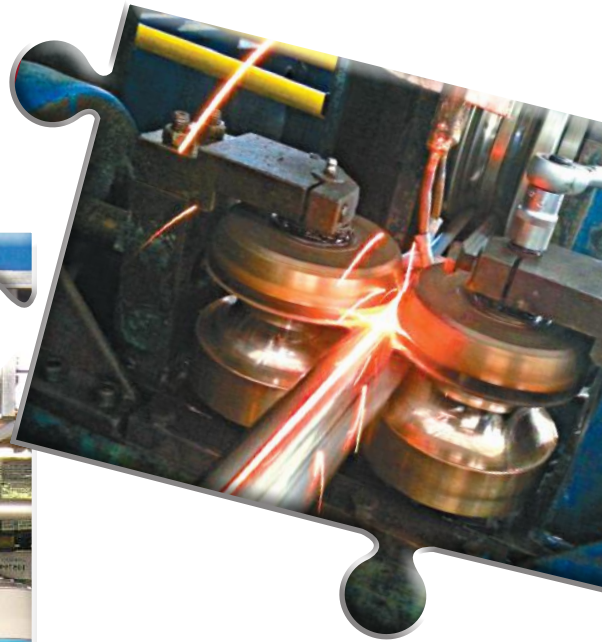
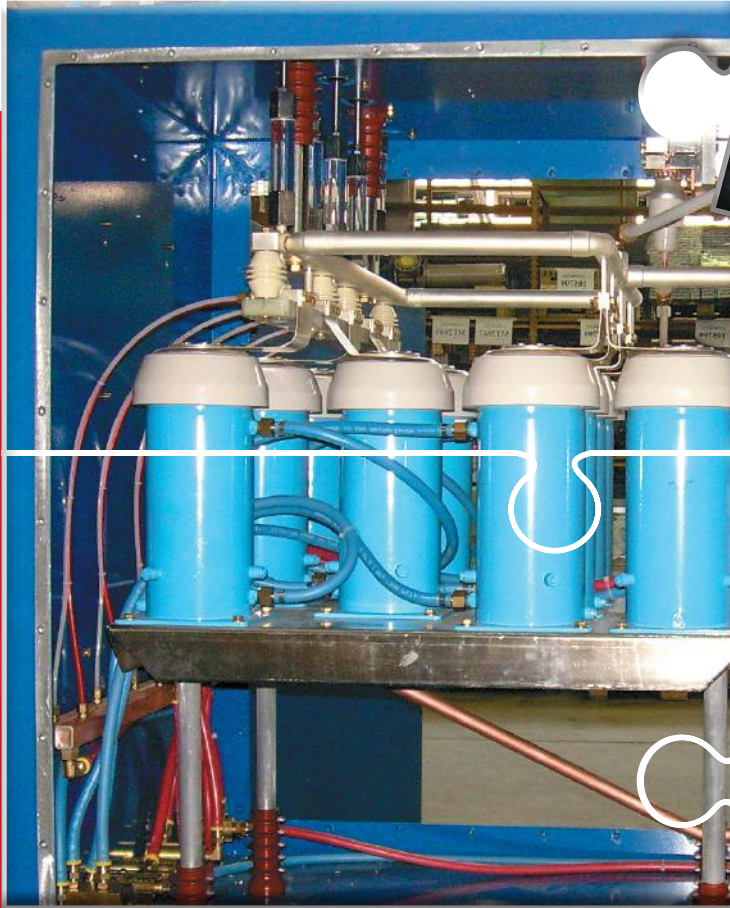




TUBULAR GOODS

## VARIABLE FREQUENCY VACUUM TUBE WELDERS



Robust



Precise



Easy maintenance

**Variable output frequency** is a strategic choice when welding stainless steel tubes or pipes with a severe range of wall thickness and OD.

Adopted circuitry solution is able to guarantee the constant available reactive nominal power, independently by the working frequency value selected.

The ideal load matching capability is auto-tuned independently from the selected frequency value.

A dedicated PLC software acts a complementary inductive and capacitive adaptation upon operator's frequency selection.

# VARIABLE FREQUENCY VACUUM TUBE WELDERS



## MACHINE FEATURES

- Class C oscillator grounded grid solution
- Oscillator tube MTBF 35.000 to 50.000 working hours
- Short-circuit proof
- Welder efficiency 70%
- Same coils as the Mosweld Welder
- Easy adaptation of any load features
- Strong response in limit conditions
- Around 50 years of experience in vacuum tube welders

## ADVANTAGES

- Ideal managing of the heat affected zone versus material OD and thickness ratio.
- Best quality of external and internal welding beads with relevant benefits for inner and outer scarfing tools.
- Improved welding quality for finite tube mechanical operation.
- An active control of spume effects, typical of non ferrous material welding process.
- Possibility to weld galvanised magnetic products.
- Welding of ferritic and austenitic stainless steel family on the same tube mill.

## TECHNICAL INFO

|  |   |
|--|---|
| <b>Continuous output power</b>           | 100 - 600 kW  |
| <b>Power regulation range</b>            | 0 - 100%  |
| <b>Frequency range Ratio</b>             | 1:1,3 or 1:2 (see below)  |
| <b>Voltage supply</b>                    | On demand   |
| <b>Output Stabilization</b>              | By Thyristor Control automatic voltage regulator: $\pm 1\%$ at Net variation $\pm 10\%$ |
| <b>Residual Ripple</b>                   | Less than 1% at any power output  |
| <b>Cooling method</b>                    | Water to water by Stainless Steel heat exchanger  |
| <b>Max. industrial water temperature</b> | 27°C  |
| <b>Standard colour</b>                   | Light grey RAL 7035   |
| <b>Frequency range</b>                   | 1:1,3 (i.e. 160 - 210 kHz) for austenitic stainless steel only                          |
|  | 1:2 (i.e. 150 - 300 kHz) for both austenitic and ferritic steel                         |

## 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.



SAET S.p.A ■ Via Torino, 213 ■ 10040 Leinì (To) Italy  
Phone (+39) 011 99.77.999 ■ Fax (+39) 011 99.74.328

[www.saetemmedi.com](http://www.saetemmedi.com)