

## EVOLUTION SP3-C / SP4-E / SP5-E



## WELDING MACHINE OF A DIFFERENT SPECIES





FEEDER EV-4R

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# EVOLUTION

#### One single welding machine to meet every requirement

The new family of welding machines **EVOLUTION** is designed for the industrial sectors that make reliability and efficiency their distinctive feature. The experience of Sincosald in the welders world and the applied advanced technology, make **EVOLUTION** a professional instrument with high performance and a user-friendly arc control.

## Technology and efficiency of a different generation

The new multi-process inverter has been developed to perform MIG/MAG, TIG-lift, MMA and pulsed welding, guaranteeing absolute precision in arc starts and welding. More than 200 synergy curves enable a wide variety of materials to be processed in order to meet the broadest demands in the world of welding.



USB PORT



CYLINDER HOLDER LOWERED



REINFORCED WHEELS

MONOCOQUE FRAME

LIFTABLE

**BY EYEBOLTS** 

Wheeled version SP4-E / SP5-E

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5P 5-E

#### WIRE FEEDER WITH COLOURED ROLLERS



5.7 INCH LCD DISPLAY

#### Planning and Design in continuous contact

The R&D department has studied a new reinforced monocoque frame, designed to withstand harsh production plants environments. The back wheels fitted with reinforced iron rims provide greater stability to the machine. The eyebolt connections allow the welding machine to be lifted and the lowered trolley facilitates the loading operations of the gas cylinder . The new generation wire feeder has a quick release system and has been customised with coloured rollers. Evolution features a large, bright 5.7-inch LCD display.

The arc control software developed by Sincosald further improves the stability of the arc and pulse correction during pulsed welding, providing a much higher welding speed.



Compact version **SP3-C** 



#### **Technical features**

- 99 JOB ( working points) 100% customizable.
- The smart torch POWER MASTER and REMOTE CONTROL UP/DOWN can be connected.
- PUSH PULL torches can be used thanks to a new application included in the synchronisation card.
- V.R.D. mode available.
- Towing device with quick release rollers in different colours according to the materials being used and the diameters.
- Electronic circuit specially designed to limit Inrush currents when the generator is switched on.
- Integrated cooling system inside th generator.

### - Fast and precise short circuit control when welding with a very short arc.

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- The latest generation interface, enables the connection to the welding ROBOT in automated systems.
- Compatible with industry 4.0.
- Self-diagnosis system.
- SEP software for the management, control and printing of welding processes.

In addition to the classic welding processes, Sincosald has developed 3 new high-performance welding processes: EVO PULSE SPEED - EVO PULSE RISE

- EVO PULSE FORCE.

#### SYNERGY CURVES



**EVO SPEED** Increases welding speed with variable dynamic control.

High penetration and melting

capacity of the weld pool.

**EVO FORCE** 





**EVO COLD** Very cold Short Arc suitable for thin thicknesses and galvanised sheets.

**EVO PIPE** Specific for first pass welding and joints with lots of air.

#### NEW MIXED CURVES



**EVO PULSE SPEED** Suitable for fast welding using controlled heat input.



**EVO PULSE RISE** Suitable for faster and more precise vertical upward welding.



**EVO PULSE FORCE** Increased welding penetration suitable for medium thicknesses.

## EVOLUTION SP3-C / SP4-E / SP5-E

#### **TECHNICAL DATA**

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	SP3-C	SP4-E	SP5-E
3 Phase Input	400 V	400 V	400 V
Fuse	25 A	32 A	40 A
MAX power	16.5 KW	19.5 KW	26.2 KW
Noise emissions	< 70 dB	< 70 dB	< 70 dB
Max current	26.5 A (MIG)	31.5 A (MIG)	42 A (MIG)
Performance 100%	300 A	330 A	380 A
Performance 60%	330 A	360 A	480 A
Performance 50%	-	400 A	500 A
Performance 40%	-	-	-
Open circuit voltage	62 V	62 V	62 V
Power factor	0.9	0.99	0.99
Welding current range	10 – 330 A	10 – 400 A	10 – 500 A
Compliant with standards	EN 60974-1 - 5 - 10	EN 60974-1 - 5 - 10	EN 60974-1 - 5 - 10
Application class	S	S	S
Insulation Class	F	F	F
Protection class	IP23 S	IP23 S	IP23 S
Cooling	AF	AF	AF
Operating temperature	- 10 + 40 ° C	- 10 + 40 ° C	- 10 + 40 ° C
Wire diameters			
Steel	0.8 – 1.2 mm	0.8 – 1.6 mm	0.8 – 1.6 mm
STAINLESS steel	0.8 – 1.2 mm	0.8 – 1.6 mm	0.8 – 1.6 mm
Aluminium	1.0 – 1.6 mm	1.0 – 1.6 mm	1.0 – 1.6 mm
Weldable electrodes diameters	1.0 – 4.0 mm	1.0 – 4.0 mm	1.0 – 4.0 mm
Wire feed speed	0.6 – 25 Mt./min	0.6 – 25 Mt./min	0.6 – 25 Mt./min
Wire spool capacity	15 Kg	15 Kg	15 Kg
Dimensions, mm (L x I x H)	1100 x 590 x 1000	1100 x 590 x 1000	1100 x 590 x 1000
Weight, kg	110	115	120



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