

# P4<sup>+</sup> AVC/OSC

Portable Smart Welding Station  
for orbital tube & pipe welding



## Advantages & benefits

- ▶ AVC (Arc Voltage Control): Stable arc, flawless welds - every time
- ▶ OSC (Torch Oscillation Control): Precision for perfect weld seam
- ▶ AVC / OSC control: When perfection meets stability
- ▶ Single-Phase Power: Ideal for on-site operations
- ▶ Lightweight Design (35 kg): Easy transport & handling
- ▶ Compact Footprint: Perfect for confined spaces
- ▶ Optimized Duty Cycle: Designed for tubing & piping applications
- ▶ Polysoude Standard GUI: Easy to use, quick operator adoption

**POLYSOUDE**

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# Technical data

		P4+ AVC/OSC SPECIFICATIONS	
Input power		Single phase + Earth 100 V / 115 V / 200 V / 230 V ± 10% 50 or 60 Hz	
Open circuit voltage		94 V	
Type of current source		Inverter	
Power		5.5 kVA	
Insulation class		H	
Protection class		IP 23	
Welding current	Standar (1 Amp steps)	3 to 170 A (200 V/230 V) (constant or pulsed) 3 to 130 A (100 V/115 V) (constant or pulsed)	
	High precision (1/10 Amp steps)	3 to 50 A (constant or pulsed)	
Welding current precision		± 1 A for I ≤ 100 A and ± 1% for I >100 A	
Duty cycle	Input power	110/115 V	220/230 V
	100%	100 A	110 A
	60%	120 A	125 A
	40%	130 A	-
	25%	-	170 A
Motion controls		Torch rotation: constant or pulsed Wire feeding: constant or pulsed / automatic wire retract AVC - Arc Voltage Control / OSC (Torch Oscillation Control)	
Gases controlled		Welding gas, backing gas/trailing gas (option), with flow safety valve	
Smart Welding Station cooling		Forced ventilation	
Torch cooling		Built-in closed-loop water cooling system with flow safety valve	
Programme display/loading		Arc voltage, welding current, angular position in degrees, speed of rotation and wire speed.	
WPs in memory		Max. 200	
Real-time welding data acquisition		PC internal memory	
PC internal memory Programme archiving/loading		USB memory stick	
Dimensions (L x W x H)		600 x 651 x 320 mm (23.6 x 25.6 x 12.6 in)	
Weight		35 kg / 80 lbs (without options)	
Standards		EN 60974-1 and EN 60974-10	

## GENERAL CHARACTERISTICS

- ▶ LAN, WLAN and OPC-UA 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

## Associated Welding Heads

Contact our staff to confirm compatibility with your welding job

### OPTIONS AND ACCESSORIES

- Polyfil Series: External portable wire feeders with 1.5 or 15 kg spool protection
- Axis for data acquisition

