

# PRECONS

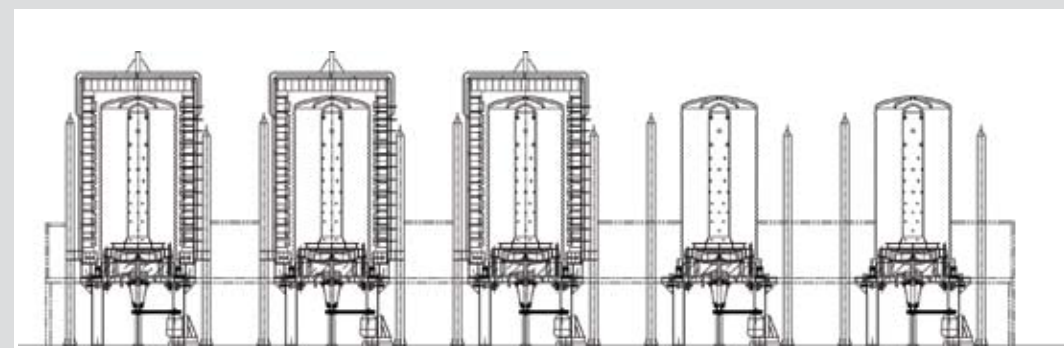
an established supplier of quality furnaces

## BELL ANNEALING FURNACE

- ▶ India's No.1 supplier of bell furnaces.
- ▶ More than 100 installations in use.
- ▶ 3 to 30 MT batch capacity.
- ▶ Maximum temperature up to 950 °C.
- ▶ Spheroidisation above 85%
- ▶ Vacuum assisted N<sub>2</sub> atmosphere with automatic pressure regulation.
- ▶ Multi profile programme controller with ratio control system to achieve close temperature uniformity.
- ▶ Auto programming facilities to adapt different cycles depending upon diameter – grade combination.
- ▶ Provision for data logging.



## Installation diagram for a typical 3 bell-5 base system



## BAR/FORGED COMPONENTS ANNEALING FURNACE

- ▶ From 5 MT onwards.
- ▶ Facilitates very low scale annealing.
- ▶ Rectangular bell design with stationary or bogie type base.
- ▶ Maximum temperature up to 950 °C.
- ▶ Spheroidisation above 85%.
- ▶ Master-slave temperature control to achieve close temperature uniformity.

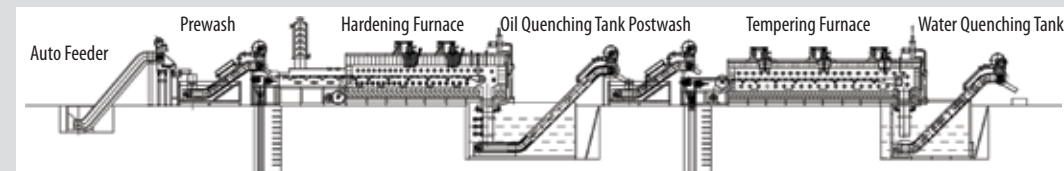


## CONTINUOUS HARDENING AND TEMPERING PLANT



- ▶ Capacity up to 1000 Kg/hr.
- ▶ Well suited for through hardening and tempering of fasteners and other cold forged components.
- ▶ Auto feeder, prewash, hardening, quenching, post wash, tempering and quenching.
- ▶ Methanol-LPG atmosphere.
- ▶ Oxyprobe carbon potential system.
- ▶ PLC control as option.
- ▶ Provision for data logging.

## Installation diagram for a typical hardening, quenching and Tempering line



## COMPOSITE CURING OVEN

- ▶ Used for curing carbon composite for aerospace application.
- ▶ Box / Bogie type construction.
- ▶ Maximum temperature up to 250 °C.
- ▶ Temperature uniformity within  $\pm 2$  °C.
- ▶ Vacuum system for vacuum bagging.
- ▶ PLC control.



## TRANSFORMER CORE ANNEALING FURNACE

- ▶ Batch capacity up to 6 MT.
- ▶ Specially designed for annealing CRGO silicon core.
- ▶ Bogie hearth construction for easy loading / unloading.
- ▶ Maximum temperature up to 800 °C.
- ▶ Nitrogen atmosphere for scale free annealing.
- ▶ Designed to minimize gas consumption.



## VERTICAL CYLINDRICAL FURNACE WITH SEALED RETORT

- ▶ Batch capacity up to 2 MT.
- ▶ Varied applications such as Gas carburising, Gas nitriding, Carbonitriding, Annealing, Normalising, Hardening, etc.,
- ▶ Maximum temperature up to 1000 °C.
- ▶ Temperature uniformity within  $\pm 5$  °C
- ▶ Leak tight retort and door assembly.
- ▶ Powerful fan for gas circulation.
- ▶ Programmable ratio controller.
- ▶ Vacuum assistance for annealing and normalising.
- ▶ Carbon potential control



## SOLUTION TREATMENT / AGEING FURNACE FOR AAAC

- ▶ Batch capacity up to 2 MT for solution treatment and 10 MT for ageing.
- ▶ Maximum temperature up to 600 °C.
- ▶ Temperature uniformity within  $\pm 5$  °C.
- ▶ Bogie hearth construction with single or twin bogie.
- ▶ Base tilting arrangement for fast quenching for solution treatment.



## ROLLER HEARTH FURNACE



- ▶ Capacity up to 10 MT/hour.
- ▶ Ideal for stress relieving and annealing of formed tubular coils / pressure parts of boilers, etc
- ▶ Roller hearth construction.
- ▶ Maximum temperature up to 800 °C.
- ▶ LPG/CNG firing.
- ▶ Mass flow fuel control for better combustion efficiency.
- ▶ Energy efficient recuperator.
- ▶ PC-PLC control – auto mode.

## BOGIE HEARTH FURNACE

- ▶ Batch capacity up to 300 MT.
- ▶ Ideal furnace for varied heat treatment processes such as stress-relieving, annealing, normalizing, tempering etc.,
- ▶ Maximum temperature up to 1150 °C.
- ▶ Oil and gas fired options.
- ▶ Mass flow fuel control for better combustion efficiency.
- ▶ Unique flat roof construction.
- ▶ Energy efficient recuperator.
- ▶ PC-PLC control.

