

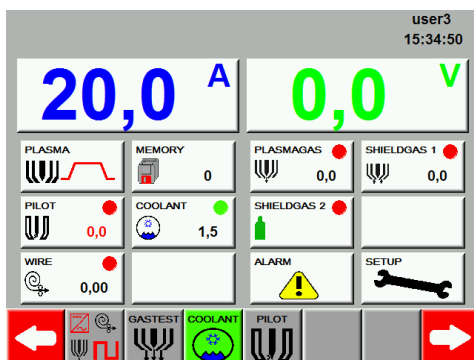


WELDING

PMI - 350 TL - Powder

User friendly plasma powder equipment
for high-tech welding solutions

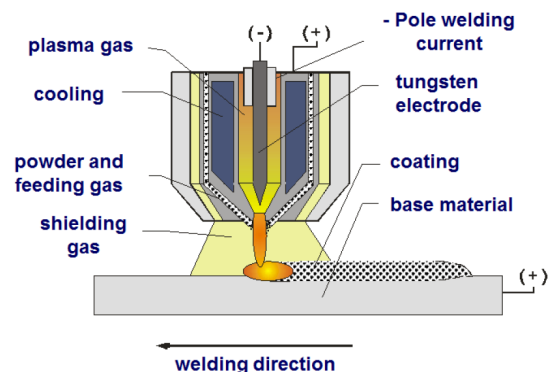
Intuitive Touch Screen



Plasma Powder Source DC

Multi-functional unit – the perfect equipment for plasma welding.

- PLASMA/TIG/MMA processes
- Highly stable plasma arc
- High deposition rates for shorter welding times
- Homogeneous, porosity and spatter free coatings
- Integrated program memory
- Easy to automate
- User-friendly touch display
- Cooling unit with monitoring



Plasma welding has important advantages and offers an attractive alternative to laser welding where high quality is required, particularly for metal sheets and other components.

However, unlike TIG welding, the arc is constricted and concentrated via a copper nozzle. This enables a higher power density. The high concentration of the arc enables square butt welding, avoiding the need for “V” or “J” type joint preparations. Dramatic reductions in the use of filler wire become possible.

The high power density arc permits much higher welding speeds compared to TIG – often increases of 100% or more are attainable; not only does this save time and money, deeper weld penetration is an added benefit. The tungsten electrode has a far longer life as it is positioned inside the plasma nozzle and is thus protected from contamination.

The use of a pilot arc to initiate the transferred welding arc eliminates the risk of HF interference with automated equipment. Often 10,000 or more welds can be made before the electrode needs replacement.

The welding filler alloy, in gas atomized powder or cold wire form is conveyed into the weld pool where the shielding gas protects it from the atmosphere. The plasma arc and the heat input can be far better controlled than a conventional electric arc and the energy is almost completely spent to melt the filler metal, reducing the heat input and dilution to the minimum.

An automation interface enables the unit to be used in robotic and automated applications.

Technical Specifications

Specifications PMI - 350 TL - Powder

Mains voltage	3 x 400 V AC \pm 15% 50/60 Hz \pm 1%
Power connection	4 x 32 A CEE plug, 6 mm ²
Torch connection	Single connector
Welding current (60% duty-cycle)	320 A
Welding current (100% duty-cycle)	290 A
Control range	3 ÷ 350 A
Control range pilot current	0,5 ÷ 50 A
Type of protection	IP 21 S
Electronic plasma gas control	0,1 ÷ 5,0 l/min
Manual shielding gas control	1,0 ÷ 25,0 l/min
Manual powder gas control	0,5 ÷ 5,0 l/min
Dimensions (LxWxH)	1200x520x940 mm
Weight	105 kg



Technical changes and mistakes reserved

Applications



Equipment and Accessories

Powder Feeder PF2

Item no.: 1024594

Carries gas	Ar, Ar-H2
Carries gas flow rate	0 ÷ 7 l/min
Powder reservoir	1,5 l
Protection class	IP23
Weight (without powder)	ca. 8,0 kg
Dimensions (LxWxH)	285 x 235 x 400 mm
Powder feed rate 3-120 g/min, depending on feeding wheel configuration, torch, anode and powder density.	



Torch PP280

Item no.: 1025423 (4m)

Type of torch	Powder manual torch
Construction	Hand-held 70° torch
Max. current at 100% duty-cycle	280 A DC
Powder flow rate *	max. 80 g/min
Cooling	Liquid
Hose pack length	4 m / 6 m**

*Max. feeding rate depending also on powder density, powder feeder settings and type of anode.

** optional hose pack length



Torch PP400

Item no.: 1025728 (6m)

Type of torch	Powder machine torch
Construction	vertical
Max. current at 100% duty-cycle	400 A
Powder flow rate *	max. 80 g/min
Cooling	Liquid
Hose pack length	4 m** / 6 m

*Max. feeding rate depending also on powder density, powder feeder settings and type of anode.

** optional hose pack length



Remote control RC-S

Item no.: 1016968

Remote control to start pilot / plasma, analog potentiometers and control LED's including 5 metres connecting cable



Tungsten Grinder

Item no.: 1006908

Sharpens electrodes precise and simple in longitudinal shape.

For Ø 1,0 ÷ 4,0 mm



Accessories

Böhler Guardian 62

Item no.: 32373



Böhler Guardian 62 Air complete

Item no.: 56997



Böhler Welding Gloves MIG/MAG Premium

Item no.: (M/9) 61137 / (L/10) 53095 / (XL/11) 60310



Consumables

For suitable powder products please refer to the high quality product range UTP PLASweld™ of voestalpine Böhler Welding UTP Maintenance GmbH
www.voestalpine.com/welding/de/Marken/UTP-Maintenance

