

# P4

TIG - With or without filler wire

## Portable Smart Welding Station for orbital tube welding



 OPC UA



 POLYSOUDE

60 YEARS  
ANNIVERSARY 

# P4 Portable Smart Welding Station

for orbital tube welding

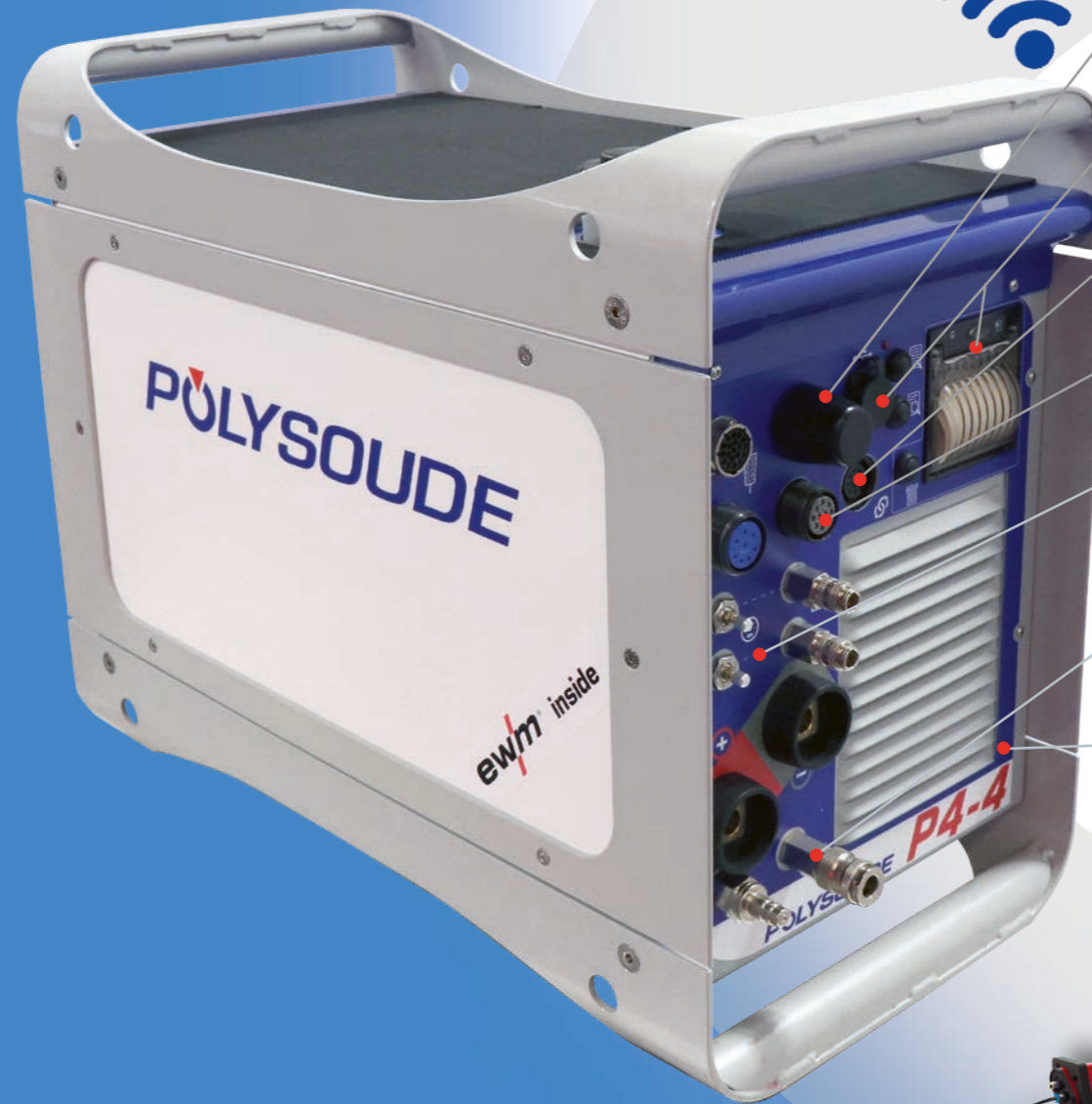
Compatible with all Polysoude™ welding heads with or without filler metal

## Advantages

- ▶ **Ergonomic design:** user-friendly, easy to operate human-machine-interface with wireless touchscreen
- ▶ **Modular design:** huge number of accessories can be perfectly tailored to the particular applications
- ▶ **Modern and ever evolving :** 100% Industry 4.0 compatible and IIoT (\*) connectivity  
Remote access to welding program loading and to data retrieval
- ▶ **Unique level of precision:** setting and control of the welding current in steps of 1/10 Ampere
- ▶ **Robust and reliable:** particularly well suited for working on site (extremely solid design, carrying handles, rugged touch wireless controllers delivered with carrying bag)

Resulting from 60 years' experience in mastering automated welding technologies

\* IIoT: Industrial Internet of Things



## General characteristics

- LAN and WLAN compatible
- Built-in printer or USB stick for welding procedure archiving and documentation
- Automatic recognition of Polysoude welding heads
- Closed loop regulation of torch rotation and wire speed
- Welding gas control and backing gas with adjustable mass flowmeter
- Built-in closed loop water cooling system with safety valve for welding head and torch
- Auto-range 115 - 230 V single phase ±10% compatible with field power generators



Plug & Play software for wired or wireless touch controllers



Multiple USB ports (4 in total) for backup, transfer and archiving of welding programmes and monitored data (USB stick supplied)



Ultra-precise gas flow control with display in the graphical interface



Full-function remote control with welding programme selection



Compatible with numerous standard peripheral equipment – printer, barcode reader, oxygenmeter, etc.

## Associated Welding Heads



### ▶ UHP + MW Series

Closed welding heads for TIG tube to tube welding without filler wire



### ▶ MU Series

Open welding heads for TIG tube to tube welding with or without filler wire



### ▶ TS Series

Open and closed welding heads or TIG tube-to-tubesheet welding with or without filler wire

## Accessories



### ▶ Polyfil Series

External portable wire feeders with spool protection



### ▶ Switchbox

Alternate use of two welding heads including automatic selection of the corresponding welding programme

# Graphical User Interface (GUI): Just follow the instructions!

## ► Intuitive graphical interface

With multilingual "Help" menu for optimised welding programmes including tack welding.



# Integration into a connected plant

Thanks to the on-board OPC-UA server, performance and connectivity combine to offer new and unique services: secure transfer of data to production software, sending of remote start orders, real-time monitoring of welding data, etc.



# They trust us

Our customers are our best references





## Technical specifications

Welding method	TIG - DC, constant or pulsed, with or without filler wire
Input power (Auto-range)	Single phase 115 V / 230 V $\pm$ 10% - 50 / 60 Hz
Open circuit voltage	< 113 V
Insulation class	H
Protection class	IP 23 S
Welding current standard (steps of 1 A)	Range 170 A: 3 to 170 A (200 V / 230 V) 3 to 130 A (100 V / 115 V)
High precision (steps of 1/10 A)	Range 50 A: 3 to 50 A (100 V / 230 V)
Welding current precision	$\pm$ 1 A when $I \leq 100$ A and $\pm$ 1% when $I > 100$ A
Duty cycle	170 A / 25% at 230 V • 130 A / 40% at 115 V 110 A / 100% at 230 V • 100 A / 100% at 115 V
Motion controls	Torch rotation: constant or pulsed Wire feeder: constant or pulsed / automatic wire retract
Shielding gas control	Welding gas with manual adjustment mass flowmeter, 2 <sup>nd</sup> gas (backing gas)
Power source cooling	Forced ventilation
Welding torch cooling	Built-in closed loop water cooling system with flow safety valve
Display / recording (non-volatile) of real values during welding	Arc Voltage, welding current, electrode position in angular degrees, welding speed and wire speed
Connectivity	4 USB ports, 1 Ethernet port, 1 plug-in Wi-Fi antenna
Dimensions L x W x H	630 x 320 x 500 mm
Net weight	31 kg
Standards	EN 60974-1 / EN 60974-10



## Options and accessories

- 10.5" wireless touchscreen controller with intuitive and multilingual programming software
- 10.4" quick release wired touchscreen with intuitive and multilingual programming software
- OPC-UA activation USB stick
- Full-function remote control
- Wire feeder control
- 2<sup>nd</sup> gas kit with mass flowmeter (manual adjustment)
- Wireless digital barcode-scanner with cradle and USB cable
- Manual tack welding kit including water-cooled TIG torch
- Extension cable (15 m) for welding heads
- Dual welding head switch box
- Control kit for closed welding heads fitted with tachometer or welding heads other than POLYSOUDE™

## ► Guidance and technical support

A welding application specialist in your area will advise you on the welding process and appropriate equipment for your application.

## ► Commissioning / Training

A complete training program will enable you to start using the equipment immediately and in the best way possible.

## ► Maintenance / Repair

Maintenance and repair operations can be carried out at the Polysoude plant as well as on site by our service network.

## ► Rental service

Increase the flexibility of your production! A large range of equipment is available for rental from our hire fleet.

## Your partners worldwide

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