

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958 /e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt. 22.09.2017

NOTICE INVITING TENDER

SUB: on-site calibration of master instruments.

Ref: Enquiry no: 9251700029/ Dated: 22/09/2017; Due Dt: 14/10/2017

Tender of the following work should be submitted in a sealed cover consisting of three inner sealed covers such as 1) EMD cover, 2) Technical bid cover & 3) Price bid cover, all super- scribing the name of work, enquiry number etc.

- 1) EMD cover shall contain requisite **EMD of ₹. 1,037/-** & Payment of EMD must be in e-Collect mode only. Tender without EMD will be summarily rejected and the Technical bid & price bid shall not be considered.
- 2) Technical bid cover shall contain duly filled in Technical bid document signed by the tenderer in all the pages with documentary evidences for pre-qualification such as experience, value of work executed in the similar nature of work etc. Any bid without proper documentary evidence for pre-qualification shall not be considered for further evaluation.
- 3) One set of unpriced bid of Contract Work Schedule duly signed by the tenderer for accepting the work content (BOM) should be submitted along with the Technical bid for technical evaluation.
- 4) The price bid cover shall contain price bid document duly filled in and signed by the tenderer in all the pages. The tenderer has to quote most competitive rates for all the items given in the Bill of Quantities in pricebid.

The complete Technical bid and price bid along with requisite **EMD of ₹ 1,037/-** shall reach the office of the undersigned on or Before **14/10/2017 at 14.00 Hrs.**

MSE suppliers can avail EMD Waiver benefits only if they submit along with the offer, attested copies of either EM II Certificate having deemed validity (five years from the date of issue of acknowledgement in EM II) or valid NSIC certificate or EM II Certificate along with attested copy of a CA Certificate (Format Enclosed). Tenders without EMD/MSME proof as detailed above will be summarily rejected.

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

The Technical bid will be opened on the same day at **14.30 hrs.** In case of opening day falls on holiday or happened to be declared as a holiday the receipt and opening of the tender shall automatically fall on the same timing of the next working day. Date and time of opening of the Price Bid shall be intimated only to the bidders those who have qualified after evaluation of the Technical bid. You / Your authorized representative may participate in the tender opening.

Clarification if any can be obtained from the undersigned.

Kindly acknowledge the receipt of the entire set of tender document.

Thanking you,

Yours faithfully,

For Bharat Heavy Electricals Limited,

Sr.Engineer/Contracts
Maintenance & Services

Encl:

- 1) NIT – Notice Inviting tender (Consists of Preamble, Technical Bid & price bid)

Tender should be addressed to: **THE Sr.ENGINEER,
MAINTENANCE & SERVICES / CONTRACTS,
2&4 BUILDING, BHARAT HEAVY ELECTRICALS LIMITED,
HIGH PRESSURE BOILER PLANT,
TIRUCHIRAPPALLI - 620014,
TAMILNADU**

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

NOTICE INVITING TENDER

01.	Name of work	On-sit calibration of master instruments.
02.	Earnest Money Deposit	₹ 1,037/-
03.	Duration of the contract	6 Months from date of commencement of the work.
04.	Last Date for Receipt of Tender	14.00 Hrs. on 14/10/2017
05.	Date of Technical Bid Opening	14.30 Hrs. on 14/10/2017
05.	Date of Price Bid Opening	Will be intimated to those who are Qualified separately.
07.	Guarantee Period	Not applicable

The Tender documents can be down loaded from BHEL website (www.bhel.com) / govt. website (www.tenders.gov.in) at free of cost.

Tender document contains 18 Pages (Technical Bid -17 Pages & Schedule for price bid – 01 page).

ISSUING OFFICER

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

TECHNICAL BID

NAME OF THE WORK: on-sit calibration of master instruments.

Ref: Enquiry no: 9251700029/ Dated: 22/09/2017; Due Dt: 14/10/2017

PRE-QUALIFICATION CRITERIA

The following eligibility criteria shall be complied to fulfill the Technical bid:-

Sl. No	Description	Vendor to confirm
1	Only those bidders shall quote who is having calibration lab certified by NABL or international accreditation body for ISO 17025:2005 compliance. [Copy of accreditation certificate has to be submitted]	
2	Bidder shall have valid scope for on-site calibration [Bidder to confirm]	
3	Bidder has to mention the list of reference master instruments and their accuracy used for on-site calibration against each line item referred in the enquiry. [Reference master instruments list is to be attached]	
4	Bidder has to submit scope of accreditation along the offer. [Scope of accreditation is to be attached]	
5	Name and contact details like E-mail, Phone number, Fax no, etc. of the customer / company where the contract is executed. Bidder to confirm.	
6	BHEL may verify the information provided by vendor. In case the information provided by vendor is found to be false / incorrect, the offer shall be rejected. Bidder to confirm.	
7	(i) BHEL Vendor code (if applicable) - (ii) PAN Number (Copy to be Enclosed) - (iii) GSTN registration Number (Copy to be Enclosed) - (iv) Mobile number (Which is linked to GSTN registration Number) - (v) Email id (Which is linked to GSTN registration Number) - (vi) SAC Code - Offer will be entertained only if the vendor submit the details as above & has a valid GST registration no. If any specific exemption is available, a declaration with due supporting documents need to be furnished for considering the offer. Otherwise the offer shall be rejected.	
8	Acceptance for Scope of Work as per the Enquiry	
9	Acceptance for All Terms & Conditions as per the Enquiry	
10	The bidder along with its associate/collaborators/sub-contractors/sub-vendors/consultants/service providers shall strictly adhere to BHEL fraud prevention policy displayed on BHEL website http://www.bhel.com and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice	

Sign & Seal of Contractor

SCOPE OF WORK:

ad

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

ITEM NO.	SCOPE OF WORK	UOM
10/10	Scope of Work: Calibration of DC Source/Measure Instrument 1. Instrument desc. : DC Calibrator 2. Make : Masibus inst.ltd. 3. Model : 2001 4. Inst. sl.no. : 94030030 5. Unique sl.no. : SM-06 6. Calibration Ranges : Measure mode: 0 to 2mA & 0 to 20mA, 0 to 200mV & 0 to 2V Source mode: 0 to 2mA & 0 to 20mA, 0 to 200mV & 0 to 2V [Note: In each Calibration range minimum 5 equidistant calibration points (including zero & Full scale) are required.] 7. Required Instrument accuracy level : $\pm 0.5\%$ FSV 8. Required periodicity : 1 Year 9. Required Accuracy level of the reference master instrument: $\pm 0.125\%$ FSV (minimum)	1 NO
20/10	Scope of Contract: Calibration of Secondary Master Electrical Instrument. 1. Material desc. : AC Digital Ammeter 2. Make : AE Electric Ltd. 3. Inst. sl.no. : 7/97/68338/1 4. Unique sl.no. : SM-08 5. Range : 0 to 5 A [Note: Minimum 5 equidistant calibration points (including zero & Full scale) are required in the range.] 6. Required Instrument accuracy level : $\pm 0.8\%$ FSV 7. Required periodicity : 1 Year 8. Required Accuracy level of the reference master instrument: $\pm 0.2\%$ FSV (minimum)	1 NO
30/10	Scope of Contract: Calibration of Secondary Master Electrical Instrument. 1. Material desc. : DC Loop Calibrator 2. Make : Masibus inst.ltd. 3. Model : TCS4050M 4. Inst. sl.no. : 08346634 5. Unique sl.no. : SM-09 6. Range : measure mode: 0-25mA, 0-250mV Source mode: 0-25mA, 0-250mV [Note: In each Calibration range minimum 5 equidistant calibration points (including zero & Full scale) are required.] 7. Required Instrument accuracy level : $\pm 0.5\%$ FSV 8. Required periodicity : 1 Year 9. Required Accuracy level of the reference master instrument: $\pm 0.125\%$ FSV (minimum)	1 NO

Sign & Seal of Contractor

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

40/10	Scope of Contract: Calibration of Secondary Master Temperature Instrument. 1. Material desc. : Temperature Calibrator 2. Make : Yokogawa 3. Model : CA12 E Handy type 4. Inst. sl.no. : T1HB011 5. Unique sl.no. : SM-36 6. Range : Sense & source mode 7. Sense mode: 7.1 Sence mode Ranges: DC Voltage : 0 to 100mV, Resistance : 0 to 400 Ohms, Pt 100 : -150°C to 800°C (Minimum 5 equidistant readings required covering these ranges) 7.2 Thermocouples Ranges: T= 0° to 400°C E= 0° to 1000°C K= 0° to 1200°C R= 0° to 1750°C J= 0° to 1200°C S= 0° to 1750°C B= 600° to 1800°C N= 0° to 1300°C (Minimum 6 equidistant readings required covering these ranges) 8. Source mode: 8.1 Source mode Ranges: DC Voltage : 0 to 110mV, Resistance : 0 - 400 Ohms, Pt100 : -150°C to 800°C (Minimum 5 equidistant readings required covering these ranges) 8.2 Thermocouples Ranges: T= 0° to 400°C E= 0° to 1000°C K= 0° to 1200°C R= 0° to 1750°C J= 0° to 1200°C S= 0° to 1750°C B= 600° to 1800°C N= 0° to 1300°C (Minimum 6 equidistant readings required covering these ranges) 9. Required Instrument accuracy level : $\pm 0.25\%$ FSV 10. Required periodicity : 1 Year 11. Required Accuracy level of the reference master instrument: $\pm 0.0625\%$ FSV (minimum)	1 NO
-------	---	------

Sign & Seal of Contractor

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

50/10	Scope of Contract : Calibration of Secondary Master Temperature Instrument. 1. Material desc. : Temperature Calibrator 2. Make : Nagman 3. Model : NAGMAN 14+ 4. Inst.s/no. : 992613893 5. Unique sl.no. : SM-37 6. Range : Sense & source mode 7. Sense mode: 7.1 Sence mode Ranges: DC Voltage : 0 to 55mV, 0 to 550mV Resistance : 0 - 550 Ohms, 0 - 5.5 Kilo ohms Pt 100 : -150°C to 800°C (Minimum 5 equidistant readings required covering these ranges) 7.2 Thermocouples Ranges: T= 0° to 400°C E= 0° to 850°C K= 0° to 1200°C R= 0° to 1750°C J= 0° to 1100°C S= 0° to 1750°C B= 600° to 1800°C N= 0° to 1300°C (Minimum 6 equidistant readings required covering these ranges) 8. Source mode: 8.1 Source mode Ranges: DC Voltage : 0 to 110mV, 0 to 1100mV Resistance : 0 - 400 Ohms, 0-4 kilo ohms Pt 100 : -150°C to 800°C (Minimum 5 equidistant readings required covering these ranges) 8.2 Thermocouples Ranges: T= 0° to 400°C E= 0° to 1000°C K= 0° to 1200°C R= 0° to 1750°C J= 0° to 1200°C S= 0° to 1750°C B= 600° to 1800°C N= 0° to 1300°C (Minimum 6 equidistant readings required covering these ranges) 9. Required Instrument accuracy level : $\pm 0.25\%$ FSV 10. Required periodicity : 1 Year 11. Required Accuracy level of the reference master instrument: $\pm 0.0625\%$ FSV (minimum)	1 NO
-------	--	------

Sign & Seal of Contractor

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

60/10	Scope of Contract: Calibration of Secondary Master electrical Instrument. 1. Material desc. : Digital Multi meter 2. Make : Motwane 3. Model no. : DM6k1 4. Inst. sl.no. : A05776G09 5. Unique sl.no. : SM-38 6. Following Ranges to be calibrated: AC Voltage : 0 to 6V,60V,600V,750V DC Voltage : 0 to 600mV,6V,60V,600V,1000V AC Current : 0 to 60 mA, 600 mA,6A,10A DC Current : 0 to 60 mA, 600 mA,6A,10A Resistance : 0 to 600 ohms,6 k.ohms,60 k.ohms,600 k.ohms,6 M.ohms,60 M.ohms [Note: In each Calibration range minimum 5 equidistant calibration points (including zero & Full scale) are required.] 7. Required Instrument accuracy level: For AC: +/- 0.8 % FSV For DC: +/- 0.5 % FSV 8. Required reference master Instrument accuracy level: For AC: +/- 0.2 % FSV For DC: +/- 0.125 % FSV 9.Required periodicity : 1 Year	1 NO
-------	--	------

Sign & Seal of Contractor

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

70/10	Scope of Contract : Calibration of Secondary Master Temperature Instrument. 1. Material desc. : Temperature Calibrator 2. Make : Yokogawa 3. Model : CA71 4. Inst.s/no. : T1L8024 5. Unique sl.no. : SM-39 6. Range : Sense & source mode 7. Sense mode: 7.1 Sence mode Ranges: DC Voltage : 0 to 100mV,1V,10V,100V DC Current : 0 to 20 mA, 0 to 100 mA AC Voltage : 0 to 1V,10V,100V,300V Resistance : 0 to 400 Ohms, Pt 100 : -150°C to 800°C (Minimum 5 equidistant readings required covering these ranges) 7.2 Thermocouples Ranges: T= 0° to 400°C E= 0° to 1000°C K= 0° to 1200°C R= 0° to 1750°C J= 0° to 1200°C S= 0° to 1750°C B= 600° to 1800°C N= 0° to 1300°C (Minimum 6 equidistant readings required covering these ranges) 8. Source mode: 8.1 Source mode Ranges: DC Voltage : 0 to 100mV,1V,10V,30V DC Current : 0 to 20 mA, 4 to 20 mA Resistance : 0 to 400 Ohms, Pt 100 : -150°C to 800°C (Minimum 5 equidistant readings required covering these ranges) 8.2 Thermocouples Ranges: T= 0° to 400°C E= 0° to 1000°C K= 0° to 1200°C R= 0° to 1750°C J= 0° to 1200°C S= 0° to 1750°C B= 600° to 1800°C N= 0° to 1300°C (Minimum 6 equidistant readings required covering these ranges) 9. Required Instrument accuracy level : $\pm 0.25\%$ FSV 10. Required periodicity : 1 Year 11. Required Accuracy level of the reference master instrument: $\pm 0.0625\%$ FSV (minimum)	1 NO
-------	--	------

Sign & Seal of Contractor

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

80/10	Scope of Contract: Calibration of Secondary Master Temperature Instrument. 1. Material desc. : Temperature Calibrator 2. Make : Yokogawa 3. Model : CA71 4. Inst. sl.no. : T1L8028 5. Unique sl.no. : SM-40 6. Range : Sense & source mode 7. Sense mode: 7.1 Sence mode Ranges: DC Voltage : 0 to 100mV,1V,10V,100V DC Current : 0 to 20 mA, 0 to 100 mA AC Voltage : 0 to 1V,10V,100V,300V Resistance : 0 to 400 Ohms Pt 100 : -150° to 800°C (Minimum 5 equidistant readings required covering these ranges) 7.2 Thermocouples Ranges: T= 0° to 400°C E= 0° to 1000°C K= 0° to 1200°C R= 0° to 1750°C J= 0° to 1200°C S= 0° to 1750°C B= 600° to 1800°C N= 0° to 1300°C (Minimum 6 equidistant readings required covering these ranges) 8. Source mode: 8.1 Source mode Ranges: DC Voltage : 0 to 100mV,1V,10V,30V DC Current : 0 to 20 mA, 4 to 20 mA Resistance : 0 to 400 Ohms Pt 100 : -150° to 800°C (Minimum 5 equidistant readings required covering these ranges) 8.2 Thermocouples Ranges: T= 0° to 400°C E= 0° to 1000°C K= 0° to 1200°C R= 0° to 1750°C J= 0° to 1200°C S= 0° to 1750°C B= 600° to 1800°C N= 0° to 1300°C (Minimum 6 equidistant readings required covering these ranges) 9. Required Instrument accuracy level : $\pm 0.25\%$ FSV 10. Required periodicity : 1 Year 11. Required Accuracy level of the reference master instrument:$\pm 0.0625\%$ FSV (minimum)	1 NO
-------	---	------

Sign & Seal of Contractor

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

90/10	Scope of Contract: Calibration of Secondary Master electrical Instrument. 1. Material desc. : DC Digital Ammeter 2. Make : MECO 3. Unique sl.no. : SM-45 4. Inst. sl.no. : 3462215 5. Power Suply : 230V AC 6. Input : 75 mV 7. Range : 750A DC (Minimum 5 equidistant readings required covering this range) 8. Required Instrument accuracy level : ± 0.5 % FSV 9. Required periodicity : 1 Year 10.Required reference Instrument accuracy level: ± 0.125 % FSV	1 NO
100/10	Scope of Contract: Calibration of Secondary Master electrical Instrument. 1. Material desc. : D.C.Digital Voltmeter 2. Make : MECO 3. Unique sl.no. : SM-46 4. Inst.sl.no. : 3462315 5. Power Supply : 230V AC 6. Input : 200 V DC 7. Range : 199.9 V DC (Minimum 5 equidistant readings required covering this range) 8. Required Instrument accuracy level : ± 0.5 % FSV 9. Required periodicity : 1 Year 10.Required reference Instrument accuracy level: ± 0.125 % FSV	1 NO
110/10	Scope of Work : Calibration of Digital Pressure Gauge 1. Instrument Name: Digital Pressure Gauge 2. Make : Fluke 3. Model : 700G08 4. Inst.sl.no : 2742102 5. Unique sl.no : SM-47 6. Range : -1 to 70 kg/cm ² 7. Resolution : 0.001 kg/cm ² 8. Medium : OIL 9. Required Calibration Points- Range: -1 to 0 kg/cm ² - minimum 5 equidistant calibration points Range: 0 to 70 kg/cm ² - minimum 10 equidistant calibration points (including zero and full scale value) 10.Required Instrument accuracy level: ± 0.1 % FSV 11.Required periodicity: 1 Year 12.Required reference instrument accuracy level: ± 0.025 % FSV	1 NO

Sign & Seal of Contractor

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

120/10	Scope of Work : Calibration of Digital Pressure Gauge 1. Instrument Name: Digital Pressure Gauge 2. Make : Fluke 3. Model : 700G29 4. Inst.sl.no : 2751128 5. Unique sl.no : SM-48 6. Range : -1 to 210 kg/cm ² 7. Resolution : 0.01 kg/cm ² 8. Medium : OIL 9. Required Calibration Points- Range: -1 to 0 kg/cm ² - minimum 5 equidistant points Range: 0 to 210 kg/cm ² - minimum 10 equidistant points (including zero and full scale value) 10.Required Instrument accuracy: ± 0.1 % FSV 11.Required periodicity: 1 Year 12.Required reference instrument accuracy: ± 0.025 FSV	1 NO
130/10	Scope of Work : Calibration of Digital Pressure Gauge 1. Instrument Name: Digital Pressure Gauge 2. Make : Fluke 3. Model : 700G31 4. Inst.sl.no : 2763037 5. Unique sl.no : SM-49 6. Range : -1 to 710 kg/cm ² 7. Resolution : 0.01 kg/cm ² 8. Medium : OIL 9. Required Calibration Points- Range: -1 to 0 kg/cm ² - minimum 5 equidistant points Range: 0 to 710 kg/cm ² - minimum 10 equidistant points(including zero and full scale value) 10.Required instrument accuracy: ± 0.1 % FSV 11.Required periodicity: 1 Year 12.Required reference instrument accuracy: ± 0.025 % FSV	1 NO
140/10	Scope of Work : Calibration of Digital Pressure Gauge 1. Instrument Name: Digital Pressure Gauge 2. Make : Wika instruments 3. Model : CPG 1500 4. Inst.sl.no : 1A00CONW42Y 5. Unique sl.no : SM-51 6. Range : 0 to 700 kg/cm ² 7. Resolution : 0.01 kg/cm ² 8. Medium : OIL 9. Minimum 10 equidistant calibration points shall be selected in the entire range including zero and full scale value. 10.Required instrument accuracy: ± 0.1 % FSV 11.Required periodicity: 1 Year 12.Required reference instrument accuracy: ± 0.025 % FSV	NO 1

Sign & Seal of Contractor

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

150/10	Scope of Work : Calibration of R-Type master Thermocouple 1. Item Description : Primary Master Thermocouple 2. Unique Sl. No : PM-19 3. Type : R Type(Pt/Pt.Rh 13 %) 4. Range of the Thermocouple : 0°C to 1200°C 5. Calibration points required : 300, 500, 700, 900, 1050,1200°C 6. Required Thermocouple Accuracy (as per IS 2055): $\pm 3^{\circ}\text{C}$ up to $600^{\circ}\text{C} \pm 0.5 \%$ above 600°C 7. Calibration Periodicity: 1 Year	NO 1
160/10	Scope of Work : Calibration of R-Type master Thermocouple 1. Item Description : Primary Master Thermocouple 2. Unique Sl. No : PM-20 3. Type : R Type(Pt/Pt.Rh 13 %) 4. Range of the Thermocouple : 0°C to 1200°C 5. Calibration points required : 300, 500, 700, 900, 1050,1200°C 6. Required Thermocouple Accuracy (as per IS 2055): $\pm 3^{\circ}\text{C}$ up to $600^{\circ}\text{C} \pm 0.5 \%$ above 600°C 7. Calibration Periodicity: 1 Year	NO 1
170/10	Scope of Work : Calibration of Stop Watch 1. Item Description : Stop Watch 2. Calibration points required : Minimum 5 readings in the range of 1 second to 60minute. 3. Required Accuracy : 0.1% of reading 4. Calibration Periodicity: 1 Year	NO 5
	Terms & Conditions: Common for item No 10 to 170 1. All the instruments are to be calibrated at BHEL Trichy works. 2. The L1 offer will be considered on cumulative basis of all the items (from Item no 10 to 170). 3. The accuracy of reference masters used for calibration shall have minimum four times better accuracy than the BHEL's instrument(UUC) [except item no. 150 to 170]. 4. All the reference master instruments used for calibration should have valid calibration certificate traceable to national/international standards. 5. One copy of calibration certificate of the reference master instruments used for calibration shall be handed over to BHEL Trichy along with the calibration certificate of UUC. 6. The Calibration certificate should incorporate all the below mentioned details: i) The name, Sl.no and the unique identification no. of the BHEL's instrument. ii) Date of Calibration and Due date for Next Calibration. iii) Name and address of the customer has to be mentioned in the certificate as "M/s. BHEL, M&S Department, Trichy-14" iv) The details of the reference masters used for calibration like Sl. No, Range, Standard Value for measurement, Accuracy, etc.	
	v) Details of Traceability of the reference master instruments. vi) For each calibration point, the deviation and % error to be mentioned as applicable for UUC. vii) The calibration certificate shall include "as found and as left data". If both "as found and as left data" are same then it shall be exclusively mentioned in the certificate. viii)NABL Logo mentioning the certificate number shall be affixed on the certificate. 7. Calibration certificate should be delivered within 2 weeks after the instrument is calibrated. 8. After completion of calibration, three nos. of valid invoice shall be submitted. 9. The boarding, lodging, to & fro transportation cost of the calibration staffs are under vendor scope. 10.All the instruments identified for calibration are to be calibrated within 5 working days.	

Sign & Seal of Contractor

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

GENERAL TERMS AND CONDITIONS FOR M&S CONTRACTS

- 1) The workmen of contractor should be covered under PF/ESI, etc., as per labour laws.
- 2) Safety precautions have to be ensured by the Contractor Depending on the work nature. Necessary work permit system and personal protective equipments (PPE) such as electrical resistance rubber gloves, helmet, spectacle goggles, safety shoes, safety belt etc. as applicable to Mechanical works should be adhered while carrying out the work.
- 3) PPES for appropriate trade job has to be ensured by the contractor at the job site at all times.
- 4) The contractors may visit the area to assess the quantum of work before quoting.
- 5) The contractor should mention the point to point confirmation.
- 6) Contractor should commit for Terms and Conditions of the enquiry otherwise the offer shall be liable for rejection.
- 7) **TWO PART BID SYSTEM:** Contractor should send their offer for two part bid system as below
- 8) Contractor may visit to get acquaintance with quantum of day to day work by visiting BHEL Trichy premises before quoting.
- 9) The contractor should quote the exact time required to complete the work in their offer.

TENDERING CONDITIONS:

- a) The Bidders shall submit the offer in TWO PART BID SYSTEM (Part -I & II) along with EMD as indicated below which shall be sealed in ONE OUTER ENVELOPE.
- b) Envelope I- This sealed envelope should contain all the copies of technical bid together with un-priced commercial bid. This envelope should be clearly marked "Part I - Technical and commercial bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder. Envelope I should contain sealed EMD cover indicating the enquiry detail.
- c) Envelope II - This sealed envelope should contain price details. This envelope should be clearly marked as - "Part -II Price bid", indicating Enquiry No., Due Date and Address & Reference of the Bidder.
- d) Envelope III - This sealed envelope should contain requisite **EMD**. This envelope should be clearly marked as - "EMD COVER", indicating Enquiry No., Due Date and Address & Reference of the Bidder.
- e) All the three envelopes shall be put in one cover, duly sealed, super scribing as offer for Enquiry No., and due date of opening, Name of the work and the address and reference of the Bidder.
- f) The offer should reach this office on or before the due date by 14.00 Hrs. (IST). Late offers will not be considered.
- g) Tender should not be addressed to any Individual's name but only by designation to:

THE Sr.ENGINEER
MAINTENANCE & SERVICES / CONTRACTS,
2&4 BUILDING,
BHARAT HEAVY ELECTRICALS LIMITED,
HIGH PRESSURE BOILER PLANT,
TIRUCHIRAPALLI - 620 014.
TAMIL NADU, INDIA.

- h) Tenders should be free from CORRECTION AND ERASURES, Corrections if any, must be attested. All amounts shall be indicated both in words as well as in figures. Where there is difference between amount quoted in words and figures, amount quoted in words shall prevail.
- i) Offers should be in ENGLISH and accompanied by detailed Point to point confirmation of the scope of work.

Sign & Seal of Contractor

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

OPENING OF TENDERS:

- The Part I - Technical & un-priced commercial bid and EMD Cover alone would be opened on the Tender opening date(as mentioned in the enquiry) by 14.30Hrs(IST)
- The Part II - Price bid of technically suitable Bidders alone would be opened. The Technically suitable Bidders would be informed about the Price bid opening date.
- Clarifications if any required by BHEL for Technical evaluation would be sought from Bidders before opening of Part II - price bid.

GST:

- Response to Tenders for Contractor will be entertained only if the vendor has a valid GST registration no which should be clearly mentioned in the offer. If any specific exemption is available, a declaration with due supporting documents need to be furnished for considering the offer.
- Contractor shall mention their GSTN registration number in all their invoices and invoices shall be in the format as specified/prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice no, commercial invoice no etc., then the Invoice No which is linked/uploaded in GSTN network shall be clearly indicated), item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, etc.
- All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code).

LD CLAUSE:

If the contractor fails to complete the work as per terms & conditions of the order within the delivery schedule, 0.5% of the order value will be deducted for each week of delay or part thereof subject to a maximum of 10% of the total contract value.

IMPORTANT NOTE: BHEL reserves the right to short close this contract with one month advance notice due to administrative reasons. BHEL's decision in this regard is final. Under such circumstances payment will be made for actual number of work carried out up to the period.

Sign & Seal of Contractor

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES

☎: (0431) 2575958/e-mail: avinashsahoo@bheltry.co.in



ISO 9001

ENQ No: 9251700029

Dt.22.09.2017

COMMERCIAL TERMS AND CONDITIONS FOR M&S CONTRACTS

- 1) 100% payment will be made after completion of work on submission of invoice in triplicate duly certified by Area In – charge.
- 2) Attendance register should be maintained.
- 3) **Payment of EMD & SD must be in e-Collect mode only, while making such payment, Enquiry number may be mentioned in Remark column. Offers without EMD shall be liable for rejection.**

Procedure to remit (EMD/SD) money to BHEL Trichy's Account :

Login to : <https://www.onlinesbi.com/prelogin/icollecthome.htm?corpID=574693>

- a) Select State Bank Collect available on the top (pre login page)
 - b) Accept the terms and conditions and click "PROCEED"
 - c) Select State "TAMILNADU " and Institution type " INDUSTRY ".
 - d) Select " **BHEL TRICHY** " under "INDUSTRY".
 - e) In the next page, Select APPROPRIATE category, fill details correctly & click "SUBMIT".
 - f) If all details entered are correctly populated, click "CONFIRM "to proceed.
 - g) Make payment as per your convenience. (Options available are payment of fees through **SBI Net Banking, State Bank ATM cum Debit Cards / Other Bank Debit / Credit Cards and through SBI Branches**).
 - h) SAVE & Keep the copy of receipt for future reference.
- 4) Security Deposit shall be furnished by the successful vendor to the total contract value before starting the work. The total amount of Security Deposit will be 5% of the contract value. EMD of the successful tenderer shall be converted and adjusted towards the required amount of Security Deposit. SD is forfeited in case of any failure in execution of the contract or due to any shortcomings observed in the documentation furnished earlier for getting qualified or in case the Contractor is banned.
 - 5) An additional payment as per circular ref. BHE/HR/W/EW/08.04.2014 is to be paid to the contract workmen as below, over and above the minimum wages prescribed by the government of Tamil Nadu:

Unskilled	-	Rs.3200/-
Semiskilled	-	Rs.3700/-
Skilled	-	Rs.4100/-
 - 6) Bonus @ 8.33 % to workmen to be paid.
 - 7) **Rate should be quoted as per price bid.**
 - 8) Taxes if any will be mentioned separately in the offer.
 - 9) The rate that is offered should be comprehensive and no separate charges will be made towards expenses like travel, boarding and lodging.
 - 10) The contractor should quote the validity of the offer.
 - 11) If two or more vendors offer the same rate, negotiation will be conducted separately.
 - 12) The contractor should remit the salary/wages for their workmen only through Bank. Monthly clearance will be given in respect of all contractors, if only the salary/ wages to the workmen has been remitted through the bank account of the contract workmen. The relevant Bank statement/proof for Bank payment should be produced along with PF and ESI challan's to Welfare Section every month.

Certificate by Chartered Accountant on Letter Head

This is to certify that M/s. _____ (hereinafter referred to as 'company') having its registered office at _____ is registered under MSMED Act 2006, (Entrepreneur Memorandum No (Part II)) _____ dt. _____, Category: (Micro/Small). (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as per the latest audited financial year _____ as per MSMED Act 2006 is as follows:

1. For Manufacturing Enterprises: Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No. S.O.1722(E) dated October 5, 2006):

₹ _____ Lacs

2. For Service Enterprises: Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act 2006):

₹ _____ Lacs

(Strike off whichever is not applicable)

The above investment of ₹ _____ Lacs is within permissible limit of ₹ _____ Lacs for _____ Micro / Small (Strike off which is not applicable) Category under MSMED Act 2006.

Or

The company has been graduated from its original category (Micro/Small) (Strike off which is not applicable) and the date of graduation of such enterprise from its original category is (dd/mm/yyyy) which is within the period of 3 years from the date of graduation of such enterprise from its original category as notified vide S.O. No. 3322(E) dated 01.11.2013 published in the gazette notification dated 04.11.2013 by Ministry of MSME.

Date:

(Signature)

Name:

Membership number:

Seal of Chartered Accountant

BHARAT HEAVY ELECTRICALS LIMITED

(A Govt. of India Undertaking)

High Pressure Boiler Plant, Tiruchirappalli 620 014, India

MAINTENANCE & SERVICES DEPARTMENT

☎: (0431) 2575958 / 2575123 / e-mail : avinashsahoo@bheltry.co.in

ENQ No: 9251700022

Dt.22.09.2017

SCHEDULE FOR PRICE BID

SUB: on-sit calibration of master instruments.

Ref: Enquiry no: 9251700029/ Dated: 22/09/2017; Due Dt: 14/10/2017

ITEM NO.	SCOPE OF WORK	RATE	VALUE
10/10	SM-06, DC Calibrator		
20/10	SM-08, Digital Ammeter		
30/10	SM-09, Loop Calibrator		
40/10	SM-36, Temp. Calibrator		
50/10	SM-37, Temp. calibrator		
60/10	Sm-38, Digital Multi meter		
70/10	SM-39, Temp Calibrator		
80/10	SM-40, Temp Calibrator		
90/10	SM-45, Digital Ammeter		
100/10	SM-46, Digital Voltmeter		
110/10	SM-47, Digital Pressure Gauge		
120/10	SM-48, Digital Pressure Gauge		
130/10	SM-49, Digital Pressure Gauge		
140/10	SM-51, Digital Pressure Gauge		
150/10	PM-19, R-Type Thermocouple		
160/10	PM-20, R-Type Thermocouple		
170/10	Stop Watch		

- Taxes if any should be quoted extra.

Note: Please quote rate for the above item text with reference from detailed text of Scope of work.

- 1). 100% payment will be made after completion of work on submission of invoice in triplicate duly certified by Area In – charge.
- 2). Tax deduction will be made from every bill at the prevailing rate as per the Government rule and regulation from time to time.
- 3). Detailed scope of work and other terms and conditions are specified in the Technical Bid of the Tender.
- 4). **L1 vendor will be finalized based on Individual item basis.**

Sign & Seal of Contractor