Electric Oven

JRFURNACE has built a large number of Electrically heated and fuel fired Bogie/Fixed/Continuous ovens for the past two decades. JRFURNACE has a full range of Bogie/Fixed/Continuous ovens up to a capacity of 500 MT to offer to Foundry Cast House, Heavy Engineering, Automobile, Rail Wagon, Electrical Machines and other metal industries with temperature range of 500C to 4500C. The fixed/bogie hearth ovens can be offered with single or double doors applications however the Continuous ovens are always with double door application for one end charging and other end discharging. The material are loaded on the bogie hearth ovens with the help of EOT crane or any mechanical device on the electro-mechanically operated bogie and by charging machine or Air casters in case of fixed hearth ovens for the desired drying and curing.

The continuous ovens can be conveyorised or trolley type, the Conveyor of Conveyorised oven will be electro mechanically operated and the pusher for the trolley of the trolley type oven can be either electro mechanically or hydraulically operated. In continuous ovens material is loaded at the front end of the conveyor/trolley and unloaded at the back end of the oven after maintaining the desired retention time for satisfactory drying/curing.

In electrically heated ovens with electrical heating system through resistive Cartridge type/Tubular type heating elements located along with the side/back walls/roof of the oven. The heating elements of the oven shall be divided into suitable no of zones as per the size of the oven and will be control by PID based control philosophy with Thyristor/Contactor based relay logic.
In case of fuel fired ovens are fired with high efficiency burners supported by a full complement of combustion system with safety arrangements.
Generally, JRFURNACE Bogie/Fixed/Continuous ovens are lined with Mineral Wool/Ceramic fiber blankets packed in between double wall panels on the side wall, roof and door and hearth of the ovens to minimize the skin temperature. The inner wall of the oven can be of Mild Steel or Stainless steel depending upon the service temperature.

The Ovens will be provided with suitable baffles with recirculation fans for better heat transfer due to convection and good temperature uniformity. The baffles and recirculation fans can be made out of Mild Steel or Stainless steel depending upon the service temperature. The drive motor of the recirculation fans is VFD driven for soft starting and better temperature controls.

- **FEATURES & SPECIFICATIONS**
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- **APPLICATIONS**

  - Maximum temperature 300 ˚C
  - Temperature uniformity within +/- 5 ˚C. For aerospace application within +/- 2-3 ˚C.
  - Programmable PID controller to achieve close temperature uniformity.
  - Type of Ageing Ovens: Double Bogie Heath construction.
  - Max. 200˚C for ageing and 400˚C for annealing.
  - Temperature uniformity within +/- 5 ˚C.
  - Master-slave control with programmable master controller to achieve close temperature uniformity.