MigMatic® S400iP
Synergic Pulsed MIG System

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MIG/MAG (CV) Welding System

Quick Specs

Industrial Applications
General industrial fabrication
Construction
Railcars
Mobile machinery
Shipbuilding

Processes
MIG/MAG (GMAW)
Pulsed MIG (GMAW-P)
Double Pulsed MIG
Flux-cored (FCAW)

Input Power	400 V, 3 phases (50/60 Hz)
Welding Output	400 A, 34 V at 80% duty cycle
Max. Output Amperage	440 A
Output Range	15 A – 400 A
Net Weight	Power source: 53 kg Wire feeder: 19 kg Cooler: 23 kg

Performance / Durability / Productivity

NEW!

Miller MigMatic® S400iP synergic Pulsed MIG/MAG System offers full flexibility. All modules are bespoke to the system and designed for trouble free, high productivity welding. Never before has it been so easy and straight forward to achieve excellent welding performance. Enjoy full control at all times.

Trigger program switch
Re-call up to 4 preset programs from the torch trigger (any standard MIG torch) for increased productivity on complex objects.

Miller robustness
Tested and approved for heavy duty welding under the toughest conditions. Miller goes to extreme measures to ensure trouble free welding in any environment.

The toughest wire drive mechanism
The Miller unique 4-roll drive system will ensure trouble free wire feeding.

Energy efficient
The Fan-On-Demand™ power source cooling system operates only when needed, reducing the amount of contaminants pulled though the machine. The MigMatic® Cool is controlled and monitored by the power source and runs only when needed, reducing noise and the overall energy use.

Full synergic Pulse with presets
Synergic lines for all common wire/gas combinations with presets of start/stop parameters for optimal welds.

Wind Tunnel Technology™
Internal air flow that protects electrical components and PC boards from dirt, dust and debris, greatly improving reliability.



Ease of use and versatility
Large intuitive LCD panel for quick and precise setting of advanced weld parameters.

Easy to use

Versatility
- Compatible with Push/Pull torches (optional accessory kit).
- Optional connection for automation.
- Upgradable from air cooled to water cooled without any modification to the machine or trolley.
- Suspension hook and wheel kit for the wire feeder for increased reach.
- Cable management system keeping the interconnection cable off the floor.
- Compatible with On-torch control of wire feed speed and voltage (available in Q4-2020).

TRUE BLUE® 3YR. WARRANTY

Warranted for three years, parts and labour.

ITW WELDING

Miller®

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Miller Electric Mfg. LLC
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MillerWelds.com

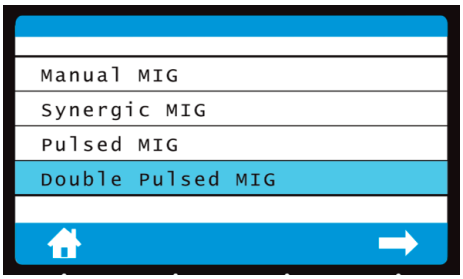
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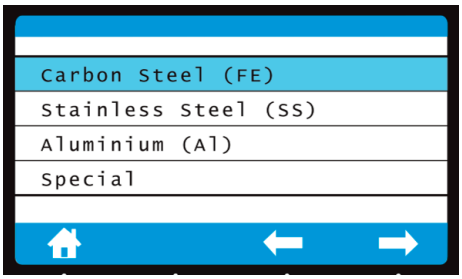
Advanced weld settings made easy

The machine is ready for advanced manual, Pulsed or Double Pulsed welding in seconds.

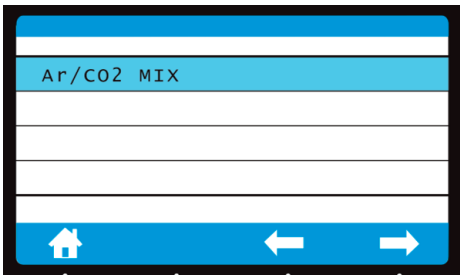
Step 1: Select your process



Step 2: Select your base material



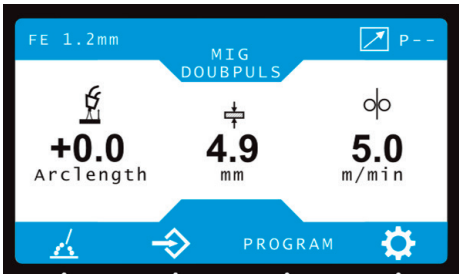
Step 3: Select your gas mixture



Step 4: Select your wire diameter



Result: Ready to weld



MigMatic® user interface – clean, crisp and easy to use

The MigMatic® system provides a full set of features and settings at your fingertips – ease of use without compromise.

Four different trigger options:

- 2T
- 4T
- Miller 4TS
- Stitch



1. Weld processes:

A. Manual MIG/MAG
B. Synergic
C. Synergic Pulse
D. Synergic Double Pulse

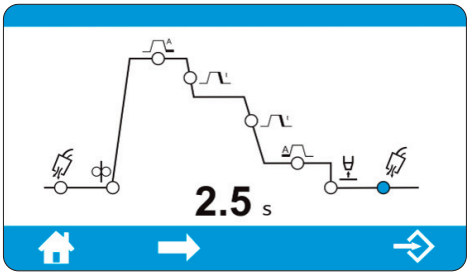
2. Adjustment of parameters:

A. Pre/post gas
B. Run-in speed
C. Crater fill
D. Burnback
E. Inductance

3. Store, modify and recall programs:

A. A total of 8 programs available
B. The first 4 recalled using the torch trigger

4. System settings and factory reset



Miller 4TS trigger functionality –
Gives access to hot start or cold start from the torch trigger

MigMatic® S400iP components

MigMatic® Feed is equipped with the Miller unique 4-wheel drive system with 37 mm driven rollers. The feeder can be fitted with wheels or suspended from a crane with interconnection cables up to 30 meters. The strain relief and the cable management system (part of the trolley) keep the interconnection cable protected.

MigMatic® S400iP benefits from Wind Tunnel Technology™ directing the airflow where it is needed whilst sensitive components are protected from ingress of dust and moisture.

MigMatic® Cool powered by the S400iP is equipped with a low flow alarm and a push button to prime the pump. The tank can hold up to 5 litres of coolant and the system generates 1 kW or 3412 BTU/h.

MigMatic® Cart can easily be adjusted to carry both the air and water cooled system. The wheels are large and durable making the system easy to move between work sites.



Specifications (Subject to change without notice.)

CV DC 3 Phase

MigMatic® S400iP

Input Power	Voltage Range in CV	Amp Range DC	Rated Output @ 40°C	IP Rating	Max. Open Circuit Voltage	Dimensions H/W/D	Weight
400 VAC, 3 ph (50/60 Hz)	13 - 42 V	15 - 400 A	400 A / 34 V @ 80% duty cycle	IP23S	70 VDC	530 / 305 / 730 mm	53 kg

MigMatic® Feed

Input Power	Welding Power Source	Wire Feed Speed	Wire Diameter Capacity	Maximum Spool Size Capacity	Input Welding Circuit Rating	Dimensions H/W/D	Weight
42 VAC	S400i S400iP S500i	1.5 - 20 m/min	0.6 - 2.0 mm	300 mm	39 V 500 A 60% duty cycle	465 / 275 / 710 mm	19 kg

MigMatic® Cool

Coolant Tank Capacity	Maximum Cooling Capacity	Input Power	Cooler on Standby	Cooler Enabled	Dimensions H/W/D	Weight
5 l	1 kW (3412 BTU/h)	400 VAC 50/60 Hz	Volts in: 400 VAC I in: 54 mA Input power (W): 6 Input power (VA): 22	Volts in: 400 VAC I in: 683 mA Input power (W): 237 Input power (VA): 273	292 / 305 / 720 mm	23 kg

Drive Rolls and Wire Guides*

Wire Size	"V" Groove Drive Roll for Hard Wire	"U" Groove Drive Roll for Soft Wire or Soft-Shelled Cored Wires	"V" Knurled Drive Roll for Hard-Shelled Cored Wires
0.8 mm	046780	—	—
1.0 mm	046781	044750	—
1.2 mm	046782	046785	046793
1.4 mm	046783	—	046794
1.6 mm	046784	046787	046795



** Kits including a set of drive rolls and wire guides.*

Ordering Information

System Component	Stock No.	Description	Qty.	Price
MigMatic® S400iP	**059015055**	400 VAC, 3 ph (50/60 Hz) equipped with mains cable, 3 m		
MigMatic® Feed	**059007022**	Fitted with Euro connector, 1.0 - 1.2 mm "V" groove drive rolls and spool cover		
MigMatic® Cool	**058042005**	1 kW of cooling, 5 l tank capacity		
MigMatic® Cart	**058066141**	Complete for air- or water-cooled system, incl. swivel for wire feeder		
Interconnection Cables				
Interconnection cable 2.5 m, MigMatic® air	**058019368**			
Interconnection cable 5 m, MigMatic® air	**058019369**			
Interconnection cable 10 m, MigMatic® air	**058019370**			
Interconnection cable 15 m, MigMatic® air	**058019371**			
Interconnection cable 20 m, MigMatic® air	**058019372**			
Interconnection cable 30 m, MigMatic® air	**058019373**			
Interconnection cable 2.5 m, MigMatic® water	**058019374**			
Interconnection cable 5 m, MigMatic® water	**058019375**			
Interconnection cable 10 m, MigMatic® water	**058019376**			
Interconnection cable 15 m, MigMatic® water	**058019377**			
Interconnection cable 20 m, MigMatic® water	**058019378**			
Interconnection cable 30 m, MigMatic® water	**058019379**			
Accessories				
Wheel kit for MigMatic® Feed	**028066304**			
Return cable kit, 400 A, 70 mm², 5 m	**057014340**			
Suspension hook	**058435**	To attach to the wire feeder when suspended from a crane/boom		
Push/Pull configuration kit	**057084226**	For installation in the feeder to synchronize the drive motors		
14-pin receptacle kit for automation	**056076174**	For installation in the feeder to facilitate connection with external automation components		
Bernard™ Q300, air cooled Mig Gun, 4.5 m	**Q3015TE3EEQ**			
Bernard™ T-Gun, 400 A, water cooled, 4.5 m	**E4215-45-5-445Q**			
Coolant 3.8 l	**043810**	2 canisters required to fill the tank		

Date: **Total Quoted Price:**

Miller recommends Elga consumables

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