## **LADLE FURNACE (LF3)**

## **Product Description**

Ladle Furnace (LF3). Ladle furnace with Tagliaferri regulation, installed in 1990, Nominal power 20 MVA with 400 mm electrode holder arms, supplied with storage system and ferro-alloys preparation and a fume purification plant.

## TECHNICAL FEATURES

Installation year 1990

revamping year -

Supplier Tagliaferri

Transformer's apparent power 20 MVA

Primary Transformer Power Supply 10 kV

Secondary Transformer Power Supply 151 – 523 V

Electrodes Diameter 400 mm

Temperature increase 3,5 °C/min

Ferro-alloys addition system Automatic

N° of silos available 14 (in common with LF2)

Available volume per silo 3,2 m<sup>3</sup>

## **COMPONENTS**

Transformer. No. 1. Threephase internal transformer  $N^{\circ}62857$  – power 20MVA 50 Hz – star primary 10,4 KV variable triangle secondary 155-520 V – type cooling OFWF water flow  $3\times450$  liters/minute

Regulation. No. 1.Tagliaferri – TERS Electro-hydraulic device which keeps the balance among the three electrodes in the liquid steel bath in the ladle. The regulations is based on keeping the arc impedance constant acting on tension and current

Wire Feeder System. No. 2. Two-track injector machine with one 21 KW direct current, convertor power supply 400 V~50 Hz. Cord wire diameter 9-16 mm speed 5-250 m/min, network supply pressure 6 bar.