TENDER DOCUMENT
(Tender Notice no. IITKGP/Aero/Aerodynamics/2022-23/TUNNELDRIVE dated: 11/01/2023)

FOR

WIND TUNNEL DRIVES

OF

(DEPARTMENT OF AEROSPACE ENGINEERING)

IIT KHARAGPUR

INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR
KHARAGPUR – 721302
WEST BENGAL
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NOTICE INVITING TENDER

Indian Institute of Technology Kharagpur, an Institute of Eminence, invites sealed bids from all Indian Manufacturers/Service providers or their authorized vendors, having registered office in India who fulfil the criteria mentioned in the Tender document and have adequate credential, for the “Wind Tunnel drives” at the Department of Aerospace Engineering, IIT Kharagpur.

Interested parties may submit their sealed bids under Two-Bids system as per Technical Specifications given at Annexure I and General Terms & Conditions and other formats given at Annexure II to XIII. Two covers (Technical Bid and Price Bid) are to be sealed and placed in one large Cover superscribed with tender reference number (Tender No. IITKGP/Aero/Aerodynamics/2022-23/TUNNELDRIVE DT:11/01/2023) and submitted to “Chairman, Departmental Purchase Committee, (Department of Aerospace Engineering), Indian Institute of Technology, Kharagpur, P.O. Kharagpur Technology, PIN : 721 302 on or before (01/02/2023) at 3.00 PM . Technical Bids will be opened on (01/02/2023) at 4.00PM.

The technical bid will be evaluated first and price bids will be opened in respect of those OEMs/Vendors, who are found technically qualified after evaluation of Technical bids. Date for opening price bids will be intimated later.

Kindly refer to the Institute website www.iitkgp.ac.in [link: Tenders] for complete tender details. The same is also available in the CPP Portal [https://eprocure.gov.in/epublish/app]. If there is any corrigendum/addendum, it shall only be published on Institute's Website and Central Public Procurement Portal.

Signature of Indenter/Professor-in-Charge, Department of Aerospace Engineering/ Wind Tunnel Lab and Aerodynamics Lab IIT Kharagpur

Signature of Head Department of Aerospace Engineering IIT Kharagpur

To
1. Institute Website
2. CPP Portal
3. Department Notice Board
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<td>Tender No. &amp; Date</td>
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<td>Estimated cost, if any</td>
</tr>
<tr>
<td>Tender fee (Non refundable)</td>
</tr>
<tr>
<td>EMD</td>
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<td>Pre -bid Meeting, if any</td>
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<tr>
<td>Bid submission start date &amp; time</td>
</tr>
<tr>
<td>Last date &amp; time for submission of sealed tenders/quotations</td>
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<tr>
<td>Pre -qualification &amp; Technical Bid opening date &amp; time</td>
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<tr>
<td>Bid opening place</td>
</tr>
<tr>
<td>Any clarification</td>
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</tbody>
</table>

Note:–
1. If the day falls on any Holiday, the date of any of the events mentioned above shall be on the next working day.
2. It is the responsibility of the Bidder to ensure that their bids whether sent by post or by courier or dropped by person should reach within the stipulated date & time.
3. The quotation received after the last date and prescribed time would summarily be rejected. Quotations having incomplete information are also liable to be rejected.
4. The Director, IIT Kharagpur reserves the right to reject any or all the quotations in full or part without assigning any reason thereof and without giving any compensation. The decision of the Director in this regard shall be final and binding to all.
5. The addendum/ corrigendum if any shall only be published on Institute’s website and CPP Portal.
**TECHNICAL SPECIFICATIONS**

**Wind Tunnel Drives**
( Tender No: IITKGP/Aero/Aerodynamics/2022-23/TUNNELDRIVE dated 11/01/2023)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of the item &amp; Specifications</th>
<th>Unit</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Control panel unit with DC drives</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

A control panel unit consisting of two DC drives is to be procured and installed for controlling the operation of two motors which power two fans in our low speed industrial wind tunnel (2.25m X 1.5m). The scope of work includes the cabling from the input up to the motor terminal. The two motors have tachometers and their rotational speed must be synchronized to be identical, in order to ensure air flow quality is reasonable. Therefore, the control unit should receive a feedback from both the tachometers to synchronize their speed to be identical. There should also be an emergency switch to operate the motors next to the test section. There is a separate blower motor attached to each motor (3 phase induction motor, 0.75Hp, 415V, 2820 RPM, 50Hz). The motors should operate continuously after installation of the drives and the payment will be released only after successful commissioning of the control panel unit that needs to be certified by the engineer-in-charge.

The motors have the following specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Motor 1</th>
<th>Motor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive type</td>
<td>DC drive</td>
<td>DC drive</td>
</tr>
<tr>
<td>Power</td>
<td>56 kW</td>
<td>75 HP</td>
</tr>
<tr>
<td>Armature voltage</td>
<td>500 V</td>
<td>480 V</td>
</tr>
<tr>
<td>Armature current</td>
<td>129A</td>
<td>138A</td>
</tr>
<tr>
<td>Speed</td>
<td>1500RPM</td>
<td>1500RPM</td>
</tr>
<tr>
<td>Field voltage</td>
<td>220V</td>
<td>230V</td>
</tr>
<tr>
<td>Type</td>
<td>DC-Shunt</td>
<td>DC-Shunt</td>
</tr>
</tbody>
</table>

2
Control panel unit with DC drives
A control panel unit consisting of one DC drive is to be procured and installed for controlling the operation of a motor which powers one fan in our gust tunnel (61cm X 91.5cm). The scope of work includes the cabling from the input up to the motor terminal. There should be an emergency switch to operate the motor next to the test section. There is a separate blower motor attached to the main motor (3 phase induction...
motor, 2 Hp, 415V, 2830 RPM, 50Hz). The motor should operate continuously after installation of the drive and the payment will be released only after successful commissioning of the control panel unit that needs to be certified by the engineer-in-charge.

The motors have the following specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Motor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Drive type</strong></td>
<td>DC drive</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td>75 kW</td>
</tr>
<tr>
<td><strong>Armature voltage</strong></td>
<td>440 V</td>
</tr>
<tr>
<td><strong>Armature current</strong></td>
<td>189A</td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td>1500 RPM</td>
</tr>
<tr>
<td><strong>Field voltage</strong></td>
<td>220V</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td>DC-Shunt</td>
</tr>
</tbody>
</table>

3. Installation of a Variable Frequency Drive system for the Slip Ring, Induction Motor (15 HP, 400/440 Volts, 20 Amps, 3Ph, Slip Ring Volt-268, Rotor Amps-27) for the Low Speed Wind Tunnel (60cm x 60cm Test Section size). The motor should operate continuously after installation of the drive and the payment will be released only after successful commissioning of the control panel unit that needs to be certified by the engineer-in-charge.

4. The desirable features of the control unit are digital display and logging of Voltage, Current, RPM, power consumed, and preferably air flow speed in the test section.

5. The Bidder needs to submit at least 1 Purchase Order from the last 3 years (in particular installations in Govt. Organizations/reputed firm) to establish track record.

| Guarantee/Warranty of above item(s), if any | 1 year after successful installation and demonstration |
GENERAL TERMS AND CONDITIONS

1. **Tender Fee:** Tender fee(s) Nil.

2. **Bid Security Declaration in lieu of EMD:** Rs. 1,07,000/- (By way of demand draft from any Nationalized Bank / Commercial Bank and paid in favour of “Indian Institute of Technology Kharagpur”, payable at Kharagpur). IIT Kharagpur will give exemption for submission of EMD who are registered with MSME, NSIC or start-ups as recognised by DIPP for the tendered item/services. However proper and valid documents in this regard must be submitted by the bidders in support of their claim. EMD should be kept in separate covers and placed in technical bid cover.

3. **Payment Terms & Performance Bank Guarantee (PBG):** 90% payment shall be made after receipt of stores in good order and condition, successful installation and demonstration thereafter certification by the Department. Balance 10% may be released against submission of Performance Bank Guarantee to the tune of 3% of the total Contract value or on completion of warranty period. PBG shall be issued from any nationalized bank/ commercial bank, which shall be valid for the period of warranty plus 60 days. No advance/mobilization support, is payable against supply of stores.

4. **Liquidated Damages:** In the event of failure to deliver the stores beyond the specified date, liquidated damages @ 1% per month or part thereof in respect of the value of stores will be deducted, subject to a maximum of 5%; alternately the order will be cancelled and the undelivered stores purchased from elsewhere at the risk and expense of the vendor.

5. **Warranty/Guarantee & On-site skill support:** 1 year onsite comprehensive OEM warranty from the date of successful installation and commissioning. The firm has to guarantee supply of spares for a minimum period of 10 years.

6. **Supply of spares and accessories:** Interested vendors must be able to supply adequate spares and consumable during three years of comprehensive warranty. Vendor should also ensure trouble free service and performance for another seven years beyond three years Comprehensive Warranty Period with adequate spares and accessories.

7. **Delivery of Stores:** The store items are to be supplied within 90 days from the date of receipt of the Purchase Order.

8. **Price:**
   a. The Price should be quoted in INR only.
   b. The price should be quoted “FOR IIT Kharagpur” basis. The price should be all inclusive.
   c. The unit prices should be for the same unit as indicated in the Schedule to tender enquiry and not for any other unit.
   d. Discount, if any, should be indicated separately/prominently.
   e. Offers should normally be on fixed and firm price basis. Any clause making price variation will not be acceptable.
9. **Bid**: Technical Bid and Price Bid should be submitted in two separate sealed envelopes quoting reference number on the top of the envelope. **Tender Fee, if any should be enclosed with the Technical Bid documents, in separate sealed envelopes, stapled with the packet containing Technical Bid documents.**

10. **Award of the Contract**: The order shall be placed to successful L1 bidder.

11. **Acceptance of Tender**: The Authority of IIT Kharagpur does not bind itself to accept the lowest priced bid and reserves the right to reject any or the entire tender bids received without assigning any reason thereof.

12. The addendum/corrigendum if any shall be published on Institute’s [Website i.e. www.iitkgp.ac.in and on CPP Portal](#).

13. **Extra Features**: If the bidder provides any other extra features on the Hardware or Software which are not mentioned in the tender product specifications, then that shall be highlighted in clear terms, with documentary evidence/literature.

14. **Compliance List**: The proposal should be properly indexed and a compliance list against the technical specifications should be provided.

15. **Service**: Response to ensure quality of services, the deputed Engineer from the OEM/Vendor shall have a [minimum of 2 years of experience](#) in the relevant field and must be in the payroll of the OEM/Vendor.

16. **Installation and Commissioning**: Free of cost at [Wind Tunnel Lab and Aerodynamics Lab / Department of Aerospace Engineering](#), IIT, Kharagpur. The supplier must ensure timely installation of Experimental test setup with necessary support to the indenters, as per details and lists to be made available by the Stores & Purchase Section or the indenting Departments/Centres/Schools.

17. **Training**: The Supplier is required to provide training at free of cost to the designated Purchaser's technical and end user personnel to enable them to effectively operate the total equipment.

18. **Site preparation**: The supplier shall inform to the Institute about the site preparation, if any, needed for the installation of equipment, immediately after the receipt of the purchase order. The supplier must provide complete details regarding space and all the other infrastructural requirements needed for the equipment, which the Institute should arrange before the arrival of the equipment to ensure its timely installation and smooth operation thereafter. The supplier shall visit the Institute and see the site where the equipment is to be installed and may offer his advice and render assistance to the Institute in the preparation of the site and other pre-installation requirements.

19. The benefit of any downward price revision (revision on account of budget/financial policy, tax revision, EPZ etc.) is to be given to IIT Kharagpur by the selected OEM/vendor.
20. Past Performance of the Vendors will be judged at the time of Technical Evaluation.

21. The Institute does not bind itself to offer any explanation to those bidders whose technical bids have not been found acceptable by the Technical Evaluation Committee of the Institute.

22. **Bidders should enclose the following documents:**
   
   a. Purchase order to be placed on: Should be mentioned in the quotation with full address, email address, phone number.
   
   b. Proforma Price Bid (without mentioning the price rate) may be attached with technical bids.
   
   c. Copy of mandatory test reports, national testing/reliability and endurance test reports etc., certified or conducted at the manufacturing site, granted by the bureaus/quality control departments/national testing laboratories (if applicable).

23. All tenders are to be handed over in a sealed box in the Office of **Department of Aerospace Engineering**, IIT Kharagpur-721302. The bids (technical and price bids) once submitted shall be the property of the Institute and shall not be returned to the vendor in future. For speed post, the Postal Address is “

   **Chairman, Departmental Purchase Committee**  
   **Department of Aerospace Engineering**,  
   **IIT Kharagpur-721302, West Bengal (State)**

24. **Opening of Price Bids:** The Price Bid(s) of only those vendor(s) who are found technically qualified will be opened and the same will be opened before the technically qualified vendor(s). The date for opening of price bids will be notified separately by email.

25. Tenderer or his/her authorized representative (with proper authorization letter for attending opening of technical bids and also for opening of price bids) may choose to be present at the time of opening of Technical Bids/Price Bids.

26. **Disqualification of Tender:** The tenders are liable for rejection in the following circumstances:
   
   a) If they are not in line with the terms and conditions of this tender notice
   
   b) Conditional quotations
   
   c) Incomplete tenders
   
   d) Tenders without Tender Fee and/or Bid Security Declaration
   
   e) Tenders submitted through Fax or e-mail
   
   f) If two bid system is not followed
   
   g) Bid received simultaneously from Indian agent on behalf of Principal/OEM and Principal/OEM itself for same item/product/services in the same tender
h) The Firm need to quote all the charges/prices as per the tender requirement, if any firm quote nil charges/consideration, the bid shall be treated as Unresponsive bid and will not be considered.

IMPORTANT

I. Director may accept or reject any or all the bids in part or in full without assigning any reason and does not bind himself to accept the lowest bid. The Institute at its discretion may change the quantity/upgrade the criteria/drop any item or part thereof at any time before placing the Purchase Order.

II. A bid submitted with false information will not only be rejected but also the OEM/vendor will be debarred from participation in future tendering process.

III. In case of any dispute, the decision of the Director of this Institute shall be final and binding on the bidders.

IV. In case the due date for opening tender happens to be a holiday, the same will be opened on the next working day. The timings will however remain unchanged. Please Note that the Institute remains closed on Saturday & Sunday.

V. The Bidders are requested to submit the bids after issue of clarifications only considering the changes made if any. Bidders are totally responsible for incorporating/complying the changes/amendments issued if any, in their bid.

VI. The motors should operate continuously after installation of the drive and the payment will be released only after successful commissioning of the control panel unit that needs to be certified by the engineer-in-charge.

VII. The Bidder needs to submit at least 1 Purchase Order from the last 3 years (in particular installations in Govt. Organizations/reputed firm) to establish track record.
ANNEXURE-III

INSTRUCTIONS & SPECIAL CONDITIONS

1. **General**: Only Indian Manufacturers/Service provider or their authorized vendors, having registered office in India are invited to quote.

   **A. Compliance under Rule 144 (xi) of the General Financial Rules (GFRs) 2017**

   I. As per Ministry of Finance, Department of Expenditure, Public Procurement Division Order (Public Procurement No.1) issued from file No.6/18/2019-PPD dated 23rd July, 2020 & the Order issued from time to time regarding Restrictions under Rule 144 (xi) of the General Financial Rules (GFRs) 2017, it is directed that 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 and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the Competent Authority i.e. the Department for Promotion of Industry and Internal Trade (DPIIT).

II. “**Bidder**” (including the term ‘tenderer’, ‘consultant’ or ‘service provider’ in certain contexts) means any person or firm or company, including any member of a 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 descriptions of bidders stated hereinbefore, including any agency, branch or office controlled by such person, participated in a procurement process.

III. “**Bidders from a country which shares a land border with India**” for the purpose of this Order means:
   a) An entity incorporated, established or registered in such a country; or
   b) A subsidiary of an entity incorporated, established or registered in such a country; or
   c) An entity substantially controlled through entities incorporated, established or registered in such a country; or
   d) An entity whose **beneficial owner** is situated in such a country; or
   e) An Indian (or other) agent of such an entity; or
   f) A natural person who is the citizen of such a country; or
   g) A consortium or joint venture where any member of the consortium or joint venture falls under any of the above

IV. The **beneficial owner** for the purpose of above will be as under:

   1. In case of a company or Limited Liability Partnership, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has a controlling ownership interest or who exercise control through other means.
Explanation:

a) “Controlling ownership interest” means ownership of or entitlement to more than twenty-five per cent of share or capital or profit of the company;

b) “Control” shall include the right to appoint majority of the directors or to control the management of policy decisions including by virtue of their shareholding or management rights or shareholders agreements or voting agreements;

2. In case of a partnership firm, the beneficial owner is the natural person(s) who, whether acting alone or together, or through one or more juridical person, has ownership of entitlement to more than fifteen percent of capital or profits of the partnership;

3. In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together, or through one or more juridical person, has ownership of or entitlement to more than fifteen percent of the property or capital or profits of such association or body of individuals;

4. Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official;

5. In case of a trust, the identification of beneficial owner(s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust through a chain of control or ownership

V. An agent is a person employed to do any act for another, or to represent another in dealings with third person.

VIII. For Works contracts, including Turnkey contracts, the successful bidder shall not be allowed to subcontract works to any contractor from a country which shares a land border with India unless such contractor is registered with the Competent Authority.

A certificate (duly filled & signed) shall be submitted by bidders in the tender documents regarding their compliance with the said order as per Annexure XI. If the certificate submitted by a bidder whose bid is accepted is found to be false, this would be a ground for immediate termination and further legal action in accordance with law.

B. Compliance under Rule 153 (iii) of the General Financial Rules (GFRs) 2017

It is mandatory for bidders to quote items having 20% or more local content. Refer revised Public Procurement (Preference to Make in India), Order 2017 P-45021/2/2017-B.E-II dated 16.09.2020 and the order issued from time to time by Department for Promotion of Industry & Internal Trade (DPIIT), Ministry of Commerce and Industry, Government of India. (Submit duly filled Annexure XII for the same).

Also, as per DPIIT, Ministry of Commerce and Industry OM vide no: P-45021/102/2019-BE-II-Part(1) (E-50310) dated 04.03.2021, bidders can’t claim themselves as Class-I local supplier / Class-II local supplier by claiming the services such as transportation, insurance, installation, commissioning, training and after sales service support like AMC/CMC etc. as local value addition.
2. **Deviation from Specifications**: It is in the interest of the tenderer to study the specifications in the tender schedule thoroughly before quoting so that, if the tenderer makes any deviations, the same are prominently brought out in the body of the tender. If you need to add any optional items to your system in order to meet our specifications, you are requested to quote for the total including the option required to suit our requirements. Otherwise, your tender will not be considered at all.

3. **TENDERERS SHALL SUBMIT ALONG WITH THEIR TENDER**: (i) Complete address and telelinks for contact persons of manufacturers/service providers/authorized vendors offices dealing with this purchase. (ii) Name and full address of the manufacturers/service providers/authorized vendors (iii) **Country of origin** is to be provided for each item. (iv) Purchase order to be placed on: Should be mentioned in the quotation with full address.

4. **Performance Bank Guarantee**: The bidders to provide Performance Bank Guarantee of the amount equivalent to the 3% of the cost of contract value from any Nationalized Bank. The Performance Bank Guarantee is required for the entire period of Warranty. Performance Bank Guarantee must remain valid for a period 60 (sixty) days beyond the expiry of the Warranty Period.

5. **Guarantee**: The tenderer has to declare that the goods sold to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications.

6. **Patent Rights**: The Supplier shall indemnify IIT Kharagpur 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.

7. **Indemnity**: The vendor shall indemnify, protect and save IIT Kharagpur against all claims, losses, costs, damages, expenses, action suits and other proceeding, resulting from infringement of any law pertaining to patent, trademarks, copyrights etc. or such other statutory infringements in respect of all the equipment(s) supplied by him.

8. **Jurisdiction**: All questions, disputes, or differences arising under, out of or in connection with the contract, if concluded, shall be subject to the exclusive jurisdiction at the place from which the acceptance of Tender is issued i.e. Jurisdiction of KOLKATA HIGH COURT. Acceptance to this effect is also necessary at the time of opening of Technical Bid.

9. **Acknowledgment**: It is hereby acknowledged that we have gone through all the points listed under “Instructions & Special Conditions” outlined above, and those in the accompanying note on “Important Conditions”, and we agree to abide by them under the penalty of permanent disqualification for Tender participation and for related penal actions for non-abidance of the conditions.
MINIMUM ELIGIBILITY CRITERIA / PRE-QUALIFICATION CRITERIA

1. **Registration Certificate(s):** Certificate of incorporation / Trade License, PAN, GST, and other related documents shall be provided with the bid document.

2. **Past Experience of the bidder:**
   a. Experience in terms of years: 3 years
   b. Experience in terms of execution of orders: The Bidder needs to submit at least 1 Purchase Order from the last 3 years (in particular installations in Govt. Organizations/reputed firm) to establish track record. Necessary supporting document with work orders/Purchase Order, list of satisfactory clients, completion certificate shall be enclosed with the bid document. Prior experience may be relaxed for start-ups as per Govt. orders issued from time to time. Supporting documents may be submitted along with the bid document.

3. **Income Tax Return (ITR) for last three Financial Year:** Bidder shall enclose ITR certificates.

4. **Non-blacklisting certificate:** The bidder should not have been suspended or blacklisted by any Govt. Organization. (An undertaking to this effect must be submitted by the bidder that the firm has not been suspended or blacklisted by any Govt. Organization in the past or as on the date of bidding).

**Note:** The condition of prior turnover, if any and prior experience may be relaxed for Start-ups (as defined by Department of Industrial Policy and Promotion) subject to meeting of quality & technical specifications and making suitable provisions in the bidding document (Rule 173 (i) of GFR 2017)
# TECHNICAL BID

<table>
<thead>
<tr>
<th>S. No</th>
<th>Description</th>
<th>Submitted (Yes / No) (If Yes- Page No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Certificate of Incorporation / Registration Certificate</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Trade License, PAN and GST Certificates</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Status of the Tenderer (attach documents, if registered company/ partnership /propriety ship)</td>
<td></td>
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<tr>
<td>4</td>
<td>Manufacturer (OEM certificate) or Service Provider /Dealer (Authorization and OEM certificate from Manufactures )</td>
<td></td>
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<tr>
<td>5</td>
<td>Details of key top official/authorized official with e-mail id and contact number</td>
<td></td>
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<tr>
<td>6</td>
<td>Experience certificate (Previous Work Orders/Purchase Orders, list of satisfactory clients with address and contact number, completion certificates, etc.)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Technical Compliance Statement, as per Annexure - VI</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Income Tax Returns of last three Financial years</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>EMD</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Declaration as per Annexure - VII</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Undertaking / Self-Certification of non-blacklisting as per Annexure - VIII</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Certification on compliance under Rule 144 (xi) of the General Financial Rules (GFRs) 2017 as per Annexure - IX</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Certification on Compliance under Rule 153 (iii) of the General Financial Rules (GFRs) 2017 / Declaration for Local content as per Annexure - X</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Other documents like literature, catalogues etc.,(if any)</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:**

1. Attach all relevant documents in the same serial order as above, properly indexed, duly signed.
2. **This is to be submitted in a separate sealed envelope** super scribing “TECHNICAL BID”, Notice inviting **Tender Reference no.** and name of the bidder.
3. Price bid of that company/firm only will be opened which do technically qualify, for further consideration. **Attach all relevant documents in the same serial order as above, properly indexed, duly signed and sealed.**

Signature and seal of the Bidder
## TECHNICAL COMPLIANCE STATEMENT

<table>
<thead>
<tr>
<th>S. No</th>
<th>Specification</th>
<th>Specification Description</th>
<th>Complied (Yes / No)</th>
</tr>
</thead>
</table>
| 1     | Control panel unit with DC drives  | A control panel unit consisting of two DC drives is to be procured and installed for controlling the operation of two motors which power two fans in our low speed industrial wind tunnel (2.25m X 1.5m). The scope of work includes the cabling from the input up to the motor terminal. The two motors have tachometers and their rotational speed must be synchronized to be identical, in order to ensure air flow quality is reasonable. Therefore, the control unit should receive a feedback from both the tachometers to synchronize their speed to be identical. There should also be an emergency switch to operate the motors next to the test section. There is separate blower motor attached to each motor (3 phase induction motor, 0.75Hp, 415V, 2820 RPM, 50Hz). The motors should operate continuously after installation of the drives and the payment will be released only after successful commissioning of the control panel unit that needs to be certified by the engineer-in-charge. The motors have the following specifications:  

<table>
<thead>
<tr>
<th>Specification</th>
<th>Motor 1</th>
<th>Motor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive type</td>
<td>DC drive</td>
<td>DC drive</td>
</tr>
<tr>
<td>Power</td>
<td>56 kW</td>
<td>75 HP</td>
</tr>
<tr>
<td>Armature voltage</td>
<td>500 V</td>
<td>480 V</td>
</tr>
<tr>
<td>Armature current</td>
<td>129A</td>
<td>138A</td>
</tr>
<tr>
<td>Speed</td>
<td>1500 RPM</td>
<td>1500 RPM</td>
</tr>
<tr>
<td>Type</td>
<td>DC-Shunt</td>
<td>DC-Shunt</td>
</tr>
<tr>
<td>Field voltage</td>
<td>220V</td>
<td>230V</td>
</tr>
<tr>
<td>Type</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 2     | Control panel unit with DC drives  | A control panel unit consisting of one DC drive is to be procured and installed for controlling the operation of a motor which powers one fan in our gust tunnel (61cm X 91.5cm). The scope of work |                      |
includes the cabling from the input up to the motor terminal. There should be an emergency switch to operate the motor next to the test section. There is a separate blower motor attached to the main motor (3 phase induction motor, 2 Hp, 415V, 2830 RPM, 50Hz). The motor should operate continuously after installation of the drive and the payment will be released only after successful commissioning of the control panel unit that needs to be certified by the engineer-in-charge.

The motors have the following specifications:

<table>
<thead>
<tr>
<th>Specification</th>
<th>Motor 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive type</td>
<td>DC drive</td>
</tr>
<tr>
<td>Power</td>
<td>75 kW</td>
</tr>
<tr>
<td>Armature voltage</td>
<td>440 V</td>
</tr>
<tr>
<td>Armature current</td>
<td>189A</td>
</tr>
<tr>
<td>Speed</td>
<td>1500RPM</td>
</tr>
<tr>
<td>Field voltage</td>
<td>220V</td>
</tr>
<tr>
<td>Type</td>
<td>DC-Shunt</td>
</tr>
</tbody>
</table>

3 Installation of a Variable Frequency Drive system for the Slip Ring, Induction Motor (15 HP, 400/440 Volts, 20 Amps, 3Ph, Slip Ring Volt- 268, Rotor Amps- 27) for the Low Speed Wind Tunnel (60cm x 60cm Test Section size). The motor should operate continuously after installation of the drive and the payment will be released only after successful commissioning of the control panel unit that needs to be certified by the engineer-in-charge.

4 The desirable features of the control units
Digital display and logging of Voltage, Current, RPM, power consumed, and preferably air flow speed in the test section.

5 The Bidder needs to submit at least 1 Purchase Order from the last 3 years. At least 1 Purchase Order from the last 3 years (in particular installations in Govt. Organizations/reputed firm) to establish track record.
ANNEXURE - VII

DECLARATION

1. I,-------------------------------------------Son /Daughter of Shri -------------------------- ---- -----------------------------------------Proprietor/Partner/CEO/MD/Director/Authorized Signatory of M/s.-----------------------------------------am competent to sign this declaration and execute this tender document.

2. Tender ref no: ________________________________ dt:_________ . I have carefully read and understood all the terms and conditions of the tender and hereby convey my acceptance of the same.

3. The information/ documents furnished along with the above application are true and authentic to the best of my knowledge and belief.

4. I/we am/are well aware of the fact that furnishing of any false information/ fabricated document would lead to rejection of my tender at any stage besides liabilities towards prosecution under appropriate law.

5. Each page of the tender document and papers submitted by my Company is authenticated, sealed and signed, and I take full responsibility for the entire documents submitted.

Signature of the Authorized Person

Date: -----------------------------

Full Name: -----------------------------

Place: -----------------------------

Company Seal: -----------------------------
UNDERTAKING REGARDING BLACKLISTING / NON – DEBARMENT
(On Company / firm’s Letterhead)

I/We hereby confirm and declare that we, M/s ________________________________, is not blacklisted/ Deregistered/ debarred by any Government department/ Public Sector Undertaking/ Private Sector/ or any other agency for which we have Executed/ Undertaken the works/ Services as on date.

Signature of the Authorized Person

Date: -------------------------

Full Name: -------------------------

Place: -------------------------

Company Seal: --------------
CERTIFICATE

I/we have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I/we hereby certify that this bidder is not from such a country and is eligible to be considered.

OR (whichever is applicable)

I/we have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I/we hereby certify that this bidder is from __________(Name of Country) and has been registered with the Competent Authority. I/we also certify that this bidder fulfils all the requirements in this regard and is eligible to be considered.

(Copy/ evidence of valid registration by the Competent Authority is to be attached with the bid document)

Signature of the Authorized Person

Date: ---------------------------

Full Name: ---------------------------

Place: ---------------------------

Company Seal: --------------
CERTIFICATE

I/we have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries and hereby certify that this bidder is not from such a country and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority.

OR (whichever is applicable)

I/we have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India and on sub-contracting to contractors from such countries; I/we hereby certify that this bidder is from ________ (Name of Country) and has been registered with the Competent Authority and will not sub-contract any work to a contractor from such countries unless such contractor is registered with the Competent Authority. I/we also certify that this bidder fulfils all the requirements in this regard and is eligible to be considered.

(Copy/ evidence of valid registration by the Competent Authority is to be attached with the bid document)

Signature of the Authorized Person

Date: ---------------------------

Full Name: ---------------------------

Place: ---------------------------

Company Seal: --------------
DECLARATION OF LOCAL CONTENT

(To be given on Company Letter Head – For tender value upto Rs.10 Crores)
(To be given by Statutory Auditor/Cost Auditor/ Practising Cost Accountant/ Practising Chartered Accountant for tender value in excess of Rs.10 Crores)

Tender No:........................................... Dated:...........................................

To
The Chairman
Departmental Purchase Committee
Department of .........................
IIT Kharagpur
PIN: 721302

Subject: Declaration of Local Content-reg.

1. Country of origin of Goods being offered:.................................................................
2. We hereby declare that items offered has .............% local content.
   (Clarification for Local content calculation as per OM No: P-45021/102/2019-BE-II-Part (1) (E-50310), dated 4th March 2021 of Department of Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Govt. of India.)
3. The details of the location(s) at which local value addition is made are given in the below table;

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the item</th>
<th>Location(s) of local value addition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

"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 the imported content in the item (including all customs duties) as a proportion of the total value, in percent.

Important:
"False declaration will be in breach of Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules 2017 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 2017 along with such other actions as may be permissible under law."

Date:...........................................

Yours faithfully,

(Signature of the bidder, with Official Seal)
Tender for Supply, Installation, Testing and Commissioning of **Wind Tunnel Drives** equipment with 1 year of warranty.

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
<th>Qty</th>
<th>Unit Price without taxes (in Rs.)</th>
<th>Taxes Rs</th>
<th>Unit Price with Taxes (in Rs.)</th>
<th>Total Amount (in Rs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Supply and Installation, Testing and Commissioning of Wind Tunnel Drives with 1 year of warranty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In words: Rupees _________________________________________________________

1. Non-conformities between Figures and Words:
   a. If, in the price structure quoted for the required goods, there is discrepancy between the unit price and total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price shall be corrected accordingly;
   b. If there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail and the total shall be corrected; and
   c. If there is a discrepancy between words and figures, the amount in words shall prevail.

Signature of the bidder along with seal
Checklist

(Bidder should fill up YES or NO without fail)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Bid Enclosures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Yes/ No</strong></td>
</tr>
<tr>
<td><strong>Technical Bid (Envelope – A)</strong> contains the following documents</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Tender fee of Rs........./ Exemption certificate</td>
</tr>
<tr>
<td>2</td>
<td>EMD</td>
</tr>
<tr>
<td>3</td>
<td>Technical Bid as per <strong>Annexure – V</strong> along with all supporting annexures, documents etc. as mentioned in the Tender document as per given sequence</td>
</tr>
<tr>
<td>4</td>
<td>Signed Notice Inviting Tender (NIT) and corrigenda thereon, if any</td>
</tr>
<tr>
<td>5</td>
<td>Any other supporting/ additional document/ information</td>
</tr>
<tr>
<td><strong>Financial Bid (Envelope – B)</strong></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Price Bid (As per the format given at <strong>Annexure – XI</strong>)</td>
</tr>
</tbody>
</table>

Note: All pages of the bid documents must be serially numbered and signed.