



E&I Labs/Spec/oil bath

BHARAT HEAVY ELECTRICALS LIMITED, HYDERABAD

Enquiry No.:

Due Date:

Supplier Quotation No:

SPECIFICATION CUM COMPLIANCE CERTIFICATE OF “LIQUID (OIL) TEMPERATURE BATH”

Note:

- 1. Vendor must submit complete information against clause no. 6.0
The offer meeting this clause would only be processed.**
- 2. Wherever "Accuracy" is required, supplier has to quote accuracy or absolute
Uncertainty for one year or more.**
- 2. The "Offered" Column and where applicable, the "Deviations" &
"Remarks" Column of this format shall be filled in by the Vendor and
submitted along with the offer.**
- 3. The offer and all documents enclosed with offer should be in English language only.**

Supplier Details

Name & Address: _____

Telephone Nos.: _____

Fax No.: _____

Email Address: _____


Suppliers Indian Agent Details

Name & Address: _____


Telephone Nos.: _____

Fax No.: _____

Email Address: _____

				DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY VENDOR	OFFERED	DEVIATIONS	REMARKS
Sl. No.	Sub-Sl. No.	Item No.	Item Name					
1			Purpose: Liquid Temperature Bath is required for Calibration of different Temperature Sensors(RTDs, Thermocouples,Dial type thermometers and Glass Thermometer, Temperature switches etc.)	Vendor to Confirm				
2			Scope: The offer shall cover following items:	Vendor to Confirm				
	2.1		One Liquid Temperature Bath with temperature range: ambient temp to 200°C or above.					
	2.2		Suitable Temperature Media(Silicone Oil) for the range.	Vendor to Confirm				
3			SPECIFICATIONS OF LIQUID BATHS					
	3.1		Specifications of Temperature Bath					
	3.11		Range : Ambient temperature to 200°C or above.	Vendor to Specify				
	3.12		Stability: Equal to or better than $\pm 0.02^\circ\text{C}$ at 200°C	Vendor to Specify				
	3.13		Uniformity: Equal to or better than $\pm 0.05^\circ\text{C}$ at 200°C	Vendor to Specify				
	3.14		Heating Time: Maximum 150 minutes from ambient temperature to 200 °C	Vendor to Specify				
	3.15		Cooling Time: Maximum 15 hours from 200°C to 80°C	Vendor to Specify				
	3.16		Stabilisation Time: Maximum 30 Minutes	Vendor to Specify				
	3.17		Operating temperature: 15°C to 40°C					
	3.18		Temperature Controlling Features					
	3.181		The bath should have PID Controller for temperature control.	Vendor to Confirm				
	3.182		Temperature Setting: Digital display with push-button data entry and Pt 100 RTD as sensor for measurement and control.	Vendor to Confirm				
	3.183		Set-Point Resolution: Equal to or better than 0.01°C	Vendor to Specify				
	3.184		Display Resolution : Equal to or better than 0.01°C	Vendor to Specify				
	3.185		Digital Setting Repeatability: Equal to or better than 0.01°C	Vendor to Specify				
	3.19		Physical and Volumetric specification:					
	3.191		Access Opening: Minimum 120 mm x 120 mm or Circular dia 120 mm.	Vendor to Specify				
	3.192		Depth : Minimum 300 mm.	Vendor to Specify				
	3.193		Volume of Bath: 14 Litres or more.	Vendor to Specify				
	3.194		Wetted parts: Shall be made from corrosion free Material	Vendor to Confirm				
	3.195		The oil bath including controller and sensor should be potential free and suitable earthing point should be provided.	Vendor to Confirm				

Sl. No		Clause No		DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY VENDOR	OFFERED	DEVIATIONS	REMARKS
	3.2			Power Requirements: 230 Volt \pm 10%,50Hz.	Vendor to Confirm			
	3.3			Calibration Certificate of bath shall be traceable to national standards, covering minimum and maximum points of bath .	Vendor to Confirm			
4				Specification for temperature media:	Vendor to Specify			
	4.1			Fluid (Silicone Oil) shall be supplied with bath considering the range, stability and uniformity specification of the bath.	Vendor to Confirm			
	4.2			The quantity of fluid shall be inline with bath capacity.	Vendor to Confirm			
5				General requirements:				
	5.1			Commissioning and proving of system is to be done at BHEL. Hyderabad	Vendor to Specify			
	5.2			The equipment should be guaranteed in respect of design, material construction, operation and against any manufacturing defects for a period of 24 months from the date of commissioning 4 copies of guarantee certificates are to be furnished. Free after sales service is to be provided during the guarantee period.	Vendor to Confirm			
	5.3			Two sets of Operation and Service Manual shall provided comprising of operating procedure, calibration procedure, trouble shooting charts, circuit	Vendor to Confirm			
	5.4			Rigid packing for all items of complete equipment, all accessories and other supplied items to avoid any damage / loss in transit	Vendor to Confirm			
	5.5			The supplier shall provide training to the staff on detailed operation of system at BHEL Hyderabad.	Vendor to Confirm			
	5.6			Supplier shall enclose the leflets /Datasheet having detail specification, Model No & Manufacturers Name of Items to be quoted.	Vendor to Confirm			
	5.7			Equipment should meet all points of our above specification and bidders must furnish point to point replies against each of the points of above specification, failing which their offer may not be considered.	Vendor to Confirm			
6				QUALIFYING CONDITIONS :	Vendor to Confirm			
	6.1			Only those vendors, who have supplied and commissioned atleast one number of bath for the range of same quoted model for similar application in the past three years and such is presently working satisfactorily for more than one year after commissioning should quote.The reference date is the date of tender.	Vendor to Specify			

 Clause No				DESCRIPTION FOR BHEL REQUIREMENT	SPECIFIED / TO BE CONFIRMED BY VENDOR	OFFERED	DEVIATIONS	REMARKS
	6.2			The following information is to be submitted by the vendor about the companies where offered equipment has been supplied. This is required from all the vendors for qualification of their offer.				
		6.21		Name of the customer/company where offered equipment is installed (Copy of Purches Order should be furnished).				
		6.22		Complete postal address of the customer .				
		6.23		Year of commissioning. (Copy of Commissioning report should be furnished)				
		6.24		Application for which the equipment is supplied .				
		6.25		Name and designation of the contact person of the customer.				
		6.26		Phone, FAX no. and email address of the contact person of the Customer.				
		6.27		Performance certificate from any one customer, regarding satisfactory performane of the equipment supplied to them and should be issued not more than one year prior to the date of tender.				