Ceramic Lined Galvanizing Furnace with Immersion Heating Rods
The development of the **Silicoat** immersion heating rod has enabled a new concept for electric resistance heating of metals. With the unique physical and electrical properties of the **Silicoat** rod, it can be installed directly in molten metals.

**The total energy** from the **Silicoat** immersion rod is transferred directly to the metal by conduction. Hence, there is no energy loss from the energy source.

**The voltage** applied to the rods is limited to 50V, being transformed from line voltage through a multistep transformer.

**The zinc temperature** is controlled by PLC-unit with modem, connected to thyristors in the supply voltage line.

**Silicoat** immersion heating rods and ceramic lined galvanizing baths contribute to high thermal efficiency of the heating system, high power installations for high production rates in small zincvolumes and long life galvanizing bath.

**High temperature Galvanizing**

High temperature galvanizing up to 610 C is used for galvanizing small components such as fasteners, threaded bolts, nails and brackets. High temperature galvanizing gives uniform and controllable coatings, also to silicon and aluminium kitted steels.

**The Silicoat** immersion heating rods are applicable to the proven CHE design of ceramic lined galvanizing baths.
“TOPFIRED CERAMIC LINED GALVANIZING FURNACE”

VS

“CERAMIC LINED GALVANIZING FURNACE WITH IMMERSION HEATING RODS (SILICOAT)”

TOPFIRED:

• HIGHER ZINC VOLUME (DUE TO HEAT TRANSFER SURFACE)
• HIGHER LOSSES FROM FURNACE CONSTRUCTION
• MORE SPACE NEEDED

SILICOAT:

• LESS ENERGY CONSUMPTION
• LESS ZINC VOLUME
• LESS LOSSES FROM FURNACE CONSTRUCTION
• LESS SPACE NEEDED