



WELD THE WORLD




ENG

POWER PULSE

3200 - 3200K - 4000 - 4000K - 5000





The new Weco Power Pulse line represents an extremely sophisticated and high-performance range of welding machines, designed to meet the needs of welding professionals.

These devices stand out due to a series of advanced features that significantly improve productivity and work quality.

Weco Power Pulse welders are designed to operate under intensive working conditions without interruptions. The high duty cycles ensure greater operational continuity, reducing downtime and increasing productivity.

By integrating the latest technological innovations, these welders offer excellent performance on a wide range of materials.

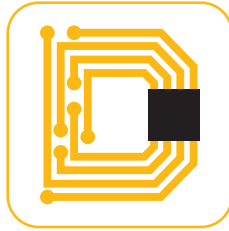
Digital technology allows for precise control of welding parameters, optimizing the quality of the welded joint and easily adapting to different welding requirements.



TECHNOLOGIES

Technology

WECO DIGITAL CONTROL



COMPLETELY FULL DIGITAL LINE

The digital control of the inverter through the latest **DSP** generation (**Digital Signal Processor**) allows rapid and precise control of the welding arc. Stability guaranteed instantly and perfect balance of the arc, from ignition to the end of welding. The welding parameters are dynamically controlled and modified in real time.

Technology

WECO PFC



SAVE BY USING ALL THE AVAILABLE POWER

Power Pulse through the **PFC** device (**Power Factor Corrector**) significantly reduces the overall cost of electricity consumption required.

Some numbers? The savings are equal to 30% compared to a traditional inverter and 45% compared to an electromechanical welder.

Technology

WECO QUICK SETTING



CREATE YOUR USER INTERFACE

Control panel customization:

each welder can customize the control panel according to their needs.

Parameter boxes:

you can select the number and sequence of welding parameters to use.



FAVORITES

QUICKLY ACTIVATE YOUR FAVORITE FUNCTIONS

Four available keys to assign welding functions quick activation such as:

- Double Pulse
- B-Level Mode
- Job Sel
- Spot / Pause
- K-DEEP
- DSI

4 JOBS can also be assigned to these keys to be activated quickly.



IMPORT & EXPORT

YOUR WELDER ALWAYS WITH YOU

The Import/Export mode allows you to **Import or Export** all the settings saved by the welder via a **USB Memory Stick**, which include:

- The JOBS saved in the machine
- The parameters set for welding (current, thickness, arc corrections, torch trigger mode and all parameters selected in each menu)
- The display settings such as the parameter boxes set and favorites chosen
- The language



WELD LOGS



PRODUCTIVITY AND WELDING QUALITY ALWAYS UNDER CONTROL

Power Pulse records and saves all the welding performed in the power source's internal database.

The parameters saved for each weld are:

- Progressive number of the weld seam
- Welding start date/time
- Welding time in seconds (single bead)
- Average welding current
- Average welding voltage
- Average wire speed
- Job number (if set)
- Instant energy of the arc in KJ

All exportable through usb and Consultable from computer!



GUARD LIMITS

PERFECT WELDING WITH GUARANTEED PARAMETERS

If you are working with certified processes (WPS), by setting the welding parameters guard limits, **Power Pulse** will signal on the display any non-compliance with the parameters to correct the operator's error. If incorrect parameters are used for a long time, **POWER PULSE** will interrupt the welding process to avoid serious defects.



UPGRADE FROM USB



KEEP YOUR POWER SOURCE UPDATED AT ALL TIMES

Quick and easy upgrade!

- Updating the entire system (power source, wire feeder and Digimanager torch) from a single USB port
- A few simple operations allow a quick and precise update
- Latest firmware release available on website



SYNERGIC PROGRAMS

ALL INCLUSIVE WITHOUT ADDITIONAL COSTS!

Power Pulse has more than 130 synergic programs available for all materials, even the most difficult to weld.

**Is there no synergic program for the material you need to weld?
We'll build it for you!**





The special functions available in Weco Power Pulse welders allow the welder to perform even the most complex welds with excellence.

Weco Power Pulse can be connected to the corporate network to enable constant monitoring and control of welding activities, ensuring process repeatability, cost and consumption control and detailed quality control. The numerous available configurations ensure that the most suitable one can be chosen in terms of ergonomics and versatility.



SPECIAL FUNCTIONS

Special Function

HIGH CONTROL PULSE (HC)



**SPEED UP AND INCREASE THE QUALITY OF YOUR
WELDING**

The new **HC Pulse (High Control)** has the characteristic of having a very fast arc control in order to optimize the drop detachment with very reduced energy.

HC features:

- Increased welding arc stability with almost total absence of spatter and micro projections
- Very reactive welding arc to the torch movement
- Reduction of energy transmitted to the welded piece
- Very linear transfer with optimal fusion fluidity and a very high execution speed



Special Function

K- DEEP



MAKE YOUR WELDING 100% SAFE

The function was created to stabilize penetration during welding, regardless of variations in stick-out length. In this way, a constant depth of fusion of the joint is achieved along its entire length. The end result is an ideal combination for quality welding. A uniformly sized bead is achieved, stabilized penetration and the risk of defects is significantly reduced. There is therefore a safety guarantee of the welding performed even with variable stick-outs.

The effectiveness of the **K-DEEP** function combined with the advantages of HC programs, such as the high hourly deposit, the excellent arc stability and the high execution speed makes the final result simply perfect and safe.



Special Function

DIGITAL SENSE IGNITION



PERFECT ARC IGNITION WITHOUT SPATTERS AND PROJECTIONS

- Almost total reduction of spatter and wire explosions during the cold striking phase and reduction of the energy transmitted to the welding piece
- Optimization of arc-ignition with short-circuited wire and notable reduction in splashes and explosions.
- Possibility to enable or disable the **DSI** function quickly through the “favorite” keys or through the Digimanager torch.
- Best result in terms of quality and efficiency using the integrated functions **DSI** (ignition), **Pulsed HC** (welding speed, low heat input), **K-DEEP** (penetration stabilizer).



Special Function

POWER MIX



WELDING VERTICAL UP WITHOUT ANY DIFFICULTIES

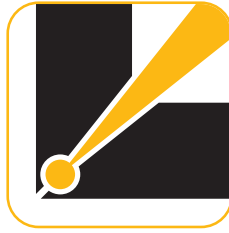
The new Weco **MIG MAG** process **POWER MIX** has the aim of reducing the average heat input to the piece, reducing the phenomenon of surface oxidation, and limiting distortions due to the heat excess.

- Simple and quick to set up thanks to the synergic programs **POWER MIX** also facilitates welding in positions (different from the standard PA-PB) just by setting the thickness of the material to be welded, without the need to act on many adjustment parameters.
- High execution speed
- Low heat input and less deformations
- High aesthetic quality of the joints
- Regular bead geometry
- Applicable on different types of steel and thicknesses



Special Function

POWER FOCUS



GUARANTEED PENETRATION EVEN WITH HIGH STICK-OUT

The special **Power Focus** function is designed to minimize overall welding costs by reducing the overall volume of joints to be welded.

Power Focus features:

- Higher arc concentration with greater penetration and lower risk of sticking compared to standard spray arc
- Greater arc stability even with long stick-outs
- Reduction in volumes of grooves to be filled and lower joint preparation costs
- Reduction and optimization of the globular transition zone (globular transfer)
- Very stable and soft arc in Short Arc process



Special Function

POWER ROOT



WELDING WITH HIGH GAP HAS NEVER BEEN SO EASY

The **Power Root** special function is a short arc, digitally controlled, cold drip transfer that ensures very high quality root passes.

Power Root features:

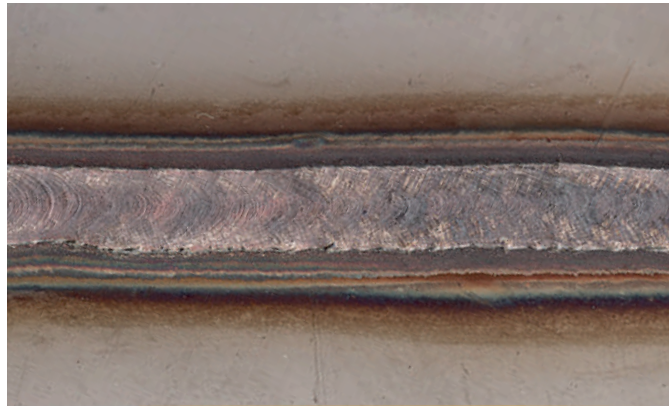
- First root pass optimization
- Vertical down welding quality
- Excellent operation
- Cold drop transfer
- Perfect union of thin sheets
- Ideal for welding joints with large gaps



LOOKING FOR THE PERFECT WELD



HC STEEL



HC STAINLESS STEEL



ALUMINUM MG HC



DOUBLE PULSED
STEEL



DOUBLE PULSED
STAINLESS STEEL



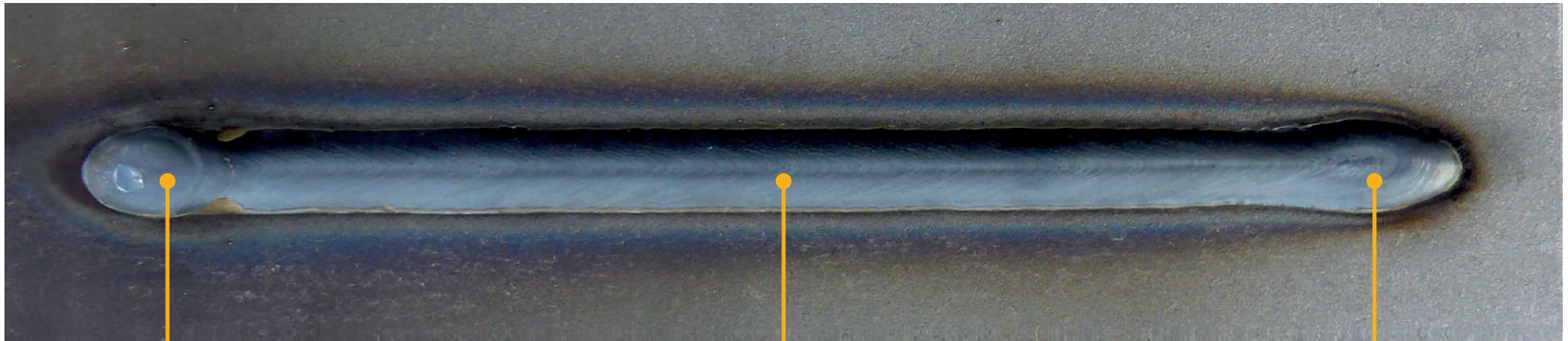
DOUBLE PULSED
ALUMINUM MG



INNOVATION

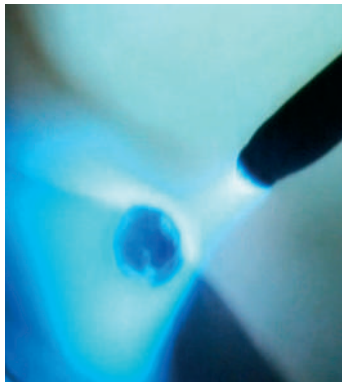
INNOVATION

Digital technology (Weco Digital Control) and Weco **knowhow** in search of the perfect weld.



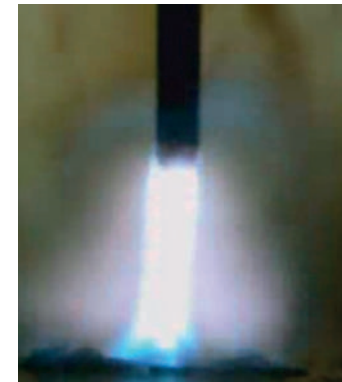
Wire cutter

The clean cut of the wire at the end of the weld avoids the formation of the ball on it, making the next ignition perfect.



Arc stabilization

The fusion is immediately balanced. There is thus an almost total reduction in projections in the initial welding phase and the weld bead is regular from the beginning to the end.



Arc striking

Always optimal arc-strikes, avoiding initial explosions and reducing the generation of spatters to a minimum, in any condition of use.



WECO DATA MANAGER

SYSTEM IMPLEMENTATION

WECO DATA MANAGER



QUALITY, COSTS, PRODUCTIVITY AND REPEATABILITY OF THE PROCESSES UNDER CONTROL

POWER PULSE is compatible with **Weco Data Manager** software.

ADVANTAGES OF WECO DATA MANAGER SOFTWARE:

1. Quality assurance

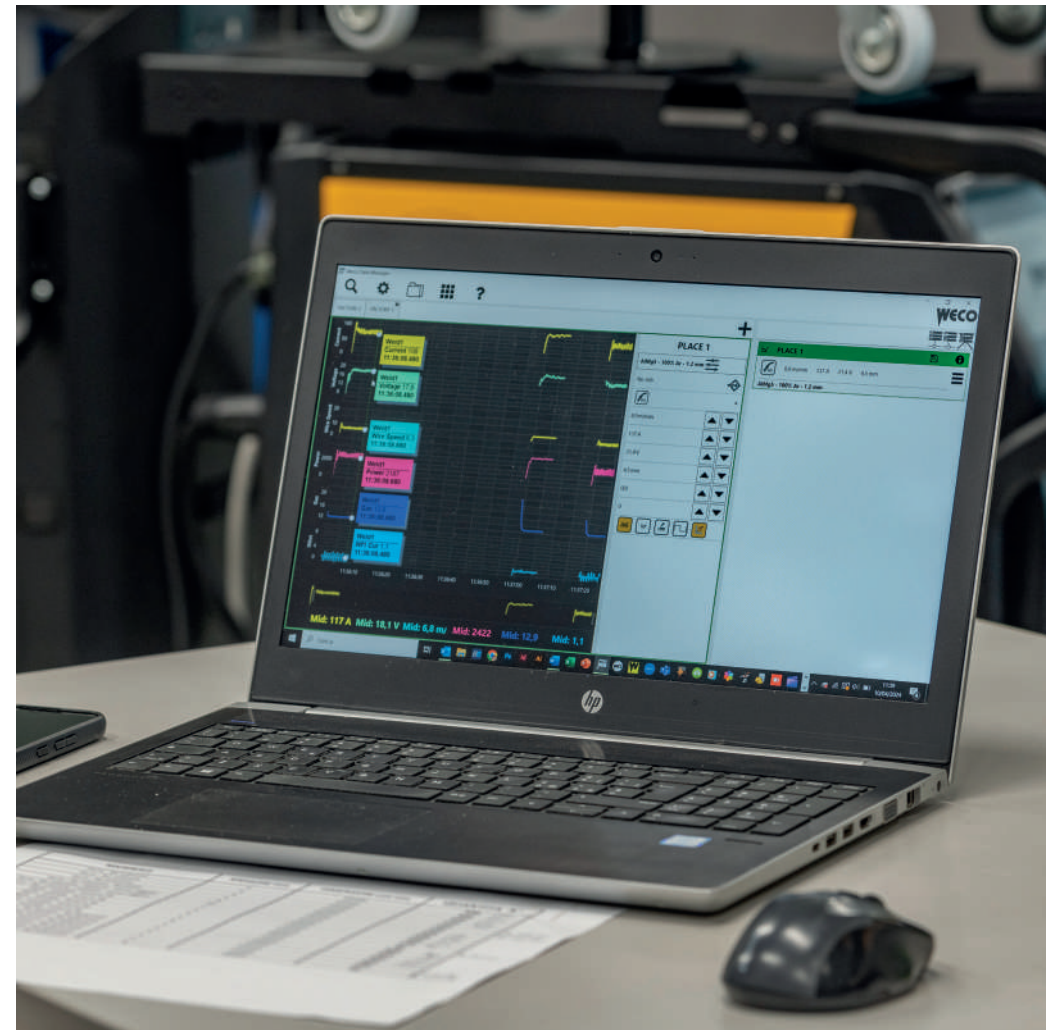
- Reporting of performed work
- Weld according to WPS
- Monitoring and management of networked welding machines
- Monitoring and control of many parameters

2. Costs control

Control of the global and detailed costs of the welding

3. Increased productivity

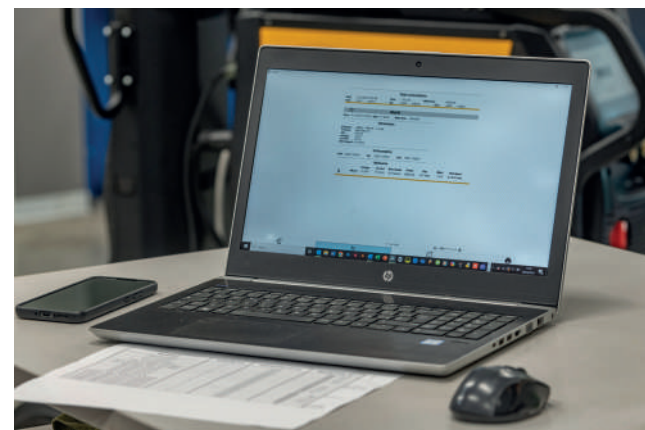
- Easy management of welding report-templates
- Association with barcodes of all processing phases
- Automation of welding machine settings via barcode
- Automatic reporting saving
- Low welder involvement (must continue to be a welder)



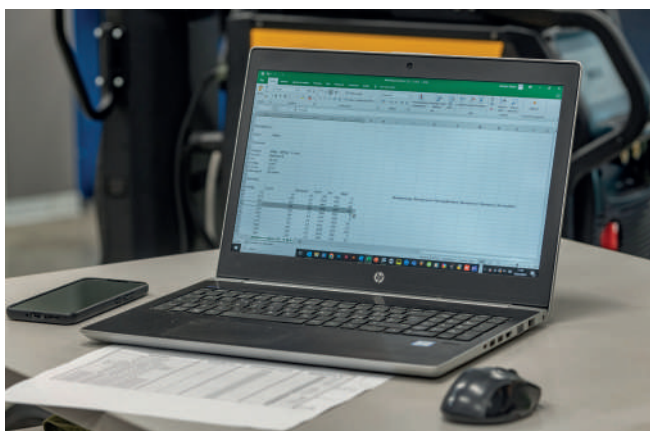


Real-time control of welding parameters

Current, Voltage, Wire speed, Power used, Quantity of gas
Absorbed current by the wire feed motor.



Creation of reports





















Integration with company management programs thanks to the report in csv format



Creation of reports

WELDING PROCESSES

PROCESSES	POWER PULSE 3200 - 3200K	POWER PULSE 4000 - 4000K	POWER PULSE 5000
MIG MAG PULSED			
MIG MAG SYNERGIC			
MIG MAG MANUAL			
TIG DC LIFT			
MMA			
GOUGING			

Working Cycles

POWER PULSE
3200 - 4000 - 5000

The high duty cycle at 40°C allows you to work continuously, even with applications requiring high work cycles.
Power Pulse 4000 and **5000** have a duty cycle of 400 Amperes at 100%.

POWER PULSE 3200

WELDING MODE	MIG MAG		TIG		MMA	
WORKING CYCLE (%)	60%	100%	60%	100%	60%	100%
WELDING CURRENT (A)	320A	260A	320A	260A	320A	260A

POWER PULSE 4000

WELDING MODE	MIG MAG		TIG		MMA	
WORKING CYCLE (%)	100%		100%		100%	
WELDING CURRENT (A)	400A		400A		400A	

POWER PULSE 5000

WELDING MODE	MIG MAG			TIG			MMA		
WORKING CYCLE (%)	40%	60%	100%	40%	60%	100%	40%	60%	100%
WELDING CURRENT (A)	500A	450A	400A	500A	450A	400A	500A	450A	400A

Working Cycles

POWER PULSE
3200K - 4000K

The efficiency of the welder’s cooling unit is essential for work quality, productivity, and avoiding repair costs. High-efficiency Weco Cooling Units extend the life of torches and reduce the wear of current tubes, saving time and money.

CU120 - 120HP

The HP version ensures high pressure of the coolant flow when using long interconnection cables. Furthermore, having the optional filter in the return circuit limits residues and extends the life of pumps, tanks and fittings.

POWER PULSE 3200K

WELDING MODE	MIG MAG		TIG		MMA	
WORKING CYCLE (%)	60%	100%	60%	100%	60%	100%
WELDING CURRENT (A)	320A	260A	320A	260A	320A	260A

POWER PULSE 4000K

WELDING MODE	MIG MAG			TIG			MMA		
WORKING CYCLE (%)	40%	60%	100%	40%	60%	100%	40%	60%	100%
WELDING CURRENT (A)	400A	350A	280A	400A	350A	280A	400A	350A	280A

CU120-CU120 HP

	CU120	CU120 HP
P 1/min	1650W	
P max	0,37MPA(50Hz) 0,47MPA (60Hz)	0,41MPA(50Hz) 0,51MPA (60Hz)



CONFIGURATIONS

Optionals

POWER PULSE 3200 - 4000 - 5000

TROLLEY R EVO



WF LIFTING KIT

SPARE PARTS
BOX TROLLEY

TROLLEY R EVO
HANDLE KIT

TROLLEY LIFTING KIT

TROLLEY L EVO



Configurations

POWER PULSE 3200 - 4000 - 5000

Functional
Trolley R EVO

Solid and Complete
Trolley L EVO

AIR



H2O



Optionals

POWER PULSE 3200K - 4000K

TROLLEY R EVO



SPARE PARTS BOX
TROLLEY

TROLLEY R EVO
HANDLE KIT

TROLLEY LIFTING KIT

TROLLEY L EVO



Optionals

POWER PULSE 3200K - 4000K

TROLLEY ZERO



Configurations

POWER PULSE 3200K - 4000K

Minimal Trolley Zero
(no porta bombola)

**Functional
Trolley R EVO**

**Solid and Complete
Trolley L EVO**

AIR



H2O



CAN BUS CONNECTOR



The CAN BUS connector is a highly effective solution for connecting to the IR-03/04 interface board, especially in simple automation applications.

It is also possible to connect FIELD BUS IR-05 interface cards to integrate **Power Pulse** with collaborative robots or automation systems using digital communication protocols such as PROFIBUS, DEVICENET, ETHERNET/IP, PROFINET, CANOPEN, ETHERCAT, MODBUS TCP.

Using the CAN BUS connector, it is possible to implement the WDM V5 box kit, which allows the welder to be connected to the corporate network. This possibility enables remote parameters administration through the WECO DATA MANAGER software, thereby facilitating the management and monitoring of welding operations.



WELD THE WORLD

A well-established industrial concern whose reliability of products is ensured by its considerable investments in research, design and testing.

WECO has been producing and selling welding equipment since 1997. Its registered office and operational site, located in the northeast of Italy, includes offices, a production area, a design and storage area, which cover the requirements of a wide national and international sales network. The wide range of welding machines and the availability of a large warehouse allows us to meet the varying needs of our customers within a short period of time. Our dynamic management, our proven experience in sales issues, as well as our knowledge of application problems ensure our company a leading edge within our industry. WECO provides solutions that improve productivity, optimise intervention times, minimise operating costs, ensuring excellent performance at all times, in any operating conditions.

WECO Srl

Corso Noblesville 8,
35013, Cittadella,
(Padova) Italy
+39 049 7301120
info@weco.it
www.weco.it



Distributor