













Efficient

Robust

Quick maintenance

## FOUR REASONS TO ELECT A MOSWELD

**MOSWELD** is the ultimate solid state power supply using MOSFET transistor technology. The circuit topology is current-fed inverter (CFI) with an inductance located between the DC and the HF stage, thus the inverter is naturally protected against load short circuit. The output circuit is a parallel type: load and inverter impedances are naturally matched, then no output transformer is required and the overall efficiency increases.

Typical layout includes a power supply cabinet containing transformer, DC inductance, SCRs bridge and auxiliary circuits and a second cabinet, the welding head, where the mosfet modules, capacitors and bus-bar are contained. The input transformer is provided to achieve insulation from the mains and to optimize the exploitations of the Mosfet based inverter.

#### MODULAR SOLID STATE HIGH FREQUENCY

# **INDUCTION WELDERS**







### MACHINE FEATURES

- · Compact cabinets less floor space is needed
- Efficiency higher than 88%
- Load short circuit proof
- Modular MOSFET Based Inverter with a Robust Design
- Very simple design of inductor coils

- Easy Maintenance need for skilled labor is eliminated
- Remote Process Checking
- Reduced Maintenance costs using standard power components not subject to obsolescence
- More than 40 years of experience in solid state converters

### **TECHNICAL INFO**

Continuous output power	50 - 600 kW
Power regulation range	0 - 100%
Frequency range	200 - 450 kHz
Voltage supply	On demand, adaptation by means of input transformer
Output Stabilization	By Thyristor Control automatic voltage regulator: ± 1% at Net variation ± 10%
Residual Ripple	Less than 1% at any power output
Cooling method	Water to water by Stainless Steel heat exchanger
Max. industrial water temperature	27°C
Standard colour	Light grey RAL 7035

### **OPTIONS**

The Automatic High Frequency Welding Head **Adjustable Table** has been designed to hold the welding head next to the tube mill. The support is equipped with three motorised movement controls along axes X, Y and Z, and allows the operator an accurate inductor positioning directly from Welder Control Desk. Maintenance and production changes are therefore easier and faster.

As an alternative to standard alphanumeric touch-screen panel, a specific software running on industrial PC installed on the control desk has been developed. The **Welding Management System** allows a real time checking of all main welding functions and the memorizing of all welding parameters and events. Working data stored can be used to repeat the best welding performances or to analyze events in the recipes database.



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