

# READYRY 4.0





Nowadays the adequate protection against corrosion of steel pipes used for the construction of pipelines has become the main concern in order to avoid undesirable repairs or replacements in field.

# External pipe coating process includes the following steps:

- Shot blast to clean the surface of the pipe by mean of a jet of abrasive grit
- Induction heating to achieve the temperature requested by the coating product
- Primer application to prepare the surface for subsequent treatments
- Adhesive application
- Polyethylene coating







Efficient



Fast



Precise

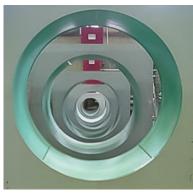
Emmedi range of products includes a strong and reliable "full body" Induction Heating System to grant a perfect uniform heating prior to application of coating layers.

Emmedi Polyethylene Coating Equipment are **highly proven solid state IGBT converters** (inverter power over 2 Megawatt), which allow a consistent and proper heat treatment of the full body of the tube or pipe at the required temperature. The temperature of the tube is controlled by an optical pyrometer targeting the tube surface between inductor and the coater.

The system consists of **one static inverter unit**, a **control desk**, a **set of coils**, a **pyrometric temperature control system and a closed – circuit distilled water cooling unit**.

An inductor support bench for a correct adjustment of the coil is also available on request. Output power and frequency of the inverter, as well as the number and the size of inductors, are calculated in order to obtain the best performances according to the range of pipes to treat.

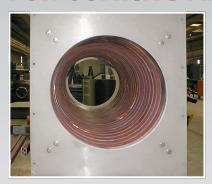






# **INDUCTION HEATING SYSTEM**

# FOR COATING APPLICATIONS







## MACHINE FEATURES

- Power and operating frequencies optimized according to production requirements.
- IGBT based I-Power inverter working at proper frequency
- Inductors are coaxial to the pipe, multiturns, water-cooled inside with deionized water and the typical gap to the tube is 60 to 150mm on the radius.
- Pyrometer for temperature control.

## **ADVANTAGES**

- Independent heating units for increased operational flexibility. Possibility to treat pipes with different OD on the same line.
- Precise temperature management thanks to closed loop PID system comparing the requested set point with the actual temperature read by the pyrometer.
- Independent power control for each heating head (PID).

# **TECHNICAL INFO**

Continuous output power	450 - 2000 kW
Power regulation range	Range 0 - 100%
Frequency range	0,5 - 3 kHz
Voltage supply	On demand
Output Stabilization	By Thyristor Control automatic voltage regulator: ± 1% at Net variation ± 10%
Cooling method	Water to water by Stainless Steel heat exchanger
Max. industrial water temperature	27°C
Standard colour	Light grey RAL 7035

