

Indian Institute of Technology Delhi
Department of Chemical Engineering

NIQ for the purchase of High Temperature Furnace from RP02447

Purchase committee met on May 27, 2011 and decided to have following specifications for the purchase of High Temp Chamber Type Furnace.

High Temp Furnace SPECIFICATIONS

Specifications for Chamber type High temperature furnace

DESCRIPTION	SPECIFICATION
Furnace type	CHAMBER TYPE HIGH TEMPERATURE FURNACE
Furnace dimensions	CHAMBER TYPE FURNACE DIMS:W= 200mmXH=200mmXD=250mm
Furnace operating temperature	1600 Deg C.
Furnace Maximum Temperature	1650 Deg C.
Type of elements	Kanthal ®Super 1700 Heating Element. 6/12 size Original manufacturer test certificate should be provided
Total power rating	9 KW(Approx)
No of control zones	One
Location & no thermocouple	Two Numbers, "R" type thermocouple; One in the center of the hot zone and other shall be used as a safety thermocouple (Original manufacturer test certificate should be provided)
Furnace temperature uniformity	+/- 3 deg C at the centre of the zone Original manufacturer test certificate should be provided
Transformer	Three Phase Transformer air cooled
Power Supply	415 Volts , Three Phase.
Type of Insulation	<ul style="list-style-type: none"> • The Furnace Hot Face Insulation lining will be by the Cumilag 32HF bricks. • The Hearth will be made with Alumina Bricks of CUMI:Cu32HF and back up insulation like 1st layer 1400 degC, board 2nd layer 1200 degC and 3Rd 1000 degC layer board of Muragappa Morgan/equivalent Original manufacturer test certificate should be provided

Furnace Construction	<ul style="list-style-type: none"> • The furnace is double wall construction, • Inner shell will hold all insulation and heating element. • There is an air gap between inner and outer shell for circulating the air by an exhaust fan.
Thyrisor	3ph,16A,Phase angle firing, (Original manufacturer test certificate should be provided)
Temp. controller	Size 48x48, 4 programm,16 segment. (original manufacturer test certificate should be provided)
Safety controller	48x48, Original manufacturer test certificate should be provided

Terms and conditions:

1. Specify terms and conditions and price at CIF New Delhi.
2. Submit commercial and technical bid separately
2. Warranty should clearly be mentioned; 3 years warranty is desirable.
3. The Institute reserves the right to accept or reject any or all quotations without assigning any reason thereof.
4. The quotation should reach to following address by **June 23, 2011**

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