

# INTERNATIONAL ADVANCED RESEARCH CENTRE FOR POWDER METALLURGY AND NEW MATERIALS (ARCI), BALAPUR P.O-500005

Date: 23.12.2025

EoI Reference No. SC20250100/PO

Expression of Interest (EOI) for Design, Engineering, Supply, Installation, Testing, Commissioning and demonstration of dry rooms for the fabrication of Li- ion/Na-ion /Li-S/Solid State Batteries

EoI Documents	:	Documents can be downloaded from www.arci.res.in and www.eprocure.gov.in
Submission of the EoI	:	As per Notice Inviting Tender
Date of Publication of EoI Notice	:	23.12.2025
Last date for clarifications, if any	:	29.12.2025 16:30 hrs
EoI submission start date and time	:	30.12.2025 at 09.00 Hrs
EoI submission end date and time	:	16.01.2026 15:30 Hrs
Opening of EoI	:	19.01.2026 at 10:00 Hrs



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#### **Table of Contents**

SI. No.	Description	Page No.
1.	Introduction	3
2.	Notice for EOI	4-7
3.	Special Instructions for Online Bid submission	8-10
4.	Technical bid- Terms & Conditions (Part I)	11-12
5.	Process & evaluation of EOI (Part II)	13-15
6.	Scope of Supply (Annexure-I)	16-21
7.	Technical compliance statement (Annexure-II)	22
8.	Declaration of local content (Annexure-III)	23
9.	Tender Acceptance Letter (Annexure-IV)	24-25
10.	Certificate by bidder (Annexure-V)	26
11.	Certificate of declaration (Annexure-VI)	27
12.	Checklist	28-29

#### **Expression of Interest**

#### **Introduction:**

International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI) is an Autonomous Research and Development Centre of Department of Science and Technology (DST), Government of India with its main campus at Balapur, Hyderabad and with operations in Chennai and Gurugram.

This current document published by ARCI invites Expressions of Interest (EOI) from reputed and eligible vendors for "Design, Engineering, Supply, Installation, Testing, Commissioning and Demonstration of Dry Rooms for the fabrication of Li-ion /Na-ion /Li-S/Solid State Batteries".

The main objective of this EOI is to assess and arrive at prospective vendors technical and commercial capabilities in delivering the system before proceeding to the formal Request for Proposal (RFP)/tendering.

This document is to provide information that is required by the potential bidders to understand the scope of supply, evaluation criteria, commercial terms, bid process details, etc thereby participate in the bid process for supply, installation, commissioning and demonstration of system to make refractory metal and alloy powders.

Final specifications, Terms and Conditions of the contract shall be made available after going through the responses of the respondents. However, it may please be noted that the decision of Director, ARCI shall be final while addressing the issues raised by respondents, in response to this document.

Invitation for Bids shall be called for after the specifications are finalized by ARCI.

ARCI reserves the right to summarily reject any or all of the offers received in response to this Expression of Interest without assigning any reason thereof.



# INTERNATIONAL ADVANCED RESEARCH CENTRE FOR POWDER METALLURGY AND NEW MATERIALS (ARCI), BALAPUR P.O-500005

#### **NOTICE FOR EOI**

International Advanced Research Centre for Powder Metallurgy and New Materials (henceforth referred to as ARCI) is an Autonomous Research and Development Centre of Department of Science and Technology (DST), Government of India with main campus at Hyderabad and with operations in Chennai and Gurugram.

Tender Enquiry No: (Case No.) SC20250100/PO Dt: 23.12.2025

<u>Scope of Supply:</u> Expression of Interest (EOI) on "Design, Engineering, Supply, Installation, Testing, Commissioning and Demonstration of Dry Rooms for the fabrication of Li-ion /Na-ion /Li-S/Solid State Batteries".

You are invited to submit your most competitive <u>online</u> quotation through CPP Portal (Central Public Procurement Portal) website <a href="https://eprocure.gov.in">https://eprocure.gov.in</a> on or before the prescribed due date. Manual bids shall not be accepted except for the original documents, if any mentioned in this tender.

This Organization invites Two Bid System bids from Class I and II local suppliers, as per DPIIT Order No. P-45021/2/2017-PP(BE-II) dated 04.06.2020, for the following items through the eProcurement System of National Informatics Centre that enables the Tenderers to download the notice inviting tenders and submit the bids online through Central Public Procurement Portal of Government of India (https://eprocure.gov.in/eprocure/app).

Please quote only in Indian Rupees as per GFR 2017, amended Rule 161 (iv) and Public Procurement (preference to make in India) Order 2017, with your lowest rate and shortest delivery period as per the following terms. As per Govt of India, Ministry of Commerce and Industry, DPIIT Order No. P-45021/2/2017-PP(BE-II) Dated 04.06.2020 only Class I Local Supplier having local content equal to or more than 50% and Class II local supplier (having local content more than 20% but less than 50%) are invited for this tender. Non local supplier (having local content less than or equal to 20%) are not eligible to apply. Local Content means the amount of value added in India which shall, unless otherwise prescribed by the nodal ministry be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all custom duties). class I local supplier/class II local supplier are required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for Class I local supplier/Class II local supplier, as the case may be. They shall also give details of the locations(S) at which local value

addition is made. Format for self-certification is given in annexure IV of tender document. Any non-compliance in this regard, the bid will not be considered in the category.

As per Ministry of Finance, Department of Expenditure Order No. F.No:6/18/2019 PPD Dated 23.07.2020, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Department of Promotion of Industry and Internal Trade (DPIIT). Format of certificate for the same as given in Annexure VI of the tender document. "Bidder "for the purpose of this order Including the term Tenderer, consultant, vendor or service provider in certain context(s) means any person or firm or company including any member of consortium or joint venture (that is an association of several persons or firms or companies), every artificial juridical person not falling in any of the description of bidders stated here in before, including any agency, branch or office controlled by such person participating in procurement process. Bidder from a country which share a land bordered with India, "For the purpose this order means:

- 1. An entity incorporated, established or registered in such a country; or
- 2. A subsidiary of an entity incorporated, established or registered in such a country; or
- 3. An entity substantially controlled through entities entity incorporated, established or registered in such a country; or
- 4. An entity whose beneficial owner is situated in such a country; or
- 5. An Indian (or other) agent of such of an entity; or
- 6. A natural person who is a citizen of such a country; or
- 7. A consortium or joint venture where any member of consortium of Joint Venture falls under any the above.

As per Ministry of Finance, Department of Expenditure Order No. F. No:6/18/2019 PPD Dated 23.07.2020, Restrictions under Rule 144(xi) of the General Financial Rules (GFRs) 2017, are applicable in the present case.

- (i) <u>Requirement of registration:</u> Any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of Goods, Services, (including consultancy Services/ Non Consultancy Services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority, specified in Annexure I of the above O.M.
- (ii) <u>Validity of registration</u>: In respect of tenders, registration should be valid at the time of submission of bids and at the time of acceptance of bids.
- (iii) Revised application format for registration of bidders from countries sharing land border with India from the following link.

 $\underline{https://dpiit.gov.in/related-links/revised-application-format-registration-bidders-under-rule-144-xi-gfr}$ 

• Item/ Services to be provided to:

International Advanced Research Centre for Powder Metallurgy and New Materials, Balapur Post, Hyderabad – 500 005, Telangana, India.

#### **Validity of Bid**

Quotation should have minimum validity of **120 days** from the date of opening.

#### Last date for submission: 16.01.2026 before 15:30 Hrs.

The bidders are required to submit soft copies of their bids electronically on the CPP Portal before the last date stated above using valid Digital Signature Certificates.

All the tenders, in which any of the prescribed conditions are not fulfilled or incomplete in any respect are liable to be rejected.

#### Clarification on bid

Bidders can seek clarification as per the schedule start and end date through email IDs given below:

For Technical clarifications: <a href="mailto:anandan@arci.res.in">anandan@arci.res.in</a>

"NO REQUEST FOR CLARIFICATION OR QUERY SHALL BE NORMALLY ENTERTAINED AFTER THE CLARIFICATIONS END DATE". Should ARCI deem it necessary to amend the bidding documents as a result of a clarification, it shall do so by hosting the clarifications and amendments on the website of ARCI/CPP Portal only for the benefit of other prospective bidders. Hence, prospective bidders are requested to follow the websites regularly.

#### Opening of the tender

Only the EOI Technical bid shall be opened online on the date of the tender opening.

#### Patent Rights:

The Supplier shall indemnify ARCI against all third-party claims of infringement of patent, trademark or industrial design rights, copy rights arising from use of the Goods or any part thereof in India.

#### **Disqualification of tenders:**

The tenders are liable for rejection in the following circumstances:

- If they are not inline with the terms and conditions of this tender notice.
- Conditional quotations
- Incomplete/Unsigned tenders.
- Tenders submitted through Fax or e-mail.

Director, ARCI reserves the right to accept or reject any or all tenders either in part or in full or to split the order without assigning any reasons there for.

IMPORTANT NOTE: Amendment, Corrigendum if any to this tender document, WILL BE HOSTED ONLY IN ARCI WEBSITE and CPP Portal and no separate Press Notification will be issued. Bidders are advised to visit our website and CPP Portal regularly to know such details.

**Director, ARCI, Hyderabad** 

#### SPECIAL INSTRUCTIONS FOR ONLINE BID SUBMISSION:

Instructions to the Bidders to submit the bids online through the Central Public Procurement Portal for e-Procurement are at <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>. The bidders must carefully follow the instructions.

- Possession of valid Digital Signature Certificate (DSC) and enrolment/registration of the contractors/bidders on the e-procurement/e-tender portal is a prerequisite for e-tendering.
- Bidder should do the enrolment in the e-Procurement site using the "Click here to Enroll" option available on the home page. Portal enrolment is generally free of charge. During enrolment/registration, the bidders should provide the correct/true information including valid e-mail-id. All the correspondence shall be made directly with the contractors/bidders through e-mail-id provided.
- Bidder need to login to the site through their user ID/ password chosen during enrolment/registration.
- Then the Digital Signature Certificate (Class III Certificates with signing key usage) issued by NIC/SIFY/TCS/nCode/eMudra or any Certifying Authority recognized by CCA India on e-Token / Smart Card, should be registered.
- The DSC that is registered only should be used by the bidder and should ensure safety of the same.
- Contractor / Bidder may go through the tenders published on the site and download the required tender documents/ Annexures for the tenders he/she is interested.
- After downloading / getting the tender document/ Annexures/ Appendices, the Bidder should go through them carefully and then submit the documents as asked, otherwise bid will be rejected.
- If there are any clarifications, this may be obtained online through the tender site, or through the contact details. Bidder should take into account the corrigendum / addendum published before submitting the bids online.
- Bidder then logs in to the site through the secured log in by giving the user id/ password chosen during enrolment/registration and then by giving the password of the e-Token/ Smart Card to access DSC.
- Bidder selects the tender which he/she is interested in by using the search option & then moves it to the 'my tenders' folder.
- From my tender folder, he selects the tender to view all the details indicated.
- It is construed that the bidder has read all the terms and conditions before submitting their offer. Bidder should go through the tender Annexures and appendices carefully and upload the documents as called for; otherwise, the bid will be rejected.
- Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document/ Annexure and generally, they can be in PDF/xls/rar/zip/dwf formats. If there is more than one document, they can be clubbed together and can

be provided in the requested format. Each document to be uploaded through online for the tenders should be less than 2 MB. If any document is more than 2MB, it can be reduced through zip/rar and the same can be uploaded, if permitted. Bidders Bid documents may be scanned with 100 dpi with black and white option. However if the file size is less than 1 MB the transaction uploading time will be very fast.

- The Bidders can update well in advance, the documents such as certificates, annual report details etc., under My Space option and these can be selected as per tender requirements and then send along with bid documents during bid submission. This will facilitate the bid submission process faster by reducing upload time of bids.
- While submitting the bids online, the bidder reads the terms & conditions and accepts the same to proceed further to submit the bid packets.
- The bidder has to digitally sign and upload the required bid documents one by one as indicated. Bidders to note that the very act of using DSC for downloading the bids and uploading their offers shall be deemed to be a confirmation that they have read all sections and pages of the bid document including General conditions of contract without any exception and have understood the entire document and are clear about the requirements of the tender requirements.
- The bidder has to upload the relevant files required as indicated in the covered content. In case of any irrelevant files, the bid will be rejected.
- The bidders are requested to submit the bids through online etendering system to the Tender Inviting Authority (TIA) well before the bid submission end date & time (as per Server System Clock). The TIA will not be held responsible for any sort of delay or the difficulties faced during the submission of bids online by the bidders at the eleventh hour.
- After the bid submission (i.e after Clicking "Freeze Bid Submission" in the
  portal), the acknowledgement number, given by the system should be
  printed by the bidder and kept as a record of evidence for online
  submission of bid for the particular tender and will also act as an
  entry pass to participate in the bid opening date.
- The time settings fixed in the server side & displayed at the top of the tender site, will be valid for all actions of requesting, bid submission, bid opening etc., in the e-tender system. The bidders should follow this time during bid submission.
- All the data being entered by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered will not viewable by unauthorized persons during bid submission & not be viewable by any one until the time of bid opening.
- Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this

is subjected to asymmetric encryption using buyers/bid openers public keys. Overall, the uploaded tender documents become readable only after the tender opening by the authorized bid openers. The confidentiality of the bids is maintained since the secured Socket Layer 128 bit encryption technology is used. Data storage encryption of sensitive fields is done.

- The bidder should logout of the tendering system using the normal logout option available at the top right-hand corner and not by selecting the (X) exit option in the browser.
- For any queries regarding e-tendering process, the bidders are requested to contact as provided in the tender document. For any further queries, the bidders are asked to contact over phone as mentioned in the CPP website or send an email to cppp-nic@nic.in.

### PART-1 TECHNICAL BID - TERMS AND CONDITIONS

#### 1. Vendor qualification criteria:

- a) Latest release of the model relevant to this tender requirement should be quoted.
- b) All items should be with part number and full description.
- c) All the relevant documents should be uploaded at the time of tender.
- d) Requirements: Registered /incorporated companies with valid statutory and regulatory compliances.
- e) Financial Capability.
- f) Average annual turnover during last three financial years.
- g) The firms should have prior experience in designing, fabrication and supply of unit similar to that is required for ARCI. They should have supplied and commissioned at least two dry rooms with dew point < -50 degree centigrade working satisfactorily with similar features earlier and the supplied machines should be working satisfactorily. The proof of supply and commissioning along with performance certificate of at least two units anywhere in the globe should be provided (The contact details of the machine users should be furnished).
- h) Site visit before submission of technical bid is mandatory for finalizing layout and scope. Two or more layout must be proposed by vendor after site visit
- i) The responsibility identification shall be thoroughly understood before embarking on the work after investigating the site thoroughly
- j) Layout, design, fabrication, and integration must be approved by ARCI prior to execution
- k) The party shall demonstrate the dry room continuously for 48h for satisfactory performance for approval
- I) Original Equipment Manufacturer (OEM) or authorized representatives of OEM only can quote for this tender. The vendor should provide an authorization letter valid on the tender date from the OEM along with the quotation.
- m) The vendor should have an adequate qualified man power for designing the system and financial capability.
- n) Should have local service center to respond service calls at short time (24 h)
- o) OEM/vendor is required to submit a letter of commitment at the time of quote for supply of spares and also for efficient and prompt after sales service of the equipment for a minimum period of 10 years after the guarantee/warranty period under mutually agreed terms and conditions.
- p) The offer of the firms not fulfilling the any of the above aspects of vendor qualification criteria will not be considered for further evaluation.

#### 2. Documents to be submitted:

- a) Company profile, incorporation documents, statutory registrations.
- b) Audited financial statements of last three years.
- c) List of major and similar nature of supplies executed.
- d) Technical plus Commercial capability details.

#### 3. Technical compliance statement:

The vendor should provide item wise details against each and every specification. Deviations if any are to be highlighted. Suppliers are required to provide the Technical Compliance Statement as per Annexure while submitting the Technical Bid.

#### 4. General instructions:

- a) The bidder should submit the scanned copy of the Technical Bid for online submission. No brochures/leaflets etc. should be submitted in loose form. Please indicate page nos. on your quotation. The price should not be mentioned anywhere in this document.
- b) Each page of the bid and strikeout/corrections shall be duly signed and stamped by the bidder. Unsigned Tenders are liable to be rejected. Failure to comply with this requirement may result in the bid being rejected.
- c) The purpose of certain specific conditions is to get or procure best product/service etc. for ARCI. The opinion of Technical Committee shall be the guiding factor for technical short listing.

#### PART - II

#### PROCESS AND EVALUATION OF EOI: TWO STAGE BIDDING PROCEDURE

#### Stage 1:-

**Invitation for Expression of Interest (EOI):** This document details the terms and conditions for inviting EoI from eligible bidders. The interested bidders are requested to submit their Expression of Interest as a turnkey solution.

**Basic Qualification Criteria:** The bidder has to submit their Expression of Interest along with qualification documents as per the basic qualification criteria defined in this document. Qualification criteria submitted by the bidder will be evaluated by the concerned authorities.

Technical Presentation and Demonstration of System Capabilities: The bidders, who are qualified in the basic qualification process, will be invited to deliver a presentation about their experience and proposed solution towards the EOI. During their presentation, bidder should provide enough evidence of their claims and explain the proposed solution in detail. The Concerned Authority will evaluate the bidders' experience, technical presentation of the proposed solution and qualify/disqualify bidders accordingly.

**Request for Proposal:** The Final RFP with desired solution will be prepared based on the evaluated proposals received from the technically qualified bidders during the stage-1.

#### **Stage 2:-**

The **technically qualified bidders** based on stage-1 will be invited for submission of their techno commercial bids for the decided solution (RFP) in 2 bid method.

#### 1. CONTENTS OF THE EOI:

The bidder should submit their expression of interest with following details:

The bidder shall provide the details asked in the Basic Qualification Criteria with supporting documents without which their offers will not be considered for further evaluation. Against each point, the bidder shall mention the compliance statement and relevant page numbers of the documents.

- 1.2 All documents submitted shall be duly signed by the authorized official of the bidder.
- 1.3 List of deliverables shall be submitted along with detailed specifications and time lines for delivery & execution of the contract.

#### 2. GENERAL INSTRUCTIONS

- 2.1 Director, International Advanced Research Centre for Powder Metallurgy and New Materials (Hereafter referred to as the Director) will receive bids in respect of the work mentioned in this document. Bids received after the closing date, as indicated in this document are liable to be rejected.
- 2.2 The bid shall be submitted in English language only.

#### 3. CAPACITY OF THE BIDDER

- 3.1 Any person signing the bid shall submit documentary evidence that his/her signature on the bid, submitted by him/her is legally binding upon him/herself, and his/her firm or company, as the case may be.
- 3.2 The bidder shall produce satisfactory proof that they are financially in a position to fulfill the contractual obligations offered to be undertaken by them. The bidder shall indicate the details of their banker.

#### 4 BIDDER TO INFORM HIMSELF/HERSELF FULLY

- 4.1 The bidder is required to carefully examine the documents enclosed and get fully aware himself/herself as to all conditions and matters which may in any way affect the works or the cost thereof, before submitting his offer.
- 4.2 If the bidder finds any discrepancies, omissions, or contradictions in the documents or is in doubt as to the true meaning of any part, he/she shall at once contact in writing for an interpretation/clarification to the Director, ARCI (eMail at: director@arci.res.in).
- 4.3 The bidder shall however not be entitled to any extension of time for submission of his/her bid on such account, unless the Director extends the due date.

#### **SCOPE OF SUPPLY**

"Design, Engineering, Supply, Installation, Testing, Commissioning and Demonstration of Dry Rooms for the fabrication of Li-ion /Na-ion /Li-S/Solid State Batteries".

### Dry room with 20%, 10% RH and 0.5% RH: *Scope:*

Design, engineering, supply, installation, testing, commissioning, and demonstration of dry rooms for Lithium-ion cell fabrication at ARCI.

The scope includes:

- \* Mechanical, electrical, civil, and instrumentation integration
- \* Supply and commissioning of dehumidification and chilling systems
- \* Ducting, filtration, controls, safety systems, and auxiliary services
- \* 48-hour performance demonstration post-installation

#### **Specification for below 20% RH Dry room: 1- Material Storage:**

Area :  $\sim$ 21 sg. m, Height 2.7 m

RH required :  $\sim 10 \%$ No. of people working : 2 (max)

Temperature inside : 23 plus or minus 2 degree Centigrade

Exterior Environment : 25-45 plus or minus 2 degree Centigrade; RH 30-80 plus

or minus 10%.

No. of doors : 1(Main door, and air lock door)

Door dimension (w x h) : 1 m x 2.1 m

Material Transfer Window: 2 window (60 cm x 60 cm)

#### Specification for below 10% Rh Dry room: 2-Cathode Line:

Area : ~90 sq. m, Height 2.7m

RH required : <10 % or better

No. of people working : 4 (max.)

Temperature inside : 23 plus or minus 2 degree Centigrade

Exterior Environment : 25-45 plus or minus 2 degree Centigrade, RH=30 to 80 plus

or minus 10%

No. of doors: 4+1(Main door, air lock, air shower, entry to 0.5% RH air lock room and

an emergency exit door)

Door dimension (w x h) : 4 Nos Single door (1m x 2.1m), 1 Emergency Door (2.0

 $m \times 2.1m$ )

Material Transfer Window: 1 window (60 cm x 60 cm)

#### Specification for below 10% Rh Dry room:3- Anode line

Area : ~60 sq. m, Height 2.7 m

RH required : ~10 % or better

No. of people working : 3 (max)

Temperature inside : 23 plus or minus 2 degree Centigrade

Exterior Environment : 25-45 plus or minus 2 degree Centigrade; RH= 30 to 80 plus

or minus 10%

No. of doors : 2 (Main door, and air shower) Door dimension (w x h): (1m x

2.1m)

Material transfer window: 1 window (60cm x 60cm)

\* Anode line dry room should have separate control of temperature and humidity.

\* For aqueous coating, only temperature control is switched on while humidity control is turned off

#### **Specification for the Below 0.5% RH Dry room: 4-Cell Fabrication:**

Area: : ~140 Sq. m, Height 2.7 m

Dew point : -50 degree Centigrade; burst: -60 degree Centigrade

RH required : < 0.5 % or better

No. of people working : 6 (max)Temperature inside :  $23 \pm 2 \circ C$ 

Exterior Environment : 25-45 plus or minus 2 degree Centigrade; RH= 30 to 80 plus

or minus 10%

No. of doors : 4(3 nos. single door i.e., Air lock, air shower, and electrolyte

filling room) and 1 of double door for an emergency exit.

Door dimension (w x h): 3single door (1m x 2.1 m) and 1 Emergency Door (2 m x 2.1

m)

Material Transfer Window: 1 window (60 cm x 60 cm)

- \* All four rooms should have separate dehumidifier unit and chiller unit.
- \* CFM to be calculated and incorporated based on the specified dimensions, manpower, and equipment requirement.

#### **GENERAL DESIGN REQUIREMENTS**

Air Handling & Dehumidification:

- \* Each dry room must be equipped with independent dehumidifier and chiller units.
- \* Air volume (CFM) shall be calculated based on:
  - ✓ Room dimensions
  - ✓ Occupancy
  - ✓ Equipment heat load
  - ✓ Required air change rate and RH control
- \* All dehumidification units must maintain:
  - ✓ Dry room 1: = 20% RH
  - ✓ Dry Rooms 2and 3 = 10% RH
  - ✓ Dry room 4: = 0.5% RH, dew point -50 degree centigrade (burst -60 degree centigrade)

- \* High efficiency desiccant rotor -based dehumidifiers with auto-reactivation (without energizing react heat) are mandatory.
- \* To be manufactured in an ISO 9001 and ISO 14001 certified manufacturing facility employing sheet metal manufacturing
- \* Units must be designed for continuous, unattended industrial use.
- \* Outdoor purge-style units required for all the rooms (<0.5% RH, & <10% RH rooms).
- \* The dehumidifier shall be compact, energy and space saving in design and, for ease of service and inspection will have test points for air pressure and airflow measurements.
- \* Factory-assembled, plug-and-play systems with internal diagnostics to be provided

#### Construction (Paneling and Walls):

#### Wall Panels:

- \* Rockwool core or Poly iso cyanurate
- \* Minimum fire resistance rating of 2 hours.
- \* Powder-coated GI sheets (approx. 1 mm thick) on both sides

#### Panel Thickness:

- \* 100 mm for <0.5% RH room
- \* 100 mm for <10% RH rooms
- \* 100 mm for <20% RH rooms

\*

#### Cleanroom Standards

- \* Cleanliness Level: ISO Class 7
- \* Filtration:
  - ✓ HEPA with appropriate micron-level filtration should be used to maintain ISO7 standards.
  - ✓ Pre-filters > 95% efficiency

#### \* Air Ducts:

- ✓ Powder-coated GI or MS (preferably seamless (Welding process) for <0.5% RH)
- ✓ Proper insulation with nitrile rubber to be provided
- ✓ Ouotes to be provided separately for GI and MS

#### \* External Cladding:

GI (Galvanized Iron) cladding may be considered for the external covering of ducting to provide additional mechanical protection and aesthetic finish.

#### Noise and Lighting

- \* Noise Level: < 65 dBA inside all dry rooms
- \* Lighting: Illumination level of minimum 400 lux
- \* Status Indicators: Red (non-operation) and Green (operation) lights with markings on each room

#### **Doors and Windows**

- \* All doors must be operable from both inside and outside.
- \* All doors shall have:

- ✓ Rubber gaskets or seals for airtightness
- ✓ Simple, fail-safe locking mechanisms
- ✓ See-through window: 450 mm x 450 mm
- \* Emergency Doors: As per layout with similar specs.
- \* Airlock and Air Shower Units: Installed as required per layout

#### Electricals and Safety Systems

- \* All control panels shall be:
  - ✓ Pre-wired with MCBs, contactors, overloads, transformers
  - ✓ Equipped with dehumidifier digital controllers (DDC)
  - ✓ Fire proofed electrical sockets

#### \* DDC Features:

- ✓ Manual/off/auto modes
- ✓ Dew point display (inlet/outlet)
- ✓ Alarm diagnostics
- ✓ Mimic diagrams and alpha-numeric fault codes
- ✓ Programmable access codes
- ✓ Auto-restart after power failure
- \* Earth leakage protection: 30-300 mA sensitivity with shunt trip Earth pit work under vendor scope
- \* Dedicated ESD grounding: Copper inlay grid connected to earth pit
- \* Sockets and load ratings: To be finalized post PO
- \* Human-Machine Interface (HMI): All software and interfaces provided with the dry room equipment must be programmed in the English language.

#### Condensing Units:

- \* Matching evaporators with pressure gauges
- \* Suction/discharge gauges, thermostatic valves
- \* High/low pressure cut-outs
- \* Local control panels to be linked with main DDC system Safety and Utility Provisions
- \* Adequate space for camera, LAN, internet ports
- \* Provision for:
  - ✓ Gas lines
  - ✓ Compressed air lines
  - ✓ Vacuum (exhaust) lines

#### Flooring:

- \* Vacuum dewatered ESD flooring
  - ✓ Thickness of ESD flooring is ~ 2+1mm
  - ✓ Copper inlay grid
  - ✓ Connected to independent earth pit
  - ✓ Antistatic properties suitable for cleanroom usage
  - ✓ Initial ESD flooring shall be done at the time of dry room construction.

✓ If there is any damage in the ESD flooring during equipment placing, the patch work or second coating of ESD flooring inside the dry room should be done by the supplier

### SPARES, MAINTENANCE, and DOCUMENTATION Spares and Maintenance:

- ✓ Vendor shall provide critical spare parts for free of cost
- ✓ Preventive and breakdown maintenance schedule must be included
- ✓ Calibration procedure for essential instruments to be documented
- ✓ First Calibration of the entire dry room units to be done for free of cost before end of warranty

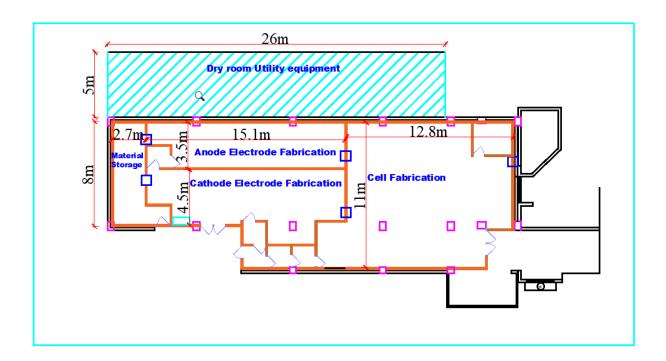
#### Documentation:

- \* Detailed drawings: layout, circuit, ducting, panel, etc.
- \* The party shall give detailed design, assembly, circuit and other relevant drawings and manuals (both soft and hard copy).
- \* Training to operating personnel (on-site) must be provided post commissioning
- \* 48-hour continuous operation test must be successfully completed prior to acceptance

#### **VENDOR ELIGIBILITY CRITERIA:**

- \* Vendor must have successfully commissioned at least two dry rooms with dew point < -50 degree centigrade (0.5%RH Room), working satisfactorily.
- \* The party shall give list of clients to whom similar systems were supplied installed and commissioned in government/PSUs/private industries. Name of contact person and other relevant details shall be provided.
- \* Site visit is mandatory for finalizing layout and scope.
- \* The responsibility identification shall be thoroughly understood before embarking on the work after investigating the site thoroughly
- \* Layout, design, fabrication, and integration must be approved by ARCI prior to execution
- \* The party shall demonstrate the dry room continuously for 48h for satisfactory performance for approval
- \* Vendor must commit to:
- \* 2 year warranty with free service
- \* Readiness to take on AMC post warranty as per ARCI norms
- \* Provide a clear item-wise cost breakup
- \* Accept and incorporate minor modifications without extra charge
- \* Provide design and as-built drawings
- \* Ensure delivery and commissioning within agreed timeframes

The approximate dimension of site available for the establishment of dry room is given below:



#### **TECHNICAL COMPLIANCE STATEMENT**

Technical bids will be evaluated based on following aspects:

1.1. **Compliance statement**: Technical specifications should be provided as a table (representative format given below), containing the following columns: i) ARCI's specifications, ii) the corresponding number/ value for the specification in the instrument offered by the supplier, iii) a statement whether there is compliance or not, iv) explaining deviation(s) if any, and v) offered item no/ model no/ part no. Please provide related officially published brochures, data sheets and application sheets.

Specifica tion format number	ARCI's Specification	Correspo nding number/ value for the specificati on in the instrumen t offered by the supplier	Compli ance yes/no	Deviation, if any, to be explained here	Offered item/ model/part number, if any
1					
2					
3					

Suppliers are required to provide this Technical Compliance Statement while submitting the Technical Bid (Cover 2). Any deviations from the tender should be mentioned clearly.

**NOTE:** Please ensure all the relevant boxes are marked YES/NO against each column.

### <u>(ON COMPANY LETTERHEAD)</u>

(In case the procurement value is less than or equal to Rs.10 Crores declaration to be given in Bidder's/Company's letter head and if more than Rs. 10 Crores declaration to be issued from the statutory auditors or cost auditor of the company (in case of companies from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies).

To, THE DIRECTOR, INTERNATIONAL ADVANCED RESEARCH CENTRE FOR POWDER METALLURGY AND NEW MATERIALS (ARCI), Balapur P.O, Hyderabad-500 005.

**Subject:** Declaration of local content and compliance of Public Procurement (Preference to Make in India) Order 2017 and its amendments regarding.

SI N O	Name of the Goods/Services/W orks	Category of the Supplier (I/II/III)	Currenc y (must be in INR)	Local Conten t (%)	Locatio n at which value Addition is made	Countr y of Origin	Comply to the above referred rule (Yes/No)

- "Local Content "means the amount of value added in India which shall, be the total value of the item being offered excluding net domestic indirect taxes) minus the value of the imported content in the item (including all customs duties) as a proportion of the total value, in percent.
- False declaration will be in breach of Code of Integrity under Rule 175(I)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions permissible under Law.

Date:	
Place:	

#### TENDER ACCEPATANCE LETTER (TO BE GIVEN ON COMPANY LETTER HEAD)

To, THE DIRECTOR, INTERNATIONAL ADVANCED RESEARCH CENTRE FOR POWDER METALLURGY AND NEW MATERIALS (ARCI),

Balapur	P.O, Hyderabad-500 005.
Sub: Acc	ceptance of Terms & Conditions of Tender.
Tender R Name of	eference No: Tender/Work/Service:
Dear Sir,	
1.	I/We have download /obtained the tender document(s) for the above mentioned Tender/Work from the website(s) namely:
	as per your advertisement, given in the above mentioned website(s).
2.	I/We hereby certify that I/We have read the entire Terms & Conditions of the tender documents from Page Noto(including all documents like annexures, schedules, etc.,) which form part the contract agreement and I/We shall abide hereby the Terms & Conditions/ Clauses contained therein.
3.	The Corrigendum(s) issued from time to time by your department/organization too have also been taken into consideration, while

- submitting this acceptance letter.
- 4. I/We hereby unconditionally accept the tender conditions of the above mentioned tender document(s)/corrigendum(s) in its totality/entirety.
- 5. I/We hereby declare that our firm has not been blacklisted/debarred by any Govt. department/Public Sector undertaking.
- 6. I/We Certify that all information furnished by our firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organization shall without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without giving any notice or reason therefore or summarily reject the bid or terminate the contract, without prejudice to any other rights or remedy including the forfeiture of the full said earnest money deposit absolutely.

1	Name and Address of the Bidder	
2	Manufacturer/Dealer/Agent	
3	Contact Person	
4	Phone	
5	Email	
6	Mobile Number	
7	GST No	
8	PAN No	
9	UTR No/DD No( In case of online transfer of Tender Fee) if any	
10	UTR No/DD No( In case of online transfer of EMD) if any	
11	Warranty, if any	
12	Delivery period	
13	Payment Terms	
14	PO to be placed in favour of	
15.	Bank details copy	

Signature with Date and Stamp of the Bidder

Date: Place:

#### <u>CERTIFICATE BY THE BIDDER (FOR TENDERS)</u> <u>(ON COMPANY LETTER HEAD)</u>

I have read the clause regarding restrictions on procurement from a bidder of a
Country which shares a land border with India. I certify that this bidder is not from such
a company or, / if from such a country, has been registered with the competent Authority
(copy of the registration Certificate enclosed). I hereby certify that this bidder fulfils all
requirements in this regard and is eligible to be considered.
•

Date:	
Place:	

Signature with Date and Stamp of the Bidder

## CERTIFICATE OF DECLARATION (ON COMPANY LETTER HEAD)

1	nereby	certify	tnat	we	M/S
	(n	ame and addres	s of the firm) i	s neither blac	klisted by
any Central/S	tate Government/	Public Undertaki	ng / Institute n	or is any crim	ninal case
registered / po	ending against the	e firm or its owne	r / partners any	where in India	€.
I also c	ertify that the abo	ve information is	true and correc	t in every asp	ect and in
any case at a	later date it is fo	ound that any de	tails provided a	above are inco	rrect any
contract given	to the above firm	n may be summa	rily terminated a	and the firm b	acklisted.
Date: Place:					

Signature with Date and Stamp of the Bidder

#### **CHECK LIST**

## BIDDER HAS TO FILL IN THE CHECK LIST GIVEN BELOW (Following documents are to be submitted online and manual as part of Technical Bid. Bidders are requested to state Yes / No against each column)

SI. No.	Description	Online Submission
1.	If bidder is not an original equipment manufacturer, authorization letter attached.	
2.	Whether Tender Fee and EMD Submitted	
3.	Whether Technical Bid Submitted	
4.	Whether Commercial Bid (BoQ) Submitted	
5.	Vendor BANK DETAILS, PAN / GSTIN Number from concerned authorities	
6.	Details of Products and Components	
7	Whether declaration form signed and Submitted (Scanned Copy by online)	
8.	Whether warranty clause mentioned	
9.	Whether all pages of tender document signed on all pages along with bidders seal	
10.	Payment terms	-
11.	Optional items, if any (Separate cover enclosed with Technical bid)	
12.	HSN/SAC CODES for the item mentioned in technical bid	
13.	Technical Compliance Statement (Annexure II)	
14.	Declaration of Local Content (Annexure III)	
15.	Tender Acceptance Letter (Annexure IV)	
17.	Certificate by the bidder (For Tenders) (Annexure V)	

18.	Certificate of Declaration (Annexure VI)	
19.	Brochure/Catalogue/Datasheet	
20.	Previous Purchase Orders (if any)	
21.	Statutory Registration Certificates	
22.	This Checklist	

#### **NOTE:**

- 1. Please ensure all the relevant boxes are marked YES/NO against each column.
- 2. Tenderers must ensure that all the required documents indicated in the Tender documents are submitted without fail. Tenders received without supporting documents for the various requirements mentioned in the tender document are liable to be rejected at the initial stage itself.