



POLYCAR 60-2

TIG - Cold Wire, Hot Wire, AVC, OSC

Open carriage-type welding head
for welding of tube and pipe joints



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Highest flexibility and quality

Advantages

- ▶ Minimal radial and axial clearance
- ▶ Modular design for orbital TIG Cold Wire and Hot Wire welding
- ▶ Perfectly adapted to tube and pipe welding of medium-sized and heavy wall thicknesses
- ▶ Reproduces all movements of a manual welder and completes the weld in a series of passes
- ▶ Especially designed for welding under difficult conditions in workshop or on site
- ▶ Narrow Gap Welding for further productivity increase

Resulting from 50 years' experience in mastering welding technologies

Particularly designed for high duty cycle applications by means of high temperature resistant materials and closed loop water cooling

Tiltable torch for socket welding ($\pm 15^\circ$)

Torch with ceramic nozzle and gas lens for laminar gas protection

Closed loop regulation to ensure precise, constant or pulsed welding speed

Motorised Arc Voltage Control (AVC) and Torch Oscillation Control (OSC) for multi-pass welding of medium and heavy wall tubes and pipes

Quick positioning

Encoder for position based control of the welding program

LP "Low Profile" version designed for use in areas with reduced axial clearance

On-board filler wire module with 1,5kg or 5 kg spool



Torch block with AVC/OSC cross slides and adjustable wire guide



On-board wire feeder with straightening device



Chromium guide rings for all tube and pipe O.D.s



Torch module "V2 Narrow Gap", for wall thicknesses up to 75 mm

Associated
Power
Sources



▶ P6

300 A, "all applications" programming by PC or touch screen, with Arc Voltage Control (AVC) and Torch Oscillation Control (OSC), three-phase power supply



▶ PC Serie

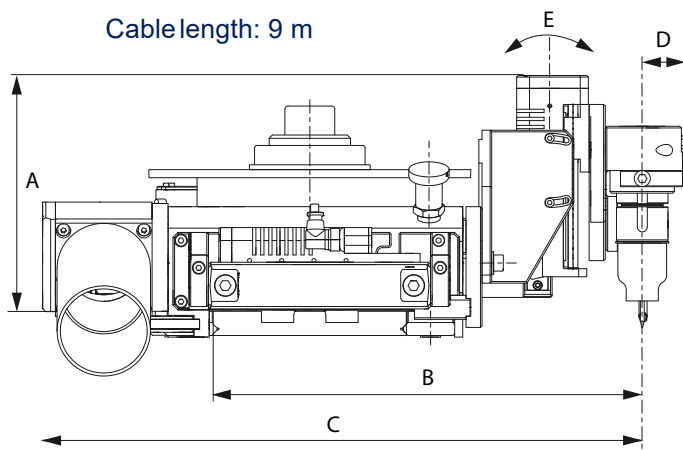
300 to 550 A, modular design for perfect adaptation to your application. Interface for mechanised and robotic peripherals, three-phase power supply



Technical specifications

Welding process / Version	CW- TIG/ GTAW Cold Wire	HW- TIG/ GTAW Hot Wire	LP- TIG/ GTAW Cold Wire
Tube / pipe O.D.	≥ 168 mm / 6"		
• A (min. radial clearance) without offset	167 mm (6.57")	167 mm (6.57")	135 mm (5.31")
• A (min. radial clearance) with offset	190 mm (7.48")	190 mm (7.48")	146 mm (5.75")
• AVC- Arc Voltage Control	60 mm (2.36")	60 mm (2.36")	30 mm (1.18")
• OSC- Oscillation Control	60 mm (2.36")		
• B (axial clearance for guide ring)	146.5 mm (5.77")		
• C (overall axial clearance)	375 to 435 mm [OSC= 60 mm] - (14.76" to 17.12" [OSC=2.36"])		
Drive motor (AVC/OSC/slides)	Stepper motor		
AVCaxis speed range	10- 500 mm / min - (0.39 - 19.68 inches / min)		
OSCaxis speed range	20 - 1000 mm / min - (0.79 - 39.37 inches / min)		
• ETorch tilting	± 15°		
Max. welding current (A)	300 A		
Electrode diameter	2.4 [standard] / 3.2 / 4.0 mm - (0.095" [standard] / 0.126" / 0.157")		
Carriage drive	DC motor, closed loops		
Welding speed range	20 - 400 mm / min - (0.79 - 15.75 inches / min)		
On-board wire spool diameter	200 mm / 5 kg - (11.8" / 30 lbs)	200 mm / 5 kg - (11.8" / 30 lbs)	100 mm / 1,5 kg - (4" / 2 lbs)
Wire feeder drive	DC motor, closed loops		
Wire feed range	95 - 2068 mm / min (3.7 - 81 inches / min)	360 - 7929 mm / min (14.2 - 312 inches / min)	95 - 2408 mm / min (3.7 - 95 inches / min)
Wire diameter	0.8 mm - (0.031" [other dia. on request])		
Welding carriage weight (excl. cable)	9 kg / 20 lbs		

Cable length: 9 m



Type	Dimensions in mm / inches					
	Amin without offset	Amin with offset	Bmin	Cmax	D	E
TIG CW	167 (6.57")	190 (7.48")	266,5 (10.49")	435 (17.13")	27 (1.06")	± 15°
TIG HW	167 (6.57")	190 (7.48")	266,5 (10.49")	435 (17.13")	27 (1.06")	± 15°
TIG LP	135 (5.31")	146 (5.75")	266,5 (10.49")	435 (17.13")	27 (1.06")	± 15°

Options and accessories

- Guide rings for all tube and pipe O.D.'s
- TIG Hot Wire version for highest deposition rates
- Extension cable (15m)
- On-board camera system
- Compact shipping case for transport and storage
- Tungsten electrodes, pre-sharpened and pre-cut
- Tool kit for daily operation



Adapted for all your applications!



"Thanks to the automatic welding process we have the guarantee that our welding procedure is perfectly respected."



POLYSOUDE: Related services

► 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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