भारतीय प्रौद्योगिकी संस्थान, गोवा
गोवा अभियांत्रिकी महाविद्यालय परिसर, फारमागुडी, फोण्डा - ४०३४०१, गोवा
Indian Institute of Technology Goa
Goa College of Engineering Campus, Farmagudi, Ponda - 403401, Goa

**Date: 26/02/2021**

**INVITATION OF BIDS FOR FRICTION STIR WELDING MACHINE**

**ENQUIRY NO: IITGOA/2020-21/029 DTD 26/02/2021**

1. Quotations are invited in two bid system for the procurement of Friction Stir Welding Machine in separate envelopes. Please mention the above-mentioned title, enquiry number and due date for submission of bids on the sealed cover to avoid the bid being declared invalid.

2. The address and contact numbers for sending bids or seeking clarifications regarding this RFP are given below –

**Assistant Registrar**
**(Stores & Purchase)**
**IIT GOA, At GEC Campus,**
**Farmagudi, Ponda – Goa.**
**403401**
**ar_sp@iitgoa.ac.in**

3. This bid enquiry is divided into three parts as follows:

   a. Part I – Contains General Information such as the time, place of submission and opening of tenders, Validity period of tenders, etc.

   b. Part II – Contains Instructions for the Bidders and essential details of the items/services required, such as the Schedule of Requirements (SOR), Technical Specifications, Delivery Period, Place of Delivery and Consignee details.

   c. Part III – Contains Price Bid format, other details etc.

4. This bid enquiry is being issued with no financial commitment and the Institute reserves the right to change or vary any part thereof at any stage and to withdraw it at any stage.

**Part I – General information**

| | |
|---|---|
| Tender No. | IITGOA/2020-21/029 |
| Tender Date | 26.02.2021 |
| Tender Category | Goods |
| Tender Type | Open |
| No. of Envelopes | 2 |

Covers Information / Submission of Bids

| Cover No. | Cover Type | Description | Document Type |
|---|---|---|---|
| 1 | Technical | Technical Specification, Tender Document, Schedule of Requirement and Compliance, Bidders Information/Indian Agent Information, PAC, Declaration of Local Content etc. | .pdf |
| 2 | Financial | Financial Bid | .pdf |

Two Bid System:
- The two-bid system will be followed for this tender. In this system bidder must submit their offer in separate sealed envelopes as – Technical Bid and Financial Bid.
- Separate technical bid and financial bid envelopes should be clearly marked as "Envelope No. 1 - Technical Bid" and "Envelope No. 2 - Financial Bid".
- Both these sealed covers are to be put in a bigger cover which should also be sealed and duly super scribed with our Tender No. & Due Date and to be submitted to the concern department/section mentioned in tender document.
- Bids should be forwarded by Bidders under their original memo / letter head inter alia furnishing details like GST number, Bank Details etc. and complete postal & e-mail address of their office.

Note:
- The technical offer should not contain any price information. If the price quoted is submitted in technical bid the tender will be rejected at the sole discretion of IIT Goa.
- Initially Technical Bids will be opened and evaluated by the purchase committee. Financial Bid of only Technically qualified bidders will be opened later.
- Contract/ Purchase Order will be awarded to the lowest bidder(L1) of Financial Bid among them.

| | |
|---|---|
| Form of Contract | Supply |
| Bid Validity (Days): | 120 days |
| Period of Work/Delivery Period (Days): | 45 days |

| | |
|---|---|
| Pre-Bid Meeting Date & Time: | Will be decided on request |
| Pre-Bid Meeting Place & Address: | N/A |
| Modification and Withdrawal of Bids: | A prospective bidder who requires clarification regarding the contents of the bidding documents shall notify to the Buyer in writing about the clarifications sought not later than 7 (Seven) days prior to the date of opening of the Bids. Copies of the query and clarification by the purchaser will be sent to all prospective bidders who have participated the bidding documents. |
| Clarification regarding contents of the tender document/RFP: | A bidder may modify or withdraw his bid after submission provided that the written notice of modification or withdrawal is received by the Buyer prior to deadline prescribed for submission of bids. A withdrawal notice may be sent by email but it should be followed by a signed confirmation copy to be sent by post and such signed confirmation should reach the purchaser not later than the deadline for submission of bids. No bid shall be modified after the deadline for submission of bids. No bid may be withdrawn in the interval between the deadline for submission of bids and expiration of the period of bid validity specified. Withdrawal of a bid during this period will result in Bidder's forfeiture of bid security. |
| Rejection of bids: | Canvassing by the Bidder in any form, unsolicited letter and post-tender correction may invoke summary rejection with forfeiture of EMD. Conditional tenders will be rejected. |
| Unwillingness to quote: | Bidders unwilling to quote should ensure that intimation to this effect reaches before the due date and time of opening of the Bid, failing which the defaulting Bidder may be delisted for the given range of items as mentioned in this RFP. |
| Contract Type: | Tender |
| Delivery Location: | Indian Institute of Technology Goa<br>Goa Engineering College Campus,<br><br>Bhausaheb Bandodkar Technical Education Complex,<br>Veling, Farmagudi, Ponda, Goa |
| Pin Code: | 403401 |
| Bid Submission End Date/Date & Time Submission: | 19.03.2021 at 17:00hrs |
| Place of Submission of Bid: | Stores & Purchase Department, IIT Goa, Admin Block,<br>At GEC Campus, Farmagudi, Ponda, Goa-403401 |
| Bid Opening Date & Time: | 22.03.2021 at 15:00 hrs |
| Bid Opening Place: | IIT Goa, Admin Block, At GEC Campus, Farmagudi, Ponda,<br>Goa-403401 |
| Other Terms & Conditions: | As mentioned in technical specification |

| | |
|---|---|
| Technical Clarification: | Name:Prof. Sachin Kore<br>School of Mechanical Sciences<br>IIT Goa<br><br>Email: sachin@iitgoa.ac.in |
| Tender Inviting Authority: | Name: Assistant Registrar (S&P)<br>Address: Stores& Purchase Department,<br>Email: ar_sp@iitgoa.ac.in<br><br>IIT Goa, Admin Block, At GEC Campus,<br>Farmagudi, Ponda, Goa - 403401 |
| Signing Authority: | Assistant Registrar (S&P) |

**Part II: Instructions to Bidders**

1. **Schedule of Requirements** – List of items are attached as **Annexure 'A'**

2. **Technical Details**: Technical details are attached in **Annexure 'B'**

3. **Two-Bid System:** In respect of Two-bid system, Bidders are required to furnish clause by clause compliance of specifications bringing out clearly the deviations from specification, if any.

**i) The Bidders are advised to submit the following documents along with Technical Bid–**

a) Compliance certificate in the following format;

| Para of tender enquiry specification item-wise (As per annexure B) | Specification of Item offered | Compliance – whether YES/NO | In case of non-compliance, deviation to be specified in unambiguous terms |
|---|---|---|---|
| | | | |

The offers must strictly be as per the specifications given in Annexure-A. At the same time, it must be kept in mind that mere copying of our specifications in the quotation shall not make the technical bid eligible for consideration. **A bid has to be supported with original catalogue (not of photo copy) of the quoted model duly signed by the OEM and the same must be sent along with the technical bid.** The quoted model should not become obsolete for a minimum period of 5 years (This is for the availability of spares). Therefore, the model quoted should invariably be highlighted in the leaflet/literature enclosed with the quotation. Non-compliance with above shall be treated as incomplete/ambiguous and the bid may be ignored without giving an opportunity to the bidder for further clarification/negotiation etc.

b) Bidders Information **(Annexure C).**

c) A copy of Indian Agent Agreement / Authorization letter from OEM / OEMs along with tender to be submitted by All Indian Agents, if the manufacturer/supplier is based in abroad.

d) GST and PAN details

e) The Bidder should provide a list of customers of previous supply of a similar/ same range of equipment to IIT's/ NIT's/Universities with contact details.

f) It is mandatory for bidders to quote items having Local Content more than 20%. Refer revised Public Procurement (Preference to Make in India), Order 2017 P- 45021/2/2017 – B. E. II dated 04.06.20 issued by DPIIT, Ministry of Commerce and Industry, Govt. of India. **(Annexure F)**

**ii) The following documents should be submitted along with Financial Bid–**

a)Price Bid. **(Annexure D)**

b)Previous order of supplies/Justification of quoted rates. **(Annexure E)**

4. **Delivery Period** – supply to be made within **45 days** from the effective date of issuance of Purchase Order. Please note that P.O. can be cancelled unilaterally by the Institute in case items are not received within the delivery period. Extension of delivery period will be at the sole discretion of the Institute, with applicability of LD clause.

5. **Delivery and Transportation** - Place for supply / installation is **'Indian Institute of Technology Goa, Ponda – Goa'.** The transportation cost & Insurance charges up to the destination is to be borne by the bidder.

## Part III: Conditions of Contract

1. Award of Contract:
   i. IIT Goa shall award the contract to the technically qualified eligible BIDDER whose bid has been determined as the lowest evaluated financial bid.
   ii. If more than one BIDDER happens to quote the same lowest price, IIT Goa reserves the right to award the contract to more than one BIDDER or any BIDDER.

2. Prices:

   a) It is mandatory to quote prices in INR – F.O.R., IIT Goa basis only.
   b) In case of Multiple options of the same product, bidders are requested to quote only one best option and not multiple options.
   c) The supplier shall pay and bear all other liabilities, taxes and duties not specifically agreed by the Purchaser in the contract.

3. Pre-installation:
   i. Please also mention the pre-installation requirements for the equipment like ambient temperature, humidity, civil work, weather specifications, power specifications, etc. When items are provided full performance satisfaction should be demonstrated.

4. Installation:
   i. Supplier shall be responsible for installation / demonstration wherever applicable and for after sales service during the warranty period and thereafter as mentioned in the contract.
   ii. Installation / demonstration to be arranged by the supplier free of cost and the same is to be done within 15 days of the arrival of the equipment at site.

5. Training:
   i. The supplier shall submit training proposal for the operation and maintenance to the personnel of IIT Goa on the offered equipment/machinery.
   ii. Wherever needed, our technical persons should be trained by the supplier at the project site free of cost. In case the person is to be trained at supplier's site abroad or in India it should be mentioned in the quotation clearly. The supplier should bear all the expenses for such training including 'to & fro' fares and lodging & boarding charges.

6. Terms of Payment:
   i. 100% within30 days after the successful delivery and installation of items at IIT Goa

7. Legal Matter:
   i. All disputes are subject to Goa jurisdiction only.

8. Rights to Accept, Reject, Amend, Modify:
   i. The basic eligibility conditions and conditions of contract are broad guidelines for pre-qualification and the Director, IIT Goa hereby reserves the right to relax / alter / modify / add/delete any or all the conditions without notice.

9. Rights to Accept, Reject Bids:
   i. The Director, IIT Goa reserves the right to accept or reject any or all bids without assigning any reason in public interest.

10. Penalty/ Liquidated Damages:
    i. Timely delivery is essence of the contract and hence if any consignment be delayed, liquidated damages at the rate 0.5% of the price of the delayed consignment, for each week or part whereof shall be levied and recovered subject to maximum of 10% of total purchase order value.
    ii. IIT Goa reserves the right to cancel the order in case the delay is more than 6 weeks. Penalties if any will be recovered by forfeiting PBG at vendor's cost and risks.

11. Supervision of Erection and Commissioning:

i. Successful BIDDER shall depute concerned specialist, for supervision of erection & commissioning of the machine to be carried out. The successful BIDDER shall make necessary arrangement at their own expenses for stay, transport and other expenses of their Specialist during their stay in Goa which also includes imparting free of cost training to IIT Goa personnel.

12. **Performance Guarantee (GFR 2017 Rule 171):**

i. Performance Guarantee Bond is mandatory.
ii. Successful tenderer/ bidder should submit performance guarantee as prescribed above to be sent to The Assistant Registrar, Stores & Purchase Department, IIT Goa on or before 15 days from the due date of issue of order acknowledgement. The PBG to be furnished in the form of bank guarantee as per proforma or annexure of the tender documents, for an amount covering 3 % of the purchase order value.
iii. The Performance Guarantee should be established in favour of "The Registrar, IIT Goa".
iv. PBG to be established through any of the National Banks (whether situated at Goa or outstation) with a clause to enforced the same on their local branch of Goa or any scheduled bank (other than national bank) situated at Goa. Bonds issued by co-operative banks will not be accepted.
v. Performance Guarantee Bond shall be for the due and faithfully performance of the contract and shall remain binding, notwithstanding such variations, alterations for extensions of time as may be made, given, conceded or agreed to between the successful tenderer and the purchaser under the terms & conditions of acceptance to the tender.
vi. The successful tenderer is entirely responsible for due performance of the contract in letter and spirit and all other documents referred to in the acceptance of tenders.
vii. The PBG shall be kept valid during the period of contract and shall continue to be enforceable for a period of one year/two years (as mentioned in the tender document) or up to warranty period, plus 60 days whichever is later from the date of order acknowledge. In case PBG needs extensions up to warranty period then supplier shall initiate extensions to PBG one month prior to expiry of PBG.
viii. For successful suppliers, if PBG is not submitted within 15 days from the date of Order Acknowledgement, then the Purchase Order will be cancelled with forfeiting of EMD.
**ix. <u>No interest shall be payable by the buyer to the Bidder on PBG.</u>**

**Annexure - A**

## List of items required

| Sl. No. | Description of Items | Qty |
|---|---|---|
| 1 | Friction Stir Welding Machine | 01 |

**Annexure – B**

## Technical Specifications for Friction Stir Welding Machine

| | |
|---|---|
| Application | Friction Stir Welding of Steel and aluminium flat sheets |
| Spindle | BT-40 |
| FSW Tool Holder | BT-40 Arbor |
| Spindle Motor | **25 HP /440 V** |
| Spindle RPM | 6 Speed levels Motor Maximum RPM 1600 |
| Feed Rate | 20-300 in 18 steps |
| Z Axis Thrust | **10000 kgf/ 100 kN(Max) Adjustable in steps of 100 'kgf)** |
| Feed Motor | 3 HP-preferably 960 RPM |
| **Feed Requirements:** | |
| Quill Stroke | 100 mm by Hydraulic Pressure |
| X axis Stroke | 800 mm (feed rate 20-300) |
| X axis Feed | 23-300 minimum 15-18 levels |
| Y axis Stroke | 200 mm / Manual |
| Z axis Stroke | 300 mm (feed rate 2mm-50mm) 18 Steps |
| Table Size | 1600 x 350 mm |
| Table Surface | 'T' Slot as per Standard |
| **Lubrication Systems:-** | |
| Lubrication | Centralized Lubrication System with Manual oil pump |
| Lubrication Oil | SAE 40 or equivalent |
| Vibration | Control with Anti Vibration Pads |
| **Hydraulic Systems:** | |
| Hydraulic Power Pack Motor | Minimum 5 HP /440 V |
| Tank Capacity | 100 Liters |
| Hydraulic Oil | Servo 68 or equivalent |
| **Structural Rigidity** | Must be rigid enough to full torque and traverse |
| **Measurement system and sensors:** | |
| **Dynamometer arrangement** | 300 x 300 Size for measuring Vertical force & Torque friction stir welding |
| **Data acquisition system** | A branded desktop computer with I5 processors, Memory (500GB) and processing speed (6B RAM Minimum) with display monitor (LCD) with latest windows OS |

**(To be printed on letterhead of the bidder)**

**Annexure - C**

## Bidders Information

| | | |
|---|---|---|
| 1. | Name of the Bidder | |
| 2. | Address of the Bidder | |
| 3. | PAN No. | |
| 4. | GSTN No. | |
| 5. | State of GST Registration | |
| 6. | E-mail | |
| 7. | Contact Person's Name & Designation | |
| 8. | Mobile No. | |

**(To be printed on letterhead of the bidder)**

**Annexure - D**

**PRICE BID FORMAT**

| S.No. | Item description & short specification | HSN Code/SAC Code | Qty in Units | GST % | Price Basis | Total Bid Price |
|---|---|---|---|---|---|---|
| 1. | Friction Stir Welding Machine | | | | | |
| 2. | **Installation and Commissioning Charges** (if any, quote in INR) | | | | | |
| 3. | **Agency Commission** (if any, quote in %) | | | | | |
| 4. | Other Charges (if any, please specify) | | | | | |
| Grand Total | | | | | | |

#HSN Code: "Harmonized System of Nomenclature Code No." and SAC Code: "Service Accounting Codes Code No."

1. Delivery Mode: Delivery at IIT Goa, at site only.
2. Terms of payment: 100% payment within 30 days after the successful delivery and installation of the item at IIT Goa.
3. Validity of the bid: 120 days from the date of submission of quotation/tender.

Signature.....
Name .....
Place: Company Name & Address: .....

Date: Affix Rubber Stamp: .....

**Note: Price Bid should be submitted in given format only. For additional information/extra items above format may be typed and used.**

**Annexure-E**

## Reasonability of Prices

Please quote best minimum prices applicable for a premier Educational and Research Institution. The party must give details of at least two purchase orders identical or similar equipment, supplied to any IITS/Research Institutions/ other organisation as per below Format (to be enclosed in Financial Bid) along with the final price paid and details are mandatory.

## Previous Supply Orders

**Name of the Firm _____**

| S.No. | PO No. & Date | Description & Quantity of ordered equipment | Value of Order | Date of completion of delivery as per contract | Remarks indicating reasons for late delivery, if any and justification of price difference of their supply order & those quoted to us | Has the equipment being installed satisfactorily (attach a certificate from the Purchaser/ Consigner) | Contact Person along with Telephone no., Fax No. and e-mail address |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

Place: _____

Date: _____ Signature and Seal of the Manufacturer / Bidder

**Annexure - F**

## DECLARATION OF LOCAL CONTENT

(To be given on company letter head - For tender value below Rs.10 crores)
(To be given by Statutory Auditor/Cost Auditor/Cost Accountant/CA for tender value above Rs.10 crores)

Date: _____

To,
The Registrar,
Indian Institute of Technology Goa,
At GEC Campus, Farmagudi, Ponda - Goa

Sub: Declaration of Local content

Tender Reference No:_____

Name of Tender: - _____

Country of Origin of Goods being offered: _____
We hereby declare that an item offered has % local content. _____

"Local Content" means the amount of value added in India which shall, be the total value of the item being offered 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(1)(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 as may be permissible under law."

Yours faithfully,
(Signature of the Bidder, with Official Seal)

# FORMAT FOR PERFORMANCE GUARANTEE BOND

**(To be typed on Non-judicial stamp paper of the value of Indian Rupees of One Hundred)** (TO BE ESTABLISHED THROUGH ANY OF THENATIONAL BANKS (WHETHER SITUATED AT GOA OR OUTSTATION) WITH A CLAUSE TO ENFORCE THE SAME ON THEIR LOCAL BRANCH AT GOA OR ANY SCHEDULED BANK SITUATED AT GOA. BONDS ISSUED BY CO-OPERATIVE BANKS ARE NOT ACCEPTED.

To,
The Registrar,
Indian Institute of Technology, Goa
Farmagudi, Ponda,
Goa – 403401

***LETTER OF GUARANTEE***

WHEREAS Indian Institute of Technology, Goa (Buyer) have invited Tenders vide Tender No..... Dt. ..... for purchase of .....
AND
WHEREAS the said tender document requires that any eligible successful tenderer (seller) wishing to supply the equipment / machinery, etc. in response thereto shall establish an irrevocable Performance Guarantee Bond in favour of **"Registrar, Indian Institute of Technology, Goa"** in the form of Bank Guarantee for Rs ..... (**3% (three percent) of the purchase value**) and valid till **one year or up to warranty period whichever is later** from the date of issue of Performance Guarantee Bond may be submitted within 15 (Fifteen) days from the date of Order Acknowledgment as a successful bidder.

NOW THIS BANK HEREBY GUARANTEES that in the event of the said tenderer (seller) failing to abide by any of the conditions referred in tender document / purchase order / performance of the equipment / machinery, etc. this Bank shall pay to Indian Institute of Technology, Goa on demand and without protest or demur Rs..... (Rupees.....).

This Bank further agrees that the decision of Indian Institute of Technology, Goa (Buyer) as to whether the said Tenderer (Seller) has committed a breach of any of the conditions referred in tender document / purchase order shall be final and binding.

We, ..... (name of the Bank & branch) hereby further agree that theGuarantee herein contained shall not be affected by any change in the constitution of the Tenderer (Seller) and/ or Indian Institute of Technology, Goa(Buyer).

**Notwithstanding anything contained herein:**

1. Our liability under this Bank Guarantee shall not exceed Rs. ..... . (Indian Rupees ..... only).
2. This Bank Guarantee shall be valid up to .....(date) and
3. We are liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if IIT Goa serve upon us a written claim or demand on or before .....(date).
4. This Bank further agrees that the claims if any, against this Bank Guarantee shall be enforceable at our branch office at ..... situated at ..... (Address of local branch).

Date:

Yours truly,
Signature and seal of the Guarantor:

Name of Bank:

**Instruction to Bank:** Bank should note that on expiry of Bond Period, the Original Bond will not be returned to the Bank. Bank isrequested to take appropriate necessary action on or after expiry of bond period.

**UNDERTAKING FOR BID SECURITY**

(To be issued by the bidder on company's letterhead in lieu of EMD)

To,
The Registrar,
Indian Institute of Technology Goa,
At GEC Campus, Farmagudi, Ponda - Goa

We, M/s ..... (name of the firm), with ref. to enquiry no. ..... dtd …… hereby undertake that:

1) We accept all the terms and conditions of the tender document.
2) We accept that, we will not modify our bid during the bid validity period, submit performance guarantee within the stipulated period and honor the contract after award of contract.
3) In the event of any modification to our bid by us or failure on our part to honor the contract after final award or failure to submit performance guarantee, our firm may be debarred from participation in any tender/contract notified by Indian Institute of Technology, Goa for a period of one year.

Yours faithfully,
(Signature of the bidder with date and seal)