

Specifications of requested furnaces for ductile cast iron projects:

1. Crucible furnaces are required for dual melt process and with two separate pots.
2. The amount of melting is 8 tons is.
3. The furnace must be equipped with “melting holding” system.
4. Medium frequency must be HZ250
5. The duration of melting in the oven should be 40 minutes.
- 6- The melting temperature should reach to 1250-1550 degrees.
7. Furnace must be adjusted for melting iron scrap and cast iron with and for additives amount up 8%.
8. Furnaces operate 24 hours a day and continuously.
9. The furnace must have a vibrating charger device to discharge the scrap into the furnace.
10. The furnace must have a tilting back & Tilting hydraulic with up and down and forward and backward movement.
11. The furnace must have a fixed melting weighing system for measuring the weight of melting without change in different angles.
12. The input power to the transformers should both have the voltage: 20 kv
13. It must have a PLC system of Siemens Company.
- 14- It should have an emergency water inlet system, emergency electricity, and an emergency drainage system.
15. The cooling system of the cooling tower and the heat exchanger should be automatic and of closed circuit type.
- 16- The water hardness device and the electrical conductivity of water should be known in terms of measuring and producing water.

17. The furnace must have melting penetration protection system in the pot and short circuit and fault E R T with an alarm.
18. It has an automatic and programmable sinter system.
19. Furnaces must be equipped with a protective flange around the pot and a hydraulic furnace door and a hood to discharge gas and smoke from scrap charging.
20. The furnace must have an automatic and programmable melt making in different scrap charge weights.