BOTTA FTA 20/10 Melting Tower Furnace

Technical characteristics:

- Liquid aluminum capacity: **2300 kg**
- Hourly melting capacity: **1000 kg/h**
- Thermal power installed: **971.574 kcal/h**
- Installed electric power: **12kW – 400VAC/50-60Hz**
- Molten aluminum temperature: **700°C ± 15°C**
- Combustible: **Methane Gas**
- Methane Gas pressure requested: **100 mBar**
- Methane Gas pipe diameter: **2"½**
- Air Pressure requested: **6 bar**
- Air pipe diameter: **¼"**
- Vertical loader with hydraulic control
- Automatic charger and cycle of furnace
- Control temperature: **by 4 thermocouples**
- Level control aluminum on melting tower: **by laser**
- Material combustion plant: **Krom Schroeder**
- Refractory material: **Calderys**
- Display and alarm management
- Management of the ramp preheating on the relevant page
- Viewing the system status: by synoptic graphic where are inserted utilities (burners, switches) and their statuses
- Managing levels of access to page with password

Parts installed:

- Loading door switch: **TELEMECANIQUE > XCSE73117**
- Tower laser level control: **DATALOGIC > S80-MH-5-Y09-PPIZ**
- Refractory: **CALDERYS type MT90**
- 2 Melting burners: **KROM SCHRODER > BIO 140 – 386.910 kcal/h (450kW)**
- 1 Maintaining burner: **KROM SCHRODER > BIO 100 – 197.754 kcal/h (230kW)**
- Hydraulic pump: **CASAPPA**
- Pump motor: **ADDA**
- Solenoid valves: **ATOS**
- Hydraulic oil flow regulators: **FLUIDPRESS**
- Liquid level: **IKRON**
- Control PLC: **SIEMENS S7-1200**
- Electric cabinet: **LEGRAND**
- Switches and push buttons: **SIEMENS/TELEMECANIQUE**
- Safety relays: **PILZ**
- Electromechanical components: **SIEMENS/TELEMECANIQUE**
- Operating panel (installed on the electric cabinet door): **WEINTEK MT8100i 10" screen LED**