

PS 406-2

TIG - With or without Filler Wire, AVC, OSC

Mobile Power Source for orbital tube welding



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Compatible with all Polysoude™ welding heads particularly with those equipped with Arc Voltage Control (AVC) and Torch Oscillation Control (OSC)

Advantages

- ▶ The most simple to use and reliable system available
- ▶ Full function power source with useful welding features and convenient data acquisition for quality assurance
- ▶ High precision inverter power source for perfectly controlled heat input and welding penetration

Resulting from 50 years' experience in mastering welding technologies



General Characteristics

Programming via scroll down menu

Error-diagnostic system

Monitoring panel with integrated printer and USB memory stick

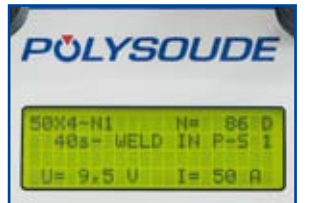
Torch gas control with flow security

Closed loop regulation of all welding motions : torch rotation, wire speed, Arc Voltage Control (AVC) and Torch Oscillation Control (OSC) ...

Built-in closed loop water cooling system with safety valve for welding head and torch



USB memory stick for saving, loading and archiving of welding programs and monitored welding data

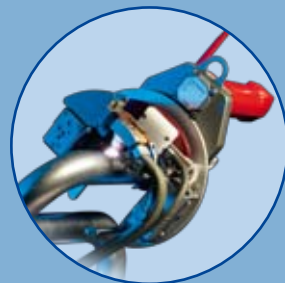


Display of real values during welding via LCD display : Arc Voltage, welding current, electrode position in angular degrees, countdown welding ...



Full function remote control with welding program selection

Associated Welding Heads



▶ MU Series

Open welding heads with or without AVC and OSC for TIG tube to tube welding, with filler wire



▶ TS Series

Open and closed welding heads with or without AVC for TIG tube to tubesheet welding, with or without filler wire



▶ Polycar Series

Open type carriage welding heads with AVC and OSC for welding of large diameter tubes and pipes, with filler wire

Wire Feeders



▶ Polyfil-3

External wire feeder and other integrated wire feeders



Technical Specification

Welding method	TIG - DC Cold Wire
Input power	Three phase 380 / 400 V \pm 10 % – 50 Hz Option: multi voltage kit from 200 V to 480 V Option: 60 Hz version
Open circuit voltage	70 V
Insulation class	F
Protection class	IP 21
Welding current	5 to 315 A – constant or pulsed
Welding current precision	\pm 1 % when $I > 105$ A and \pm 1 A when $I \leq 105$ A
Duty cycle	315 A / 40 % 260 A / 60 % 200 A / 100 %
Motion controls	Torch rotation : constant or pulsed Wire feeding : constant or pulsed / automatic wire retract AVC – Arc Voltage Control OSC – Torch Oscillation
Shielding gas control	Torch gas control with flow security.
Power source cooling	Forced ventilation
Welding torch cooling	Built-in closed loop water cooling system with flow safetyvalve
Display / recording (non-volatile) of real values during welding (LCD display on front panel and remote control)	Arc Voltage, welding current, electrode position in angular degrees, welding speed and wire speed
Temporary "user memory"	Max. 150 programs (on hard disc) according to the length of the programs
Welding procedure real time data acquisition storage and transfer	Hard disc / USB memory stick
Dimensions L x W x H	1060 x 580 x 1030 mm
Weight	150 kg (195 kg incl. multi voltage option)
Standards	EN 60974-1 / EN 50199



Options and Accessories

- AVC – Arc Voltage Control
- OSC – Torch Oscillation
- Multi voltage kit 200 V to 480 V
- Manual tack welding kit including water-cooled TIG torch
- Extension cable (15 m) for welding heads
- Kit for backing gas
- 2nd integrated cooling unit
- Interface box for second welding head (without AVC, OSC)

Graphical User Interface (GUI)

- **Graphical user interface**
No language skills are required

Programming by angular degrees, mm/min or inch/min

Non-volatile welding procedure library for all types of welding joints

Error-diagnostic system



Built-in Arc Voltage Control (AVC) and Torch Oscillation Control (OSC)

Key protected user interface

Real time data acquisition and print out via integrated printer

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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