DEPARTMENT OF MATERIALS ENGINEERING
INDIAN INSTITUTE OF SCIENCE (IISc), BENGALURU, INDIA
Local Tender Notice

Tender Notification Ref No.: MT/ENQ/TNDR/SSU-CoE/23-24/01 Date: 11.09.2023

The Department of Materials Engineering, Indian Institute of Science Bengaluru, invites tenders for supply of **"1 KW programmable fibre laser".** This Invitation for Bids is open to *all domestic (India based) manufacturers, Indian OEM or its authorised Indian distributors only*.

The scope of the supply includes Installation, Commissioning and Training at site for the "1.5 KW fibre laser".

Tender Summary

1	Tender number	***MT/ENQ/TNDR/SSU-CoE/23-24/01***
2	Tender Date	***11.09.2023***
3	Item Description	1 KW Programmable Fibre laser
4	Tender Type	Two Bid System: (a) Technical Bid (Part A) (b) Commercial Bid (Part B)
5	Place of Tender submission	Prof. Satyam Suwas Chair, Department of Materials Engineering, Indian Institute of Science, Bangalore - 560012
6	Last date & Time for submission of tender	**3rd October 2023 at 5.00 P.M**

To whom it may concern

This is a **Request for quote (RFQ)** from **Indian Agencies** for supply including Installation, Commissioning, training at site for **"1 KW Programmable Fibre laser"** at the **"Department of Mechanical Engineering (ME), Indian Institute of Science, Bengaluru.**

This Invitation for Bids is open to only domestic (India based) manufacturers, Indian OEM or its authorized Indian distributors. All interested vendors shall submit a response demonstrating their capabilities to produce the requested equipment to the primary point of contact listed below. ***With respect to this tender, the rules laid out by the Government of India in order No. P45021/2/2017-pp-BE-II issued by the Public Procurement Section, Department or Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, dated 4th June 2020 will be followed.***

- As per the order the government has defined a 'Class-I local supplier' as "a supplier or service provider whose goods, services or work offered for procurement, has local content equal to or more than 50%".
- A 'Class-II local supplier' is "a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%".

Only Class-I and Class-II local suppliers are eligible to participate in this open domestic tender. Any "Non-local supplier" i.e. "a supplier or service provider, whose goods, services or

works offered for procurement, has local content less than 20%" is ineligible to participate in this tender.

The deadline for submission of proposals **3rd October 2023 at 5.00 P.M** Proposals should arrive at the office of

The Chair,
Department of Materials Engineering
Indian Institute of Science,
Bengaluru,
Karnataka 560012,
India.

Direct all questions concerning the acquisition to addresses to ***Dr. Koushik Viswanathan*** *at*: koushik@iisc.ac.in

General Terms and Conditions

1. The bid should be submitted in the 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. The technical bid must contain a point-by-point technical compliance document. The technical proposal should contain a compliance table that should describe your compliance in a "yes" or "no" response against each of the items in the table listed in this RFQ. If "no" the second column should state, the extent of deviation. The third column should state the reason for the deviation, if any. The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirement table below.

3. In the commercial bid, the price should be inclusive of all discounts.

4. The quotations should be on FOR-IISc Bangalore basis in INR only.

5. The vendor should have qualified technical service personnel for the equipment based in India (preferably in Bangalore).

6. The covering letter should clearly state that whether the vendor is a Class-I or Class-II local supplier. Failing this the bid will be automatically rejected.

7. Bidders offering imported products will fall under the category of non-local suppliers. They cannot claim themselves as Class-1 local suppliers/Class-2 local suppliers by claiming the services such as transportation, insurance, installation, commissioning, training, and other sales service support like AMC/CMC, etc., as local value addition.

8. Purchase preference as defined by the recent edits to GFR (within the "margin of purchase preference") will be given to the Class-1 supplier.

9. MSMEs can seek an exemption to some qualification criteria. IISc follows GFR2017 for such details.

10. The vendor to state the percentage of the local content and provide self-certification that the item offered meets the minimum local content requirement. They should also give details of the location(s) at which the local value addition is made.

11. The lead time for the delivery of the equipment should not be more than 3 months from the date of receipt of our purchase order. It should be clearly mentioned in the technical and commercial bids.

12. All the quotations must be valid for at least 90 days at the time of submission.

13. List of customers and references: ***The Bidder should have supplied similar equipment in Central Universities, preferably in centrally Funded Technical Institutes (IITs, IISC, IISER, NIT). Please provide the details and contact information.***

14. 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.

15. 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.

16. Vendors are encouraged to highlight the advantage of their Laser optics and Delivery Head over comparable Laser optics and Delivery Head from the competitors.

17. If needed, a meeting for any technical clarifications can be scheduled with the undersigned by sending an email.

18. 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.

19. Warranty terms and additional warranty options is a must for all the components. Please specify the service plan like whether the local distributor will address the issue or the parent company.

20. Terms and conditions for the annual maintenance contract beyond the warranty period should be mentioned.

21. After the award of purchase order, the vendor must provide an Order Acknowledgement within 30 days from the receipt of the Purchase Order.

22. Please quote the price of each optional line item, separately.

Technical requirements

Please note that the requirements listed below are only guidelines. It does not disbar bids that do not meet the criteria listed. Vendors are requested to quote for equipment that meet the criteria to the best extent possible and list deviations. Deviations are NOT an automatic reason

for disqualification. They will be discussed by the technical committee prior to making an informed decision.

1	Laser type	Ytterbium fibre laser
2	Output power for continuous operation at collimator delivery end	1 kW ± 1 %
3	Power variation range	10 – 100% of maximum or better
4	Wavelength	1070 (nominal)
5	Emission line width	<10 nm
6	Polarization	Random
7	Mode of Operation	CW/modulated
8	Rise and Fall time	≤ 5µs
9	Beam shape	User programmable (SM/MM)
10	Beam quality	<0.5 mm mrad for SM <2 mm mrad for MM
11	Delivery fiber length	10mm or more
12	Extra requirements	Beam shape should be switchable on the fly
13	Output terminator/connector	QBH, 5 m length
14	Guide laser	~620 nm (red)
15	Operation Voltage	200 – 240VAC
16	Frequency	50Hz
17	Operating Temperature Range	+10 to 40 ºC
18	Operating Relative Humidity	10 to 80%
19	Remote Control interface	Hardware control (RS232 or equivalent) and software through GUI
20	Delivery Fiber	In case of damage to delivery fibre, laser system should have provision for change of delivery fibre by OEM authorized service engineer in India.
21	Safety Standard	The laser and its components should conform to relevant EN/ CE/ UL/ BIS regulatory standards for Safety and Emission
22	Installation & Commissioning	The installation of the laser will be carried out by the OEM/ Supplier at the user's site at IISc. Integration with an existing metal AM system will be undertaken under supervision/support from the OEM/supplier. User manual to be provided
23	Training at site	The supplier or their authorized representatives should impart training to IISc personnel.
24	Warranty	The OEM/supplier will extend the performance warranty of the supplied machine for day-today actual working conditions at user's site for a period of 12 months from the date of commissioning.

- Should have proven record of successful installations within Indian education/research institutes. Proof of such installation must be enclosed.

- The OEM/Supplier should have trained service engineers stationed in India for any on-site service requirement, details to be provided in the offer.

- OEM/supplier should have requisite stock of necessary spare parts in India.

- Company should have a minimum annual turnover of INR 5 crores.

TERMS AND CONDITIONS

1. Warranty period: 1 year.

2. Supplier Credibility:

   a. The Bidder/Vendor Must have supplied minimum 3 Laser optics and Delivery head to reputed Government Organizations in INDIA in the past 3 years. Copies of Purchase Orders to be enclosed along with the Technical Bid as proof.
   b. Supplier should compulsorily indicate details of facilities / expertise/ qualification of support staff in India. Factory trained engineer/s should be available in India for complete product support
   c. Please enclose User list in INDIA.
   d. Minimum 3 Reference letters of similar system supplied in INDIA need to be submitted for further consideration.

3. Publications:

   a. As our Research Work is of critical nature, Vendors need to enclose reference publications/application note on the usage of "Laser optics and Delivery head" to show expertise of the product being offered.
   b. As a scope of future work, we intend to use planar measurements on the same set-up. Vendors can provide reference publications of using "Laser optics and Delivery head" (from same OEM).

4. Institute reserves the right for final selection of items.

5. Vendors may quote for any other items/accessories separately as "Optional Items".

For queries or clarifications, please contact:

Dr. Koushik Viswanathan at koushik@iisc.ac.in

Annexure-I

Note: Compliance Certificate must be enclosed with the Technical bid. Non submission of Compliance Certificate will lead to disqualification of the bidder.

SNo	Description	Value	C	NC	D	Remarks
1	Laser type	Ytterbium fibre laser				
2	Output power for continuous operation at collimator delivery end	1 kW ± 1 %				
3	Power variation range	10 – 100% of maximum or better				
4	Wavelength	1070 (nominal)				
5	Emission line width	<10 nm				
6	Polarization	Random				
7	Mode of Operation	CW/modulated				
8	Rise and Fall time	≤ 5µs				
9	Beam shape	User programmable (SM/MM)				
10	Beam quality	<0.5 mm mrad for SM <2 mm mrad for MM				
11	Delivery fiber length	10mm or more				
12	Extra requirements	Beam shape should be switchable on the fly				
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17	Operating Temperature Range	+10 to 40 ºC				
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19	Remote Control interface	Hardware control (RS232 or equivalent) and software through GUI				

20	Delivery Fiber	In case of damage to delivery fibre, laser system should have provision for change of delivery fibre by OEM authorized service engineer in India.				
21	Safety Standard	The laser and its components should conform to relevant EN/ CE/ UL/ BIS regulatory standards for Safety and Emission				

C-Compliant, NC- Non Compliant, D- Deviation

Annexure-II

MANUFACTURER's AUTHORISATION FORM

[The bidder shall require the manufacturer to fill in this form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by the person with the proper authority to sign documents that are binding on the Manufacturer.]

Date: [insert date (as day, month and year) of Bid Submission]

Tender No.: [insert number from Invitation for Bids]

To: The Chair, Department of Materials Engineering (MTE), IISc, Bengaluru 560012

We *[insert complete name of Manufacturer*], who are official manufacturers of [*insert full address of Manufacturer's factories*], do herby authorize [*insert complete name of Bidder*] to submit a bid the purpose of which is to provide the following Goods, manufactured by us [*insert name and or brief description of the Goods*], and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty with respect to the Goods offered by the above firm.

Signed: [insert signature(s) of authorized representative(s) of the Manufacturer]

Name: [insert complete name(s) of authorized representative(s) of the Manufacturer]

Title: [insert title]

Duly authorized to sign this authorization on behalf of: [insert complete name of Bidder]