Global Tender Notification for Ti-48Al-2Nb-2Cr alloy powder – 20 Kgs.

(Last Date for Submission: August 8, 2023)

GTE Approval No.: IISc-GTE-2023-267

Tender Notification Ref No.: MT/ENQ-GL-TNDR/SSU/23-24/01 Date: 18th July 2023

This is a Request for Quote (RFQ) for supply of “Ti-48Al-2Nb-2Cr alloy powder” for additive manufacturing using the direct energy deposition process for Department of Materials Engineering Indian Institute of Science, Bangalore. The tender should be submitted in two separate sealed envelopes: one containing the technical bid and the other containing the commercial bid, both of which should reach us, duly signed on or before 8th August 2023 on or before 1700 hrs. The bids should be addressed to:

The Chair
Department of Materials Engineering
Indian Institute of Science
Bangalore – 560 012
Kind Attn.: Prof. Satyam Suwas
Email: satyamsuwas@iisc.ac.in/chair.mte@iisc.ac.in

The scope of bid includes Supply of “Ti-48Al-2Nb-2Cr alloy powder” on CIP -IISc Bangalore basis.

The following is the list of the specifications regarding the size, shape of the powder and the composition range of the elements.

a) Size classification of powder 45-105 micrometers
b) Shape of the powder particles should be spherical
c) The composition of the elements should be within the range mentioned in Annexure 3
d) Quantity: 20 Kgs

**Tender Summary**

<table>
<thead>
<tr>
<th></th>
<th>Tender Number</th>
<th>MT/ENQ-GL-TNDR/SSU/23-24/01</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td>Tender Date</td>
<td>12th July 2023</td>
</tr>
<tr>
<td>3</td>
<td>Item Description</td>
<td>Ti-48Al-2Nb-2Cr alloy powder – 20 Kgs.</td>
</tr>
<tr>
<td>4</td>
<td>Tender Type</td>
<td>Two bid system: (a)Technical Bid (Part A) (b) Commercial Bid (Part B)</td>
</tr>
</tbody>
</table>
| 5   | Place of tender submission | The Chairman  
Department of Materials Engineering, 
Indian Institute of Science, 
Bengaluru 560012  
Kind Attn: Prof. Satyam Suwas |
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<tr>
<th></th>
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<tbody>
<tr>
<td>6</td>
<td>Last Date &amp; Time for submission of tender</td>
<td>8th August 2023, on or before 1700 hrs</td>
</tr>
</tbody>
</table>

**General Terms and Conditions:**

1. The bid should be submitted in two-cover system, i.e., technical bid and commercial bid separately in sealed covers. The technical bid should contain all commercial terms and conditions, except the price.
2. In the commercial bid, the price should be inclusive of all discounts.
3. The lead time for the delivery of the items should not be more than 16 weeks from the date of receipt of our purchase order. It should be clearly mentioned in the technical and commercial bids.
4. All the quotations must be valid for at least 90 days at the time of submission.
5. List of customers and references: It is preferable for the Bidder should have supplied similar equipment in centrally Funded Technical Institutes (IITs, IISC, IISER, NIT). Please provide the details and contact information.
6. The Bidder must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere. A declaration to this effect should be provided.
7. Items in addition to that listed in the technical table that you would like to bring to the attention of the committee, such as data sheets, technical plots etc. can be listed at the end of the compliance table.
8. Vendors are encouraged to highlight the advantage of their product over comparable product from the competitors.
9. If needed, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email.
10. The Institute reserves the right to accept or reject any bid, or to annul the bidding process and reject all bids, at any time prior to the award of contract without thereby incurring any liability of the affected bidder or bidders.
11. After the award of purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.

The tender documents can be sent at the following address:

The Chairman  
Department of Materials Engineering  
Indian Institute of Science, Bangalore 560012  
Karnataka (INDIA)  
Attn: Prof. Satyam Suwas
Annexure 3: Alloy composition
Alloy Ti-48Al-2Nb-2Cr, 100% Virgin

1. **Chemical Compositions**: The detailed chemical composition is given as below

   i) **Alloying Elements**:

<table>
<thead>
<tr>
<th>S. no.</th>
<th>Element</th>
<th>Atomic Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Al</td>
<td>48 ± 1</td>
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<tr>
<td>02.</td>
<td>Nb</td>
<td>2 ± 0.5</td>
</tr>
<tr>
<td>03.</td>
<td>Cr</td>
<td>2 ± 0.5</td>
</tr>
<tr>
<td>04.</td>
<td>Ti</td>
<td>Balance</td>
</tr>
</tbody>
</table>