## Government of India Bhabha Atomic Research Centre Beam Technology Development Group

# Ref: BTDG/ATLAF/WORKS/AN/MF/2021/297/ 2317

To,

# To whom it may concern

# Sub: <u>Fabrication and supply of accessories for vacuum metal vapour generator- 1 lot</u> <u>Invitation of Quotations</u>

## DUE DATE: December 15, 2021

Dear Sirs,

- 1. Quotations are invited for the fabrication job as per the enclosed job details.
- The quotations must reach. *Director, Beam Technology Development Group* by <u>December</u> <u>15, 2021</u> and must be sent in a sealed envelope <u>superscribed</u> with the above reference number, subject and due date given above.
- 3. The address on the envelope should read

(**Attn. Anik Mazumder)** To,

Director,

Beam Technology Development Group

BARC, Trombay, Mumbai - 400 085.

- 4. The bidder may contact on Telephone Nos. <u>+91-22-25590218/6052</u> or by email at nagaraj@barc.gov.in for any clarifications in the enquiry.
- 5. Sealed Quotations should be submitted only through <u>Registered post/speed post</u> through Indian Postal Service. Offers sent by telegram, telex, courier, fax or e-mail will not be considered
- 6. Associate Director, Beam Technology Development Group BARC reserves the right to accept or reject any or all quotations without assigning any reason.

Yours faithfully,

Trombay

Mumbai - 400 085.

December 6, 2021

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Beam Technology Development Group

Encl: One (Job details) C.C.: AAO, (WORKS) CC, BARC

# <u>Technical specifications for Fabrication and supply of accessories for vacuum metal vapour</u> <u>generator- 1 lot</u>

The requirement is for the fabrication and supply of high purity rare earth metallic rods and chunks of Samarium and Ytterbium, for the experimental work to the extent of quantity and purity specified in table 1. The scope of the work includes

- 1. Procurement of raw material that meets the chemical purity requirements to prepare Samarium and ytterbium.
- 2. Preparation of metallic rods and chunks by appropriate technique after reduction to metal.
- 3. Thorough cleaning of metallic rods by use of suitable solvent.
- 4. Inspection and testing as per the detailed QA/QC program.
- 5. Packing and safe delivery of the fabricated components to BARC, Mumbai with due care to prevent oxidation of metallic rods

S.no	Rare earth element and CAS Number	Specifications		
		Purity (Sm/TREM)	≥99.9%(3N)	
1.	Samarium metal CAS - 7440-19-9 <b>Chunk/shots</b>	Total rare earth	≥99.5%	
		metal (TREM)		
		Typical analysis,	Ca 200, Fe 50, Gd 100, Mg 50, Si 10, Y 100.	
		ppm		
		Shape	Shots/lumps/chunks	
		Maximum chunk	10 mm	
		Size	_	
		Minimum chunk	7 mm	
		SIZE	7.45	
		Bulk density	>7.45 g/cc	
		Storage	Immersed in mineral oil to prevent oxidation	
		Baakaging	250g bottle	
		Total Quantity	2009 Dottle 5000g (250g x 20No s bottles)	
		Durity (Sm/TPEM)	>00.0%(2N)	
	Samarium metal CAS - 7440-19-9 <b>10mm dia Rods</b>	Total rare earth	>00.5%	
		metal (TRFM)	299.370	
		Typical analysis	Ca 200 Fe 50 Gd 100 Mg 50 Si 10 Y 100	
		ppm		
		Rod Shape and	10mm Diameter,50mm long	
2.		size		
		Bulk density	>7.45 g/cc	
		Storage	Immersed in mineral oil to prevent oxidation	
		and packed in argon		
		Packaging	5 rods in a packet	
		Total Quantity	10mm Diameter,50mm long – 20 No.s	
	Samarium metal CAS - 7440-19-9 <b>6mm dia Rods</b>	Purity (Sm/TREM)	≥99.9%(3N)	
		I otal rare earth	299.5%	
			Co 200 Eo EO Co 100 Ma EO Si 10 V 100	
3.		n ypical allalysis,	Ca 200, Fe 50, Gu 100, Mg 50, Si 10, T 100.	
		Rod Shape and	6mm Diameter 50mm long	
		size		
		Bulk density	>7.45 g/cc	
		Storage	Immersed in mineral oil to prevent oxidation	
		ll č	and packed in argon	
		Packaging	5 rods in a packet	
		Total Quantity	6mm Diameter,50mm long – 30 No.s	

**Table 1** – Details of metal required, quantity and chemical composition

4.	Ytterbium metal	Purity (Yb/TREM)	≥99.9%(3N)	
	CAS - 7440-64-4	Total rare earth	≥99.5%	
	Chunks / shots	metal (TREM)		
		Typical analysis,	Ca 50, Cu <1, Fe 30, La 400, Lu 100, Mg 3,	
		ppm	Si 1, Sn 1, Sr 1, Tm 100.	
		Shape	Shots/lumps/chunks	
		Maximum chunk	10 mm	
		size		
		Minimum chunk	7 mm	
		SIZE		
		Bulk density	>6.9 g/cc	
		Storage	Immersed in mineral oil to prevent oxidation and packed in argon	
		Packaging	250g bottle	
		Total Quantity	4000g (250g x 16 No.s bottles)	
5.	Ytterbium metal	Purity (Yb/TREM)	≥99.9%(3N)	
CAS - 7440-64-4		Total rare earth	≥99.5%	
	10mm Dia Rods	metal (TREM)		
		Typical analysis,	Ca 50, Cu <1, Fe 30, La 400, Lu 100, Mg 3,	
		ppm	Si 1, Sn 1, Sr 1, Tm 100.	
		Rod Shape and	10mm Diameter,50mm long	
		SIZE		
		Bulk density	>6.9 g/cc	
		Storage	Immersed in mineral oil to prevent oxidation	
		Baakaging	5 rode in a packet	
		Total Quantity	10mm Diameter 50mm long – 20 No.s	
6	Vttorbium motol	Durity (Vh/TDEM)		
0.		Total rare corth	>00.5%	
	CAS - 7440-64-4	motal (TPEM)	299.570	
	6mm dia rods		C2 50 Cu <1 Eo 30 L 2 400 L 100 Mg 3	
		nnm	Si 1 Sn 1 Sr 1 Tm 100	
		Rod Shape and	6mm Diameter 50mm long	
		size	onin Dianotoi,oonin long	
		Bulk densitv	>6.9 g/cc	
		Storage	Immersed in mineral oil to prevent oxidation	
			and packed in argon	
		Packaging	5 rods in a packet	
		Total Quantity	6mm Diameter,50mm long – 30 No.s	

# 1. Procurement of raw material and testing

- a. All materials shall be such that the final compositional requirements are satisfied.
- b. Certificates for material and purchase order copies for all bought out items shall be provided.

# 2. Inspection, testing and acceptance criteria

- a. The contractor shall rigorously inspect the components before delivery to ensure that they will comply with the specifications and relevant dimensions. The purchaser shall have access at all reasonable time to all shop where components are being fabricated/assembled and all facilities for inspection shall be provided.
- b. Each component shall undergo the following tests at suppliers shop before dispatch
  - i. Metrological inspection as per sizes
  - ii. Compliance of applicable compositional specifications

#### Acceptance criteria

The products shall be sampled and tested for chemical composition in Government approved laboratory as per the relevant purity and impurities specified. Testing charges have to be borne by the supplier. After inspection of workmanship and specifications of each lot of the metallic rods/chunks by the way of test report, it shall be accepted for final delivery to BARC, Mumbai. The material which will not qualify the sizes and compositional requirements shall be rejected.

#### 3. General specifications, terms and conditions

- a. Dimensional Tolerances: As specified in the drawings or Diameter: ±2% (but not less than ±0.1mm), Height: ±1%, Linearity: Maximum deviation 0.5% of total length if not specified in the drawing.
- b. Quotation details: The quotation should be in the printed letter head /quotation format which should consist of the <u>PAN No., GST No. of the firm.</u> Quotation shall be signed by proprietor or authorized person and affix company seal. Computer generated/scanned and printed quotation will not be accepted. Failing to mention the details in their quotation will become liable to be rejected. All taxes, other charges should be mentioned clearly.
- c. GSTIN of BARC related details: Suppliers please note that BARC is the final consumer of the goods/services procured and does not intends to make any outward supply. BARC will not avail the benefits of Input Tax Credit and hence, the goods can be supplied without quoting the GSTIN of BARC, Mumbai on the invoice. The invoices taxed under GST, as per rates applicable under the GST Schedule of Rates, shall be admitted for payment. An undertaking shall be submitted by the supplier that the GST has been promptly deposited with the authorities (Annexure II). GST shall be paid only in the case of supplier clearly indicating their GSTN on the invoice.
- d. Compliance for Section 206AB & 206CCA of Income Tax Act, 1961: Vendor has to submit a declaration in the attached proforma (Annexure III) along with necessary acknowledgements in support of the declaration along with the quotation (Two previous financial years IT return information). In case the aforesaid declaration is not submitted, Accounts section shall be deducting the TDS at the higher rates as instructed under the provisions of the Income Tax Act.
- e. GST exemption Certificate: Since the goods are to be supplied against the work order meant for research purpose of a research organization under DAE, the necessary GST will be exempted to the party. Interstate transaction for R&D will attract IGST only @ 5% as per notification No. 47/17-Integrated Tax (Rate) dated 14.11.2017. Transaction within the state will attract Central Goods and Service Tax (CGST) @ 2.5% as per notification no. 45/2017-Central Tax (Rate) dated 14.11.2017 and State Goods Service Tax (SGST) @2.5% as per notification no. 45/2017-State Tax (Rate) dated. 14.11.2017 of the State of Maharashtra. No claim for reimbursement of GST above the stipulated rate as per notification would be entertained later.
- f. Material test certificates: The material testing certificates for all raw materials shall be provided along with the items. A laboratory test certificate issued by Government approved lab conforming the purity shall also be furnished before the items are dispatched to BARC, Mumbai, India.

g. Note to Contractor: All the persons involved in the erection and commissioning job, if any, shall possess valid Police Verification Certificate (PVC) to enter into BARC premises. In addition to that, vendor has to submit a certificate (Annexure I) that the contractors or their employees have not been involved in any corrupt or criminal activity and no police has been registered against any of them. The contractor shall observe all safe working practices and shall provide safety gears to his worker wherever necessary. For any work inside BARC, the contractor has to strictly abide by rules and regulations set by Security Section of BARC.

## h. Quality surveillance, inspection and inspection report

- i. 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 to: the premises in which the work is being carried out the drawing and/or tooling involved, and Gauges, instruments, etc. required for inspecting the work. Inspection and tests shall be carried out by the fabricator as per the requirements detailed in the drawings and the specifications.
- *ii.* The purchaser reserves the right to inspect any material or equipment furnished or used by Supplier under the contract and to reject any, which is found defective in workmanship, design, or otherwise unsuitable for the purpose intended.
- iii. Components found unsatisfactory as to workmanship or material shall be removed by fabricator and replaced by components, which are satisfactory. In the events of Purchaser's inspection revealing poor quality of goods, Purchaser shall be at liberty to specify additional procedures if required to ascertain supplier's compliance with the component specifications.
- iv. Even though Purchaser or his representative carries out inspection, such inspection shall not however relieve Supplier from his responsibilities for furnishing the components conforming to the requirement of the contract. The Supplier shall maintain proper inspection records and make it available to Purchaser's representative whenever required. The fabricator shall submit three copies of inspection report to the purchaser for approval.
  - i. *Free issue material:* There is no free issue of material. All material required for the job is to be supplied by the bidder.
  - **j.** *Workmanship:* The surface should be free from impurities, inclusions, unconverted oxides etc, having an impact on a common processing or application of the product. Components with manufacturing defects viz. Cracks, voids, inclusions, oxide scales will not be accepted.
  - **k.** *Dispatch:* The finished components shall not be dispatched prior to approval by our engineer at bidder's works.
  - I. *Packing and shipment:* All components shall be packed properly to avoid damage during shipment.
  - **m.** *Delivery schedule:* Supplier shall deliver the completed components/equipment in 60 days from the date of release of order.
  - n. *Warranty:* Guarantee of the items shall be furnished for one year from the date of delivery.
  - **o.** *Confidentiality clause:* No party shall disclose any information to any third party concerning the matters under this contract generally. In particular, any information identified as "Proprietary" in

nature by the disclosing party shall be kept strictly confidential by the receiving party and shall not be disclosed to any third party without the prior written consent of the original disclosing party.

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.

The contractor or sub-contractor, consultant, adviser or the employees engaged by the contractor shall not use BARCs name for any publicity purpose through any public media like Press, Radio, TV or Internet without the prior written approval of BARC

p. Payment terms: No advance payment will be made. Full payment will be made by NEFT/ECS on satisfactory completion of the works. Party should submit the bill along with advance stamped receipt. Income Tax @2% and GST TDS @2% will be deducted at source from the bill.

## Annexure I

Certificate of the C	Contractor / Owner of the Firm
This is to certify that the undersigned isat (address)	the proprietor / Owner of M/s
contract in BARC, Trombay. I hereby labourers have not been indulge in any a has been registered against any of them.	who have been awarded work certify that my firm / company and my employees / dverse or corrupt criminal activity and no police case
	Signature of the Contractor
	Name
	TIGHTO
	Dt
(Through concern	DtDt
(Through concern	DtDt
(Through concern To, Dy. Chief Security Officer	ned Engineer/ Officer, BARC)

#### Annexure - II

#### UNDERTAKING (Goods & Service Tax)

The Following certificates should be submitted by the suppliers/contractors to the paying authority on the bills itself when Goods & Servant Tax (GST) is claimed as extra by the contractors/suppliers.

- Certified that the goods and packing on which Goods & Service Tax (GST) has been charged have not been exempted under the Goods & Service Tax (GST) or the rules made there under.
- Certified further that we have actually paid Goods & Service Tax (GST) and are being assessed to Goods & Service Tax (GST) and also that where there are statutory exemptions under the GST act concerned we have availed of the same and certify non-availability of such provisions for Goods & Service Tax (GST).
- Certified that in respect of the amount claimed in the bill, no claim is pending for refund/ or is admissible. Certified that in the event of our getting refund in whole or in part of the element of Goods & Service Tax (GST), we shall pass on the benefit of the amount of refund obtained by us.

## 4. Certified further that we (our branch or agent) \_

(Address)	
are registered as dealer in the State of	under the
Central Registration No	for the

purpose of Goods & Service Tax (GST)

Signature & Stamp

# Annexure III

## TO WHOMSOEVER IT MAY CONCERN

Undertaking pursuant to Section 206 AB of the Income Tax Act 1961 Declaration confirming filing of Income Tax Return from Immediate two preceding years.

I. [Name], in the capacity of Individual/ Proprietor/ Partner/ Director/Authorized signatory of [Entity Name] with PAN , do hereby make the following declaration as required under the relevant provisions of the Income Act, 1961 (hereinafter referred as 'the Act'):

- 1. That I/We am/are authorized to make this declaration in the capacity as Individual/ Proprietor/Partner/Director.
- I/We hereby declare and confirm that I/We do not fall under the definition of 2. specified person' as provided in section 206AB of the IT Act.
- 3. I/We have duly filed return of income for FY 18-19 & FY 19-20 within due date as per Section 139(1) of the Income-tax Act, 1961 - Yes / No (strike out whichever is not applicable).
- 4. If return has been filed the details are as follows:

I/We,

having PAN

hereby confirm that the provision of Section 206 AB is not applicable in my/our case as I/we am/are regular in filing of Income Tax Return. The details (along with proof of documents) of acknowledgement numbers and date of filing of Income Tax Returns for last two financial years are furnished below:

S.No.	Financial Year / (Assessment Year)	Date of Filing Income Tax Beturn	ITR Acknowledgement
1	2018-19 / (2019-20)	Recurn	Number
2	2019-20 / (2020-21)		

5. I/We hereby take responsibility for any loss/liability fully including any Tax, interest, penalty, etc. that may arise due to incorrect reporting of above information.

All the aforesaid representations are true and correct, and we/I agree to furnish any evidence required at any time in support thereof.

On behalf of \_

<< Name of the authorised signatory>>

<<Designation>>

Name of the Entity:

Seal :

Date :