the weld pool and a TIG-like appearance of the weld. All Migatronic Flex machines are equipped with this function.

## SmartCard®

The card holds the program controlling the desired welding process. Data from Migatronic's program database can be saved on it. SmartCards can be edited without changing the machine's hardware. SmartCard is for Flex 4000-5000.

## STB

An abbreviation for the separate wire-feed unit.

## Synergy kit

A purchased control for KMX for controlling primary welding parameters (V/A) by means of a single control knob. The kit includes 11 synergy lines adjustable for all common types of wire/gas combinations. Synergy lines are welding parameters coded together in the sequence from dip-transfer to mixed-transfer and spray-transfer.

## Synergi Plus™

A function for dynamic setting of all overarching pulse parameters in TIG welding in DC mode (Pi machines only).

## TIG LIFTIG®

Ignition of the arc through direct contact between workpiece and tungsten electrode, as opposed to high-frequency (HF) ignition.

## Yard Unit

A small compact wire-feed unit for Ø 200 mm (5 kilogram) wire spools.

Below you will find a wide range of machine accessories for the different families. Note that not all models in a machine family have the highlighted functions. Please contact your local distributor or Migatronik for details about the specific machines.

# MACHINE ACCESSORIES

| Accessories/machine family                               | Sigma | Flex 3000 | Flex 4000-5000 | KMX | MEW | MIG | Automig | PI - 1-phase and 3-phase | Navigator | Mamba | Scout | Zeta - 1-phase and 3-phase |
|----------------------------------------------------------|-------|-----------|----------------|-----|-----|-----|---------|--------------------------|-----------|-------|-------|----------------------------|
| Relief arm                                               | ■     |           | ■              | ■   |     | ■   |         |                          |           |       |       |                            |
| Autotransformer 230-500 V                                | ■     |           | ■              | ■   | ■   | ■   |         | 3-ph                     | ■         |       |       | 3-ph                       |
| Battery booster (emergency starter)                      |       |           |                |     | ■   |     |         |                          |           |       |       |                            |
| Petrol or diesel                                         |       |           |                |     | ■   |     |         |                          |           |       |       |                            |
| Shoulder strap                                           |       |           |                |     |     |     |         |                          |           | ■     |       |                            |
| CEE mains plug                                           | ■     | ■         | ■              | ■   | ■   | ■   | ■       | 3-ph                     | ■         | ■     | ■     | 3-ph                       |
| CEE outlet – 50/60 Hz                                    |       |           |                |     | ■   |     |         |                          |           |       |       |                            |
| Circle cutting device                                    |       |           |                |     |     |     |         |                          |           |       |       | ■                          |
| Dialog torch                                             | ■     | ■         | ■              | ■   | ■   | ■   | ■       | ■                        |           |       | ■     |                            |
| Digital display (additional purchase)                    |       |           |                |     |     | ■   |         |                          |           |       |       |                            |
| Double wire-feed unit                                    | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Nozzles and electrodes for a variety of wall thicknesses |       |           |                |     |     |     |         |                          |           |       |       | ■                          |
| Electrode cable                                          | ■     | ■         | ■              | ■   | ■   | ■   |         | ■                        | ■         | ■     | ■     |                            |
| Electric start                                           |       |           |                |     | ■   |     |         |                          |           |       |       |                            |
| Remote control                                           | ■     | ■         | ■              | ■   | ■   | ■   |         | ■                        | ■         |       | ■     |                            |
| Additional control panels                                | ■     | ■         | ■              | ■   | ■   | ■   | ■       | ■                        | ■         |       |       |                            |
| Flow control for water cooling                           | ■     | ■         | ■              | ■   | ■   | ■   |         | ■                        | ■         |       |       |                            |
| Foot control unit                                        |       |           |                |     |     |     |         | ■                        | ■         |       | ■     |                            |
| Roller guide                                             |       |           |                |     |     |     |         |                          |           |       |       | ■                          |
| Cable suspension                                         | ■     |           |                |     |     |     |         |                          |           |       |       |                            |
| Kit: Cellulose electrodes                                |       |           |                |     | ■   |     |         |                          |           |       |       |                            |
| Kit: for remote control                                  | ■     | ■         | ■              | ■   | ■   | ■   |         | ■                        | ■         |       |       |                            |
| Kit: Gas control                                         |       | ■         | ■              |     |     |     |         |                          |           |       |       |                            |
| Kit: MIG Manager®                                        | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Kit: MMA for wire-feed units                             | ■     |           | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Kit: for separate interconnecting cables                 | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Kit: Polarity reverser (STB models only)                 | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Kit: Push-pull                                           | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Kit: Synergy                                             | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| MIG Manager® torch                                       | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| MigaCARD®                                                |       |           |                |     |     |     |         |                          |           |       |       |                            |
| MigaEDITOR™                                              | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| MigaMONITOR™ software                                    | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Possibility of triple version                            | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Switchable                                               | ■     | ■         | ■              | ■   | ■   | ■   | ■       |                          |           |       |       |                            |
| Robo Wire Feeder – RWF Multifeeder                       | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Robot interface                                          | ■     | ■         | ■              | ■   | ■   | ■   |         | ■                        |           |       |       |                            |
| Sequence torch                                           | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Safety earth rod                                         |       |           |                |     | ■   |     |         |                          |           |       |       |                            |
| Safety systems for oil, water, charging rate, etc.       | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Bracket and set of wheels for wire-feed unit             | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| SmartCard®                                               |       |           |                |     |     |     |         |                          |           |       |       |                            |
| Wire spools for all types of wires                       | ■     | ■         | ■              | ■   | ■   | ■   | ■       |                          |           |       |       |                            |
| Cooling unit                                             | ■     | ■         | ■              | ■   | ■   | ■   |         | ■                        | ■         |       |       |                            |
| Trolley                                                  | ■     | ■         | ■              | ■   | ■   | ■   |         | ■                        | ■         |       |       | ■                          |
| Tool tray                                                | ■     | ■         | ■              | ■   | ■   | ■   |         | ■                        | ■         |       |       |                            |
| Yard unit                                                | ■     | ■         | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| Open or closed wire-feed units                           |       |           | ■              | ■   | ■   | ■   |         |                          |           |       |       |                            |
| 230 V outlet for electric tools                          |       |           |                |     | ■   |     | ■       |                          |           |       |       |                            |

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