

LEAD ROD BILLET PLANT Type LRBCP

The equipment we are offering is designed to produce calibrated rod billets to be used in a cold forged press to get the terminal battery bushes positive and negative.





EQUIPMENT DESCRIPTION

Equipment – Lead rod calibrated billet production

The Equipment consists on:

nr.1 LEAD MELTING POT,

nr.1 AUTOMATIC INGOT FEEDER,

nr.1 LEAD PUMP & DELIVERY SYSTEM,

nr.1 LEAD CYLINDERS CASTING MACHINES,

nr.1 CYLINDER HEIGHT LASER CONTROL.

Equipment – Lead rod calibrated billet production

 4,5 tons capacity, electrically heated by heaters (81 kw) immersed in the lead alloy. The lead temperature control inside the crucible pot is granted by a thermocouple. The melting pot is equipped with steel external covering panels with embedded temperature insulating sheets, hood and connection flange for exhausting pipe. All commands and controls, including the switching on/off timing are installed on a remote electrical switchboard, provided with an Emergency switcher command located close to the unit. The melting pot requires suction not included in the offer.

Automatic ingot feeder

• Ingot feeder totally automatic designed for loading up to 20 ingots and equipped with a sensor level (installed in the melting pot) for supply regularly the settled lead quantity. All commands and settings are installed on a common electrical switchboard containing the lead pot commands. The equipment is also provided with an Emergency switch command located close to the unit.

Lead pump & delivery system

- Lead delivery system, consisting on:
 - o a lead rotary pump equipped with an electrical motor
 - a stainless steel heated feeding pipe, provided with its own temperature sensor control
 - \circ $\,$ lead's dispenser that supply the lead to Cylinder Casting Machine

The lead's dispenser, electrically heated, and fed by the rotary pump through the pipe, guarantees a constant flow of lead to the Cylinder Casting Machine.

All commands and settling are installed on the general control panel, while an Emergency switcher is provided on the machine.



Lead cylinders casting machines

 A rotary round table adjustable and provided by motor gear - inverter's controlled for an accurate setting ensures a constant output of rod billet. The molten lead is continuously fed into the dispenser positioned just over the rotating casting table and in direct contact with it and it flows into the 90 casting cavities of the rotating table. The machine producing the rod billet will have 45 cavities producing rod billets for positive bushes and the remaining 45 cavities producing rod billets for negative bushes. An automatic unloading system will collect rod billets in dedicated containers and scrap billets will be separated. The rotation of the table is ensured by a ball bearing basement on which a cogged wheel is connected to the motor gear. The excess lead present on the round table during the cast operation is removed by a cutting blade and the lead scrapes return to the melting pot by means of a belt conveyor.

The table is water cooled for a rapid cooling of the cast billet.

The machine is equipped with all accessories for a stand alone service including its own electric switchboard and automatic lubrication of the ejector pins and cutting blade. Each machine can operate in automatic mode independently from the status of the other one.

The output of each machine is from minimum 90 to 200 rod billet per minute (depending from the billet size). In case of more LEAD CYLINDERS CASTING MACHINE installed (to obtain different size of rod billets) each machine can operate in automatic mode independently from the status of the other one.





















CYLINDER HEIGHT LASER CONTROL

• The purpose of the laser reading device is to carry out the control of the height of the cylinder inside the casting wheel before ejection and also the control of the height of the pins with a step-by-step manual cycle combined with the rotation of the wheel. The system allows you to enter tolerances +/- compared to the nominal size of the billet; all billets outside the tolerance range will be automatically rejected.











STANDARD TECHNICAL DATA (with two casting wheels)

- Overall Dimensions: mm 6500x3500x2600h (with aspiration cup)
- Electricity: 400 V 50Hz
- Installed power: **125 Kw**
- Compressed air: 6 bar
- Cooling water requirement: max 600 liters/hour at 20°C with pressure 2,5 bar
- Output capacity (for each casting wheel): up to 200 billets/min. (depending from the billet size)