

Horizontal retort FNC electric furnace



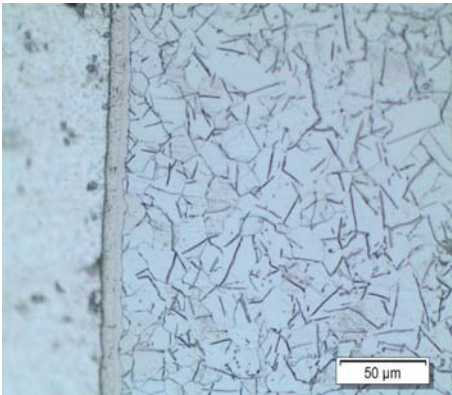
Seco/Warwick Allied commissioned **ferritic nitrocarburising furnace** for heat treating bearing cages for **Harsha Engineers Limited**; a leading bearing cage manufacturer based in **India**.



The furnace is a horizontal retort furnace with facilities to do nitrocarburising of bearing cages by zero flow method.



The furnace is equipped with vacuum system, gas control system, turbo cooling, atmosphere cooling system and post oxidation system to get material very uniform grey color and other tribological properties to meet the specifications of leading bearing manufacturers

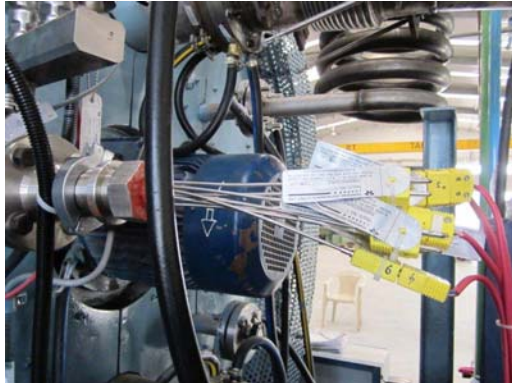


The process is to establish a case depth of 8 to 25 microns with very less porosity.

The nitrogen potential control is based on hydrogen analyzer and allows measurement and regulation of nitrogen atmosphere potential by measuring the hydrogen content in the furnace atmosphere. Also all the process parameters like ammonia flow, carbon dioxide flow, ratio of carbon dioxide to ammonia, furnace pressure are automatically regulated.



The furnace control system employs cascade based temperature control system to regulate the furnace temperature very closely to meet stringent AMS 2750 D requirements of the customer.



The SCADA system displays the temperatures measured in a graphical format.

Due to the well established Zero flow method, the gas consumption for the process is many times less than the conventional process.