PROGRAMMABLE HEAT TREATMENT FURNACE

Chamber size	:	0.8m (H) x 1m (W) x 1m (D)
Rating	:	60 KW
Maximum temperature :	:	1400^{o}C
Furnace construction	:	Vertical lifting door. Front loading type with working height of 900mm
Heating elements	:	Silicon carbide double ended heating elements placed vertically on both sides of furnace.

Suitable programmable controller to adjust the heating and cooling rates, holding times etc.

Facilities for inert gas heat treatment, forced air cooling ducts etc and fitting arrangements should be provided.

Other feature

- Carbon control with oxygen probe
- Nitrogen-methanol atmosphere system
- Gas flowmeters for dissociated ammonia or exothermic atmospheres
- Automatic nitrogen purge system
- Control and recorder options
- Standard endothermic atmosphere system
- Low surface watt release for extended life
- Heating element circuit power transformer with tap switches to compensate for element aging

Applications

- Annealing (nickel alloys, alloy steels etc)
- Brazing
- Solutionising, Hardening etc

Operating & instruction manuals and maintenance & service manuals – **3 copies each**

Installation & commissioning and demonstration of its functioning in BHEL laboratory to be arranged.

Address of the Indian agent along with appropriate certificate from the Principal Supplier should be provided.

The suppliers should mandatorily provide the list of various organizations (including in India) with their contact addresses, where similar equipment has been supplied.

The supplier should ensure that the spares are made available for the next 10 years and certificate should be furnished to this effect. Essential spares required for trouble free operation for 5 years should be quoted.

The supplier shall provide 12 months warranty from the date of commissioning.

Only reputed manufacturers with ISO 9001 certificate need to quote.

After the delivery to BHEL R & D, if the Programmable Heat Treatment Furnace is installed in existing R & D building it has to be shifted to the new building (Center for Nanotechnology and Applications) within 9 months from the supply of the equipment. This has to be done by the supplier and related expenses should be specified.

For any Technical Clarification, please contact :
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