

# Series Reactors for Furnace Application



**TAMINI**  
ENERGY TRANSFORMERS

### OVERVIEW

Reactors are used in furnace operation with the purpose of:

- arc stability and power regulation
- optimisation electrodes consumption
- limitation of current during smelting process
- reduction of flicker on the feeding network

Core and windings are of the same type of the transformer with the difference that in the magnetic core limbs suitable gaps designed for specified reactance and reactive power values are inserted.

The reactance is generally requested to be constant up to 2 times the rated current; when higher a core-less solution is normally applied.

Reactors are adjustable in steps by a tap changer (TC), in order to select the proper value of reactance at any operational set-point achieving a quick furnace regulation.



Tamini has designed and successfully supplied many different types of transformer - reactor solution. Among them the "Booster-type" one, in which the reactor is built-in, is the solution that optimizes the voltage/current values in the transformer regulation circuit.

### PRODUCT SCOPE

- Through-put rating up to 150 MVA