



सीएसआईआर - राष्ट्रीय धातुकर्म प्रयोगशाला
CSIR - NATIONAL METALLURGICAL LABORATORY
(Council of Scientific & Industrial Research)

Burmamines, Jamshedpur - 831 007
Tel: 0657 2345 129/132/128/126, Fax: 0657 2345131
Email: spo@nmlindia.org Website: www.nmlindia.org



25.09.2025

CORRIGENDUM

Tender Reference No. :- PUR/090/SKN/DB/EQM/2025-26

Tender ID :- 2025_CSIR_248423_1

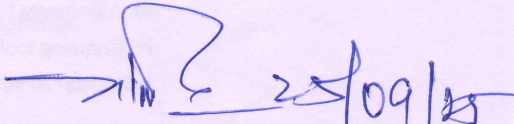
**Item Name :- Supply, Installation & Commissioning of
ISOTHERMAL CONDUCTION CALORIMETER**

NOTE: The Bids must be submitted in the Central Public Procurement Portal (URL:<https://etenders.gov.in/eprocure/app>) only. Manual/Offline bids shall not be accepted under any circumstances. Bidders should quote in INR only.

Consequent to the Pre-Bid Meeting held on 19.09.2025, the revised technical specifications are attached in Annexure-A.

The bidders are requested to submit their bid based on this revised technical specifications as per Annexure-A.

All other terms and conditions shall remain same.


Stores & Purchase Officer,
CSIR-NML, Jamshedpur



सीएसआईआर - राष्ट्रीय धातुकर्म प्रयोगशाला
CSIR - NATIONAL METALLURGICAL LABORATORY
(Council of Scientific & Industrial Research)

Burmamines, Jamshedpur - 831 007
Tel: 0657 2345 129/132/128/126, Fax: 0657 2345131
Email: spo@nmlindia.org Website: www.nmlindia.org



ANNEXURE-A

Equipment

Isothermal Conduction Calorimeter

01 Set

TECHNICAL SPECIFICATIONS (REVISED)

1. General Features:

- 1.1 The calorimeter should be capable of measuring heat release in isothermal conditions (constant temperature).
- 1.2 The calorimeter should be able to measure the rate of heat evolution continuously, at least up to 7 days, conforming to the ASTM standards C1702.
- 1.3 The calorimeter should be capable of measuring the heat using a twin-type isothermal design with sample and reference chambers, accommodating eight sample cells in one single instrument for simultaneous measurements (each with an individual reference to reduce baseline noise).
- 1.4 Each channel in the calorimeter should be able to accommodate sample sizes of 20 ml (minimum) or more in glass ampoules or polypropylene/polyurethane vials material.
- 1.5 The temperature of the calorimeter must be computer-controlled from the software.

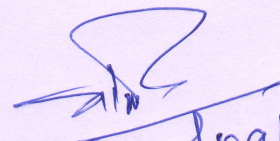
2. Specific Technical Requirements

- 2.1 Operating temperature: 5°C or lower to 70°C or higher
- 2.2 Temperature stability: $\pm 0.15^\circ\text{C}$ or better in the range of operating temperature
- 2.3 Temperature accuracy: $\pm 0.001^\circ\text{C}/24$ hrs. or better in the range of operating temperature
- 2.4 Baseline repeatability: $\leq 2 \mu\text{W}$
- 2.5 Baseline drift over 24 hours: $< 5 \mu\text{W}$
- 2.6 Short-term noise: $< 1 \mu\text{W}$

3. Accessories

The equipment must be supplied with following -

- i. Ampoules/vials for keeping sample inside calorimeter chamber: 450 nos. (minimum) if disposable; 20 nos. (minimum) if reusable.
- ii. Lids/caps: same nos. or more as mentioned above for ampoules/vials.
- iii. Adjustment tool -01 no. (minimum)
- iv. Crimping tool-01 no. (minimum)
- v. Eyelets- 20 nos. (minimum)


25/09/25



सीएसआईआर - राष्ट्रीय धातुकर्म प्रयोगशाला
CSIR - NATIONAL METALLURGICAL LABORATORY
(Council of Scientific & Industrial Research)

Burmamines, Jamshedpur - 831 007
Tel: 0657 2345 129/132/128/126, Fax: 0657 2345131
Email: spo@nmlindia.org Website: www.nmlindia.org



4. Data Analysis Requirements

- 4.1 The equipment must be supplied with licensed software for complete experimental control, data acquisition, and analysis.
- 4.2 Upgrade of software to be made free of cost during warranty period.
- 4.3 The software must include the following features:
- The initial and final set time of the cement.
 - Compressive strength
 - Arrhenius kinetic analysis plot.
 - Total heat release plot.

5. Utility items

5.1 A computer workstation with following specifications

- Operating system: Latest windows version
- Processor: core i7 or higher
- RAM: DDR4 32GB or better
- Storage: SSD 512 GB or better
- Display: Full HD, color, 23 inch or better
- Accessories: Keypad, mouse, printer

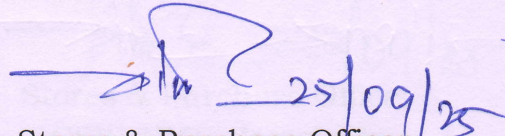
5.2 UPS: 5 KVA UPS with minimum 30 min backup

6. Warranty: Three (03) years comprehensive warranty and two (02) years non-comprehensive AMC after warranty

7. Manufacturer Experience, Installation & Training

- 7.1 The OEM/Indian principal must provide a list of at least 05 nos. successful installations in India of the same equipment.
- 7.2 The equipment should be installed and commissioned by the manufacturer/supplier at CSIR-NML, Jamshedpur, without any extra charges.
- 7.3 The manufacturer/supplier shall provide complete manual, hands-on training on the sample testing, data acquisition, data analysis and basic maintenance of the equipment for a period of at least two full working days at CSIR-NML, Jamshedpur after installation.

NML Scope: Space and single point electrical supply


25/09/25
Stores & Purchase Officer,
CSIR-NML, Jamshedpur