

	BHARAT HEAVY ELECTRICALS LIMITED			Date :	
	Heavy Power Equipment Plant, Ramachandrapuram,			Due Date :	
	Hyderabad - 502 032. INDIA.			Supplier Qtn. No.:	
	Phones :			Date :	
	Purchase Dept. :				
<p>NOTE:-1. Vendor must submit complete information against clause no. 14.0 The offer meeting this clause would only be processed. 2. The offer and all documents enclosed with offer should be in English language only. 3. Inadequate / incomplete, ambiguous, or unsustainable information against any of the clauses of the specifications/requirements shall be treated as non-compliance and will be technically disqualified</p>					
TENDER DOCUMENTS TO BE FILLED BY THE SUPPLIER FOR SUPPLY OF					
FLUX DRYING OVENS QUANTITY: 3 NOS.					
ADDRESS SUPPLIER :					
TELEPHONE NOS.:					
FAX NOS.:					
E-MAIL ADDRESS :					
Sl. No.	Description for BHEL Requirement	specify / confirm	Offered	Deviations	Remarks
1.0	Temperature range: 50 to 400 deg.C	vendor to confirm and specify range of temperature			
2.0	Continuous operating temperature: 300 deg.C	vendor to confirm			
3.0	Number of shelves: FIVE or SIX	vendor to specify nos of shelves			
3.1	sheet thickness of shelves shall be min of 2 mm	vendor to confirm			
4.0	Approximate storage space Inside the Oven: L x W x H : 600 x 600 x 800 mm	vendor to and specify L: W: H: _____			
5.0	Capacity : Minimum100 kg (SAW flux to dry / bake)	vendor to specify			
6.0	Air Circulation : Natural convection and forced air	vendor to confirm			
6.1	Vent to be provided for air circulation	vendor to confirm			
6.2	Mode of forced air and its location is to be indicated in Drawing (Forced air Fan should be on side only, not on top,- for easy maintenance) The motor used for Fan rotation should of standard type with make Seimens/ABB/CG only	vendor to specify			
6.3	Door hinges shall be of forged material with proper support on door side and hinge side	Vendor to confirm			
6.4	No of hinges for oven door	Vender to specify			
7.0	Controls and Indicators : Temperature controller with digital temperature indicator.	vendor to confirm			

Sl. No.	Description for BHEL Requirement	specify / confirm	Offered	Deviations	Remarks
7.1	Indicator to be acibrated as per IS and calibration report to be furnished along with the machine	vendor to confirm			
8.0	Input supply : 415 V, THREE phase, 50 Hz	vendor to confirm			
9.0	Proper heating elements shall be provided for continuous drying of flux at 300 deg.C.	vendor to confirm			
9.1	Chamber to be coated with heat resistant silver paint	vendor to confirm			
10.0	Detailed drawing / catalogue shall be submitted along with offer.	vendor to confirm and provide			
11.0	Heating elements location shall be in such a way to provide uniform temperature all over the chamber	vendor to confirm and specify location			
11.1	Heating element type:DRAW OUT TYPE for easy maintenance / repair and replacement (Widely available in local market type)	vendor to confirm			
11.2	Thermocouples are to be calibrated as per IS, Report is to be furnished along with the machine	vendor to confirm			
11.3	location of thermocouples is to be specified. Uniformly located all over the chamber.	Vendor to furnish GA drawing showing location of thermocouples			
12.0	SPARES required for 2 years normal operation shall be quoted and list is to be provided with offer	vendor to quote seperately (item wise)			
12.1	Tools for maintenance: Taparia make Socket set 9.5mm(3/8) square drive, product No. S3/8H (14 sockets and six accessories) along with one Allenkey set mm size (KHM9V) and one Inch size (KHI10V)	Vendor to confirm			
12.2	Vendor to quote seperately for the following additional spares (for each machine)	vendor to quote seperately (item wise)			
12.1.1	Temp.Controller with sensor - 01 No.				
12.1.2	Heating assembly with elements - one set				
12.1.3	Thermocouple - 3 nos				
12.1.4	Electric motor - 1 no.				
12.1.5	V belts - 1 Set				
12.1.6	Panel on/off switch - 01 no.				
12.1.7	Door hinges - 2 nos.				

Sl. No.	Description for BHEL Requirement	specify / confirm	Offered	Deviations	Remarks
13.1	The detailed electrical drawings is to be submitted along with the offer	vendor to furnish			
14.0	Only those vendors, who have supplied and commissioned atleast one OVEN in the past ten years (On the Date of Opening of tender) and such oven is working satisfactorily for more than one year, after commissioning (On the Date of Opening of tender) should quote. The following information should be submitted by the vendor about the companies where similar ovens have been supplied. This is required from all the vendors for qualification of their offer.	Vendor to note			
14.1	Customer reference list to be supplied along with the offer	vendor to furnish			
14.2	address of customer	vendor to furnish			
14.3	phone numbers of customers	vendor to furnish			
14.4	contact person of customer	vendor to furnish			
14.5	e-mail id of customer	vendor to furnish			
14.6	Performance certificate from customer for similar oven	vendor to furnish			
15.0	Inspection : the ovens will be inspected by BHEL Engineers at vendors works before dispatch of the same.	vendor to confirm			
16.0	Commssioning and prove out of the equipment at BHEL works is suppliers responsibility.	Vendor to confirm			
17.0	The equipment shall be guaranteed for the satisfactory performance for a period of 24 months from the date of commissioning.	vendor to confirm			
18.0	Safety				
18.1	One number safety controller for excess temperature cut in case of the main controller fails.	vendor to confirm			
18.2	Suitable thermocouple fail safety protection device.	vendor to confirm			
18.3	Suitable interlocking arrangement between the fan motor circuit and the heater circuit.	vendor to confirm			
18.4	Overload protection device for the motors.	vendor to confirm			
18.5	Door safety interlock with power circuit is to be provided	vendor to confirm			
19.0	Painting - The oven shall be painted with heat resistant paint.	vendor to confirm			