

LADLE FURNACE (LF4)

Product Description

Ladle furnace with Tagliaferri regulation, installed in 1998, Nominal power 25 MVA with 400 mm electrode holder arms , supplied with storage system and ferro-alloys preparation and a fume purification plant.

TECHNICAL FEATURES

Installation year 1998

Supplier Tagliaferri

Transformer's apparent power 25 MVA

Primary Transformer Power Supply 10 kV

Secondary Transformer Power Supply 99 – 310 V

Electrodes Diameter 400 mm

Temperature increase 4 °C/min

Ferro-alloys addition system Automatic

N° of silos available 16

Available volume per silo 2,8 m³

COMPONENTS

Transformer. No. 1. Thriphase internal transformer N°3/62528 O.T.F.- power 22,5 MVA 50 Hz – triangle primary 10,8 KV variable triangle secondary 100-310 V – type cooling OFWF water flow 3×160 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

Ferro – Leghe. Nr. 1. Automatic material transport system made of: n° 5 flat belts, n°1 distributor car for loading storing silos, n° 4 weigher hoppers, n°1 flat weighing belt, n°1 bucket elevator belt, n°1 vibrating chute. The system is used to dose, weigh and load into the Ladle Furnace.

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.