



बैंक नोट पेपर मिल इण्डिया प्रा. लिमिटेड

BANK NOTE PAPER MILL INDIA PVT LIMITED

JV of SPMCIL - A Govt. of India Enterprises & BRBNMPL - A Subsidiary of RBI

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OPEN TENDER ENQUIRY – BNPM/OTE/CALIBRATION OF INSTRUMENTS/0817/2022-23

Issue Date & Time: 10.02.2022 15:30 hrs.

Closing Date & Time: 24.02.2022 11:00 hrs.

A. Scope of work: Calibration of following Instruments

S No	Item Details	Make	Standard	UoM	Quantity
1.	Three Phase Variable AC Power Supply	Voltamp	NABL	Nos	1
2.	Single Phase Variable AC Power Supply	Automatic Electric	NABL	Nos	1
3.	Soldering & De-soldering Station	Solomon	NABL	Nos	2
4.	Variable DC Power Supply	Aplab	NABL	Nos	1
5.	Dual Channel Variable DC Power Supply	Aplab	NABL	Nos	1
6.	Air Set Panel, 0 to 2.5 bar & 0 to 10 bar	Nagman	NABL	Nos	2
7.	Temperature Calibrator, Range: 50°C to 350°C	Nagman	NABL	Nos	1
8.	Multifunction Process Calibrator	AOIP	NABL	Nos	1
9.	Pressure Calibrator range: -0.85 to 2 bar	R&D Instruments	NABL	Nos	1
10.	Pressure Calibrator range: 0 to 70bar	R&D Instruments	NABL	Nos	1
11.	Master Pressure Gauge (0 to 2.5 bar)	Altop	NABL	Nos	1
12.	Master Pressure Gauge (0 to 10 bar)	Altop	NABL	Nos	1
13.	Master Pressure Gauge (0 to 400 bar)	Altop	NABL	Nos	1
14.	Master Pressure Gauge (-1 to 0 bar)	Altop	NABL	Nos	1

Note:

1. The calibration is to be carried out on site (i.e. at BNPM, Mysuru). Instruments that cannot be calibrated on field may be taken for calibration at their laboratory at bidder's cost. BNPM shall reserve the right to deploy its representative for witnessing the calibration in laboratory at BNPM's cost.
2. The agency shall carryout the calibration work at BNPM site only without affecting our daily activities and during such times when it is made available to the party.
3. The calibration should be traceable to NABL standards and participating bidder's lab should have accreditation of NABL for the calibrating instruments.
4. Details of NABL accreditation should be submitted along with the price bid.
5. The agency shall issue the individual calibration certificate to each of the Instrument being calibrated which will be valid for at least one year. The Work Order Shall remain valid upto 12 months from the date of issue. However the calibration work shall be carried out as per intimation received from Technical Dept. of BNPM.
6. Calibration status labels/sticker shall be affixed on all instruments after Calibration.
7. Refer "Instrument specifications" (pg. 5 – 10) for range/specifications/model/serial number of instruments which needs to be calibrated.



Other terms & conditions :

1. Bidders shall understand the complete scope of work before tendering by visiting the plant premises if required. Ignorance of the site shall not be accepted as basis for any claim / compensation. The submission of the tender by the bidder will be construed as evidence that such an examination was made and any further claims/disputes in regard to price quoted shall not be entertained or considered.
2. Bidders may visit / inspect the BNPM plant installations at their own cost with prior permission of BNPM, if required, before submitting the offer.
3. The expenses towards transportation of man & materials, accommodation (food & lodging) of personnel, local transport & travel, expenses towards preparation and submission of individual calibration certificates/ affixing labels etc. will be in the scope of bidders.
4. If required, necessary sectional wise shutdown shall be arranged by BNPM for the execution of works. Complete Plant shutdowns (if any) planned by BNPM shall be informed to Bidder well in advance to plan for additional manpower for attending the works. Bidder has to promptly arrange the required manpower to utilize the plant shutdowns.
5. Provision for all the tools, tackles, instruments, equipment etc. whichever required for the completion of the works is in the Scope of bidder and shall be arranged for the bidder.
6. Bidder shall take full responsibility for supervision and proper execution of works covered under the scope of contract. The work should be executed in through professional way & in true workmanship. The work will be carried out without hampering / disturbing day to day functioning of the BNPM. Any damage caused to BNPM machinery or any other assets inside BNPM premises by any deliberate efforts to effect/hamper the production of the plant by the bidder or his/her team shall be made good or replaced at cost of the bidder only.
7. Bidder shall be held responsible for any violation of statutory regulations local, state or central and BNPM instructions that may endanger safety of men, equipment, material and environment in his scope of work or another bidder or agency. It will be the sole responsibility of the Bidder to cover the deputed manpower of the Bidder at BNPM, Mysore with proper insurance. BNPM will not be responsible for any incidence due to non-insurance coverage of the deputed manpower by the CONTRACTOR.
8. The entire works should be to the satisfaction of BNPM. If any of the work is found to be unsatisfactory by BNPM, bidder has to rectify the same within the stipulated timeframe given by BNPM at their own cost & expenses.
9. On completion of the entire works, bidder shall submit the necessary documents/certificates as mentioned in the scope of work.



10. Bidder's personnel to be engaged in job must use safety gadgets i.e. safety boot, safety helmet, goggles, ear plug etc., inside the installations wherever applicable. Bidder shall ensure the safety of his work personnel while carrying out the calibration job. Supply of all necessary safety gadgets/ PPE are in the scope of bidder.

11. Bidder's personnel to be engaged in job shall have to obtain entry pass from BNPM Security & Safety department / Individual Section Heads authority for entering in BNPM's secured areas / installations.

I. For Online Submission mode

Type of Tender (Two Bid / PQB / EOI / RC / Development / Indigenization / Disposal of Scrap / Security item etc.	Single Bid System (Part-I Techno-commercial bid & Financial /Price Bid)
Tender Processing Fee	Rs. 100/- + taxes (to be paid online)
Bid submission mode	Online Through e-tendering portal www.tenderwizard.com/BNP .
Closing date and time for receipt of tenders	24.02.2023; 1100 Hrs.

- Interested bidders may obtain further information about this requirement from the above office selling the documents. They may also visit our website www.tenderwizard.com/BNP mentioned above for further details.
- Aspiring Bidders/Contractors who have not registered in e-tendering should register through the website E – Tendering (www.tenderwizard.com/BNP) for participating in the Online Tenders. The registration charges will be Rs. 500/- plus applicable taxes (per year) which needs to be paid through electronic mode only.
- For details, registration and e-payment, please visit e-tendering website www.tenderwizard.com/BNP or contact KEONICS help desk @ 9686196755 / 8951906455
- Class III Digital Signature Certificate (DSC) is mandatory to participate in e-Tenders. Participating bidders/Contractors have to make sure that they have the valid DSC. If not, they can procure from any of the firm as approved by CCA.
- The tenderer shall satisfy BNPMIPL that they are competent and authorized to submit tender and/or to enter into a legally binding contract with the BNPMIPL. To this effect, any person giving a tender shall render documentary evidence that his signature on the tender submitted by him is legally binding upon himself, his firm or company as the case may be
- BNPM reserves the right to cancel the tender at any stage without assigning the reasons thereof.



B. Terms & Conditions:

1. Documents to be submitted:

- a) Signed copy of this document (All the pages).
- b) Filled price details as per the format provided below in this document.
- c) Technical details /datasheet for the enquired product (if applicable).
- d) Micro / Small Enterprise (Certificate issued by MSME)/UAM/NSIC certificate (If applicable).

2. Price: Price should be inclusive of manpower cost, tools cost, manpower & tools transportation cost, lodging & boarding charges, P&F, To & Fro Freight, Transit Insurance and GST. Price shall remain fixed & no price variation shall be accepted till completion of contract.

3. Terms of Payment: 100% payment shall be made within 30 days after calibration & receipt of calibration reports at BNPM Plant, Mysuru and on production of all required documents by the supplier. NEFT/RTGS details shall be furnished along with the Original Invoice.

4. Delivery Terms & Delivery Address: Work shall be carried out on F.O.R Basis, Bank Note Paper Mill India Pvt. Ltd., Mysore.

5. Required Delivery Schedule: The Work Order Shall remain valid upto 12 months from the date of issue of Work Order. However the calibration work shall be carried out as per intimation received from Technical Dept of BNPM.

Delivery of reports: Engineering Stores, Bank Note Paper Mill India Pvt Ltd., Note Mudran Nagar, Mysore - 570003. Stores contact details: 0821-2401476/486/412/461.

6. Method of evaluation: Evaluation shall be carried out on **overall effective price** quoted by the bidders, unless any other method of evaluation is specifically provided in the enquiry. The quoted price for each item should be inclusive of P&F, To & Fro Freight, Transit Insurance and any other charges required for delivery of that item to BNPM, Mysuru.

7. Taxes: All Taxes shall be as applicable in GST regime.

Payment of CGST, SGST, IGST & UTGST: The suppliers are required to adhere the following procedure in order to honour the payment against CGST, SGST, IGST & UTGST in the invoice.

- i) An invoice issued by the vendor for goods or services or both as applicable should be in accordance with the provisions of Sec 31 of the CGST Act & should contain all the prescribed information's in accordance with Chapter VI of CGST rules 2017.
- ii) A debit note issued if any, by the vendor should be in accordance with the provisions of Sec 34 of the CGST Act.
- iii) The vendor should mandatorily upload the aforementioned documents in respective GSTR, details of outward supplies of goods or services as applicable within the prescribed time under GST Act.



- iv) The vendor should provide the relevant documents to confirm the tax charged on the invoice has been paid to the credit of government after adjusting the ITC if any.

Notwithstanding the above, the supplier should provide indemnification as follows:

In the event of non-compliances with respect to GST Act & Rules by the successful bidder, the purchaser is allowed to adjust the GST amount from retention amount (either in BG or in cash) held by the company. If no amount is available for recovery, the successful bidder will refund the GST liability within 10 days from the date of GST reversal in GSTRN.

The above requirements are mandatory to claim any GST liability, failing which, the GST liability will not be paid /reimbursed/accepted.

A. The bidder should consider the following points while quoting GST Rate in their bids:

1. In case of unregistered bidders, the rate and amount of GST shall be shown as “Nil”.
2. In case of a compounding dealer, GST shall be quoted as “Nil” as compounded dealers cannot collect GST from the consumers. The price quoted therefore shall be construed as all inclusive.
3. In case of work contracts or pure labour contracts, the bidder shall quote single GST rate for the work.
4. In case of composite supplies, i.e., a supply consisting of one principal supply and other ancillary supplies, the supply will attract the GST Rate of the principal supply. For example, if Item A in the supply order is the major or principal supply and other items are ancillary supplies, the bidder shall quote the GST Rate applicable to the principal goods (i.e., Item A) being supplied.
5. In case of mixed supply, i.e., a combination of two or more individual goods made together for a single price (each of these items can be supplied separately and is not dependent on any other), the total supply will attract the GST rate of the item which has the highest rate of tax. For example, if Item A in the mixed supply attracts highest rate of tax, the bidder shall quote the GST rate applicable to item A for total mixed supply.
6. In case of supplies which are neither composite nor mixed supplies, the bidder shall quote the GST Rate applicable to each item of supply separately.
7. If there is any difference of opinion regarding classification in HSN code, the bidder should sought clarification/raise query within the given time from the date of tender and it would be clarified before submitting the bid. Once clarified then that will be final & binding and no deviation shall be granted.

C. Other instructions for the bidders to claim any GST liability, failing which, the GST liability will not be paid/reimbursed/accepted:

1. Registered/compounding Contractor/supplier should produce GST Invoice containing all the particulars stated in Rule 46 of the CGST Rules, 2017 in accordance with the provisions of Section 31 of the CGST ACT.
2. The supplier should mandatorily update the invoice details in GSTR-1, details of outward supplies of goods or services within the prescribed time under GST Act
3. The Payment shall be made net of TDS as per the provisions of CGST/SGST/IGST Act.



4. Wherever there is difference in the amount admitted, the supplier may be directed to issue a Credit Note (in case of reduction in the Invoice value)/Debit Note (in case of increase in the Invoice value), and payment shall be released only after the receipt of such Debit or Credit Note
 5. Supplier should provide the relevant documents to confirm the tax charged on the invoice has been paid to the credit of Government after adjusting with ITC, if any.
 6. Supplier should provide indemnification as follows: “In the event of non-compliances with respect to GST ACT and Rules by the supplier, the supplier should refund the GST liability within 10 days from the date of GST reversal in GSTRN failing which the purchaser shall recover the GST amount from the retention amount (whether in BG or in Cash) held by the company”.
- 8. Calibration Certificate:** The service provider shall provide calibration certificate for all calibrated instruments valid for **12 months** from the date of calibration of instruments at BNPM, Mysuru.
- 9. Liquidated Damages (LD):** Liquidated damages shall be applicable at the rate of 0.5% per week or part thereof until actual completion of calibration & submission of reports at BNPM, Mysuru, subject to a maximum deduction of 10% of the delayed good's /service's contract price.
- 10. Delay in supplier's performance:** Time for and the date specified in the contract or as extended for the delivery of the stores shall be deemed to be the essence of the contract and the supplier shall deliver the goods and perform the services under the contract within the time schedule specified by BNPM in the contract.
- Any delay attributable to the supplier in maintaining its contractual obligations towards delivery of goods and performance of services shall render the supplier liable to any or all the following sanctions besides any administrative action such as (a) Imposition of liquidity damages; (b) Termination of contract for default.
- 11. Extension of Time:** If the contract is delayed in the progress of work by changes ordered in the work, or any clause which BNPM shall decide to justify the delay, then the time of completion shall be extended by a reasonable time.
- If at any time during the currency of contract, the supplier encounters conditions hindering timely delivery of the goods and performance of services, the supplier shall promptly inform BNPM in writing about the same and its likely duration and make a request to BNPM for extension of the delivery schedule accordingly. On receiving the supplier's communication, BNPM shall examine the situation as soon as possible and, at its discretion, may agree to extend the delivery schedule, with or without liquidated damages for completion of supplier's contractual obligations by issuing an amendment to the contract.
- 12. Risk Purchase Clause:** If the supplier fails to abide by the terms and conditions of the contract/agreement, or fails to deliver the material as per the delivery schedule or any time repudiates the contract,



Procure the tendered item / render service from other agencies at the risk and cost of the supplier. The cost difference between the alternative arrangement and existing contract value wherein default has been made will be recovered from the supplier along with the other incidental charges.

In case of procurement through alternative sources, if procurement price is lower than the existing contract value wherein default has been made, in such case no benefit on this account will be passed on to the supplier.

13.Settlement of Disputes through Arbitration: All disputes and differences of any kind whatsoever arising out of or in connection with the contract, whether during the progress of the work or after their completion except accepted matters shall be settled through arbitration process as per the Arbitration & Conciliation Act, 1996. The venue of arbitration shall be Mysore, Karnataka.

14.Legal Jurisdiction: The Courts of Mysore (Karnataka State) shall alone have jurisdiction to decide on any legal matter of dispute whatsoever arising out or in respect of the contract.

15.Force Majeure: In the event of any unforeseen event directly interfering with the supply of stores arising during the currency of the contract, such as war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, or acts of God, the Contractor shall, within a week from the commencement thereof, notify the same in writing to the Purchaser with reasonable evidence thereof. Unless otherwise directed by BNPM in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. If the force majeure condition(s) mentioned above be in force for a period of 90 days or more at any time, either party shall have the option to terminate the contract on expiry of 90 days of commencement of such force majeure by giving 14 days' notice to the other party in writing. In case of such termination, no damages shall be claimed by either party against the other, save and except those which had occurred under any other clause of this contract prior to such termination.

16.Fore-Closure Clause: If at any time during the continuation of this contract, the use of material ordered in this contract is completely banned or due to drastic change in Government policy its use as, raw material is discontinued or is declared hazardous to public health or cause rising to civil commotion, epidemics, wide-spread strikes and 21 days' notice of such eventualities is given by purchaser to the seller, the seller without any right to enforce the contract, will agree to the fore-close the performance of balance portion of this contract and in that event no claim for damages or loss will be lodged against the purchaser.

17.Rights of Rejection: BNPMIPL reserves the right to reject any or all the applied bids without assigning any reason whatsoever. The enquiry can be rejected on national security grounds.



Instruments Specifications:

Three Phase Variable AC Power Supply - Auto Transformer (Variac)

Make: Voltamp/ Equivalent

Model: 15PM-3(SPL)

Input: 415V AC, 3Phase, 50Hz

Output: 0-500V AC, 3Phase, 50Hz

Max. Output Current: 15A

Cooling: Air cooled

Meter: Digital Voltmeter & Ammeter with selector switches to read output volt and current.

Indication: Mains on Lamp RYP

Protection: 3 pole MCB on Input

Output: Thru 3 phase socket

Operation: Manual by knob provided on unit / Motorized.

Single Phase Variable AC Power Supply - Auto Transformer (Variac)

Make: Automatic Electric ltd.,

Model: 4D-IPM8

Input Volts: 230 V AC, 50Hz, 1 Phase

Output Volts: 0 to 260 V AC

Current rating: 4 A

Digital Meter (V & I): will be provided

Power Socket: 230VAC socket (Std. Indian Make) - 1 No. with On-Off lamp Indication switch.

Soldering and De- soldering Station – 2nos

Make: Solomon

Model: SL 916

Voltage: - Power Consumption

(Soldering & De-soldering): 220/240 V AC

Temperature setting range: Soldering: 150 - 420°C

De-soldering: 210 - 480°C

Heating operating voltage

(Soldering & de-soldering): 24 V AC

Station: L218: W: 176:H145 (mm)

Weight: 5300 g

Station-Hand piece Cord length: 115 cm

AC Power Cord: 3 pin plug 180 cm

Vacuum pump: -500 mmHg 24 V AC

Variable DC Power Supply

Make: Aplab

Model: L3202

Output Voltage: 0 – 32 V DC

Output Current: 0 – 2 A



Metering: 3 Digit DPM.

Meter Accuracy: ± 3 counts.

Constant Voltage Mode:

Regulation: Line: $\pm 0.01\% \pm 2\text{mV}$ for $\pm 10\%$ change in line output.

Load: $\pm 0.01\% \pm 2\text{mV}$ for load change from zero to full load.

Ripple & Noise: 1mV rms max. 20Hz - 20MHz.

Constant Current Mode:

Regulation: Line: $\pm 0.1\% \pm 250\mu\text{A}$ for $\pm 10\%$ line change.

Load: $\pm 0.1\% \pm 250\mu\text{A}$ for change in output voltage from 0 Volts to maximum output voltage.

Ripple & Noise: 0.04% rms.

Mode Indication: LED indication for constant voltage / current operating mode.

Line Voltage: 230V AC $\pm 10\%$ 50Hz, single phase

Dual channel Variable DC Power Supply

Make: Aplab.

Model: L3205.

Output Voltage: 0 – 32 V DC.

Output Current: 0 – 5 A.

Metering: 3 Digit DPM.

Meter Accuracy: ± 3 counts.

Constant Voltage Mode:

Regulation: Line: $\pm 0.01\% \pm 2\text{mV}$ for $\pm 10\%$ change in line output.

Load: $\pm 0.01\% \pm 2\text{mV}$ for load change from zero to full load.

Ripple & Noise: 1mV rms max. 20Hz - 20MHz.

Constant Current Mode:

Regulation: Line: $\pm 0.1\% \pm 250\mu\text{A}$ for $\pm 10\%$ line change.

Load: $\pm 0.1\% \pm 250\mu\text{A}$ for change in output voltage from 0 Volts to maximum output voltage.

Ripple & Noise: 0.04% rms.

Mode Indication: LED indication for constant voltage / current operating Mode.

Line Voltage: 230V AC $\pm 10\%$ 50Hz, single phase

Air Set Panel

Make: Nagman

Pressure Gauges Range:

1) 0 to 2.5 Bar

2) 0 to 6 Bar

Accuracy: $\pm 1.6\%$ FS

Microprocessor Based Universal Temperature Calibrator

Make: Nagman

Model: MTC 350

Range: 50°C to 350°C

Resolution: 0.1°C

Accuracy: $\pm 0.4^\circ\text{C}$

Stability: $\pm 0.05^\circ\text{C}$

Stabilisation Time: 15 to 20 Minutes



Temperature Readout: °C / °F Switchable

Well Diameter: 25 mm

Immersion Depth: 110 mm

Interchangeable Thermowells: Single hole to suit 1/4" & 1/2" Probes.

Measurement Capability: Thermocouples: ISA Types J, K, R, S, N RTD: Pt100 IEC Std.

mA: 0 to 25 mA mV : 0 to 100 / 1000 mV Volt : 0

Resistance: 0 to 500 Ohms / 3.5 kOhms

Smart Pressure Calibrator: -0.85 to 2bar

Make: R & D Instrument Services

Model: APC 2

Measurement Range: -0.85 to 2 Bar:

Accuracy: $\pm 0.05\%$ F.S

Pressure Display Units: bar, psi, kg, kPa, MPa, mmHg, atm, mH2O, inHg, inH2O, ftH2O, cmH2O, mbar

Display type Large Graphic Display (LCD/TFT)

Keypad type: Touch / Membrane Keypad

Pressure Port: 1/4 -inch

Volt Input: 0 to 30V DC

Pressure Switch Test Maximum, 5V DC

Smart Pressure Calibrator: 0 to 70bar

Make: R & D Instrument Services

Model: APC70

Measurement Range: 0 to 70 Bar:

Accuracy: $\pm 0.05\%$ F.S

Pressure Display Units: bar, psi, kg, kPa, MPa, mmHg, atm, mH2O, inHg, inH2O, ftH2O, cmH2O, mbar

Display type Large Graphic Display (LCD/TFT)

Keypad type: Touch / Membrane Keypad

Pressure Port: 1/4 -inch

Volt Input: 0 to 30V DC

Pressure Switch Test Maximum, 5V DC

<u>Master Pressure Gauge (0 to 2.5 bar)</u> Make: Altop Industries Ltd. Model: APCAL-4000 Range: 0 to 2.5 bar Resolution: 0.01 bar Accuracy: $\pm 0.25\%$ FSD Connection size: 0.5 inch	<u>Master Pressure Gauge (0 to 400 bar)</u> Make: Altop Industries Ltd. Model: APCAL-4000 Range: 0 to 400 bar Resolution: 1.0 bar Accuracy: $\pm 0.25\%$ FSD Connection size: 0.5 inch
<u>Master Pressure Gauge (0 to 10 bar)</u> Make: Altop Industries Ltd.	<u>Master Pressure Gauge (-1 to 0 bar)</u> Make: Altop Industries Ltd.



Model: APCAL-4000 Range: 0 to 10 bar Resolution: 0.05 bar Accuracy: +/- 0.25% FSD Connection size: 0.5 inch	Model: APCAL-4000 Range: -1 to 0 bar Resolution: 0.005 bar Accuracy: +/- 0.25% FSD Connection size: 0.5 inch
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Multifunction Process Calibrator

Make: AOIP

Model: CALSYS



Measuring Function:

Measuring Function	Range	Range	Resolution	Accuracy	Remark	
DC Voltage	50mV	-5 to 55 mV	1μV	0.02%+10	Impedance : about 100MΩ	
	500mV	-10 to 550 mV	10μV	0.02%+2		
	5V	-0.1 to 5.5 V	0.1mV	0.02%+5	impedance : 1MΩ	
	50V	0 to 55 V	10mV	0.03%+5		
DC Current	50mA	-5 to 50 mA	1μV	0.02%+2	impedance : 10MΩ	
Resistance	About 1mA exciting □ 500Ω	0 to 550 Ω	0.01Ω	0.02%+0.1Ω	Plough voltage about 2.5 V not including the accuracy of down-lead resistance	
	5KΩ About 0.1mA exciting	0 to 5.5 KΩ	0.1Ω	0.02%+0.5Ω		
Frequency	100Hz	20 to 110.0Hz	0.1Hz	±2	impedance : 100 kΩ or more Square wave atleast 1Vp-p 50% duty cycle	
	1Khz	0.1 KHz to 1.1 KHz	1Hz			
	10Khz	0.10KHz to 10 KHz	0.1KHz			
Thermocouple	R	0°C to 1767°C	1°C	0 to 500°C : 1.8°C	Adopt ITS-90 Thermostatic scale not including the accuracy of inner temperature compensatory error	
	S	0°C to 1767°C		500 to 1767°C : 1.5°C		
	K	-100°C to 1372°C	0.1°C	-100 to 0°C : 1.2°C		
				0 to 1372°C : 0.8°C		
				-50 to 0°C : 0.9°C		
	E	-50°C to 1000°C		0 to 1000°C : 1.5°C		
	J	-60°C to 1200°C		-60 to 0°C : 1°C		
				0 to 1200°C : 0.7°C		
	T	-100°C to 400°C		-100 to 0°C : 1°C		
				0 to 400°C : 0.7°C		
	N	-200°C to 1300°C		-200 to 0°C : 1.5°C		
				0 to 1300°C : 0.9°C		
	B	600°C to 1820°C		1°C		600 to 800°C : 2.2°C
			800 to 1000°C : 1.8°C			
			1000 to 1800°C : 1.4°C			
RTD	PT100	-200°C to 800°C	0.1°C	-200 to 0°C : 0.5°C	Pt100-385 Thermometric scale not including the accuracy of down-lead Resistance	
				0 to 400°C : 0.7°C		
				400 to 850°C : 0.8°C		
	PT1000	-200°C to 630°C		-200 to 100°C : 0.22°C		
				100 to 300°C : 0.3°C		
				300 to 630°C : 0.4°C		
	Cu50	-50 to -150°C		-50 to 0°C : 0.5°C		
				0 to 150°C : 0.7°C		



Output Function:

Measuring Function	Range	Measuring Range	Resolving Power	Accuracy	Remark	
DC Voltage	100mV	-10 to 110 mV	1 μ V	0.02%+10	Max output current 5 mA Output resistance <0.1 Ω	
	1V	-0.1 to 1.10 V	10 μ V	0.02%+10		
	10V	-1 to 11 V	0.1mV	0.02%10		
DC Current	20mA	0 to 22 mA	1uA	0.02%+10	Inside power supply24 V, 1 K Ω resistance at 20 mA	
Analog Transducer	-20mA	-0 to 22 mA	1uA	0.02%+10	Outside power supply 5 to 28 V, 1K Ω resistance at 20 mA	
Resistance	400 Ω	0 to 400 Ω	0.01 Ω	0.02% + 0.1 Ω	\pm 0.1 to 3 mA exciting current	
	4K Ω	0 to 4 K Ω	0.1 Ω	0.05% + 1 Ω	\pm 0.05 to 0.3 mA exciting current	
	40K Ω	0 to 40 K Ω	1 Ω	0.1% + 10 Ω	\pm 0.01 to 0.03 mA exciting current	
Thermocouple	R	0 to 1767	1 $^{\circ}$ C	0 to 100 $^{\circ}$ C : 1.5 $^{\circ}$ C	ITS-90	
	S	0 to 1767		100 to1767 $^{\circ}$ C : 1.2 $^{\circ}$ C		
				0 to 100 $^{\circ}$ C : 1.5 $^{\circ}$ C		
				100 to1767 $^{\circ}$ C : 1.2 $^{\circ}$ C		
	K	-200 to 1372	0.1 $^{\circ}$ C	-200 to -100 $^{\circ}$ C : 0.6 $^{\circ}$ C		
				-100 to 400 $^{\circ}$ C : 0.5 $^{\circ}$ C		
				400 to1200 $^{\circ}$ C : 0.7 $^{\circ}$ C		
				1200 to 1372 $^{\circ}$ C : 0.9 $^{\circ}$ C		
	E	-200 to 1000		-200 to -100 $^{\circ}$ C : 0.6 $^{\circ}$ C		
				-100 to 600 $^{\circ}$ C : 0.5 $^{\circ}$ C		
				600 to 1000 $^{\circ}$ C : 0.4 $^{\circ}$ C		
				-200 to -100 $^{\circ}$ C : 0.6 $^{\circ}$ C		
	J	-200 to 1200		-100 to 800 $^{\circ}$ C : 0.5 $^{\circ}$ C		
				800 to 1200 $^{\circ}$ C : 0.7 $^{\circ}$ C		
				-250 to 400 $^{\circ}$ C : 0.6 $^{\circ}$ C		
	T	-250 to 400		-200 to -100 $^{\circ}$ C : 1 $^{\circ}$ C		
	N	-200 to 1300		-100 to 900 $^{\circ}$ C : 0.7 $^{\circ}$ C		
				900 to 1300 $^{\circ}$ C : 0.8 $^{\circ}$ C		
				400 to 600 $^{\circ}$ C : 2 $^{\circ}$ C		
	B	400 to 1820	1 $^{\circ}$ C	600 to 800 $^{\circ}$ C : 1.5 $^{\circ}$ C		
				800 to 1820 $^{\circ}$ C : 1.1 $^{\circ}$ C		

RTD	PT100	-200 to 850	0.1 $^{\circ}$ C	-200 to 0 $^{\circ}$ C : 0.3 $^{\circ}$ C	Pt100-385 thermometric scale Pt100, Cu50 \pm 0.1 mA excitation Current. Accuracy does not contain lead resistance
				0 to 400 $^{\circ}$ C : 0.5 $^{\circ}$ C	
				400 to 850 $^{\circ}$ C : 0.8 $^{\circ}$ C	
	PT1000	-200 to 630		-200 to 100 $^{\circ}$ C : 0.22 $^{\circ}$ C	
Frequency	Cu50	-50 to 150	0.1Hz	100 to 300 $^{\circ}$ C : 0.3 $^{\circ}$ C	1 to 11Vp-p square wave Accuracy \pm 10% 50% duty cycle load >100 K Ω
				300 to 630 $^{\circ}$ C : 0.4 $^{\circ}$ C	
				-50 to 150 $^{\circ}$ C : 0.6 $^{\circ}$ C	
				\pm 2	
PULSE	100Hz	10 to 100000 Cycles	1 cycle	\pm 2	1 to 11 Vp-p square wave Accuracy \pm 10% 50% duty cycle load > 100 K Ω
	1KHz				
	10KHz				
	100KHz				
SWITCH	100Hz		0.1 Hz	\pm 2	Max switch current voltage / current : +28 V / 50 mA
	1KHz		1 Hz		
	10KHz		0.1 KHz		
	100KHz		1 KHz		
LOOP	24V				Max output current about 25 mA short circuit protection



18.Price Bid Format:

Sl no	Material Description	UOM	Qty	HSN /SAC	Basic unit Price (INR)	Transportation, Fooding and lodging or any other charges (INR)	Unit price (Incl. of Transportation, Fooding and lodging or any other charges) (INR)	GST @ %	GST Amount (INR)	Total unit price (Transportation, Fooding and lodging or, any other charges & GST) (INR)	Input Tax Credit for HSN/ SAC (INR)	Effective unit price (net of input tax credit) (INR)	Effective total price (net of input tax credit) (INR)
			a		b	c	D=b+c	e	F=d*e	(g) = (d)+(f)	(h)	(i) = (g) - (h)	(j) = (i)*(a)
1.	Three Phase Variable AC Power Supply	No s	1										
2.	Single Phase Variable AC Power Supply	No s	1										
3.	Soldering & De-soldering Station	No s	2										
4.	Variable DC Power Supply	No s	1										
5.	Dual Channel Variable DC Power Supply	No s	1										
6.	Air Set Panel, 0 to 2.5 bar & 0 to 10 bar	No s	2										



OPEN TENDER ENQUIRY – BNPM/OTE/CALIBRATION OF INSTRUMENTS/0817/2022-23

7.	Temperature Calibrator, Range: 50°C to 350°C	No s	1										
8.	Multifunction Process Calibrator	No s	1										
9.	Pressure Calibrator range: - 0.85 to 2 bar	No s	1										
10.	Pressure Calibrator range: 0 to 70bar	No s	1										
11.	Master Pressure Gauge (0 to 2.5 bar)	No s	1										
12.	Master Pressure Gauge (0 to 10 bar)	No s	1										
13.	Master Pressure Gauge (0 to 400 bar)	No s	1										
14.	Master Pressure Gauge (-1 to 0 bar)	No s	1										
Total effective price for calibration of instruments (inclusive of boarding, Lodging, any other charges Freight, P&F, Transit Insurance Charges etc.) on F.O.R, BNPM, Mysuru basis (INR)													

Method of evaluation: Evaluation shall be carried out on **overall effective price** quoted by the bidders, unless any other method of evaluation is specifically provided in the enquiry. The quoted price for each item should be inclusive of P&F, To & Fro Freight, Transit Insurance and any other charges required for delivery of that item to BNPM, Mysuru.



OPEN TENDER ENQUIRY – BNPM/OTE/CALIBRATION OF INSTRUMENTS/0817/2022-23

We hereby confirm that

1. We accept all the terms & conditions mentioned in the enquiry.
2. Price quoted is inclusive of P&F, Transit Insurance, To & Fro Freight and GST on F.O.R Basis, BNPM Plant, Mysuru.
3. SAC Code: _____
4. GST registration status: Unregistered / Compounding / Registered.
5. Delivery period: (Days / Weeks) from date of purchase order.
(The delivery period should include time of collection of instruments from BNPM up to delivery of material to BNPM after due calibration).
6. Calibration Certificate: **Yes**, 12 Months from date of completion of calibration.
7. Bid validity: 30 days from date of closing of tender including extensions/corrigendum's (if any).
8. Bank Details: Acc. No.; Bank Name:;
Branch name:; Branch Code:;
IFSC:
9. MSME / NSIC status: (If yes, then supporting document to be submitted along with the offer)
(Please fill above: MSI – For Micro Enterprises; SSI – For Small Enterprises; MED.SI – For Medium Enterprises; NSIC – For National Small Industries Corporation regd. firm)

Signature of bidder:

Name of the Firm:

Seal of the firm:

GST No.:

Contact Details:

Contact Person:

Contact Number:

Contact E-Mail ID:

NOTE: Interested bidders are recommended to register themselves at company's website in order to get future enquiries of relevant items.



Format for Bid Security Declaration:

Enquiry No: BNPM/OTE/CALIBRATION OF INSTRUMENTS/0817/2022-23 dated 10.02.2023

(To be submitted on Company letterhead)

BID SECURITY DECLARATION

We, the undersigned, declare that we will automatically be suspended from being eligible for bidding in any tender with Bank Paper Mill India Private Limited, Mysuru for the period of 12 months, if we are withdrawing our bid during the period of bid validity (or) fail to execute the contract, if awarded.

Signature _____

Name -----

Designation -----

Date -----

Stamp of the Organization -----

