

SIGMA SELECT

Designed for intelligent welding
beyond the ordinary

Modular-based three-phase MIG/MAG and MMA inverter.

From basic, manually operated welding machines to advanced 550 amps high-performance pulse welding machines.



MIGATRONIC
WELDING VALUE

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A TRULY CUSTOMISED WELDING SOLUTION

HAVE IT ALL IN ONE MACHINE

With the new Sigma Select you will have one welding machine, that you can instantly adapt to match your current production needs – without deselecting functions you may need in the future. Sigma Select is the new generation of welding solutions, which make it possible for you to adjust your setup whenever you need to.

MAKE A SMART INVESTMENT

With Sigma Select you don't have to worry about the future. Once you buy the machine, you won't have to invest in another machine for a long time. You can simply upgrade your Sigma Select with the new functions you need for less than the cost of a new welding machine. Upgrade your welding set-up by adding programs or functions if new customers make new demands on your welding production.



THE MOST VERSATILE CONTROL PANEL WITH MULTIPLE OPTIONS

BASIC CONTROL PANEL

For basic welding. No unnecessary gadgets. Use the control knobs to adjust your welding parameters.

GRAPHIC CONTROL PANEL

Built to meet the future. Choose Synergic or Pulse and upgrade if your needs change. The digital soft key control panel is prepared for multiple add-ons including automatic functions for easier welding. Pick it up and take it with you.



Basic control panel (78815041)



Graphic control panel (78815040)

DESIGNED FOR INTELLIGENT WELDING BEYOND THE ORDINARY

EXTENDED WARRANTY - UP TO FIVE YEARS

Register newly purchased welding machines no later than 30 days from the date of purchase and get up to 3 or 5 years' warranty on selected components.

After registration, you will receive a warranty certificate.

We will contact you when it is time for the annual check-up.



CHOOSE YOUR LEVEL WHEN IT COMES TO CONTROL

BASIC

The Basic level of the control panel is designed for MIG/MAG and MMA welding and manual setting of welding parameters.

SYNERGIC

In the Synergic level, all primary welding parameters are linked and work together. Synergic includes a standard package of more than 50 welding programs.

PULSE

The Pulse level is perfect for stainless steel and aluminium because it provides spatter-free welding. Pulse includes Synergic and more than 50 welding programs.



The digital soft key control panel is prepared for multiple add-ons. Pick it up and take it with you.



The modular-based welding machine can transform to fit any production need. Add only welding programs and functions.



The SD card is for back-up on your pc or transfer of job settings to other Sigma Select machines.



DUO PLUS



For a perfect finish

Get stunning TIG-like welds with a MIG/MAG welding machine. DUO Plus technology automatically ensures a perfect final touch. It works in all materials, for all welding positions and all welders can do it. It's quite simple.



SEQUENCE



Tab your way to the perfect settings

The Sequence function makes it possible for you to save up to 9 personal sequences in each welding program. Switch between them with just a tap on the welding torch. Use Sequence for mounting and assembly, for instance where welders carry out many different welds during their workday.



SEQUENCE REPEAT



Invent your own arc

The Sequence Repeat technology provides maximum freedom to construct the ideal arc for your specific welding tasks.

Link together individual sequences and customise welding cycles.

HOW TO CONFIGURE THE MACHINE

SIGMA SELECT C

SIGMA SELECT S

HARDWARE CONFIGURATION							
POWER SOURCE	300 A	400 A	550 A	300 A	400 A	550A	
Optional water-cooling							
Optional IGC ¹⁾							
Graphic control panel							
BASIC control panel							

¹⁾ Intelligent Gas Control (IGC) saves gas, optimises gas protection and improves welding quality.



POWER ARC

Secure maximum weld penetration

With PowerArc technology, you build strong and solid structures in mild and stainless steel. Achieve maximum weld penetration in thick plates when welding fillet welds and butt welds with PowerArc.



MIGA JOB CONTROL

A clever digital memory

Take advantage of a digital memory in your welding machine - save your favourite welding settings and recall them anytime you want. Transfer settings to other Select machines. Miga Job Control makes it easy to find your routine settings and start welding right away.



MIGALOG

Register every weld

Keep track of your welding data with MigaLog software. Analyse and document your work. Use MigaLog to extract conclusive evidence for verification in accordance with EN and ISO welding standards.



HOW TO CONFIGURE FUNCTIONS & PROGRAMS

	FUNCTIONS											PROGRAM PACKAGES					
	Manual setting	Synergic DC	Synergic DC / Pulse	DUO Plus™	Sequence	Sequence Repeat 1)	Power Arc™	Intelligent Arc Control 2)	Miga Job Control™	Miga LOG™	Key Lock Card	Standard	Mild steel	Stainless steel	Aluminium	All programs	Single program
CONTROL																	
Graphic control panel	Standard	Optional	Optional	-	Optional	Optional	-	Optional	Optional	Optional	Optional	-	-	-	-	-	-
Graphic control panel SYNERGIC	Standard	Standard	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Standard	Optional	Optional	Optional	Optional	Optional
Graphic control panel PULSE	Standard	Standard	Standard	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Standard	Optional	Optional	Optional	Optional	Optional
BASIC control panel	Standard	-	-	-	-	-	-	-	-	-	Optional	-	-	-	-	-	-
Function package 3)		-	-				-	-				-	-	-	-	-	-

1) Requires Sequence

2) Intelligent Arc Control (IAC) for root passes. Power source must be prepared for IAC when purchased

3) DUO Plus function is not active until Synergy or Pulse function has been selected

IAC™ INTELLIGENT ARC CONTROL AUTOMATICALLY ADJUSTS THE ARC 50,000 TIMES PER SECOND...

SIMPLIFY COMPLEX WELDS

Intelligent Arc Control (IAC) makes difficult downward welding of root passes easy, even for less experienced welders. With a 100% stable and focused short arc, you achieve complete fusion in root passes. This increases the quality of each weld and your product.

WELD A SOLID FOUNDATION

Use Intelligent Arc Control to make the first joint, the root pass. Intelligent Arc Control makes sure that fusion in this first joint is perfect. It makes up a solid groundwork with a flat weld appearance and you can proceed with the rest of your weld.

BENEFITS

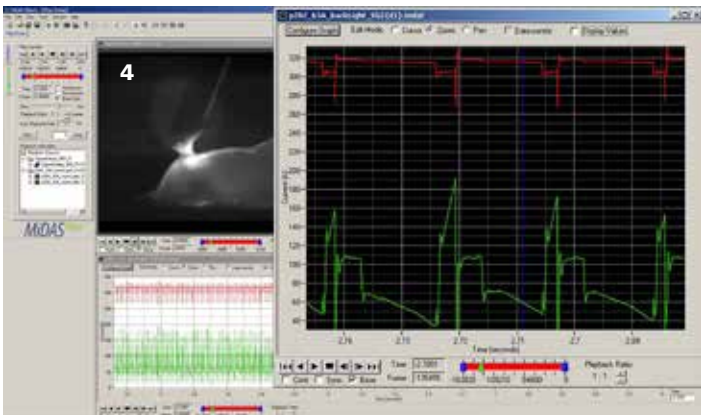
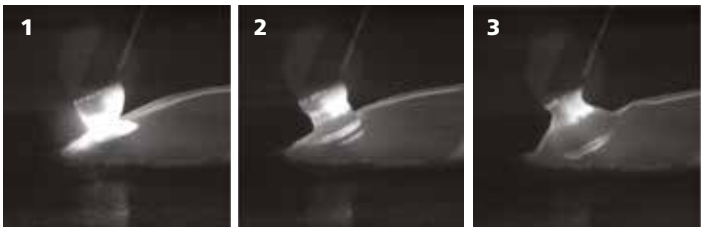
- Not sensitive to a varying stickout in a weld pass = easier to carry out root passes
- Easy process: makes good welders even better - easier for less experienced welders to carry out complex welds
- Significantly increases welding speed in downward welding of root passes compared to traditional upward welding
- Weld faster = produce more
- Less heat input = less deformation of the welded material but still with sufficient penetration
- No weld spatter = less time spent on post-treatment
- Lower production costs for each workpiece

IAC IS IDEAL FOR

- Root passes
- Pipes, tubes and tanks
- Butt welds
- Mild and stainless steel
- All plate thicknesses
- Manual and automated welding
- Standard welding procedures according to EN 1090/15612



IAC - Vertical downward welding of a root pass in a district heating pipe. Welding speed is significantly increased compared to traditional upward welding..



Real time laboratory records showing full control of the IAC process, also during droplet pinch-off.

INTELLIGENT GAS CONTROL IGC® - SYNERGIC GAS FLOW WITH LARGE-SCALE REDUCTION OF GAS CONSUMPTION

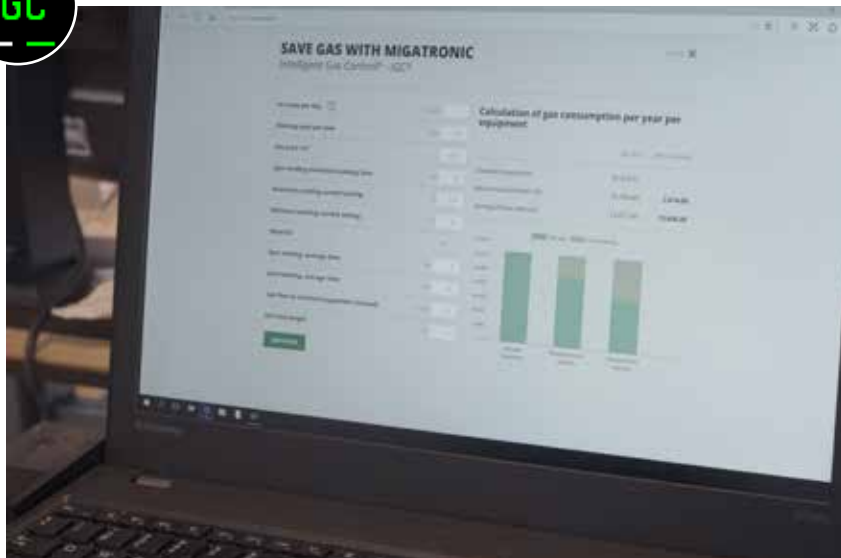
SAVE UP TO 50% WITH AUTOMATIC GAS CONTROL

IGC® Intelligent Gas Control technology prevents over-consumption of gas and gives you long term savings.

With weld pools always perfectly protected, you increase the quality of each weld.

Make sure that all your welding machines are equipped with IGC® Intelligent Gas Control and save money every day.

Your investment will quickly pay for itself.



BENEFITS

- Always optimum gas protection = no holes, pores or impure welds. Less failures created by insufficient gas flow or gas turbulence
- No unnecessary loss of gas, so-called gas puff at ignition = no over-consumption of gas
- No change in working procedures = easy for welders
- Fewer replacements of gas cylinders = save money and time
- Gas synergy lines are pre-adjusted for MIG and TIG welding – for gas and type of wire

IGC® IS IDEAL FOR:

- All welding processes
- All materials
- All kinds of welds
- Manual and automated welding

MIGAJOB CONTROL - A CLEVER DIGITAL MEMORY

Save your favourite welding settings and recall them anytime you want. Transfer settings to other Select machines. Miga Job Control makes it easy to find your routine settings and start welding right away.



BENEFITS

- Avoid spending time on finding the perfect settings for specific welding jobs.
- Save a large number of welding programs using individual welding job names.
- If welders share welding machines, they can save their own unique settings and quickly recall them again.
- It is easy to scroll through your saved welding jobs on the user-friendly graphic control panel.
- Copy settings to other welding machines via SD card.

MIGA JOB CONTROL IS IDEAL FOR:

- Workshops with a large number of welding machines and where welders share welding machines.
- Avoiding failures in your settings.

SIGMA SELECT DATA

POWER SOURCE	SELECT 300 / 300 IAC	SELECT 400 / 400 IAC	SELECT 550
Current range (MIG), A	15-300	15-400	15-550
Mains voltage +/- 15% (50-60Hz), V	400	400	400
Fuse, A	16	20	35
Mains current, effective, A	11.0 //16.0	17.5	27.2
Mains current, max., A	15.4	26.0	39.2
Power, 100%, kVA	9.0	12.1	18.9
Power, max., kVA	10.7	18.0	27.1
Open circuit voltage, V	50-60// 65-70	65-70	75-80
Efficiency	0.85	0.85	0.90
Power factor	0.90	0.90	0.90
Duty cycle 100% /20°C (MIG), A%/V	290/100/28.5 // 300/100/29.0	345/100/31.5 // 310/100/29.5	475/100/37.8
Duty cycle max. /20°C (MIG), A%/V		400/60/34.0 // 400/60/34.0	550/60/41.5
Duty cycle 100% /40°C (MIG), A%/V	220/100/25.0 // 270/100/27.5	300/100/29.0 // 280/100/28.0	430/100/35.5
Duty cycle 60% /40°C (MIG), A%/V	240/60/26.0 // 240/26	370/60/32.5 // 350/60/31.5	510/60/39.5
Duty cycle max. /40°C (MIG), A%/V	300/25/29.0 // 300/80/29.0	400/50/34.0 // 400/40/34.0	550/50/41.5
Application class	S/CE	S/CE	S/CE
Protection class	IP 23S // IP 23	IP 23	IP 23
Standards	IEC60974-1. IEC60974-10 Cl. A	IEC60974-1. IEC60974-10 Cl. A	IEC60974-1. IEC60974-10 Cl. A
Dimensions C (H x W x L), mm	700x260x735	700x260x735	700x260x735
Dimensions S (H x W x L), mm	454x260x735	454x260x735	454x260x735
Weight C, kg	36.9 // 53	52 // 53	53
Weight S, kg	26 // 36	35 // -	36

WIRE FEED UNIT	MWF 30 (INTERNAL)
Wire feed speed, m/min.	0.5-30.0
Wire diameter mm	300
Duty cycle 100% /40°C, A/%	430/100
Torch connection	EURO
Protection class	IP 23
Standards	IEC60974-5. IEC60974-10 CL. A
Dimensions (H x W x L), mm	413x310x750
Weight, kg	11.6

COOLING UNIT	MCU 1300
Cooling capacity (1 l/min.), W	1300
Tank capacity, l	5
Max. pressure, bar	5
Max. temperature, °C	70
Standards	IEC60974-2. IEC60974-10 CL.A
Dimensions (H x W x L), mm	207x260x680
Weight, kg	20

We reserve the right to make changes.

Dealer stamp: