



2022
catalogue





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Emiliano Generali,
C.E.B (Costruzioni Elettromeccaniche Bolognesi), 1954

CEBORA since 1954

History

68 years have already passed since 1954, when Emiliano Generali, whose memory remains indelible in all who have known, founded the C.E.B. (Costruzioni Elettromeccaniche Bolognesi), a manufacturer of battery chargers and welding machines, which in the years '60, merging with his other creation, the O.R.A. (Officina Ruote & Affini) gave birth to one of the most solid enterprises in Italian industry: CEBORA.

Since the Eighties the creation of two distinct divisions leads to a further increase in market, the Welding Division is in fact flanked by the Industrial Wheels Division, for the expansion and qualification of its range of wheels and furniture supports.

Sixty-eight years marked by a succession of expansions, expansion of plants and organic, in a succession of generations between employees and management plans, to keep the thrust intact to the success left as a tangible imprint by the founder Emiliano Generali



A cutting-edge group

A continuous evolution that looks to the future

1954



Emiliano Generali founded the company C.E.B. (COSTRUZIONI ELETTROMECCANICHE BOLOGNESI), a manufacturer of battery chargers and MMA electrode welding machines

1958

Emiliano Generali set up a second company, O.R.A. (Officina Ruote e Affini), for the production of internal handling wheels for industrial use and to be fitted to with furniture



1963



The two companies are merged into CEBORA that during 1963 employs a total of 40 personnel generating a turnover of 2 billion lire.

1984

CEBORA R&D dept., made up by a strong team of highly specialized and motivated technicians, creates the first highly portable MIG/MAG welder (Pocket MIG) that achieves an immediate success both in Europe and the United States.



1980

The first Production of wheels and housings designed for commercial transport industrial applications with a higher load capacity compared to the existing competition is launched.



of made in Italy

CEBORA GROUP
MADE IN ITALY

1986

CEBORA presents the revolutionary Plasma Pocket, a highly portable power source offering a 5 mm cutting capacity on a wide range of materials becomes another worldwide commercial success

2000

CEBORA focus its research and development efforts to high technology market sectors, such as the automation industry, launching a comprehensive range of robotic MIG, TIG and Plasma Welding equipment that quickly gained the confidence of system integrators and robot manufacturers around the world.

2005

The CEBORA industrial plasma cutting range is further enhanced with the addition of the HQC Plasma line devoted to high-definition cutting for automated solutions with pantographs and robots.

The new heavy-duty line of castors is born, and rapidly becomes a major contender within Europe's top markets, including Germany, specifically with the launch of the stainless steel heavy-duty housings.

2010

CEBORA Welding & Cutting Division and CEBORA Wheels & Motion Division are created.


CEBORA
wheels&motion

2014

In order to further strengthen its position within the automation and robotics markets, CEBORA achieves group status with the acquisition of Gefra Automation s.r.l., a respected and experienced system integrator with highly qualified staff specializing in the in automation and robotization of the production processes.

2021

ELETTRO CF, welding and plasma cutting company in Bologna, joins CEBORA GROUP



GEFRA
automazione

 **elettro**
CF

A global partner

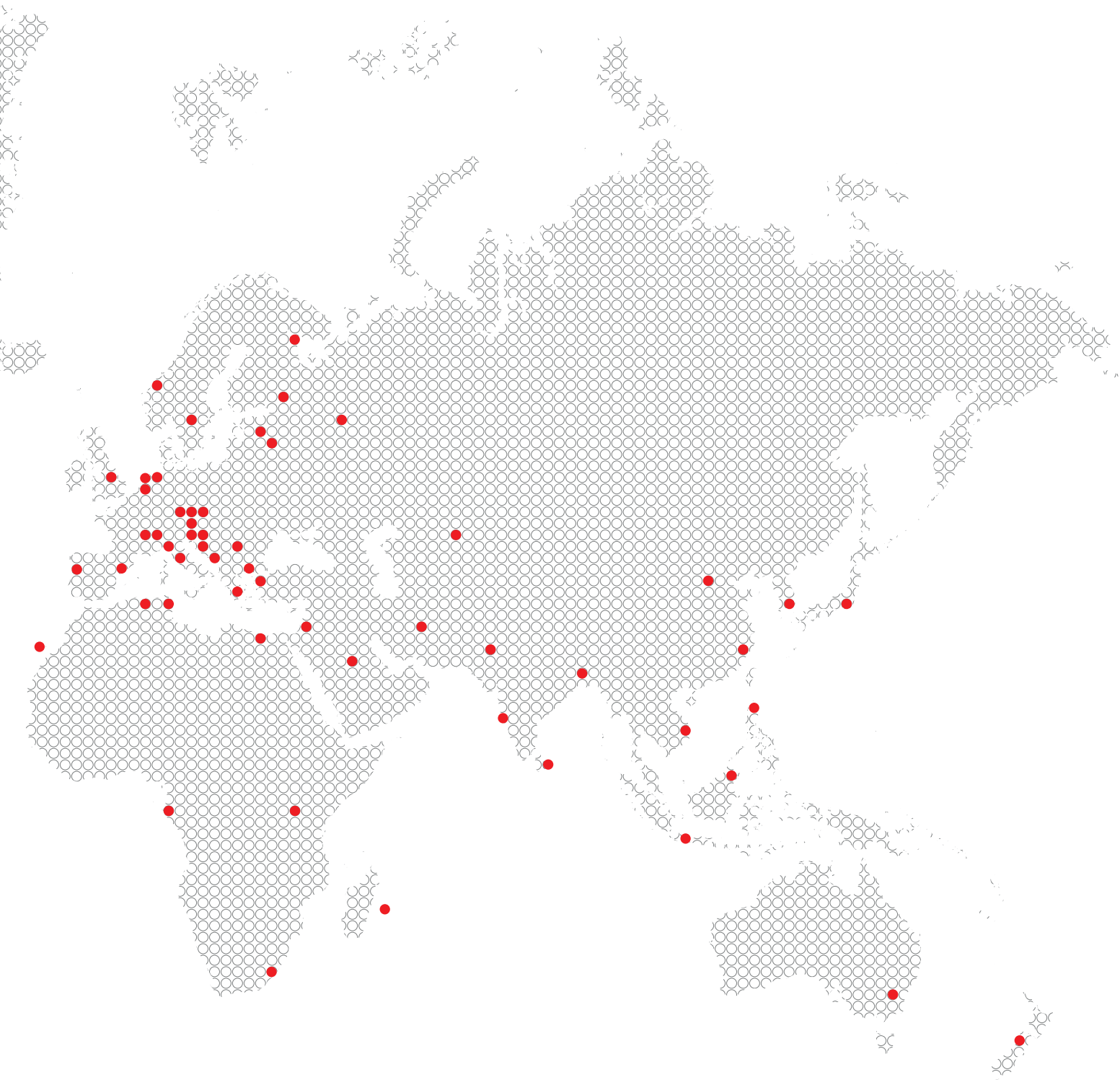
Production efficiency, excellent value for money, prompt deliveries and minimum product risk, are at the basis of CEBORA's philosophy.

A dynamic and highly efficient sales force works together with the marketing department and technical assistance service, to meet the needs of customers around the world.

Thanks to the selection and continuous implementation of specific services provided to importers and distributors, CEBORA is able to rapidly and successfully deliver its products to every corner of the world.

Maximum support to customers and the sales network is also ensured thanks to regular training courses held directly on the premises by the same engineers who design the machines and to the website which is constantly updated with information relating to the latest production news of CEBORA GROUP.

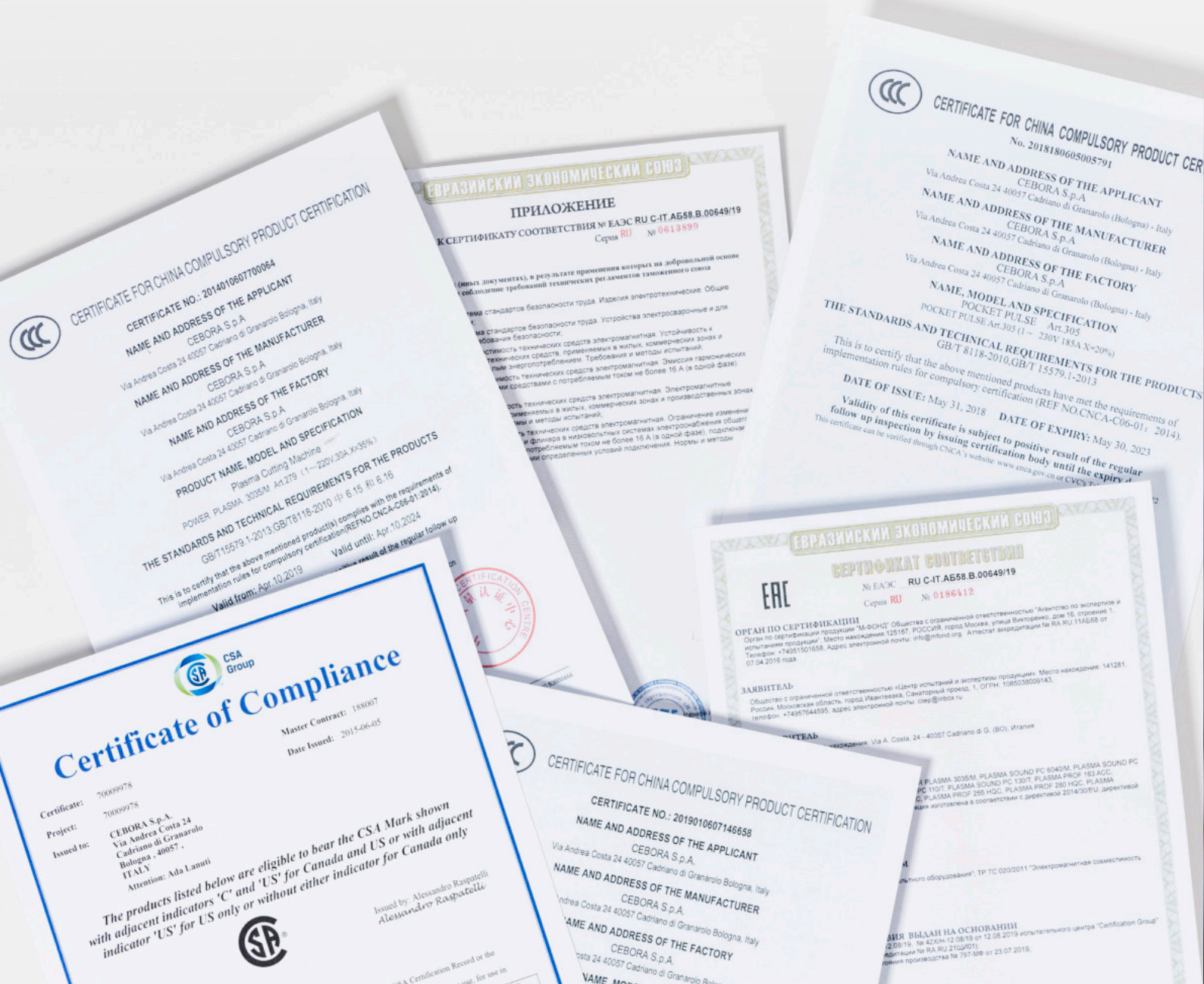




Certifications

The quality of CEBORA is worldwide recognized, also by specific certifications, such as the EAC certificate (Russian board), the CCC certificate (Chinese board), CSA (Canada) etc.

All machines are marked "CE" for their compliance with the European and international standards relevant to welding and plasma cutting equipment.



Approvals



Mercedes-Benz



LINCOLN



VAS 6771



Products

MIG, TIG, MMA, Cutting Plasma







MIG

MONO STAR MIG 1620/M SYNERGIC
POCKET PULSE

SYNSTAR 200 M

SYNSTAR 250 M

SYNSTAR 270 T

SYNSTAR 270 T SRS

SYNSTAR 330 TC

SYNSTAR 330 TS

SYNSTAR 400 TS

KINGSTAR 400 TS

KINGSTAR 520 TS



MIG - Art. 304

MONO STAR MIG 1620/M SYNERGIC



Single phase input	230 V +15% / -20% 50/60 Hz
Fuse rating (slow blow)	16 A
Input power	4,5 kVA 20% 2,8 kVA 60% 2,5 kVA 100%
min - max current obtainable in welding	20 ÷ 160 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	160 A 20% 110 A 60% 100 A 100%
Stepless regulation	Electronic
Max. wire spool size	Ø 200 mm / 5 kg
Protection class	IP 23 S
Weight	11 kg
Dimensions (WxLxH)	196 x 420 x 380 mm

MIG - Art. 305

POCKET PULSE



Single phase input	230 V +15% / -20% 50/60 Hz
Fuse rating (slow blow)	16 A
Input power	5,5 kVA 20% 3,7 kVA 60% 2,7 kVA 100%
min - max current obtainable in welding	20 ÷ 185 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	185 A 20% 140 A 60% 110 A 100%
Stepless regulation	Electronic
Max. wire spool size	Ø 200 mm / 5 kg
Protection class	IP 23 S
Weight	13,5 kg
Dimensions (WxLxH)	196 x 458 x 380 mm



MONO STAR MIG 1620/M SYNERGIC

Single-phase synergic inverter power source for MIG/MAG welding with an innovative design, particularly versatile and suitable for various applications, especially repairs, maintenance and basic car body repairs.

- › **SHORT** process
- › **Synergic curves** for mild steel wire (\varnothing 0.6 / 0.8 / 0.9 / 1.0 mm) and flux cored wire (\varnothing 0.9 mm)
- › **Optional package of curves** for aluminum, stainless steel and CuSi3 (Art. 266)
- › **LCD display** to view and adjust the major functions instantly:
Type of wire or gas, current and thickness, voltage and wire speed
- › **EURO connection**: either the standard MIG torch (Art. 1246) or the “professional” torch for flux cored wires (Art. 1638) can be used
- › **2-roller-wire feed motor**
- › **Easily transportable** thanks to its lightweight body (11 kg only)

A dedicated trolley for transportation of the power source, (Art. 1653) particularly compact and handy, is available as optional.

Power source characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard

POCKET PULSE

Single-phase **pulsed arc** synergic inverter power source for MIG/MAG welding with an innovative design, particularly versatile and suitable for various applications, especially repairs, maintenance and basic car body repairs.

- › **SHORT** and **PULSE** processes
- › **Synergic curves** for mild steel wire (\varnothing 0.6 / 0.8 / 0.9 / 1.0 mm), stainless steel (\varnothing 0.8 / 0.9 mm), Al/Mg (\varnothing 0.8 / 0.9 / 1.0 mm), CuSi3 (\varnothing 0.8/ 0.9 mm) and flux cored wire (\varnothing 0.9 mm)
- › **LCD display** to view and adjust the major functions instantly:
Type of wire or gas, current and thickness, voltage and wire speed
- › **EURO connection**: either the standard MIG torch (Art. 1246) or the “professional” torch for flux cored wires (Art. 1638) can be used
- › **2-roller-wire feed motor**
- › **Easily transportable** thanks to its lightweight body (13,5 kg only)

A dedicated trolley for transportation of the power source, (Art. 1653) particularly compact and handy, is available as optional.

Power source characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard

MIG - Art. 322

SYNSTAR 200 M



Single phase input	230 V + 15% / -20% 50/60 Hz
Fuse rating (slow blow)	16 A
Input power	6,3 kVA 20% 3,8 kVA 60% 3,1 kVA 100%
min - max current obtainable in welding	20 ÷ 200 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	200 A 20% 140 A 60% 120 A 100%
Stepless regulation	Electronic
Max. wire spool size	Ø 300 mm / 15 kg
Protection class	IP 23 S
Weight	45 kg
Dimensions (WxLxH)	480 x 830 x 825 mm

MIG - Art. 358

SYNSTAR 250 M



Single phase input	230 V + 15% / -20% 50/60 Hz
Fuse rating (slow blow)	25 A
Input power	8,6 kVA 20% 6,2 kVA 60% 5,4 kVA 100%
min - max current obtainable in welding	20 ÷ 250 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	250 A 20% 200 A 60% 180 A 100%
Stepless regulation	Electronic
Max. wire spool size	Ø 300 mm / 5 kg
Protection class	IP 23 S
Weight	45 kg
Dimensions (WxLxH)	480x830x825 mm



MIG - Art. 324

SYNSTAR 270 T



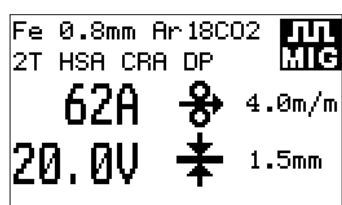
Three phase input	400V + 15% / -20% 50/60 Hz
Fuse rating (slow blow)	16 A
Input power	9,3 kVA 20% 6,9 kVA 60% 5,3 kVA 100%
min - max current obtainable in welding	20 ÷ 270 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	270 A 20% 220 A 60% 180 A 100%
Stepless regulation	Electronic
Max. wire spool size	Ø 300 mm / 15 kg
Protection class	IP 23 S
Weight	50 kg
Dimensions (WxLxH)	480 x 830 x 825 mm

SYNSTAR 200 M – 250 M – 270 T

SYNSTAR 200 M, 250 M and 270 T are synergic inverter power sources for MIG/MAG welding with an innovative design, particularly versatile and suitable for various applications, especially for light – medium metal works.

- › **SHORT** process (double current level)
- › **PULSE** and **DOUBLE PULSE** processes (optional)
- › **Synergic curves** for solid wire and aluminum from Ø 0.6 to 1.2 mm, (depending on the model) flux cored wire (Ø 0.9* mm) and CuSi3 (Ø 0.8 / 0.9 / 1.0 mm)
- › **LCD display** to view and adjust the major functions instantly:
Type of wire or gas, current and thickness, voltage and wire speed
- › **EURO connection**: the standard MIG torch (Art. 1242), the water-cooled MIG torch (Art. 1241 only for Art. 324) and CEBORA Push-Pull (Art. 2003) can be used
- › **2-roller-wire feed unit** (Art. 322) and **4-roller-wire feed** (Art. 358, 324)

Power sources characterized by low electrical input (**PFC**)
Compliant with EN 61000-3-12 standard



LCD panel

Process Params	
CRA	OFF
Double Pulse	ON
Frequency	1.5Hz
Pulse Step	1.0m

Optional pulse and double pulse function

*not for Art. 324

MIG - Art. 564

SYNSTAR 270 T SRS edition



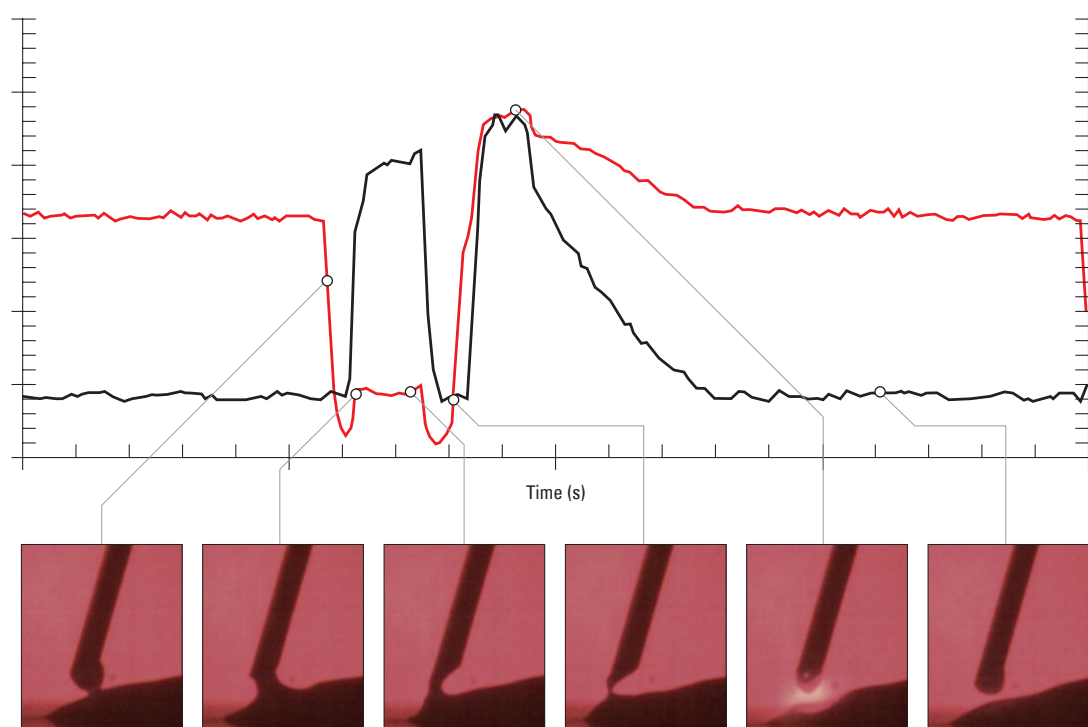
MIG-TIG

MMA

Three phase input	400 V +15% / -20% 50/60 Hz	
Fuse rating (slow blow)	16 A	
Input power	9,3 kVA 20% 6,9 kVA 60% 5,3 kVA 100%	9,5 kVA 20% 7,3 kVA 60% 5,4 kVA 100%
min - max current obtainable in welding	10 ÷ 270 A	10 ÷ 250 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	270 A 20% 220 A 60% 180 A 100%	250 A 20% 200 A 60% 160 A 100%
Stepless regulation	Electronic	
Max. wire spool size	Ø 300 mm / 15 kg	
Electrodes that can be used	Ø 1,5 ÷ 5,0	
Protection class	IP 23 S	
Weight	68 kg	
Dimensions (WxLxH)	510 x 1020 x 865 mm	



— Arc Voltage — Arc Current



SRS MIG process dynamics

SYNSTAR 270 T SRS edition

The new SYNSTAR 270 T SRS edition is a three-phase **multi-process** inverter power source for MIG – TIG - MMA welding, particularly versatile and suitable for various applications.

- › **MIG SHORT** process (double current level)
- › **PULSE MIG** and **DOUBLE PULSE MIG** processes
- › **SRS MIG** process (Spatter Reduction System) to thoroughly achieve spatters-free welds with reduced heat input
- › **System calibration** procedure to adjust all welding parameters and process variables (possibility of setting the features of the welding torch) – only available with SRS MIG
- › **LIFT TIG** process (easy polarity reverse)
- › **PULSE TIG** process (optional)
- › **Synergic curves** for wires of \varnothing 0.6 / 0.8 / 0.9 / 1.0 / 1.2 mm, including stainless steel pulse synergic programs optimized for small thickness welds
- › **LCD touch-screen display** to view and adjust the major functions instantly:
Type of process, type of wire or gas and arc length, current and thickness, voltage and wire speed
- › **Dust filter** to protect the power source against iron powders
- › **USB** and **RS232 ports** to easily update the software
- › **CEBORA 4-roller-wire feed unit** (\varnothing 30 mm)

SYNSTAR 270 T SRS edition can be equipped with several different types of torches:

- › **CEBORA MIG Push-Pull torch, air-cooled**, - cable length 4 m (Art. 2003), self-limited to 200 A
- › **CEBORA MIG torch, air-cooled**, 280 A 60% - cable length 3,5 m (Art. 1242)
- › **CEBORA MIG torch, water-cooled**, 380 A 60% - cable length 3,5 m (Art. 1241)
- › **BINZEL TIG "ABITIG 450 W" torch**, - cable length 4 m (Art. 1256) combined with extension lead Art. 2068
- › On request, the cooling unit (Art. 1681) is also available

Power sources characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard

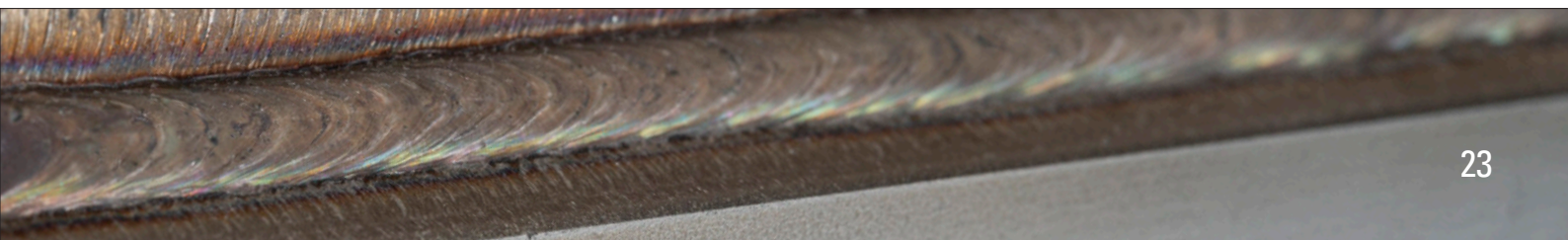


MIG SRS - First pass on tube with beveling

SRS (Spatter Reduction System)

Short circuit welding process that offers several advantages:

- › No spatters in welding
- › Low heat input in welding
- › Suitable for thin thicknesses and for reduced distortions
- › Excellent root pass also on root sides
- › Easy achievement of the first pass on especially open edges
- › Precise and stable arc with excellent control of the welding pool
- › Optimal weld bead, even aesthetically



MIG - Art. 386

SYNSTAR 330 TC



	MIG-TIG	MMA
Three phase input	400 V +15% / -20% 50/60 Hz	
Fuse rating (slow blow)	16 A	
Input power	12,4 kVA 40%	11,6 kVA 40%
	10,8 kVA 60%	10,2 kVA 60%
	9,2 kVA 100%	9,3 kVA 100%
min - max current obtainable in welding	10 ÷ 330 A	
Duty Cycle (10 min.40°C) According to IEC 60974-1	330 A 40%	300 A 40%
	300 A 60%	270 A 60%
	270 A 100%	250 A 100%
Stepless regulation	Electronic	
Max. wire spool size	Ø 300 mm / 15 kg	
Protection class	IP 23 S	
Weight	72 kg	
Dimensions (WxLxH)	510 x 1020 x 960 mm	

MIG - Art. 388

SYNSTAR 330 TS



	MIG-TIG	MMA
Three phase input	400 V +15% / -20% 50/60 Hz	
Fuse rating (slow blow)	16 A	
Input power	12,4 kVA 40%	11,6 kVA 40%
	10,8 kVA 60%	10,2 kVA 60%
	9,2 kVA 100%	9,3 kVA 100%
min - max current obtainable in welding	10 ÷ 330 A	
Duty Cycle (10 min.40°C) According to IEC 60974-1	330 A 40%	300 A 40%
	300 A 60%	270 A 60%
	270 A 100%	250 A 100%
Stepless regulation	Electronic	
Max. wire spool size	Ø 300 mm / 15 kg	
Protection class	IP 23 S	
Weight	82 kg	
Dimensions (WxLxH)	510 x 1022 x 1330 mm	



SYNSTAR 330 TC – 330 TS

SYNSTAR 330 TC AND 330 TS are three-phase **multi-process** inverter power sources for MIG/MAG, TIG and MMA welding, particularly versatile and suitable for various applications, especially for metal works

- › **MIG SHORT** process (double current level)
- › **PULSE MIG** and **DOUBLE PULSE MIG** processes
- › **LIFT TIG** process (easy polarity reverse)
- › **PULSE TIG** process (optional)
- › **Synergic curves** for wires of \varnothing 0.6 / 0.8 / 0.9 / 1.0 / 1.2 mm, including stainless steel pulse synergic programs optimized for small thickness welds
- › 5" **LCD touch-screen display** to view and adjust the major functions instantly:
Type of process, type of wire or gas and arc length, current and thickness, voltage and wire speed
- › **USB** and **RS232** ports to easily update the software
- › **CEBORA 4-roller-wire feed unit** (\varnothing 30 mm)

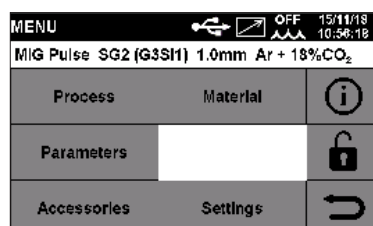
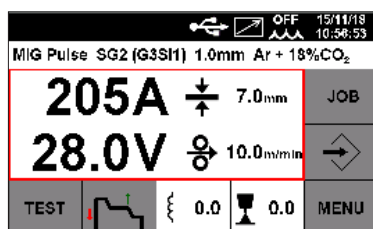
SYNSTAR 330 TC and TS can be equipped with several different types of torches:

- › **MIG CEBORA Push-Pull torch, air-cooled**, - cable length 4 m (Art. 2003), self-limited to 200 A
- › **CEBORA MIG torch, air-cooled, 380 A 60%** - cable length 3,5 m (Art. 1239)
- › **CEBORA MIG torch, water-cooled, 380 A 60%** - cable length 3,5 m (Art. 1241)
- › **CEBORA MIG UP/DOWN torch, water-cooled, 500 A** - cable length 3,5 m (Art. 1245)
To be compulsorily combined with digital – analogic UP/DOWN adapter kit (Art. 2053)
- › **BINZEL TIG "ABITIG 450 W" torch**, - cable length 4 m (Art. 1256) combined with extension lead Art. 2068

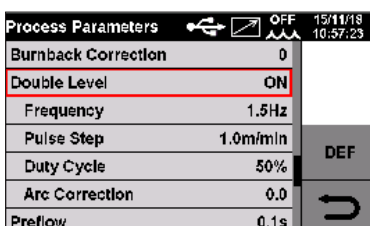
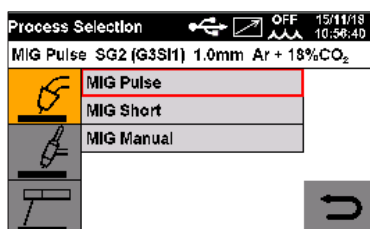
- › On request, the cooling unit (Art. 1681) is also available

Power sources characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard



Possibility to choose any function from the menu



Pulse and double pulse included

MIG - Art. 382

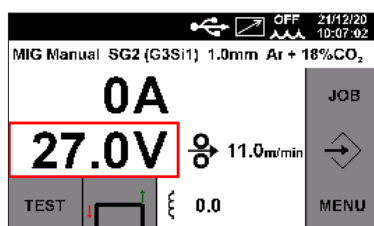
SYNSTAR 400 TS

ECO Power

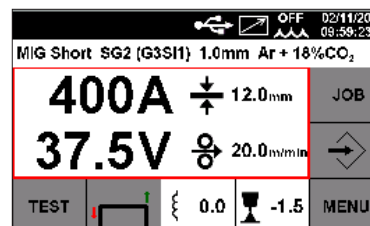
High-yield power source
400 A at 100%



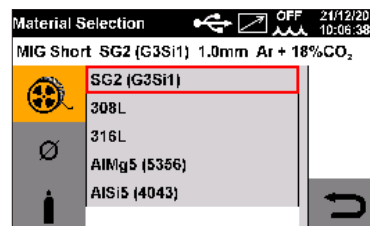
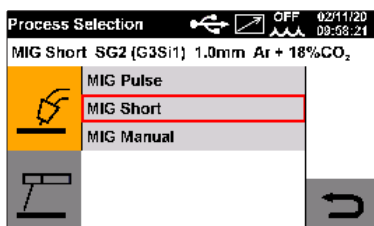
	MIG/MAG	MMA
Three phase input	400 V +15% / -20% 50/60 Hz	400 V +15% / -20% 50/60 Hz
Fuse rating (slow blow)	25 A	
Input power	17,5 kVA	
min - max current obtainable in welding	10 ÷ 400 A	10 ÷ 380 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	400 A 100%	380 A 100%
Stepless regulation	Electronic	
Max. wire spool size	Ø 300 mm / 15 kg	
Protection class	IP 23 S	
Weight	111 kg	
Dimensions (WxLxH)	527 x 1078x 1398 mm	



Possibility to choose
any function from the menu



Possibility to choose type of wire,
diameter and gas



SYNSTAR 400 TS

SYNSTAR 400 TS is a very high efficient inverter three-phase synergic power source for MIG/MAG – MMA welding, consisting of a new hardware architecture that fully meets the most stringent requirements in terms of performance and consumption, placed within a robust structure, entirely made of pre-galvanised steel.

It is therefore particularly versatile and suitable for different applications, especially for high metal works.

Separately cooled power electronics: an air flow is forced by the fans inside the cooling tunnel which ensures a perfect division between the exterior and the interior of the power source, thus preventing contamination from metal dust.

The yield of this power source is **the highest among the comparable ones** and allows to obtain a maximum current of **400 A at 100%** of the duty cycle (10 min. 40°C), according to IEC 60974-1 standards absorbing about 25 A from the mains power supply.

The power source also complies with 2009/125/EC Directive, which regulates Energy related Products (erp), better known as the Ecodesign Directive.








- › **MIG SHORT** process (double current level)
- › **PULSE MIG** and **DOUBLE PULSE MIG** processes (optional)
- › **Synergic programs** available for \varnothing 0.8/1,0/1,2/1,6 mm solid wire, as well as for stainless steel and aluminium
- › It's available an optional wire feed roll kit for aluminum and cored wire (on demand)
- › 5" **LCD touch-screen display** to view and adjust the major functions instantly:
Type of process, type of wire or gas and arc length, current and thickness, voltage and wire speed
- › Pre-arranged for integration in automation via optional analog interface KIT (Art. 456)
- › **Easily removable cooling grid**, to facilitate and reduce the maintenance time
- › **USB port interna** and **RS232** ports to update the software
- › **4-roller-wire feed unit (\varnothing 37 mm) in aluminium**
- › **Equipped with water cooling unit**

SYNSTAR 400 TS can be equipped with 3 different types of torch:

- › **Push-Pull** torch (42 Vdc)
- › **CEBORA MIG torch, water-cooled, 500 A** - cable length 3,5 m (Art. 1243)
- › **CEBORA MIG UP/DOWN torch, water-cooled, 500 A** - cable length 3,5 m (Art. 1245)
To be compulsorily combined with digital – analogic UP/DOWN adapter kit (Art. 2053)

Power source characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard

Material Selection				OFF	02/11/20
				09:56:39	
MIG Pulse	SG2 (G3Si1)	1.2mm	Ar + 18%CO ₂		
	0.8mm		V		
	1.0mm		V		
	1.2mm		V		
	1.6mm		V		
					

Setting of filling wire with information of roller type



MIG - Art. 372

KINGSTAR 400 TS



	MIG-TIG	MMA
Three phase input	400 V +15% / -20% 50/60 Hz	
Fuse rating (slow blow)	20 A	
Input power	18,8 kVA 40%	17,7 kVA 40%
	16,4 kVA 60%	15,8 kVA 60%
	14,2 kVA 100%	15,3 kVA 100%
min - max current obtainable in welding	10 ÷ 400 A	
Duty Cycle (10 min.40°C) According to IEC 60974-1	400 A 40%	380 A 40%
	370 A 60%	350 A 60%
	340 A 100%	300 A 100%
Stepless regulation	Electronic	
Max. wire spool size	Ø 300 mm / 15 kg	
Electrodes that can be used	Ø 1,5 ÷ 6,0	
Protection class	IP 23 S	
Weight	120 kg	
Dimensions (WxLxH)	588 x 1120 x 1380 mm	

MIG - Art. 374

KINGSTAR 520 TS



	MIG-TIG	MMA
Three phase input	400 V +15% / -20% 50/60 Hz	
Fuse rating (slow blow)	32 A	
Input power	25,8 kVA 40%	26,1 kVA 40%
	23,7 kVA 60%	23,2 kVA 60%
	20,7 kVA 100%	22,1 kVA 100%
min - max current obtainable in welding	10 ÷ 520 A	
Duty Cycle (10 min.40°C) According to IEC 60974-1	500 A 40%	500 A 40%
	470 A 60%	460 A 60%
	440 A 100%	440 A 100%
Stepless regulation	Electronic	
Max. wire spool size	Ø 300 mm / 15 kg	
Electrodes that can be used	Ø 1,5 ÷ 6,0	
Protection class	IP 23 S	
Weight	130 kg	
Dimensions (WxLxH)	588 x 1120 x 1380 mm	



KINGSTAR 400 TS – 520 TS

KINGSTAR 400 TS and 520 TS are two **multi-process** power sources for MIG/ MAG – TIG – MMA welding with high performance, particularly suitable for high production applications.

› On-demand processes:

PULSE MIG and **HD PULSE** processes

SHORT MIG (double current level) and **DOUBLE PULSE** processes

SRS MIG process (Spatter Reduction System) to thoroughly achieve spatters-free welds with reduced heat input

MIG 3DPULSE process

SWPS package (Standard Welding Procedure Specifications) according to ISO 151612, which meets the qualification requirements of the procedures in compliance with EN 1090-1

FULL TIG process (PULSE TIG, XP/APC/EVO START)

› Included processes:

MIG SHORT HD (high deposit) and **MIG ROOT** processes (first pass)

LIFT TIG process (easy polarity reverse)

› **System calibration procedure**, to complete the adjustment of all welding parameters and process variables (possibility of adjusting the system by taking into account the characteristics of the welding torch and the extension lead used between the trolley and the power source). Available only with SRS MIG

› **Industry 4.0 compliant power sources**: the new hardware architecture allows the implementation of a web server (through the Ethernet LAN port or by means of an external kit, through Wi-Fi connection), that enables the operator to take advantage of all those tasks requiring data collection and processing, welding parameter setup, diagnostics and remote assistance

› **User interface** remotely controlled can be handled through personal computer, **tablet and smartphone**

› **Easily removable cooling grid**, to facilitate and reduce the maintenance time

› **Bayonet connection** in accordance with MIL-C-SS 116 standard for a simple introduction and fixing of the connection cables between power source and trolley

› **2 USB ports** for saving data and updating software

› 7" colour **LCD touch-screen** display

› **4-roller-wire feed unit in aluminium**

› On request, the cooling unit for KINGSTAR 400 TS (Art. 1683) is also available

Power sources characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard

SRS MIG process



KINGSTAR

3DPulse welding process



Innovation in the context of MIG/MAG welding signed by CEBORA

3DPulse is a **pulse welding process** designed to optimize the transfer of the filler metal at reduced heat and higher joint execution speed.

Comparison between 3D Pulse and standard pulse:

+30%

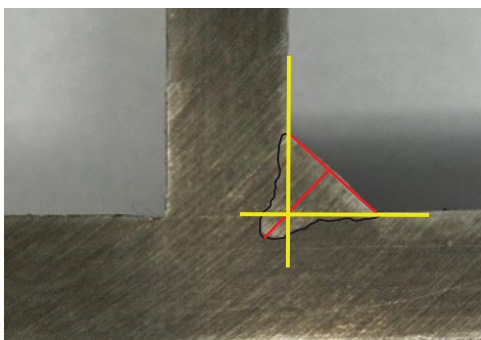
Execution
speed

+20%

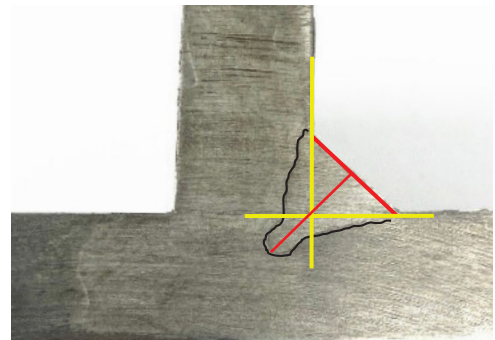
Penetration in
corner joints

+15%

Saving on
manufacturing costs



Standard Pulse – Stainless 8 mm



3DPulse – Stainless 8 mm

3DPulse (Art. 814)

The 3DPulse, available by activating the pulse (Art. 231) welding process, uses specific numerical algorithms and mathematical models, which exploit the computational capabilities of the microprocessor by adapting the system responses to changes in key process variables.

ADVANTAGES:

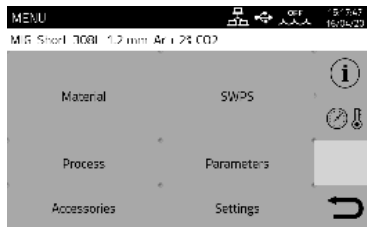
- › Minimized or null joint processing and recovery times
- › Mild welding noise
- › Decreased welding smokes
- › Short and stable arc, easy to drive and to handle
- › Excellent bead workability
- › Excellent ability to spread austenitic or low-moisturizing filler material
- › Welding pass on top - strong and symmetrical penetration
- › Excellent final quality of the welding seam



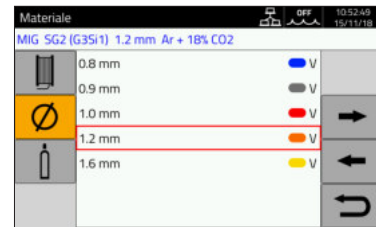
Display KINGSTAR



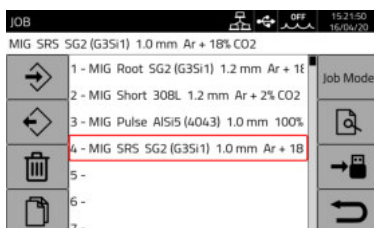
Primary screen



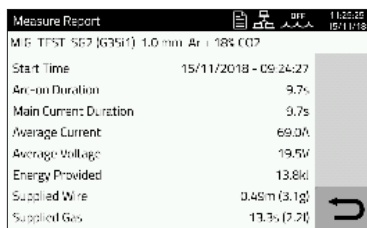
Direct access to all functions



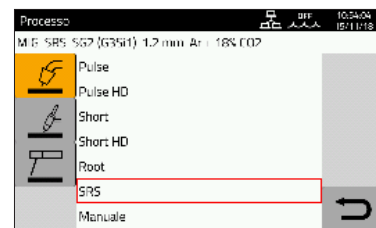
Set-up of the filler wire with indication of the roller type



Save JOB with customizable name



Measurements report after each welding bead



Wide selection of welding processes



Remote control kit of the wire feed unit (Art. 437)



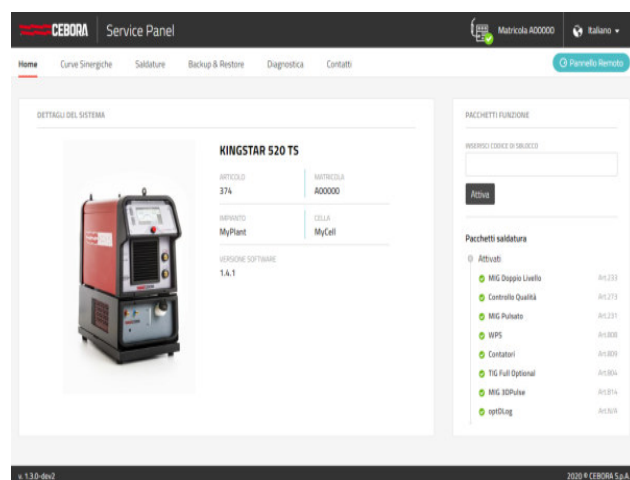


LCD 7" colour touch-screen display positioned in the center of the power source

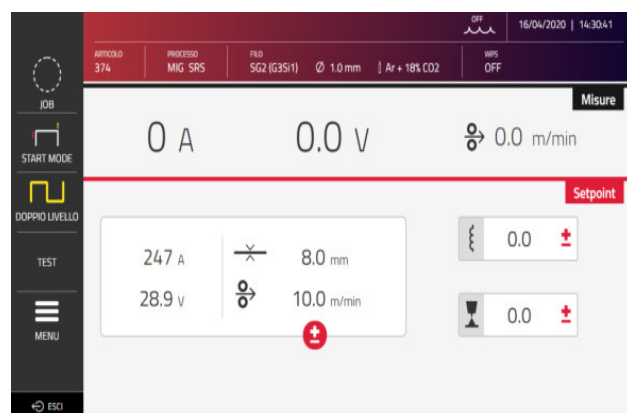


Compact 4-roller quick-release wire feed unit with insertion rollers (\varnothing 37 mm), easily identifiable thanks to color-coding system through diameters

Webapp



Service panel



Remote panel

Industry 4.0

The KINGSTAR line is based on a dual-core microprocessor control board equipped with an Ethernet network interface and an open-source software platform.

Through the integrated web server it is possible to interconnect - directly via cable or via Wi-Fi with an external kit - to the company network using standard TCP/IP and HTTPS protocols that make it compliant with Industry 4.0 requirements.

In fact, KINGSTAR power sources offer a REST API programming interface that allows a flexible bidirectional data exchange with management systems and company MES, allowing both the configuration of process parameters and the consultation of production data.

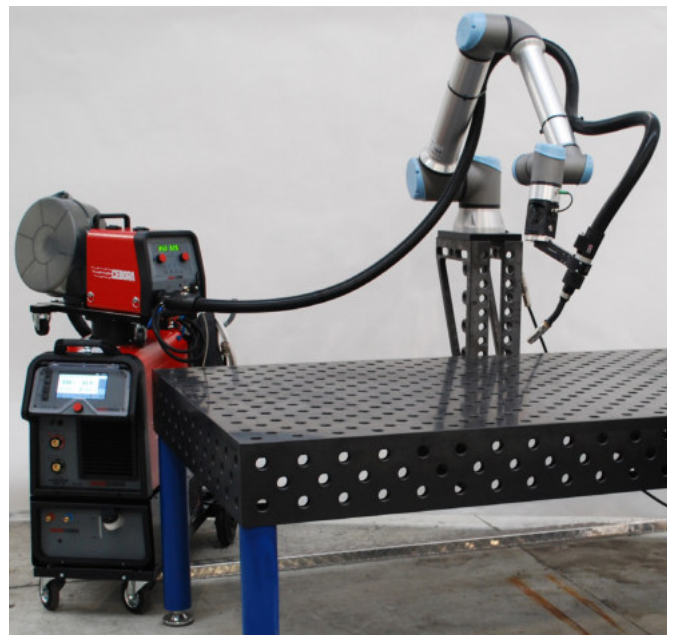
It is also possible to remotely monitor the status of the generator and the welding process in real time, and to access the generator internal logs for remote diagnostics and service.

The KINGSTAR power sources also feature an integrated web app that allows complete remote management using a simple browser from a personal computer or tablet, without the need to install additional software. You can therefore monitor the general status of the power source, the status of the welding process and the trend of the most significant measurements.

Webapp - The user interface can be used via pc, tablets and smartphones



The manual version with CANopen interface for mechanized and automated system is also available

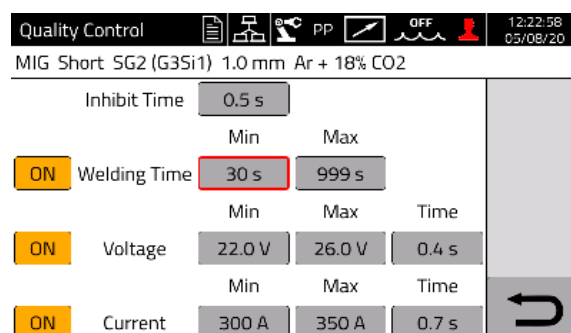


Additional functions

KINGSTAR power sources offer new software packages aimed at improving production control and digitizing business processes and activities. These power sources are also pre-arranged for the use of optical scanners to automate the processes with barcodes and QR code scanning.

Quality Control (Art. 273)

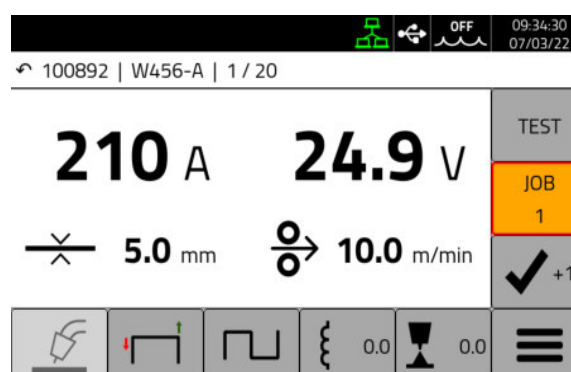
Software package dedicated to the software package for managing and repeating the welding seams. It allows to define minimal and maximum thresholds of arc current, arc tension and welding time. If the threshold is exceeded it is marked on the panel and in the welding reports.



Control panel screenshot

Production Mode (Art. 817)

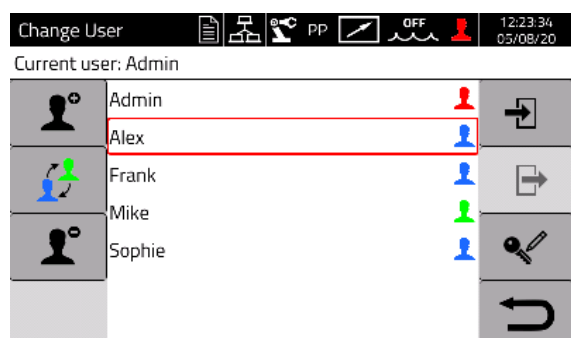
Software package dedicated to the management and tracking of welding processes in mass production of parts, batches and job orders: it allows to export to file the welding processes complete with processing name, job order name and part number. It allows a better intergration with MES systems for Industry 4.0



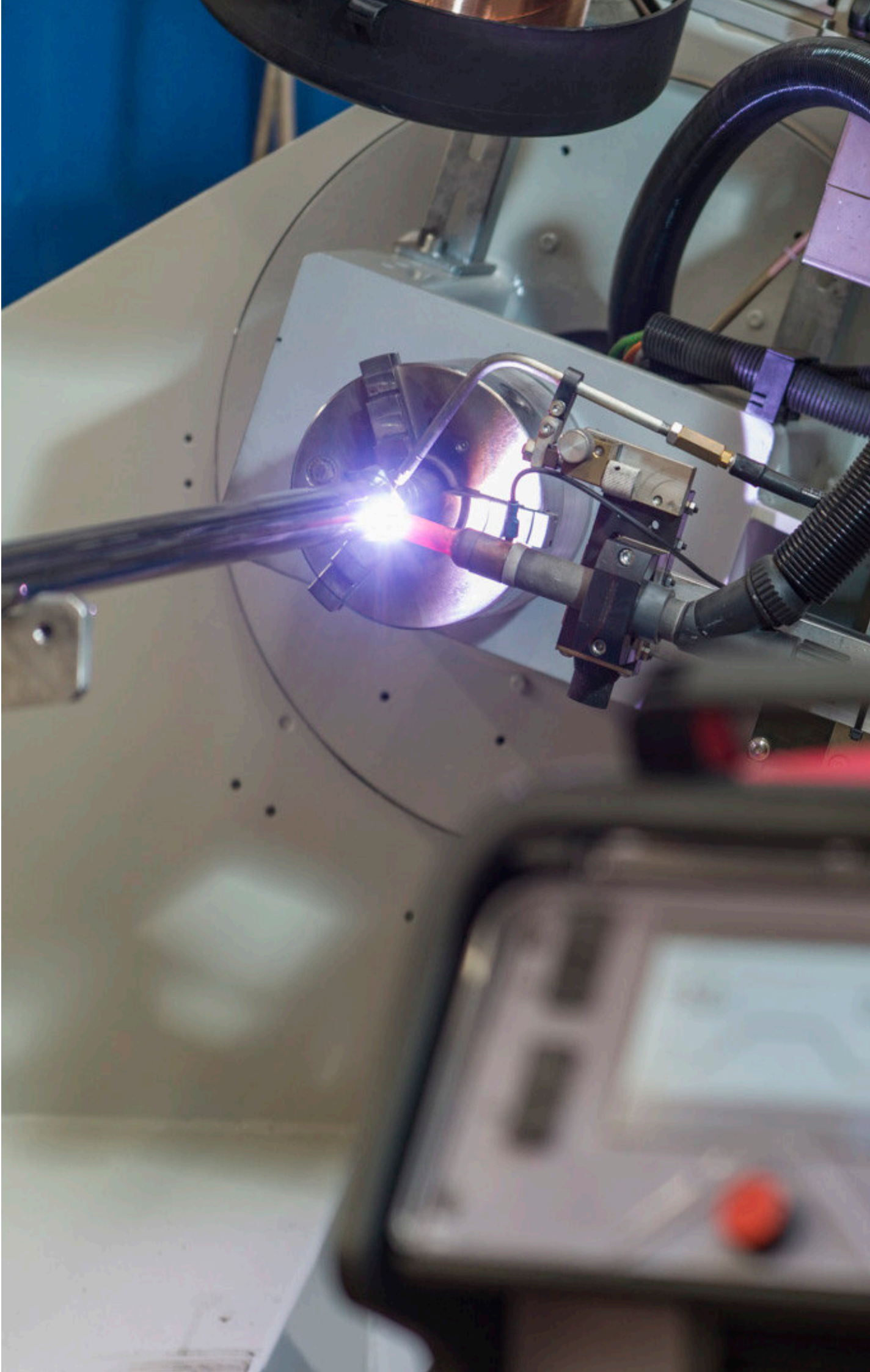
Control panel screenshot

Advanced Users (Art. 809)

Software package that allows the configuration of a list of operators, with the assignment of an identification name, a unique code (PIN) and the level of access credentials. It is possible to import and export the usage data as CSV files on a USB memory stick.



Control panel screenshot



TIG

WIN TIG DC 180 M
WIN TIG DC 220 M
WIN TIG DC 250 T
WIN TIG DC 350 T
WIN TIG DC 340 T
WIN TIG DC 500 T

WIN TIG AC-DC 180 M
WIN TIG AC-DC 230 M

WIN TIG AC-DC 270 T
WIN TIG AC-DC 340 T
WIN TIG AC-DC 450 T



TIG - Art. 551

WIN TIG DC 180 M



	TIG	MMA
Single phase input	230 V + 15% / -20% 50/60 Hz	
Fuse rating (slow blow)	16 A	
Input power	4 kVA 35% 2,7 kVA 60% 2,2 kVA 100%	4,6 kVA 30% 3,5 kVA 60% 2,8 kVA 100%
min - max current obtainable in welding	5 ÷ 180 A	10 ÷ 140 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	180 A 35% 135 A 60% 110 A 100%	140 A 30% 115 A 60% 95 A 100%
Protection class	IP 23 S	
Weight	10,3 kg	
Dimensions (WxLxH)	171 x 420 x 340 mm	



TIG - Art. 553

WIN TIG DC 220 M



	TIG		MMA	
Single phase input	115 V +15% / -20% 50/60 Hz	230 V +15% / -20% 50/60 Hz	115 V +15% / -20% 50/60 Hz	230 V +15% / -20% 50/60 Hz
Fuse rating (slow blow)	25 A	16 A	25 A	16 A
Input power	3,8 kVA 40% 3,1 kVA 60% 2,2 kVA 100%	5,3 kVA 30% 3,2 kVA 60% 2,7 kVA 100%	3,6 kVA 35% 2,8 kVA 60% 2,3 kVA 100%	4,5 kVA 35% 3,8 kVA 60% 3,4 kVA 100%
min - max current obtainable in welding	5 ÷ 160 A	5 ÷ 220 A	10 ÷ 110 A	10 ÷ 140 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	160 A 40% 140 A 60% 110 A 100%	220 A 30% 160 A 60% 140 A 100%	110 A 35% 90 A 60% 75 A 100%	140 A 35% 125 A 60% 115 A 100%
Protection class	IP 23 S			
Weight	16 kg			
Dimensions (WxLxH)	207 x 500 x 411 mm			



TIG - Art. 555

WIN TIG DC 250 T



TIG

MMA

	208/220/230 V ±10% 50/60 Hz	400/440 V ±10% 50/60 Hz	208/220/230 V ±10% 50/60 Hz	400/440 V ±10% 50/60 Hz
Three phase input				
Fuse rating (slow blow)	16 A	10 A	16 A	10 A
Input power	5,7 kVA 25% 4,0 kVA 60% 2,8 kVA 100%	6,2 kVA 35% 5,0 kVA 60% 4,0 kVA 100%	7,5 kVA 30% 4,9 kVA 60% 3,7 kVA 100%	7,0 kVA 60% 4,5 kVA 100%
min - max current obtainable in welding	5 ÷ 230 A	5 ÷ 250 A	10 ÷ 210 A	10 ÷ 210 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	230 A 25% 180 A 60% 140 A 100%	250 A 35% 210 A 60% 180 A 100%	210 A 30% 150 A 60% 120 A 100%	210 A 60% 150 A 100%
Protection class	IP 23 S			
Weight	22,7 kg			
Dimensions (WxLxH)	207 x 437 x 411 mm			



TIG - Art. 557

WIN TIG DC 350 T



TIG

MMA

	208/220/230 V ±10% 50/60 Hz	400/440 V ±10% 50/60 Hz	208/220/230 V ±10% 50/60 Hz	400/440 V ±10% 50/60 Hz
Three phase input				
Fuse rating (slow blow)	16 A	16 A	20 A	16 A
Input power	7,8 kVA 35% 6,4kVA 60% 5,4kVA 100%	9,6 kVA 40% 7,8 kVA 60% 6,6 kVA 100%	9,3 kVA 35% 7,3 kVA 60% 6,4 kVA 100%	11,5 kVA 40% 9,3kVA 60% 7,8 kVA 100%
min - max current obtainable in welding	5 ÷ 280 A	5 ÷ 350 A	10 ÷ 240 A	10 ÷ 280 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	280 A 35% 245 A 60% 220 A 100%	350 A 40% 280 A 60% 250 A 100%	240 A 35% 200 A 60% 180 A 100%	280 A 40% 240 A 60% 210 A 100%
Protection class	IP 23 S			
Weight	78 kg			
Dimensions (WxLxH)	705 x 1060 x 975 mm			



TIG - Art. 380

WIN TIG DC 340 T



	TIG	MMA
Three phase input	400 V \pm 15% 50/60 Hz	
Fuse rating (slow blow)	16 A	
Input power	10 kVA 40% 8,3 kVA 60% 7,1 kVA 100%	9,8 kVA 40% 9,5 kVA 60% 8,7 kVA 100%
min - max current obtainable in welding	3 \div 340 A	10 \div 270 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	340 A 40% 300 A 60% 270 A 100%	270 A 40% 250 A 60% 240 A 100%
Protection class	IP 23 S	
Weight	108 kg	
Dimensions (WxLxH)	410 x 610 x 810 mm	

TIG - Art. 381

WIN TIG DC 500 T



	TIG	MMA
Three phase input	400 V \pm 15% 50/60 Hz	
Fuse rating (slow blow)	25 A	32 A
Input power	20,4 kVA 60% 16,5 kVA 100%	17,6 kVA 100%
min - max current obtainable in welding	3 \div 500 A	10 \div 380 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	500 A 60% 440 A 100%	380 A 100%
Protection class	IP 23 S	
Weight	108 kg	
Dimensions (WxLxH)	588 x 1120 x 1010 mm	



DC WIN TIG

The functions featuring DC WIN TIG welding power sources are as follows:

- › **EVO START** function (pulse current ignition, to be adjusted in hundredths of a second)
- › **EVO LIFT** function (contact ignition + HF)
The combination of the two functions allows precise ignitions on the workpiece as well as a better joining of poorly prepared sheets
- › **Quick spot function with minimal heat input** thanks to a specific program that allows the accurate adjustment of the welding time parameter; usable in 2/4 strokes
- › **Extremely accurate welds** thanks to a digital controller that ensures an excellent current stability and precision. This also allows an accurate adjustment of the minimum current (3 A) useful to carry-over operations on metal mould edges
- › **Minimized maintenance times** thanks to the easily removable cooling grid
- › **JOB function** that allows to easily save from 10 to 99 JOB (depending on the model), the settings preferred by the operator in dedicated programs
- › **TIG DC XP** (extra Pulse) process allows welding current pulse up to 15 kHz frequencies (high acoustic comfort), getting an extremely focused and penetrating welding arc, for a high feed rate and maximized productivity.
It is possible to overlay an additional low frequency pulse (double pulse) onto the XP process.
- › Perfect for thin thicknesses and automated processes such as PLASMA ARC WELDING (PAW) to increase welding speed and quality.
- › **APC** process (Active Power Control) allows to take control of the welding current as the torch distance varies, thus without using the pedal for the current adjustment.
This process keeps the heat input on the workpiece steady as the welding position changes, especially in the corners.

Particularly, WIN TIG DC 500 T and 340 T:

- › **Industry 4.0 compliant power sources:** The new hardware architecture allows the implementation of a web server (through the Ethernet LAN port or by means of an external kit, through Wi-Fi connection), that enables the operator to take advantage of all those tasks requiring data collection and processing, welding parameter setup, diagnostics and remote assistance
- › **User Interface** remotely controlled can be handled through personal computer, tablet and smartphone
- › **2 USB ports** for saving data and updating software
- › 7" colour **LCD touch-screen** display

Power sources characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard



TIG - Art. 558

WIN TIG AC-DC 180 M



	TIG	MMA
Single phase input	230 V +15% / -20% 50/60 Hz	
Fuse rating (slow blow)	16 A	
Input power	4,4 kVA 25% 2,5 kVA 60% 2,2 kVA 100%	4,4 kVA 30% 3,3 kVA 60% 3,0 kVA 100%
min - max current obtainable in welding	5 ÷ 180 A	10 ÷ 130 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	180 A 25% 110 A 60% 100 A 100%	130 A 30% 100 A 60% 90 A 100%
Protection class	IP 23 S	
Weight	17,5 kg	
Dimensions (WxLxH)	207 x 500 x 411 mm	

WIN TIG AC-DC 180 M

WIN TIG AC-DC 180 M is a full-featured, compact, single-phase inverter power source extremely compact but full o functionality:

- › **EVO START** function (pulse current ignition, to be adjusted in hundredths of a second)
- › **EVO LIFT** function (contact ignition + HF). The combination of the two functions allows precise ignitions on the workpiece as well as a better joining of poorly prepared sheets
- › **Quick spot function with minimal heat input** thanks to a specific program that allows the accurate adjustment of the welding time parameter; usable in 2/4 strokes
- › **Extremely accurate welds** thanks to a digital controller that ensures an excellent current stability and precision. This also allows an accurate adjustment of the minimum current (3 A) useful to carry-over operations on metal mould edges
- › **Minimized maintenance times** thanks to the easily removable cooling grid
- › **JOB function** that allows to easily save from 10 to 99 JOB (depending on the model), the settings preferred by the operator in dedicated programs
- › **AC frequency adjustable from 50 to 200 Hz**
- › **TIG DC XP** (extra Pulse) process allows welding current pulse up to 15 kHz frequencies (high acoustic comfort), getting an extremely focused and penetrating welding arc, for a high feed rate and maximized productivity.
It is possible to overlay an additional low frequency pulse (double pulse) onto the XP process. Perfect for thin thicknesses and automated processes such as PLASMA ARC WELDING (PAW) to increase welding speed and quality.
- › **TIG DC APC** process (Active Power Control) allows to take control of the welding current as the torch distance varies, thus without using the pedal for the current adjustment.
This process keeps the heat input on the workpiece steady as the welding position changes, especially in the corners.

WIN TIG AC-DC 230 M



	TIG	MMA
Single phase input	230 V +15% / -20% 50/60 Hz	
Fuse rating (slow blow)	16 A	
Input power	5,7 kVA 30%	6,2 kVA 40%
	4,8 kVA 60%	4,4 kVA 60%
	3,7 kVA 100%	3,6 kVA 100%
min - max current obtainable in welding	3 ÷ 230 A	10 ÷ 180 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	230 A 40%	180 A 30%
	200 A 60%	140 A 60%
	170 A 100%	120 A 100%
Protection class	IP 23 S	
Weight	21,5 kg	
Dimensions (WxLxH)	232 x 530 x 467 mm	



WIN TIG AC-DC 230 M

The new WIN TIG AC-DC 230 M is a single-phase direct and alternated current inverter power source with HF ignition for TIG and MMA welding, with a modular design that facilitates the integration of the new optional cooling unit (Art. 1685).

Features:

- › **EVO START** function (pulse current ignition, to be adjusted in hundredths of a second)
- › **EVO LIFT** function (contact ignition + HF)
The combination of the two functions allows precise ignitions on the workpiece as well as a better joining of poorly prepared sheets
- › **Quick spot function with minimal heat input** thanks to a specific program that allows the accurate adjustment of the welding time parameter; usable in 2/4 strokes
- › **Extremely accurate welds** thanks to a digital controller that ensures an excellent current stability and precision. This also allows an accurate adjustment of the minimum current (3 A) useful to carry-over operations on metal mould edges
- › **Minimized maintenance times** thanks to the easily removable cooling grid
- › **JOB function** that allows to easily save from 10 to 99 JOB (depending on the model), the settings preferred by the operator in dedicated programs
- › **AC frequency adjustable from 50 to 200 Hz**
- › **Quick setting and adjustment** of the AC waveform function
- › In **AC TIG** mode, it is possible to independently adjust the amplitude and percentage of the half-waves to get the desired penetration/cleaning and a lower rounding of the electrode tip

- › **AC “MIX”** function that allows to weld aluminium joints with different thicknesses
- › **DC PULSE** process as standard
- › **TIG DC XP** (extra Pulse) process allows welding current pulse up to 15 kHz frequencies (high acoustic comfort), getting an extremely focused and penetrating welding arc, for a high feed rate and maximized productivity.
- › **DC APC TIG** process allows the welding current to be automatically adjusted, keeping a steady voltage, regardless of the distance changed from the workpiece. Such adjustment is generally controlled by the foot pedal switch.
- › **VRD** (Voltage Reduction Device) function: in MMA mode, enhances safety in dangerous environments
- › **Pre-arranged for integration into simple automation** via optional analog interface kit (Art. 456)
- › Possibility of remote control panel (Art. 457)
- › An optional trolley (Art. 1676) for transportation of the power source and the cooling unit is also available
- › **5” LCD colour touch** screen panel
- › Internal **USB** port for software update

Power source characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard



WIN TIG AC-DC 230 M with trolley for transportation of the power source and the cooling unit



New trolley for transportation (Art. 1676)

TIG - Art. 394

WIN TIG AC-DC 270 T



	TIG	MMA
Three phase input	400 V +15% / -20% 50/60 Hz	
Fuse rating (slow blow)	10 A	10 A
Input power	7,6 kVA 40% 7,1 kVA 60% 6,3 kVA 100%	8 kVA 40% 7,4 kVA 60% 7 kVA 100%
min - max current obtainable in welding	3 ÷ 270 A	10 ÷ 210 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	270 A 40% 250 A 60% 230 A 100%	210 A 40% 200 A 60% 190 A 100%
Protection class	IP 23 S	
Weight	69 kg	
Dimensions (WxLxH)	560 x 950 x 1010 mm	

TIG - Art. 395

WIN TIG AC-DC 340 T



	TIG	MMA
Three phase input	400 V ±15% 50/60 Hz	
Fuse rating (slow blow)	16 A	20 A
Input power	11,3 kVA 40% 10,3 kVA 60% 9,7 kVA 100%	13,1 kVA 40% 12,1 kVA 60% 11,5 kVA 100%
min - max current obtainable in welding	3 ÷ 340 A	10 ÷ 310 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	340 A 40% 320 A 60% 310 A 100%	310 A 40% 290 A 60% 280 A 100%
Protection class	IP 23 S	
Weight	109 kg	
Dimensions (WxLxH)	588 x 1120 x 1010 mm	



TIG - Art. 396

WIN TIG AC-DC 450 T



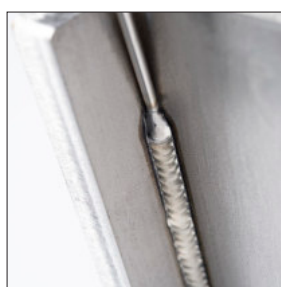
	TIG	MMA
Three phase input	400 V \pm 15% 50/60 Hz	
Fuse rating (slow blow)	20 A	
Input power	18,2 kVA 50% 15,9 kVA 60% 13,8 kVA 100%	17,8 kVA 45% 15,2 kVA 60% 13,9 kVA 100%
min - max current obtainable in welding	3 ÷ 450 A	10 ÷ 360 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	450 A 50% 400 A 60% 380 A 100%	360 A 45% 340 A 60% 320 A 100%
Protection class	IP 23 S	
Weight	112 kg	
Dimensions (WxLxH)	588 x 1120 x 1010 mm	



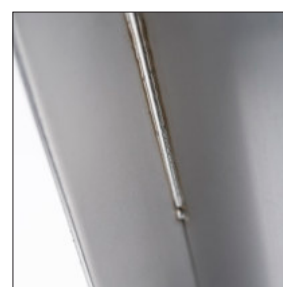
EVO LIFT Spot



MIX AC-DC



XP Function



APC Function

AC-DC WIN TIG

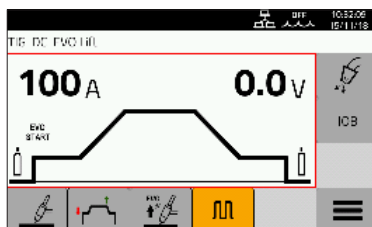
The three-phase power source features that have always characterized WIN TIG AC-DC 270 T, 340 T and 450 T are as follows:

- › **EVO START** function (pulse current ignition, to be adjusted in hundredths of a second)
- › **EVO LIFT** function (contact ignition + HF). The combination of the two functions allows precise ignitions on the workpiece as well as a better joining of poorly prepared sheets
- › **Quick spot function with minimal heat input** thanks to a specific program that allows the accurate adjustment of the welding time parameter; usable in 2/4 strokes
- › **Extremely accurate welds** thanks to a digital controller that ensures an excellent current stability and precision. This also allows an accurate adjustment of the minimum current (3 A) useful to carry-over operations on metal mould edges
- › **Minimized maintenance times** thanks to the easily removable cooling grid
- › **JOB function** that allows to easily save from 10 to 99 JOB (depending on the model), the settings preferred by the operator in dedicated programs
- › **AC frequency adjustable from 50 to 200 Hz**
- › **Quick setting and adjustment** of the AC waveform function
- › In **AC TIG** mode, it is possible to independently adjust the amplitude and percentage of the half-waves to get the desired penetration/cleaning and a lower rounding of the electrode tip
- › **AC "MIX"** function that allows to weld aluminium joints with different thicknesses
- › **TIG DC XP** (extra Pulse) process allows welding current pulse up to 15 kHz frequencies (high acoustic comfort), getting an extremely focused and penetrating welding arc, for a high feed rate and maximized productivity. It is possible to overlay an additional low frequency pulse (double pulse) onto the XP process. Perfect for thin thicknesses and automated processes such as PLASMA ARC WELDING (PAW) to increase welding speed and quality.
- › **TIG DC APC** process (Active Power Control) allows to take control of the welding current as the torch distance varies, thus without using the pedal for the current adjustment. This process keeps the heat input on the workpiece steady as the welding position changes, especially in the corners.
- › **Industry 4.0 compliant power sources:** the new hardware architecture allows the implementation of a web server (through the Ethernet LAN port or by means of an external kit, through Wi-Fi connection), that enables the operator to take advantage of all those tasks requiring data collection and processing, welding parameter setup, diagnostics and remote assistance
- › **User interface** remotely controlled can be handled through **personal computer, tablet and smartphone**
- › 7" colour **LCD touch-screen** display
- › **2 USB ports** for saving data and updating software

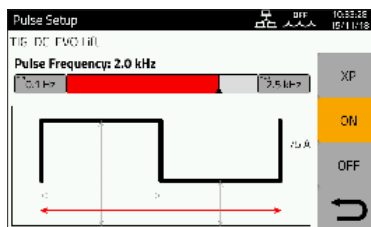
Power sources characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard

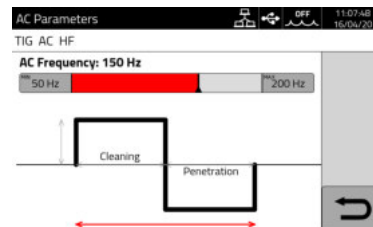
Display WIN TIG



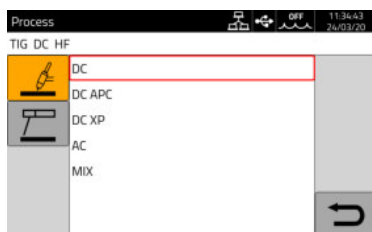
Primary screen



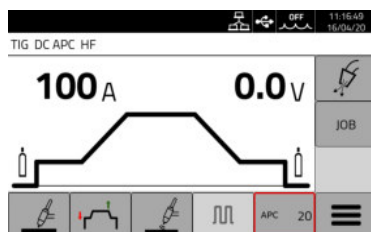
Quick adjustment of pulse parameters



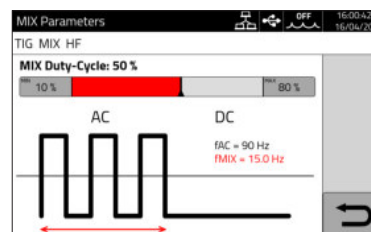
Quick adjustment of AC frequency parameters (only for AC-DC TIG)



Selection of the processes



APC Function



HF MIX Function

LCD panel with an user-friendly encoder



USB device for software update



Industry 4.0

The three-phased-power WIN-TIG range is based on a dual-core microprocessor control board equipped with an Ethernet network interface and an open-source software platform.

Through the integrated web server it is possible to interconnect - directly via cable or via Wi-Fi to an external kit - to the company network using standard TCP/IP and HTTPS protocols that make it compliant with Industry 4.0 requirements.

In fact, these power sources have got a REST API programming interface allowing a flexible bidirectional data exchange with management systems and company MES, allowing both the configuration of process parameters and the consultation of production data.

It is also possible to remotely monitor the status of the source and the welding process in real time, and to access the generator internal logs for remote diagnostics and service.

These power sources also feature an integrated web app that allows complete remote management using a simple browser from a personal computer or tablet, without the need to install additional software.

You can therefore monitor the general status of the power source, the status of the welding process and the trend of the most significant measurements.



Webapp - The user interface can be used via pc, tablets and smartphones



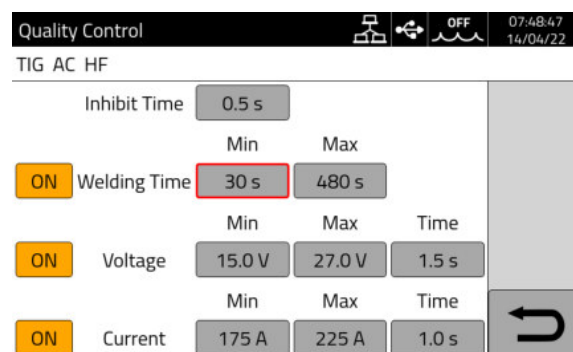
Pre-arranged for barcode scanner

Additional functions

Our WIN TIG line offers new software packages aimed at improving production control and digitizing business processes and activities. These power sources are also pre-arranged for the use of optical scanners to automate the processes with barcodes and QR code scanning.

Quality Control (Art. 273)

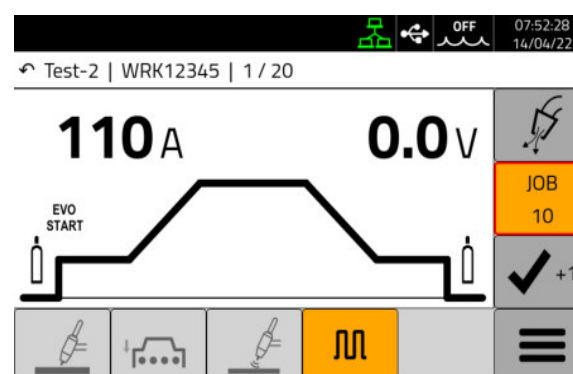
Software package dedicated to the software package for managing and repeating the welding seams. It allows to define minimal and maximum thresholds of arc current, arc tension and welding time. If the threshold is exceeded it is marked on the panel and in the welding reports.



Control panel screenshot

Production Mode (Art. 817)

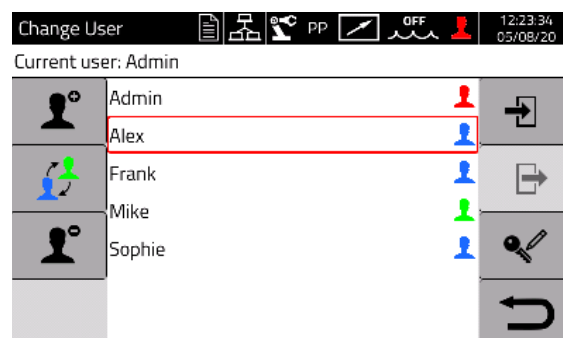
Software package dedicated to the management and tracking of welding processes in mass production of parts, batches and job orders: it allows to export to file the welding processes complete with processing name, job order name and part number. It allows a better intergration with MES systems for Industry 4.0



Control panel screenshot

Advanced Users (Art. 809)

Software package that allows the configuration of a list of operators, with the assignment of an identification name, a unique code (PIN) and the level of access credentials. It is possible to import and export the usage data as CSV files on a USB memory stick.



Control panel screenshot



MMA

POWER ROD 180 M

POWER ROD 200 M-Cell

POWER ROD 250 T-Cell

POWER ROD 380 T-Cell



MMA - Art. 506

POWER ROD 180 M



Single phase input	230 V + 15% / -20% 50/60 Hz
Fuse rating (slow blow)	16 A
Input power	6,2 kVA 30% 3,9 kVA 60% 3,5 kVA 100%
min - max current obtainable in welding	10 ÷ 180 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	180 A 30% 125 A 60% 115 A 100%
Electrodes that can be used	Ø 1,5 ÷ 4,0
Protection class	IP 23 S
Weight	9,6 kg
Dimensions (WxLxH)	172 x 420 x 340 mm

POWER ROD 180 M

POWER ROD 150 M is a single-phase inverter power source for MMA welding of all AWS 7018 basic rutile electrodes, stainless steel and aluminum and can also be used for DC TIG welding with ignition 'CEBORA Lift'. It is very light and compact source; thanks to these features, it is easily transportable and suitable to a wide range of working conditions.

› It weld all basic rutile electrodes up to Ø 4.0 and the working cycle is 180 A to 30%; 115 A to 100%

Power sources characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard

MMA - Art. 520

POWER ROD 200 M-Cell



Single phase input	230 V + 15% / -20% 50/60 Hz
Fuse rating (slow blow)	16 A
Input power	6,7 kVA 30% 4,7 kVA 60% 3,6 kVA 100%
min - max current obtainable in welding	10 ÷ 200 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	200 A 30% 150 A 60% 120 A 100%
Electrodes that can be used	Ø 1,5 ÷ 4,0
Protection class	IP 23 S
Weight	9,6 kg
Dimensions (WxLxH)	172 x 420 x 340 mm

MMA - Art. 514

POWER ROD 250 T-Cell



Three phase input	400 V ±10% 50/60 Hz
Fuse rating (slow blow)	10 A
Input power	9,2 kVA 30% 7,3 kVA 60% 6,5 kVA 100%
min - max current obtainable in welding	10 ÷ 250 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	250 A 30% 210 A 60% 190 A 100%
Electrodes that can be used	Ø 1,5 ÷ 5,0
Protection class	IP 23 S
Weight	15,7 kg
Dimensions (WxLxH)	207 x 437 x 411 mm

MMA - Art. 519

POWER ROD 380 T-Cell



Three phase input	400 V \pm 10 50/60 Hz
Fuse rating (slow blow)	16 A
Input power	16,6 kVA 30% 10,0 kVA 60% 8,0 kVA 100%
min - max current obtainable in welding	10 ÷ 380 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	380 A 30% 270 A 60% 230 A 100%
Electrodes that can be used	Ø 1,5 ÷ 6,0
Protection class	IP 23 S
Weight	26,3 kg
Dimensions (WxLxH)	297 x 463 x 588 mm



POWER ROD 200 M-Cell – 250 T-Cell – 380 T-Cell

POWER ROD 250 T-Cell and 380 T-Cell are three-phase inverter power sources recommended for professional welding of **cellulosic electrodes**.

Suitable for shipbuilding, welding professionals, pipe welding and in maintenance for what concerns the available voltage and the high quantity of electrodes that can be melted.

Features:

- › Power sources also suitable for **DC TIG / Pulse TIG** welding with “CEBORA lift ignition”
- › “**Hot Start**” and “**Arc Force**” functions ensure sophisticated control of short circuit conditions, i.e. electrode transfer, which is the parameter that most affects the quality of the weld
- › “**Anti-stick**” function that automatically switches off the electrical arc to allow the detachment from the basic material

Power sources characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard

MMA - accessories

	Art. 506	Art. 520	Art. 514	Art. 519
Remote control for the welding current adjustment (art. 187) + connection (art. 1192)		●	●	●
5 m extension cable for remote control			●	●
Electrode holder (5 m - 35 mm ²) and work return lead (3 m - 35 mm ²)		●	●	
Electrode holder (5 m - 50 mm ²) and work return lead (3,5 m - 50 mm ²)				●
Electrode holder (5 m - 16 mm ²) and work return lead (3 m - 16 mm ²)	●			
Trolley			●	●



(Art. 187)



(Art. 1281.04 / 1284.05 / 1286.05)



(Art. 1192)



(Art. 1656)



(Art. 1653)



Plasma

POWER PLASMA 3035/M

PLASMA SOUND PC 50/M

PLASMA SOUND PC 70/T

PLASMA SOUND PC 110/T

PLASMA SOUND PC 130/T



Plasma - Art. 279

POWER PLASMA 3035/M



Single phase input	115 V +15% / -20% 50/60 Hz	230 V +15% / -20% 50/60 Hz
Fuse rating (slow blow)	32 A	16 A
Input power	3,5 kVA 35% 2,8 kVA 60% 2,4 kVA 100%	
min - max current obtainable in welding	5 ÷ 30 A	
Duty Cycle (10 min.40°C) According to IEC 60974-1	30 A 35% 25 A 60% 22 A 100%	
Stepless regulation	Electronic	
Protection class	IP 23 S	
Weight	13 kg	
Dimensions (WxLxH)	175 x 503 x 400 mm	

THICKNESS ON MILD STEEL:

Quality & productivity cutting	8 mm
Maximum thickness	12 mm
Severance	15 mm



Plasma - Art. 326

PLASMA SOUND PC 50/M



Single phase input	230 V ± 10% 50/60 Hz
Fuse rating (slow blow)	32 A
Input power	7,8 kVA 40% 5,8 kVA 60% 5,3 kVA 100%
min - max current obtainable in welding	20 ÷ 50 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	50 A 40% 42 A 60% 33 A 100%
Stepless regulation	Electronic
Protection class	IP 23 S
Weight	23 kg
Dimensions (WxLxH)	286 x 590 x 406 mm

THICKNESS ON MILD STEEL:

Quality & productivity cutting	15 mm
Maximum thickness	20 mm
Severance	25 mm



POWER PLASMA 3035/M

POWER PLASMA 3035/M is a single-phase multi-voltage inverter plasma cutting power source with high-frequency (HF) ignition, very easy to use thanks to its lightweight body (13 kg only).

Despite its small size, it ensures an excellent cutting quality on all metals, including new high-strength steels.

POWER PLASMA 3035/M works with compressed air or nitrogen for high quality cuts with air consumption of only 60 lt/min, input pressure by 3.5 bar.

Features:

- › **Automatic voltage change** (115V-230V +15% / - 20%)
- › **Pilot Arc operating mode with HF**
- › **“Pilot Self-Restart”** function, which automatically stops and restarts the arc, thereby increasing the operator productivity
- › **Nozzle holder protection**
- › CEBORA CP 40 manual torch with cable 4 m. long with direct adapter (Art. 1206)

Power sources characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard

The automated version also requires the analog interface kit for pantographs (Art. 441) and it is equipped with CEBORA CP 40 DAR torch with cable m 6 or m 12 long.

PLASMA SOUND PC 50/M

PLASMA SOUND PC 50/M is a single-phase inverter plasma cutting power source with “ON AIR” ignition and with electronic and mechanical protection system.

The power source automatically recognizes the manual and straight (MAR-DAR) CEBORA CP 70C torches, both the 6 m and 15 m length models.

Features:

- › Automatic detection of worn-out consumables
- › **Gouging** and **Pilot Self-Restart** functions
- › **Nozzle holder protection**

The automated version also requires the analog interface kit for pantographs (Art. 441)

Power sources characterized by low electrical input (**PFC**)

Compliant with EN 61000-3-12 standard

PLASMA SOUND PC 70/T



Three phase input	208/220/230 V $\pm 10\%$ 50/60 Hz	400/440 V $\pm 10\%$ 50/60 Hz
Fuse rating (slow blow)	20 A	12 A
Input power	12 kVA 35% 10,5 kVA 60% 8,5 kVA 100%	12 kVA 60% 10,5 kVA 100%
min - max current obtainable in welding	20 ÷ 70 A	
Duty Cycle (10 min. 40°C) According to IEC 60974-1	70 A 35% 60 A 60% 50 A 100%	70 A 60% 60 A 100%
Stepless regulation	Electronic	
Protection class	IP 23 S	
Weight	26 kg	
Dimensions (WxLxH)	286 x 515 x 406 mm	

THICKNESS ON MILD STEEL:

Quality & productivity cutting	25 mm
Maximum thickness	30 mm
Severance	35 mm



Three phase input	208/220/230 V $\pm 10\%$ 50/60 Hz	400/440 V $\pm 10\%$ 50/60 Hz
Fuse rating (slow blow)	32 A	25 A
Input power	15 kVA 35% 11,9 kVA 60% 11 kVA 100%	20,5 kVA 50% 16,5 kVA 60% 15,5 kVA 100%
min - max current obtainable in welding	20 ÷ 80 A	20 ÷ 110 A
Duty Cycle (10 min.40°C) According to IEC 60974-1	80 A 35% 65 A 60% 60 A 100%	110 A 50% 95 A 60% 90 A 100%
Stepless regulation	Electronic	
Protection class	IP 23 S	
Weight	34 kg	
Dimensions (WxLxH)	297 x 504 x 558 mm	

THICKNESS ON MILD STEEL:

Quality & productivity cutting	35 mm
Maximum thickness	40 mm
Severance	50 mm

PLASMA SOUND PC 130/T



Three phase input	208/220/230 V $\pm 10\%$ 50/60 Hz	400/440 V $\pm 10\%$ 50/60 Hz
Fuse rating (slow blow)	50 A	32 A
Input power	22 kVA 50% 21 kVA 60% 16,6 kVA 100%	22 kVA 80% 21 kVA 100%
min - max current obtainable in welding	20 ÷ 130 A	
Duty Cycle (10 min. 40°C) According to IEC 60974-1	130 A 50% 125 A 60% 105 A 100%	130 A 80% 125 A 100%
Stepless regulation	Electronic	
Protection class	IP 23 S	
Weight	40 kg	
Dimensions (WxLxH)	297 x 613 x 558 mm	

THICKNESS ON MILD STEEL:

Quality & productivity cutting	40 mm
Maximum thickness	50 mm
Severance	60 mm

PLASMA SOUND PC 70/T - 110/T - 130/T

PLASMA SOUND PC 70/T, PLASMA SOUND PC 110/T and PLASMA SOUND PC 130/T are three-phase multi-voltage (208-220-230V/400-440V/50-60 Hz) inverter plasma cutting power sources with "ON AIR" ignition and with electronic and mechanical protection system. These power sources automatically recognize CEBORA CP 70C hand and straight torch (MAR-DAR) and CP 162C hand and straight torch (MAR-DAR), with both 6 m and 15 m. cable lengths.

Features:

- › User-friendly **LCD 5" display** with cutting charts included
- › **Gouging, Pilot Self-Restart function and Spot Marking** (Art. 337)
- › Automatic detection of torch type and length and of **worn-out consumables**

The automated version also requires the analog interface kit for pantographs (Art. 441)
(Art. 433 only for Art. 337)

The CP Trademark



The CP registered trademark identifies the CEBORA original consumable parts for plasma power sources. We strongly recommends the use of original CP consumables, as they are the only parts ensuring the expected power source-torch combination performance.

The geometry and materials selected for CP consumables are decided when the power source and the torch are designed, and represent the best compromise between part performance, reliability and lifetime, in respect of the IEC 60974-7 standards.

The use of non-original consumables on power sources and torches means that CEBORA shall therefore not be liable in the event of any accidents and all warranties shall become void.

The use of non-original parts can cause the following consequences:

- › Overheating of the power source
- › Failure of electronic circuits
- › Short-circuits in a process using such voltages exceeding 250 DC V

MAR torch CP 70C
(Art. 1626)



DAR torch CP 70C
(Art. 1627)



MAR torch CP 162C
(Art. 1631)



DAR torch CP 162C
(Art. 1632)





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