



Kjellberg®
FINSTERWALDE

PSI 350plus **Compact Welding Inverter**



Plasma Transferred Arc Welding and Plasma Keyhole Welding with one System

Kjellberg Finsterwalde is providing high-quality and flexible systems engineering for plasma transferred arc welding and plasma keyhole welding with the PSI 350plus.

Both processes can be easily automated because of the integral PLC.

Kjellberg Finsterwalde would be pleased to provide you with a quote in accordance with your requirements.

The advantages of systems engineering:

- convenient operation by means of predefinable welding programs
- infinitely variable welding parameter adjustment
- visual process monitoring
- fully electronic gas control
- compact design because of integral cooling unit

Overview of the two processes

Plasma Transferred Arc Welding

Plasma transferred arc welding (PTA) is a thermal coating process. It was developed for complex welding tasks, and has made its mark in industry by producing high-quality coatings.

Excellent wear and/or corrosion protection is provided by means of single-layer welding of coat thicknesses of up to 4 mm.

Some of the **application areas**:

- automated plating of valves in the automotive industry
- maintenance and regeneration of workpieces such as screw conveyors and rollers
- coating of components subject to abrasion such as excavator teeth

Advantages of the process:

- extremely good metallurgic connection between the substrate and the basic material
- extremely good dilution of the parent metal (2 to 10 %)
- small thermal influence zone
- good material application rate (up to 20 kg/h, depending on torch and powder)

Plasma Keyhole Welding

Plasma keyhole welding can be used to connect high-alloyed, low-alloyed or non-alloyed materials between 1 and 10 mm thick in one layer with an I-joint - with or without additional material.

Main application areas:

- longitudinal and orbital welding of thick-walled pipes, containers and bottoms

Advantages of the process:

- no additional seam preparation at the almost parallel workpiece edges, therefore less work than with other joining processes
- less heat introduction and therefore less distortion
- low-cost due to omission of auxiliary material or less material required than with other welding processes

Technical Data

PSI 350plus	
Max, welding current	350 A
Control voltage	24 V
Weight	210 kg
Dimensions (L x W x H)	980 x 680 x 1,450 mm

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