

	BHARAT HEAVY ELECTRICALS LIMITED			Date :	
	Heavy Power Equipment Plant, Ramachandrapuram,			Due Date :	
	Hyderabad - 502 032. INDIA.			Supplier Qtn. No.:	
	Phones :			Date :	
	Purchase Dept. :				
NOTE:-Supplier Qtn. No.: 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					
TENDER DOCUMENTS TO BE FILLED BY THE SUPPLIER FOR SUPPLY OF					
WELDING ELECTRODE DRYING OVENS QUANTITY: 2 Nos.					
ADDRESS SUPPLIER :					
TELEPHONE NOS.:					
FAX NOS.:					
E-MAIL ADDRESS :					
Sl. No.	Description for BHEL Requirement	Specification to be confirmed by Vendor	Offered	Deviations	Remarks
	PURPOSE : Drying oven to heat and bake the Welding Electrodes before Welding				
	TECHNICAL SPECIFICATION				
1	HEATING CHAMBER				
1.1	Heating Chamber size	500 mm L X 750 mm W X 1000 mm H or higher			
1.2	Working temperature	50 °C to 500 °C			
1.3	Continuous operating temperature:	400 °C or more			
1.4	Number of shelves:	6			
1.5	Material of the inner surface of heating chamber	SS - 304, 3mm thick sheet			
1.6	Capacity of the oven (to Dry/Bake)	50 kg or more			
1.7	Air Circulation : Forced Air to maintain uniform	Vendor to confirm			
1.7.1	Vent to be provided at top for air circulation	vendor to confirm			
2	HEATING ELEMENT				
2.1	Type	Coiled Coil type			
2.2	Material of the heating element	Kanthal A1			
2.3	Heating Power	12 KW or more			

3	DOOR				
3.1	Door type	Electro Mechanically operated door / Lifting Type			
3.2	Motor make	Kirloskar / ABB / Crompton Greaves			
3.3	Gear Box	MM Gear / Encon /Transtech			
3.4	Motor Drive Rating	1 Hp, 440V, 3Ph, 50 Hz AC supply			
3.5	Door speed	4 Mtrs/min or more			
3.6	Material of Sprocket shaft & chain	Vendor to Specify			
4	INSULATION				
4.1	Material of Insulation (Bricks) :	HFK/CFK/IS8			
4.2	Brick Size	115 mm or more			
4.3	Ceramic Lining Details				
4.3.1	Thickness of Ceramic lining	200 mm thick ceramic fiber			
4.3.2	Material Grade	1260 Deg. C			
4.3.3	Density	128 Kgs/Mt (Sq) or more			
4.3.4	Anchors for laying Ceramic Fibre Blanket	Grade AISI- 316			
	FOR FORCED AIR CIRCULATION				
5	FAN				
5.1	Fan type	Indirect			
5.2	Motor make	Kirloskar/Crompton Greaves/Bharat Bijilee			
5.3	Motor Drive Rating	1 Hp, 440V, 3Ph, 50 Hz AC supply			
5.4	Material of Fan shaft	AISI 309 SS			
5.5	Material of Fan impeller	AISI 310 SS			
6	TEMPERATURE CONTROLLER				
6.1	Temperature Controller type	Digital Type			
6.2	Master Controller	TAIE make or Equivalent			
6.3	Calibration accuracy	0.5 % of F.S.D			
6.4	Type of sensor	K type Thermocouples			
6.5	Control accuracy	± 2 °C			
6.6	Control Supply	230 V, 1Ph, 50 Hz AC supply			
7	Uniformity of temperature	± 5°C			
8	Control Accuracy	± 3°C to ± 5°C			
9	Mode of Supply	440V, 3ph, 50Hz AC Supply			
10	Skin Temperature	Max +15°C (Max), above temperature			

11	Heating elements shall be provided on the sides	Vendor to confirm			
11.1	Heating element type: DRAW OUT TYPE for easy maintenance / repair and replacement	Vendor to confirm			
12	SPARES : Vendor shall quote for the itemised spares required as follows	Vendor to quote separately (item wise)			
12.1	Heaters : 12 No's	Vendor to quote			
12.2	Controller : 1 No	Vendor to quote			
12.3	Thyristors: 1 no	Vendor to quote			
12.4	Thermcouple : 1 No	Vendor to quote			
12.5	Belt : 1 No	Vendor to quote			
12.6	Bearing : 1 No	Vendor to quote			
13	5 sets of operation and maintenance manuals shall be furnished along with detailed leectrical drawings along with the offer	Vendor to confirm			
14.0	Performance Certificate : Only those vendors, who have supplied and commissioned atleast one OVEN with same features 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.	Vendor shall submit the Performance Certificate along with the offer, without which. Offers will be Technically Rejected			
14.1	Customer reference list to be supplied along with the offer, which includes Contact person, adress, email Mobile No etc.	Vendor to provide			
15	Pre Inspection at Vendors works : The Eqpt. will be inspected by BHEL at suppliers works	Vendor to confirm			
16	Commssioning and prove out of the equipment at BHEL works is suppliers responsibility.	Vendor to confirm			
17	The equipment shall be guaranteed for the satisfactory performance for a period of 24 months from the date of commissioning.	Vendor to confirm			