

Pre-Qualification requirements for GAS TYPE DIAL THERMOMETER as per specification TG60745

Description:

Gas actuated dial thermometer is used for measuring temperature in primary water and seal oil system of turbo generator. It comprises of bourdon tube, bezel ring, glass, shank and dial. It should be of very reliable and proven design to measure the temperature in all operating conditions.

- 1.0** The vendor should be a regular manufacturer of such dial thermometer with following requirements-

Sr. No.	Parameter	Value
(i)	Dial size (mm)	100 (minimum)
(ii)	Scale	Degree C
(iii)	Range	0 to 50 (minimum)
(iv)	Accuracy	±1 % of Full Scale Deflection

- 2.0** In support of above sl. no. 1, vendor shall furnish technical details in below mentioned format for at least five (5) nos. of dial thermometer for the P.O. executed in past 5 years (from date of enquiry) along with P.O. copies.

S. No.	Brief technical details	Application	Name & address of customer	Date of supply
	<ul style="list-style-type: none"> - Application fluid - Working pressure and temperature - Dial size - Measuring range, scale, accuracy - Material of case/bourdon tube/ bezel ring etc. 	De-mineralized water, oil & gas		

- 3.0** Vendor to furnish the test certificate for accuracy, calibration test and type test as per EN13190 against any one of the P.O. submitted as per clause 2. Test certificates must be clearly correlated with P.O.
- 4.0** Vendor to furnish acceptance certificate from one of the end users of dial thermometer against any one of the P.O. submitted as per clause 2. (Original Certificate or through e-mail directly from the customer). Acceptance certificate should contain information like item details and its application or correlation with P.O.

Note: BHEL reserves the right to verify information submitted by vendor. In case the information is found to be false / incorrect, the offer shall be rejected.

MANUFACTURER'S NAME AND ADDRESS			QUALITY PLAN				TO BE FILLED BY BHEL		TO BE FILLED BY BHEL			
BHEL	VENDOR'S NAME	ITEM			QP NO.							
					REV							
		DRG. NO.	AS PER PO									
		SPEC.	AS PER PO									
SL. NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORDS	AGENCY			REMARKS
1	2	3	4	5	6	7	8	9	D	10		11

Note: All page of inspection documents shall be numbered in chronology with the QAP clause , dully mentioning the corresponding QAP clause nos. at the top of each page. One index page containing the documents descriptions, their page no & QAP clause shall be attached upfront the inspection documents.

MANUFACTURER/SUBCONTRACTOR		LEGEND:	FOR CUSTOMER USE	
		! RECORDS IDENTIFIED WITH 'TICK' SHALL BE ESSENTIALLY INCLUDED BY CONTRACTOR IN QA DOCUMENTATION.		
		M: MANUFACTURER / SUBCONTRACTOR B: BHEL / NOM. INSPECTION AGENCY N: CUSTOMER INDICATE 'P' PERFORM 'W' WITNESS AND 'V' VERIFICATION ALL 'W' INDICATED IN COLUMN 'N' SHALL BE 'CHP' OF CUSTOMER		APPROVED BY