Government of India
Bhabha Atomic Research Centre
Nuclear Recycle Group
Technology Development Division

Ref: TDD/ZF7Lens/2022/0122 Date: 20/5/2022

NIT for Minor Fabrication Due date: 3rd June 2022

Subject: Manufacturing, testing and supply of a Precision C Mount Lens Assembly as per drawing and technical specification.

Sealed quotations are invited for and on behalf of the President of India for the work as described below. The last date of submission of sealed quotation is 03/06/2022 up to 15:00 hrs at Room No 309,Service Building, WIP Complex, BARC, Trombay, Mumbai 400085. Please mention the reference number on the front cover of the sealed quotation. Sealed quotation shall only be sent through Postal Speed Post/Normal Post only. Hand delivery of the quotations is strictly not allowed. The sealed quotation will be opened on the same day at 15:30 hrs. in the office of authorized tender opening officer, TDD.

Description of work	Quantity	Duration
ZF7 equivalent lens with lens holder fabrication	**1 Set**	**Four Months**

A) Vendor Evaluation Criteria:-
Quotations of the firms fulfilling below requirement will be accepted.

A.1 Registered MSME with work experience on Lens design, fabrication for R&D departments in BARC of value 1,00,000/- or above.

A.2 Registered office & factory for lens & lens holder fabrication & testing supply to BARC.

A.3 Technically qualified team for understanding BARC design of lens and lens holder.

A.4 Bidder shall submit two envelopes, one technical offer and second is financial offer. The technical envelop shall include printed hardcopy of technical offer. **Bidder shall not include financial price in technical offer envelope.** The financial offer envelope shall have printed hardcopy of complete offer with financial values. Total price inclusive of GST shall be mentioned in word as well as numerical at end.

1.0: General: The scope of work for tender includes design fabrication testing and supply of ZF7 equivalent lens set with lens holder as per technical specification of the tender.

1.1 For **ZF7 equivalent lens with lens holder fabrication**following shall be done.

Manufacturing, testing supply of a Precision C Mount Lens consisting of the following:

1. Manufacturing & Polishing of 02 Nos. of individual lenses as per the optical design (refer Annexure-1) provided in Radiation shielding /Radiation Resistant glasses ZF7 and BK7G25.

   The lens manufacturing tolerances are as follows:
   Radius- within +/- 0.1 mm of design radius
   Diameter: +0.00/- 0.05 mm of design diameter
   Center thickness: +/- 0.05 mm of design CT
   Surface figure: Maximum Lambda/4 irregularity over Clear Aperture @ 632 nm Wavelength.
   Centration error :< 3 ARC MIN
   AR Coating: BBAR Ravg< 0.4 % 425-675 nm
   Compliance to above tolerances to be reported in the Certificate of Conformance, and suitably backed by measurement reports.

2. Fabrication of the precision C Mount/CS Mount(1 No.) precision aluminum housing to hold the lenses and with provision for focusing the optics. The housing design to be in agreement with the design (refer Annexure-1)provided by BARC and any modifications need to be approved by BARC prior to manufacture.

   Finish: Black anodized.
   The casing must meet the requirement of delivering an Air separated achromatic doublet as prescribed in the design.

All tooling costs for making the Air separated achromatic doublet as above are to be borne by the bidder. Supplier has to ensure suitable packing and safe delivery of the items at purchaser’s site.

2**Offers will be evaluated in two parts first technical basis**. **Second on overall cost basis**. hence it is mandatory for bidder to consider entire scope of work and quote e.g. 1 set cost shall be given inclusive of GST. **Two sealed envelopes shall be sent**. The first will have technical offer, quantity. After the technical scrutiny, qualifying offers will be selected for financial bid opening.

3.1: Quotation shall be valid for minimum 30 days from the date of opening.
3.2: Concessional rate of GST 5% is applicable for supply items.
3.3: The bidder shall be of qualified for similar types of works with PO /WO , references to be submitted.
3.4: The Payment will be made as per Government procedure after the job is completed satisfactorily in all respects and has been approved by the officer supervising the job. Payment shall be made only on satisfactory completion of work, and on production of bill in duplicate, advance stamped receipt. In general after submission of all the papers mentioned in work order, it takes about a month period for releasing the payment, as per standard practice followed in BARC. Income tax @ prevailing rate at the time of execution of work and applicable surcharge on Income Tax as applicable & education cess on IT & SC as applicable will be deducted from the bill.
3.5: Work shall be completed within four months of release of work order.
3.6: Quotations are to be printed on letter head and should mention Goods and Services Tax (GST) Registration Number as well as any other prevailing Tax Registration Number registered with local, state/Central authority, PAN Number of the firm, Service Tax Registration Number etc.
3.7: Quotations that are received in computer generated form are to be construed as invalid and will be rejected.
3.8: Similarly claims raised by the firms are also to be in Printed Invoice formats consisting of the above Registration Numbers.
3.9: It is necessary to mention Taxes Registration Numbers clearly in the quotation, without which the offers will not be considered.

4.0 Undertaking: The vendor shall give undertaking stating that he/she has understood the entire scope of work inclusive of technical requirements as well as other associated security/safety and other general requirements.

5.0: Procedure for submission of Bid (Off-line through Speed/Normal post only) and further Evaluation : **The biddershall submit the bid in hard copy in sealed Single envelop through Speed Post only.** Envelop shall contain**two sealed sub envelops, one sub envelope marked as Technical bid & other sub envelope marked as Financial Bid**. Both sub Envelopes shall have Ref. no. of Tender. No intermixing of Bids is allowed. Bid without two sealed sub-envelops shall be rejected. No further communication will be made against this tender. **Initially Technical Bids will be opened and Evaluation will be carried out as mentioned in Sr. No. A. 1 to A.4.**

Contact undersigned for any other technical inquiry about the job.

(D G Parulekar)
SO/F, Phone: 25591140
Email:pdhag@barc.gov.in

Fig. 1. Schematic diagram of the [illegible] of the [illegible] of [illegible]

Table 1. Design [illegible] of [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

Note: All [illegible]

Table 2. [illegible] of [illegible]

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

Specifications of the [illegible]

- [illegible] Design Wavelength: 486.1 nm – 587.6 [illegible]
- [illegible] Focal Length of [illegible]
- [illegible] Back Focal [illegible]
- [illegible] Clear [illegible]

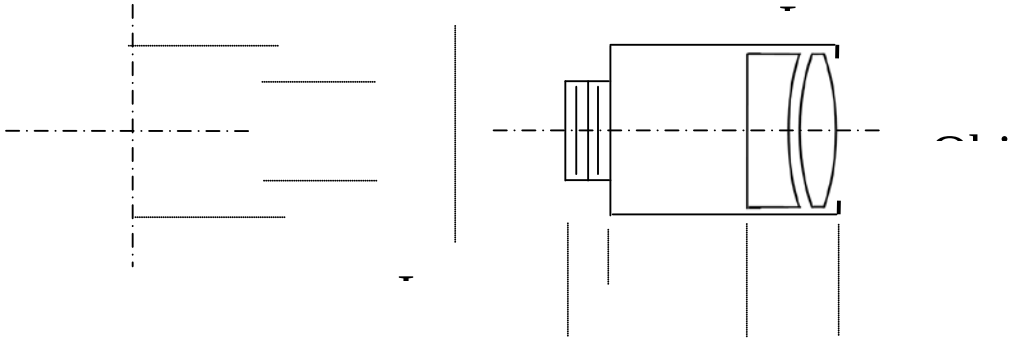

Fig. 2. Schematic diagram of the [illegible] assembly for [illegible]