



## EMG Automation Introduces Inductance Based Furnace Guiding System for High Temperature Application

In quest for a suitable measuring principle for metal strip, EMG Automation GmbH, after many years of research, zeroed in on inductive principle. Inductive principle relies on the electrical conductivity of the strip and is not affected by the electrostatic conditions prevailing in the measuring environment. Successful installation and excellent performance of more than 5,000 inductive measuring systems across the globe validates the superior performance of inductive based guiding systems.

EMG, having expertise in the development and application of the Inductive Sensors, particularly at high temperature thermal processing plants, have now successfully installed more than 400 furnace guiding systems across the world. Successful installations of furnace guiding systems in India include Uttam Steel, JSW, Shree Precoated Steels Ltd, etc.

The salient features of the new generation

inductive sensors for high temperature applications are:

- \* Sensors can withstand temperature up to 1100 °C temperature
- \* Accuracy and reliability to achieve control precision in Continuous annealing & galvanizing furnaces
- \* Immunity towards metal vapour or other substance in the furnace
- \* Easy mounting; no access to furnace environment required
- \* Maintenance-free operation
- \* Efficient and economic

The measuring principle of furnace guiding system is electromagnetic induction. At the strip edges, two centre sensors are installed at one level, vertically in line with the strip pass level and symmetrically in line with the centre of the plant to enable the strip pass centrally between these centre sensors. One centre sensor functions as a transmitter and the other one as a receiver.