

Government of India
Bhabha Atomic Research Centre
Advanced Tunable laser applications facility (ATLAF), BTDG
Trombay

Mumbai-400085

Ref. No: BTDG/ATLAF/WORKS/1A/2021/211

Date: 23/11/2021

To,

To whom it may concern

Sub: Fabrication and supply of High reflectivity Mirrors
Invitation of Quotations

Due date: 2nd Dec, 2021

Dear Sirs,

Quotations are invited for the "**Fabrication of High reflectivity Mirrors** as per **Annexure-1**". The bidder shall quote for fabrication of these components with material.

1. Taxes and excise duties shall be quoted separately. Form H/AF shall be provided wherever necessary.
2. Quotations are to be in printed letter head /quotation format which should consist of sales tax, registration number registered with the local ST authority/ CST authority, PAN number etc.
3. The quotations must reach, **Head, TLS, ATLAF, Beam Technology Development Group**, by **02/12/2021**.
4. Quotation must be sent in a sealed envelope super-scribed with the reference number and due date given above by **speed post/registered post**. Quotations submitted by telegram, telex, fax, courier will not be accepted.
5. The address on the envelope should read:
The Head,
TLS, ATLAF,
Beam Technology Development Group,
Bhabha Atomic Research Centre,
Trombay, Mumbai-400 085.
Attn: Shri Amit Khattar.
6. The finished components shall not be dispatched prior to approval by our engineer at bidder's works. Necessary inspection facilities shall be provided to our engineers during fabrication at bidder's premises.
7. The bidder shall deliver the finished components after the approval by our engineer, within **4 weeks** from the date of our firm purchase order is issued to the bidder. The finished components and the scrap from the free issue material shall be delivered by the bidder at: **Computational Lab, Hall-6, ATLAF, Above Laser Lab, BARC, Trombay, Mumbai - 400 085.**
8. Director, BTDG, BARC reserves the right to accept/reject any or all quotations without assigning any reason.
9. This tender is subject to general terms and conditions provided in next page.

for *Sushma Kh.*
Yours sincerely *16/11/21*

Director, BTDG

General Terms and Conditions

1.0 Free issue materials:

- 1.1 The free issue supply material issued by the purchaser to the fabricator shall be covered by insurance policy taken by the fabricator at his own cost for its full value.
- 1.2 The insurance policy shall cover losses of damages to the purchaser's materials due to fire, riot, strikes, theft, civil commotion etc. or any other cause.
- 1.3 The insurance policy shall be valid till the date of actual delivery of the components to the purchaser.
- 1.4 The purchaser shall be named as the beneficiary.
- 1.5 The fabricator shall return the balance material such as scraps, outputs, etc. after the fabrication to the purchaser.
- 1.6 Free issue material is NIL.

2.0 Quality surveillance, inspection and inspection report

- 2.1 All work covered by the specification shall be subject to quality surveillance by the purchaser or his authorized representative for which purpose the fabricator shall allow access at all reasonable time during manufacture to -
 - 2.1.1 The premises in which the work is being carried out.
 - 2.1.2 The drawing and/or tooling involved.
 - 2.1.3 Gauge, instruments, etc. required for inspecting the work.
- 2.2 Inspection and tests shall be carried out by the fabricator as per the requirements provided in Annexure-1.
- 2.3 The fabricator shall submit three copies of inspection report to the purchaser for approval.
- 2.4 Components found unsatisfactory as to workmanship or material shall be removed by fabricator and replaced by components which are satisfactory.
- 2.5 Fabricator shall use materials as specified by the purchaser and submit to the purchaser, the material test certificate for his approval.
- 2.6 The finished components shall not be dispatched prior to approval by our engineer at bidder's works.

3.0 Delivery

- 3.1 The bidder shall deliver the finished components after approval by our engineer within **4 weeks** from the date the firm purchase order is issued to bidder.
- 3.2 In case of any requirement of extension in the delivery period supplier must request before expiry of the work order.
- 3.3 Any delay which is attributable to the contractor is liable for penalty @ ½ % per week (max. 5 %) to be imposed on contractor.

4.0 Subcontract

- 4.1 The fabricator shall not sub-contract any or all the work without written consent from the purchaser. The fabricator shall be responsible to the purchaser for all work of the sub-contractor of the fabricator, if allowed by the purchaser.

5.0 Tax

- 5.1 **GST @ 5% [SGST @ 2.5% + CGST @ 2.5%]. Goods to be supplied against this work order are meant for research purpose only of a research organization under DAE. SGST & CGST exemption certificates will be issued before shipment of the material from your works.**
- 5.2 **Income Tax @ 2% + GST TDS @ 2%** will be deducted from your bill.
- 6.0 **Payment:** Payment shall be made only on satisfactory completion of work and production of bill. Pre-stamped receipt option form for the payment to be filled and guarantee/warranty certificate with period to be provided.

7.0 Confidentiality:

- 7.1 No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as "Property" in nature by disclosing party shall be kept strictly confidential by receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party.
- 7.2 "Restricted information" categories under section 18 of the Atomic energy Act, 1962 and "Official Secrets" under Section 5 of the Official act. Any contravention of the above mentioned provisions by any contractor, sub-contractor, consultant, adviser or the employees of a contractor will invite penal consequences under the aforesaid legislation.
- 7.3 Prohibition against use of BARC's name without permission for publicity purposes
The contractor or sub-contractor, consultant, advisor or employees engaged by the contractor shall not use BARC's name for any publicity purpose through any public media like Press, Radio, TV or Internet without the prior written approval Of BARC.
- 8 Any delay which is attributed to the contractor is liable for penalty @ ½% per week (max.5%) to be imposed on the contractor.
9. In case any extension in delivery is to be granted to the contractor, party's request for extension may be called for and the same may be justified by the Division.
- 10 Job description may be incorporated in the work order.
11. **Completely fabricated job as per Annexure-1 and scope of work must be supplied with warranty on material quality and workmanship for duration of 12 months.**
12. Furnish PAN no., VAT no., Service Tax no. and copy of the PAN card should be submitted.

Annexure-1

High reflectivity mirror specifications:

- a) Material: Fused silica.
- b) Shape: Circular.
- c) Size: 50.8 mm (+0.0/-0.1 mm) diameter
- d) Thickness: 12 mm +/- 0.2 mm
- e) Coated aperture: 90 % of dimension.
- f) Coated Surface flatness: Better than $\lambda/8$ @ 633 nm.
- g) Surface quality (Scratch - Dig): 20-10 or better.
- h) Back surface finish: Fine Ground.
- i) Reflectivity (R_{avg}): > 99 % for both 'S' and 'P' polarization in the wavelength range of 500 nm – 650 nm.
- j) AOI for coating: 0-45 degree.
- k) Coating type: Multi-layer hard dielectric coating.
- l) Coating damage threshold: Better than 0.25 J/cm² @ 532 nm, 10 ns pulse duration, 10 Hz repetition rate.
- m) Parallelism: ≤ 3 arc min.

Quantity: 30

Note:

- (1) Kindly provide reflectance curve at near normal angle of incidence (over required wavelength region as mentioned above) along with your quotation.
- (2) Kindly submit AutoCAD drawing mentioning dimensional tolerances along with your quotation.

Ant Khatun