

भारत सरकार/GOVERNMENT OF INDIA  
अंतरिक्ष विभाग/DEPARTMENT OF SPACE

क्रय यूनिट-III/PURCHASE UNIT-III

विक्रम साराभाई अंतरिक्ष केंद्र/VIKRAM SARABHAI SPACE CENTRE  
तिरुवनंतपुरम/THIRUVANANTHAPURAM - 695 022

विज्ञा. सं. वीएसएससी/एसपीआरई-क्रय/4680 दि. 19/12/2023

ADVT. NO. VSSC/SPRE-PUR/4680 DT. 19/12/2023

भारत के राष्ट्रपति के लिए तथा उनकी ओर से वरिष्ठ प्रधान, क्रय एवं भंडार, विक्रम साराभाई अंतरिक्ष केंद्र (वीएसएससी), तिरुवनंतपुरम, निम्नलिखित के लिए ई-प्रापण के माध्यम से (क्रम सं. 1 के लिए) निविदाएं आमंत्रित करता है: -

For & on behalf of the President of India, the Sr. Head Purchase & Stores, Vikram Sarabhai Space Centre (VSSC), Thiruvananthapuram invites Tender **through e-procurement (for Sl. No. 1)** for the following :-

क्रम सं. Sl. No	निविदा सं. Tender No.	वर्णन / Description	मात्रा Qty.	निविदा शुल्क Tender Fee
1	VSSC/PURCHASE UNIT III (SPRE)/VS202300468001 [लोक निविदा - दो भाग/PUBLIC TENDER- TWO PART]	डायाफ्राम का विकास/ Development of Diaphragm	1 Lot/ 1 लॉट	लागू नहीं / NA

क्रम सं. Sl. No.	बोली प्रस्तुत करने की समय-सीमा Time limit for submission of Bid	बोली खोलने की तिथि Bid Opening date
01.	दिनांक 30.01.2024 [14:00 बजे तक]	दिनांक 30.01.2024 [14:05 बजे]

क्रम सं. 01 के लिए, ब्यौरे इसरो ई-प्रापण पोर्टल <https://eproc.vssc.gov.in> पर उपलब्ध हैं।  
For Sl. No. 01., details are available on ISRO e-procurement portal <https://eproc.vssc.gov.in>.

शुद्धिपत्र, यदि कोई हो तो, हमारे वेबसाइट [www.vssc.gov.in](http://www.vssc.gov.in) / [www.isro.gov.in](http://www.isro.gov.in) में मात्र प्रकाशित किया जाएगा।

Corrigendum, if any will be published in our websites : [www.vssc.gov.in](http://www.vssc.gov.in) / [www.isro.gov.in](http://www.isro.gov.in) only.

हस्ताक्षरित/Sd/-

वरि. प्रधान, क्रय एवं भंडार / Sr. Head, Purchase & Stores

E-Tenders are invited for the above mentioned procurements through our E-procurement site <https://eproc.vssc.gov.in>. Bids can be submitted before the due dates mentioned.

Only online tenders will be accepted. No manual / Postal / e-mail / fax offers will be entertained. No manual tender document will be issued. Parties interested to participate in this e-Tender are required to register themselves as vendors, if not already registered, in our e-procurement portal <https://eproc.vssc.gov.in> by downloading plugins and help demos listed on the home page of the e-procurement link mentioned above to complete the vendor registration process. They can seek help from help desk 0471-2565454 also as provided in the home page of e-procurement portal in case of any problem for registration and subsequent process. Vendors may please note that without registering in our e-procurement portal, they will not be able to quote for this e-tender.

Important Notice: Tender will be automatically closed on the due date if at least one offer is received. If the tender could not be opened on the first day due to any technical snag, it will be opened on the subsequent day as per the schedule.

This being a Two Part Tender, Cost shall be mentioned in the Price Bid Only. All the documents being uploaded like quote split up details, AMC cost etc should not contain the rates/costs. A copy of your PRICE BID, AMC quote etc WITHOUT PRICE SHALL BE UPLOADED in the Documents Solicited from the Vendor Field [available in Bid forms]. [ENSURE NOT TO MENTION ANY PRICE, OTHERWISE THE QUOTE WILL BE INVALID].

**THE TECHNICAL DOCUMENTS NEED TO BE ATTACHED ONLINE AS A SINGLE PDF FILE WITHOUT ANY PRICE INFORMATION, TECHNICAL BID CONTAINING PRICE DETAILS WILL BE TREATED AS REJECTED.**

**GOVERNMENT OF INDIA  
DEPARTMENT OF SPACE  
VIKRAM SARABHAI SPACE CENTRE (VSSC)  
THIRUVANANTHAPURAM**

**Tender for Development of diaphragm**

**Bids to be submitted online**

**Tender No.: VSSC/PURCHASE UNIT III (SPRE)/VS202300468001 dated 12-12-2023**

## A. Tender Details

Tender No :	<b>VSSC/PURCHASE UNIT III (SPRE)/VS202300468001</b>
Tender Date :	<b>12-12-2023</b>
Tender Classification:	<b>GOODS</b>
Purchase Entity :	<b>PURCHASE UNIT III (SPRE)</b>
Centre :	<b>VIKRAM SARABHAI SPACE CENTRE (VSSC)</b>

## Development of diaphragm

This tender is proposed as a DOMESTIC PUBLIC TENDER restricted only to Class-I and Class-II Local Suppliers as defined under DPIIT Order dtd 16/09/2020- Preference to make in India Order-2017 Revision. Non-Local Suppliers need not quote. Foreign OEMs/Agents quoting on behalf of Foreign OEMs are not permitted to quote. High Sea Sales Quotes not permitted. The bids shall be in INR ONLY.

This is a TWO-PART tender i.e. Techno-commercial Bid (Part-I) and Price Bid (Part-II) shall be submitted separately. All technical and commercial terms and conditions shall be furnished in the Techno Commercial Bid while price shall be indicated only in the Price Bid. Tenders are advised NOT TO UPLOAD any documents revealing the price of the main equipment, accessories, spares or AMC anywhere else other than the price-bid shall lead to unconditional rejection of the tender. Please make note of the same.

They are however, requested to upload UNPRICED BIDS (i.e. Price details masked) showing appropriate break-up of components of main equipment, individual accessories and spares as desired. Purchase preference to eligible vendors are applicable as per extent notifications issued by the Government of India.

The Class-I/Class-II Local suppliers, at the time of submitting their offer, shall provide self-certification indicating percentage of minimum local content offered in your product and shall also give details of location (s) at which the local value addition is made.

In cases if the item (s) offered exceed Rs.10 Crores, the Class-I/Class-II Local Suppliers shall provide a Certificate from the statutory auditor or cost auditor of the company (in case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.

False Declarations will be in breach of the 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 as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.

Technical Bids will be opened at the scheduled due date & time. No further intimation will be sent in

this regard. The schedule for price bid opening shown is only indicative. Price bids will only be opened in the case of parties who have been techno-commercially accepted, the details of which will be communicated at a later stage.

**A.1 Tender Schedule**

Bid Submission Start Date :	<b>12-12-2023 17:00</b>
Bid Clarification Due Date :	<b>26-12-2023 10:00</b>
Bid Submission Due Date :	<b>30-01-2024 14:00</b>
Bid Opening Date :	<b>30-01-2024 14:05</b>
Price Bid Opening Date :	<b>08-02-2024 14:00</b>

## B. Tender Attachments

NA

### Instructions To Vendors

#### 1. Specific Terms and Conditions to Tender

1. CUSTOMS DUTY: We are eligible for concessional payment of Customs Duty vide Notification Ref: 050/2017 CUSTOMS Dtd. 30/06/2017 Sl. No. 539(b) as amended by Notification No. 5/2018 dtd.25/01/2018. Please Note.

2. If any bidder submits forged / false document along with the tender, offer of such vendors will be summarily rejected and such bidders will be blacklisted for all future tenders.

3. In order to avail of the benefits extended to by Govt. of India to the Micro and Small Sectors, please submit attested copy of the valid Entrepreneur Memorandum Part-II signed by the General Manager, District Industries Centre / Udyog Adhar / NSIC Registration Certification along with your offer.

4. Liquidated Damages: The delivery period quoted should be realistic. The delivery period so quoted and mentioned in the order is the essence of the order/contract. In case of delay in delivery of material as per the delivery schedule, Liquidated Damage @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value shall be levied. Wherever, installation and commissioning is also involved, the supply will be deemed to have been completed only when the entire Stores is supplied, installed and accepted.

5. Note: SD, LD and PBG clauses are mandatory and offers of the vendors who have not agreed for the above conditions will be excluded from the procurement process. Micro and Small Vendors are not exempted from the submission of Security Deposit. Only Govt Departments/PSUs/PSEs can submit Indemnity Bond instead of Bank Gurantee towards SD/PBG.

6. Offer Validity:- Please keep and confirm the offer validity minimum 90 days[in case of Single part Tender]from the date of opening of tender/180 days [For Two Part Tenders, 120 Days after opening Part-I and 90 days after opening Part-II].

7. Our standard delivery term is FOR, VSSC. In case any vendor offers delivery term of Ex-works, Packing and Forwarding charges if any should be indicated separately either as a percentage of the quoted rate or as a Lumpsum amount.

8. Our standard payment term is 100% within 30 days for indigenous orders.

9. Performance Bank Guarantee: Wherever products offered carry warranty, the warranty should be for one year or as per manufacturers standard warranty term. Against such cases, please confirm submission of Performance Bank Guarantee. The Performance Bank Guarantee should be for 3% of the order value covering the warranty period obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of the warranty period. Alternately vendors can request for withholding 3% payment till completion of the warranty period.

10. Please quote applicable GST separately.

(a)We are eligible for partial exemption of IGST vide Notification No: 47/2017-Integrated Tax (Rate) dtd 14/11/2017 and 45/2017-Central Tax (Rate) dtd 14/11/2017 issued by Dept. of Revenue, Ministry of Finance. Necessary Exemption Certificates will be issued on demand.

(b)We are eligible for partial exemption of CGST and SGST vide Notification No: 45/2017 dtd 14/11/2017 and No: 169/2017/TAXES dtd 15/11/2017 respectively. Necessary Exemption Certificates will be issued on demand.

11. Please upload the Technical Details / Catalogue / Data Sheets (wherever applicable)

12. Security Deposit: Wherever the offer value is Rs. 5.00 Lakhs or above, the successful tenderer should submit Security Deposit @ 3% of the order value by way of Bank Guarantee / FD Receipt. The Bank Guarantee shall be obtained from any Scheduled Bank on Rs.200/- Non Judicial Stamp Paper and should be valid beyond 2 months from the completion of all contractual obligations. If the Contractor is called upon by the Purchaser to deposit, Security and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor. In case if Security Deposit is submitted and the contractor fails to execute the order, then the security deposit will be forfeited.

13. The other attached forms are our standard terms and conditions, which are to be complied with. If any conflict arise between the specific terms and standard terms, then in those cases, the specific terms will prevail over the standard terms.

14. Wherever samples are required to be submitted along with the quotation, offer without sample will not be considered.

## **2. PPP Make in India(Non- Divisible Items-Class I & II Local Suppliers Only)**

1. In line with Public Procurement (Preference to Make in India), Order 2017 & its amendments issued by Govt. of India from time to time with a view to support the Indian industries, ISRO has implemented "Purchase Preference Policy". The "Purchase Preference" is applicable for the "Class-I Local Supplier" for the goods/ services/ works covered in this tender, subject to the following terms & conditions:-

2. a) The subject item falls under Non-divisible category. b) The offers sought only from Class-I & Class-II local suppliers

3. Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content: a) Equal to or more than 50% : Class-I local supplier. b) Minimum 20% but less than 50% : Class-II local supplier. c) Less than 20% : Non-local supplier.

4. 'Local content' means the amount of value added in India (i.e. indigenous items/services added in the offered products/ services/ works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent.

5. The margin of Purchase Preference shall be up to 20%.

6. 'Margin of purchase preference' means the maximum extent to which the price quoted by the "Class-I local supplier" above the L1 (landed cost).

7. 'L1' means the lowest technically accepted tender / bid / quotation (i.e. lowest landed cost including duties, taxes and freight & Insurance).

8. Works means all works as per Rule 130 of GFR- 2017, and will also include 'turnkey works'. Works includes Engineering, Procurement and Construction (EPC) contracts and services include System Integrator (SI) contracts.

9. Purchase Preference Policy:- Goods/Works which are not divisible (ie., required quantity is 1 or as a package) and Services:

a) If L1 is from a 'Class-I local supplier', the contract will be awarded to L1 bidder.

b) If L1 is not from a 'Class-I local supplier', the lowest bidder among the 'Class-I local supplier' will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference (i.e. 20%) and the contract shall be awarded to such 'Class-I local supplier' subject to matching the L1 price (inclusive of duties, taxes and freight & insurance).

c) In case such lowest eligible 'Class-I local supplier' fails to match the L1 price, the 'Class-I local supplier' with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on, and order/contract shall be awarded accordingly. In case where none of the 'Class-I local supplier' within the margin of purchase preference agree to match the L1 price, then the order/contract shall be awarded to the original L1 Bidder.

10. The 'Class-I & II local supplier' should provide a "Self Certification" along with technical offer indicating that the item offered meets the minimum local content [as per Sl. No.(3)] as called for in the tender and provide the percentage of local content along with details of the location(s) at which the local value addition is made. In case of two bid tenders, it is mandatory to indicate compliance to

MLC(minimum Local Content) in technical bid zone.

11. The ink-signed certificate shall be provided on vendors letter head along with the offer (in case of online tender, copy of ink-signed certificate shall be uploaded along with your offer under concerned tab. Original in Hard copy shall be produced on request). In case of non-submission of certificate, the purchase preference shall not apply.

12. A committee (with an external expert from a practicing cost accountant or practicing chartered accountant, if required) constituted for independent verification shall verify the self-declarations & auditor's / accountant's certificates on random basis, as per the requirements.

13. In cases the quoted price is in excess of Rs.1000 Lakhs (including duties, taxes and freight & Insurance) the 'Class-I & II local supplier shall provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in case of suppliers other than companies) giving the percentage of local content.

14. In case of a complaint received from any local supplier indicating a need for review / verification of Local content of successful vendor / awarded vendor, for accepting a complaint from such complainant (w.r.t the false declaration given by the successful vendor on the local content), a complaint fee of Rs.2Lakhs or 1% of the locally manufactured items being procured (subject to a maximum Rs. 5Lakhs), whichever was higher, to be paid by demand draft by the complainant. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest.

15. False declarations will be in breach of code of the integrity for which a bidder or its successor's will not be eligible/debarred for purchase preference from further tenders / pending tenders for two years along with other actions as may be applicable.

16. The Public Procurement (Preference to Make in India), Order 2017 issued by Govt. of India indicates that if there are any general or specific restrictive clauses to restrict participation of Indian companies in those countries procurement tenders, reciprocity clause need to be invoked as per the order. Hence, if ISRO or Govt. of India come across that Indian suppliers of an item are not allowed to participate and / or compete in procurement by your government, the bid submitted by you will be not be considered and excluded from eligibility for procurement. Please note this point.

### **3. Instructions to Vendors**

1. Last minute clarification on tenders will not be entertained.

2. This is an E Tender. Hence Postal/Fax/Email tenders will not be accepted.

#### **4. PROFORMA FOR INSTRUCTIONS TO TENDERERS AND TERMS & CONDITIONS OF TENDER (IG)**

1. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.
- (b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.
- (c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.
- (d) Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.
2. (a) All available technical literature, catalogues and other data in support of the specifications and details of the items should be furnished along with the offer.
- (b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of nonacceptance of tender, the tenderer will have to remove the samples at his own expense.
- (c) Approximate net and gross weight of the items offered shall be indicated in your offer. If dimensional details are available the same should also be indicated in your offer.
- (d) Specifications: Stores offered should strictly confirm to our specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Test Certificates, wherever necessary, should be forwarded along with supplies. Wherever options have been called for in our specifications, the tenderer should address all such options. Wherever specifically mentioned by us, the tenderer could suggest changes to specifications with appropriate response for the same.

#### **3. ACCEPTANCE OF STORES:**

- (a) The stores shall be tendered by the Contractor for inspection at such places as may be specified by the purchaser at the Contractor's own risk, expense and cost.
- (b) It is expressly agreed that the acceptance of the stores Contracted for, is subject to final approval by the purchaser, whose decision shall be final.
- (c) If, in the opinion of the purchaser, all or any of the stores do not meet the performance or quality requirements specified in the Purchase Order, they may be either rejected or accepted at a price to be fixed by the purchaser and his decision as to rejection and the prices to be fixed shall be final and

binding on the Contractor.

(d) If the whole or any part of the stores supplied are rejected in accordance with Clause No. (c) above, the purchaser shall be at liberty, with or without notice to the Contractor, to purchase in the open market at the expense of the Contractor stores meeting the necessary performance and quality Contracted for in place of those rejected, provided that either the purchase, or the agreement to purchase, from another supplier is made within six months from the date of rejection of the stores as aforesaid.

4. As a Government of India Department, this office is exempted from payment of Octroi and similar local levies. Tenderers shall ensure that necessary Exemption Certificates are obtained by them from the Purchase Officer concerned to avoid any payment of such levies.

5. a) Your offer should be valid for 90 days from the date of opening of the tender.

b) Prices are required to be quoted according to the units indicated in the annexed tender form. When quotations are given in terms of units other than those specified in the tender form, relationship between the two sets of units must be furnished.

6. DESPATCH: The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract.

7. d) The term "Purchase Order" shall mean the communication signed on behalf of the Purchaser by an Officer duly authorised intimating the acceptance on behalf of the Purchaser on the terms and conditions mentioned or referred to in the said communication accepting the tender or offer of the Contractor for supply of stores or plant, machinery or equipment or part thereof.

#### 8. GUARANTEE & REPLACEMENT:

(a) The Contractor shall guarantee that the stores supplied shall comply fully with the specifications laid down, for material, workmanship and performance.

(b) For a period of twelve months after the acceptance of the stores, if any defects are discovered therein or any defects therein found to have developed under proper use, arising from faulty stores design or workmanship, the Contractor shall remedy such defects at his own cost provided he is called upon to do so within a period of 14 months from the date of acceptance thereof by the purchaser who shall state in writing in what respect the stores or any part thereof are faulty.

(c) If, in the opinion of the purchaser, it becomes necessary to replace or renew any defective stores such replacement or renewal shall be made by the Contractor free of all costs to the purchaser, provided the notice informing the Contractor of the defect is given by the purchaser in this regard within the said period of 14 months from the date of acceptance thereof.

(d) Should the Contractor fail to rectify the defects, the purchaser shall have the right to reject or repair or replace at the cost of the Contractor the whole or any portion of the defective stores.

(e) The decision of the Purchaser notwithstanding any prior approval or acceptance or inspection thereof on behalf of the Purchaser, as to whether or not the Stores supplied by the Contractor are defective or any defect has developed within the said period of 12 months or any other period or as to whether the nature of defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.

(f) To fulfill guarantee conditions outlined in (a) to (e) above, the Contractor shall, at the option of the Purchaser, furnish a Bank Guarantee (as prescribed by the Purchaser)

**9. PACKING FORWARDING & INSURANCE:** The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by rail, road, sea or air to withstand transit hazards and ensure safe arrival at the destination. The packing and marking of packages shall be done by and at the expense of the Contractor. The purchaser will not pay separately for transit insurance, all risks in transit being exclusively of the Contractor and the Purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

**10.** Preference will be given to those tenders offering supplies from ready stocks and on the basis of FOR destination/delivery at site.

**11. PRICES:** Tender offering firm prices will be preferred. Where a price variation clause is insisted upon by a tenderer, quotation with a reasonable ceiling should be submitted. Such offers should invariably be supported by the base price taken into account at the time of tendering and also the formula for any such variation/s.

**12. REJECTED STORES:**

Rejected stores will remain at destination at the Contractor's risk and responsibility. If instructions for their disposal are not received from the Contractor within a period of 14 days from the date of receipt of the advice of rejection, the purchaser or his representative has, at his discretion, the right to scrap or sell or consign the rejected stores to Contractor's address at the Contractor's entire risk and expense, freight being payable by the Contractor at actuals.

**13.** Sales Tax and/or other duties/levies legally leviable and intended to be claimed should be mentioned in the price bid template. If nothing is mentioned, then it will be presumed that the rate quoted is inclusive of all taxes/duties.

**14. SECURITY DEPOSIT:** Wherever, the Purchase Order value is Rs. 5.00 Lakhs or more, on acceptance of the tender, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding ten percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, 'Security' and the Contractor fails to

provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause regarding Delivery. (b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

## 15. TERMS & CONDITIONS OF TENDER

16. TEST CERTIFICATE: Wherever required, test certificates should be sent along with the despatch documents.

17. The authority of the person signing the tender, if called for, should be produced.

18. The Purchaser reserves the right to place order on the successful tenderer for additional quantity up to 25% of the quantity offered by them at the rates quoted.

19. The purchaser shall be under no obligation to accept the lowest or any tender and reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted.

20. The tenderer should supply along with his tender, the name of his bankers as well as the latest Income-Tax clearance certificate duly countersigned by the Income-Tax Officer of the Circle concerned under the seal of his office, if required by the Purchaser.

21. The term Contractor shall mean, the person, firm or company with whom or with which the order for the supply of Stores is placed and shall be deemed to include the Contractor's successors, representative, heirs, executors and administrators unless excluded by the Contract.

22. The term Purchaser shall mean the President of India or his successors or assigns.

23. The term "Stores" shall mean what the Contractor agrees to supply under the Contract as specified in the Purchase Order including erection of plants & machinery and subsequent testing, should such a condition is included in the Purchase Order.

## C. Bid Templates

### C.1 Technical Bid - Development of diaphragm

#### 1. DESIGN AND FABRICATION OF MOULD FOR RLV\_ORV DIAPHRAGM

##### Item specifications for DESIGN AND FABRICATION OF MOULD FOR RLV\_ORV DIAPHRAGM

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Scope of work	1.Design & fabrication of a suitable mould as per VSSC terms of reference for the realization of the product (RLV-ORV diaphragm), as discussed in attached drawing from VSSC. 2.Developmental mouldings (diaphragms - 4 nos.) using rubber compound with EPDM for diaphragm level qualification studies and process parameter finalization. 3.Flight component mouldings (diaphragms - 6 nos.) with qualified EPDM compound as per developed mould and process.	Yes / No / Explain		

2	Detailed work breakup is given below	<p>1.Design and realization of metallic mould and related fixtures to realize diaphragm through an appropriate moulding technique.</p> <p>2.Developmental moulding of diaphragm (4nos.) for finalizing process/product parameters.</p> <p>3.Moulding of flight use diaphragm (6 nos.)</p> <p>4.Since the order is of development nature, minimum four trial mouldings (development mouldings) are considered before supply of flight usable qualified diaphragms. Developmental moulding is aimed to understand the following:</p> <p>a)to test and confirm the properties of the elastomer, w.r.t shrinkage, flow behavior, mechanical properties, gas permeability etc</p> <p>b)to accommodate corrections in mould to meet the essential product requirements</p> <p>c)to evolve and fine tune the process parameters</p> <p>d)to finalize/demonstrate suitable fixture design for diaphragm</p> <p>e)to demonstrate repeatability in process and fine tuning of process parameters</p> <p>5.Party shall quote separately for each terms of order under the scope of work.</p> <p>6.Improvements over the mould/process aids/features, its re-</p>	Yes / No / Explain		
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		<p>design and realization, etc., the party shall address based on the experience gained during developmental mouldings.</p> <p>7.Repeatability of results in terms of product finish, dimensions, etc., need to be demonstrated through trial/developmental mouldings.</p> <p>8.Party shall plan for sufficient moulding trials, in-house, in order to to confirm the effectiveness of mould and process to meet the product dimensional requirements, as per drawing, before the start of developmental mouldings using VSSC FIMs.</p> <p>9.Based on the process parameters finalized through trial/developmental mouldings, final flight use moulding shall be carried out with process approvals from VSSC.</p>			
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3	Vendor/party pre-requisites	<p>1.The party shall have 5 years, min experience in supply of EPDM based elastomeric components for various industries. Party must have developed EN455 45 standard EPDM rubber compound and made products from them. The type test report of EN455 45 EPDM from COFRAC approved lab is to be attached along with quotation. It is also preferable for the party to have experience in the moulding and supply of perfluoro/butyl/ fluoro elastomer based components.</p> <p>2.Detailed list of components/product s currently in supply using these elastomer shall be submitted</p> <p>3.The party shall have a compression moulding press of platen size 1000 mm x 1000 mm (min), with a daylight of 1500 mm (min).</p> <p>4.The press shall have a 600 T (min) load application capability as per design</p> <p>5.The party's capability shall be assessed by an expert team from ISRO before price-bid opening, if essential.</p> <p>6.Party shall have facility to test the samples for mechanical properties</p>	Yes / No / Explain		
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4	Moulding process	<p>1.Primary option for realization of diaphragm is by compression moulding technique. However based on the expertise, party may suggest alternative methods, with clear description of its advantages. If party is suggesting different molding methods (other than compression molding), a comparison chart listing different process parameters of proposed route with compression molding technique shall be shared. Party may specify the process they are adopting for the diaphragm realization and quote separately for each technique. If a process other than compression moulding process, is suggested then a comparison chart with compression moulding process in terms of mould design, cost of realization, merits, moulding process, extraction, schedule of realization etc shall be submitted. Technique proposed by party will be reviewed by VSSC before moulding. Realisation route for mould to be communicated before finalizing design.</p> <p>2.Detailed approved process plan shall be followed for the moulding process. Moulding shall be carried out using the hydraulic press with proper electrical heating</p>	Yes / No / Explain		
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		<p>arrangements</p> <p>3.A typical moulding process shall involve,</p> <p>4.Compound processing for moulding –</p> <p>Preparation of compound to shape and size required for moulding by appropriate compound handling process</p> <p>5.Mould assembly -</p> <p>Assembly operations to be carried out in a dust free environment</p> <p>6.Moulding</p>			
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5	Following are the typical curing requirements	<p>1.Press : 600 T (min) capacity with platen size of 1000 mm x 1000 mm (min) suitable to accommodate the designed mould and should have provisions for proper clamping. Press shall have size to accommodate the mould with a daylight of 1500 mm, min</p> <p>2.Curing temperature: <math>170 \pm 5</math> °C</p> <p>3.The mould should be designed such that the temperature gradient across the mould thickness should be within <math>165-175^{\circ}\text{C}</math>.</p> <p>4.Time: 30 minutes after the mould achieves <math>170^{\circ}\text{C}</math>, min</p> <p>5.A suitable calibrated temperature monitoring system shall be arranged, as an attachment to press</p> <p>6.Uniformity in temperature distribution in the top and bottom platens of the press will be verified by VSSC and the difference in temperature variation should be less than <math>\pm 2^{\circ}\text{C}</math>. This will be verified and cleared by VSSC team before operation. Mould shall have provision to measure temperature very close to core and cavity. Party shall arrange necessary systems for the temperature gradient studies.</p> <p>7.Disassembly of the diaphragm after curing. Post curing at appropriate temperature in a hot</p>	Yes / No / Explain		
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		<p>air oven. Subsequently the product after cooling/maturation, preferably the next day flash trimming, visual inspection as well as dimensional inspection shall be performed</p> <p>8. Flash need to be carefully trimmed off from the edges &amp; removed</p> <p>9. Product shall be carefully inspected and confirmed to be free from moulding defects before dimensional inspection</p> <p>10. The dimensional inspection and weight of the component to be measured and recorded.</p>			
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6	Toolings / Instrumentation	<p>1.Mould: Party shall design the mould based on the inputs given from VSSC. The design need to be submitted within 3 weeks of order placement. Any suggestions/ modification/ detail requirements for VSSC shall be incorporated and mould shall be realized within 60 days of approval of the design. Party shall quote separately for design &amp; realization of the mould with its fixtures/toolings. The mould and fixtures so realized will be the property of VSSC and shall be supplied to VSSC after completion of the order. VSSC has the right to use it for moulding at VSSC or through any other external agency. The mould shall be the property of VSSC.</p> <p>2.Party shall clearly specify the material of construction for mould and fixtures. Mould shall be realised by machining process, using proper mould steels that shall handle the temperature, pressure,loads of moulding &amp; handling. Further, the material shall be selected properly to maintain the dimensional accuracies of product during multiple moulding/use. Mould shall possess finish and quality so as to prepare products of excellent surface finish, without any tool/machining</p>	Yes / No / Explain		
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		<p>marks. The mould on confirmation of dimensional tolerances shall be chrome plated both for core and cavity sides featuring the product.</p> <p>3. Fixtures and toolings: Suitable fixtures, support elements, toolings etc shall be designed and realized to meet the required product. Detailed design drawing and process plan shall be submitted for review and clearance by VSSC prior to the start of fabrication of each element. Process plan shall have step-by-step fabrication process along with drawings and stage inspection. Details of the machining process, machine tools and inspection also shall be listed. All mould components shall have proper identification numbers and inspection reports. All essential parts details need to be shared with VSSC for scrutiny and acceptance.</p> <p>4. Hydraulic press: Hydraulic press of minimum capacity of 600T with calibrated mould heating provisions shall be used for diaphragm moulding. Uniform temperature distribution in the platens of the heating press is necessary and it need to be ensured by thermal mapping at party's end with the participation of VSSC Engineers as</p>		
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		<p>a part of facility readiness for both developmental &amp; final moulding. Required day light with adequate parallelism between the platens also need to be ensured.</p> <p>5.All the tools, measuring instruments &amp; gauges proposed for moulding and inspection shall be calibrated and record to be submitted to vssc.</p> <p>6.Manufacturer shall maintain a master list of measuring instruments and gauges containing the relevant details like identification number, range, resolution, accuracy and calibration status.</p> <p>7.Quantity and location of thermocouples on the mould during trial/final moulding will be communicated by VSSC to the party at the time of moulding. Additional requirement from VSSC, if any, shall also be incorporated during the trial/final moulding.</p> <p>8.Party shall have an independent inspection facility and qualified manpower to carry out the quality control activities. VSSC TEAM shall witness the entire process of moulding and inspection .</p>			
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7	Process plan and Quality assurance (QA) plan	<p>1. Based on the requirement projected by VSSC, party shall make a process plan and Quality assurance plan (QA) for developmental moulding and final moulding which shall be submitted to VSSC for review and approval. Towards finalizing the process plan, the party shall plan to attend required moulding trials before the start of developmental mouldings. The material (EPDM EN455 45) for these extra items has to be sourced by the party.</p> <p>2. Any modifications/improvements suggested by VSSC, shall be incorporated and plan to be updated.</p> <p>3. Final copy of the process plan and QA plan (3 copies) shall be send to VSSC and get approval before start of the developmental moulding.</p> <p>4. One copy of this will be returned to the party with approval, two copies will be retained with VSSC.</p>	Yes / No / Explain		
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## 2. MOULDING (Developmental)

### Item specifications for MOULDING

Sl No	Specification	Value	Compliance	Offered Specification	Remark
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1	Supervision & inspection	<p>1.One Engineer, min with supervisory capacity and required process team shall be identified by the manufacturer for the overall supervision and realization of diaphragm. The team with plant level supervision shall perform all activities related to the moulding and maintain a log book for all the processing activities.</p> <p>2.Readiness of facility and process tools/aids for trial/final moulding will be reviewed and certified by VSSC team at party's site before commencing the moulding campaign activities.</p> <p>3.VSSC team will participate in the moulding campaign comprising of facility readiness checks, compound and hardware preparation processes, mould assembly and process condition checks, pre-moulding trials, component moulding and inspection activities.</p> <p>4.Processing shall be systematic and all technical observations during the processing shall be recorded in the shop log book meant for processing. Specific observations if any need to be noted in the log and it is to be brought to the notice of VSSC team. Any snag / deviation should be communicated to VSSC and clearance</p>	Yes / No / Explain		
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		<p>is to be obtained before proceeding further.</p> <p>5.Finished components shall be identified with proper identification numbers and stored as per QA plan at the specified locations as desired by VSSC, till the time of dispatch to VSSC.</p>			
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2	Acceptance	<p>1.VSSC quality/process team shall carry out surveillance and inspection as per the mandatory stages identified in the process plan,at the vendor site.</p> <p>2.Non-conformances, if any, shall be highlighted through a separate snag sheet and submitted along with the respective inspection reports.</p> <p>3.3 copies of the certified inspection reports shall be given to VSSC.</p> <p>4.A check-list consisting of identification of components, inspection report reference of all operations, waiver detail (if any) shall be submitted prior to dispatch.</p> <p>5.Acceptance of each diaphragm will be subjected to, satisfactory visual inspection, weight measurement and dimensional inspection of each diaphragm at party's/VSSC site</p> <p>6.Responsibility of accepting and rejecting the diaphragm at various stages rests with VSSC, subjected to meeting VSSC specifications.</p> <p>7.Pneumatic testing for acceptance of the realized diaphragms shall be carried out. The item shall be accepted and payment shall be released only upon successful acceptance testing</p>	Yes / No / Explain		
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3	Storage of compound, mould and fixtures	Compound to be stored in A/c during its shelf life period till moulding is completed. After completion of the order, moulds and fixtures shall be suitably protected and stored.	Yes / No / Explain		
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4	Delivery schedule	<p>1. Party shall comply the following delivery schedule during the realization.</p> <p>2. Placement of purchase order - T0</p> <p>3. Design drawing and document submission for mould and fixtures (T1) - T0 + 3 weeks</p> <p>4. Approval for design drawings by VSSC (T2) - T1 + 25 days</p> <p>5. Readiness of mould and fixtures, (T3) - T2 + 60 days</p> <p>6. Receipt of FIM from VSSC - T4</p> <p>7. Developmental moulding-1 and 2, (T5) - T4 + 20 days</p> <p>8. Developmental moulding-3 and 4, (T6) - T4 + 40 days</p> <p>9. Supply of FIM for final moulding (Batch 1) - T7</p> <p>10. Final moulding-Batch 1 ( 3 Nos.), (T8) - T7 + 20 days</p> <p>11. Supply of FIM for final moulding (Batch 2) - T9</p> <p>12. Final moulding-Batch 2 (3 Nos.), (T10) - T9 + 20 days</p> <p>T6 shall include any design modification and realization of the sub components, based on the first developmental moulding results. It may be noted that all dates are tentative dates. Even during instances of individual milestones slippages, party shall attempt to meet cumulative milestone period, by compressing areas wherever possible. The order shall be completed within 2 years from the placement of PO.</p>	Yes / No / Explain		
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5	Order period	2 years	Yes / No / Explain		
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6	Quotation	<p>Party shall submit as two-part tender (Part A and Part B) comprising of technical bid and price bid. These two bids need to be submitted in separate sealed covers.</p> <p>Techno-commercial bid (Part A)</p> <ol style="list-style-type: none"> <li>1.Company's background</li> <li>2.Infrastructure and facilities available with party (including press details and spec, heating system, instrumentation etc)</li> <li>3.Partys experience in rubber compounding &amp; moulding of rubber products</li> <li>4.Details of inspection facility available with party</li> <li>5.Brochure of the company with catalogue of products manufactured by the party and the customer.</li> <li>6.The party should have more than 5 years of experience in moulding of elastomer components</li> <li>7.Design details of mould and fixtures including the materials and their grades.</li> <li>8.Inspection procedure</li> <li>9.Realization plan.</li> </ol> <p>Price bid (Part B)</p> <p>In price bid, party should quote separately for the following and should be submitted in separate sealed cover.</p> <ol style="list-style-type: none"> <li>1.Design, development and fabrication cost for</li> </ol>	Yes / No / Explain		
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		the mould 2.Development moulding cost (per diaphragm) 3.Final moulding cost (per diaphragm)			
7	Techno-commercial bid (Part A)	1.1.Company's background 2.Infrastructure and facilities available with party (including press details and spec, heating system, instrumentation etc) 3.Partys experience in rubber compounding & moulding of rubber products/composite systems for DRDO /ISRO or other establishments 4.Details of inspection facility available with party 5.Brochure of the company with catalogue of products manufactured by the party and the customer. 6.The party should have more than 5 years of experience in moulding of elastomer components	Yes / No / Explain		
8	Price bid (Part B)	In price bid, party should quote separately for the following and should be submitted in separate sealed cover. 1.Design, development and fabrication cost for the mould 2.Development moulding cost (per diaphragm) 3.Final moulding cost (per diaphragm)	Yes / No / Explain		

9	Payment terms	<p>Payment shall be restricted to as per VSSC purchase procedures.</p> <p>1.Payment for developmental moulding will be released against supply of each developmental mould product (diaphragm) and clearance from VSSC after completing the testing as per VSSC specifications.</p> <p>2.Mould cost will be released on successful completion of developmental mouldings.</p> <p>3.Payment for flight mould product (diaphragm) will be made against the supply of each product (diaphragm) and clearance from VSSC after completing the required testing at VSSC.</p> <p>4.If the party is suggesting better process of moulding, details of the cost for tooling and fixtures to be quoted separately.</p>	Yes / No / Explain		
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10	Packing and forwarding	<p>Diaphragm inspected and cleared by VSSC only shall be dispatched along with check list. Accepted products shall be properly labeled, wrapped using PE sheet, packed in suitable containers. Manufacturer shall properly containerize the product and dispatch to VSSC with proper packing. Design of container/ packing scheme is to be submitted for review prior to realization</p>	Yes / No / Explain		
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11	General guidelines	<p>1.Details of moulding facility indented for producing the diaphragm shall be documented in the offer, indicating the hydraulic press details/make, pressure &amp; temperature control system, mould handling provisions etc.</p> <p>2.Working area should be clean, dust free to avoid contaminations during compound storage, blank preparation and moulding.</p> <p>3.Proper cleanliness for machineries and tools should be ensured to avoid rejection due to contaminations like carbon black, rust, grease, oil etc from mixing mill, hydraulic press, other tools and handling devices.</p> <p>4.Payment will be released only for inspected, and acceptable diaphragms, as per VSSC terms of reference.</p> <p>5.The party should have excellent track record of precision rubber products moulding. Should have facility with proper machinery, preferably column guided hydraulic press with heated platens of size as desired to accommodate the mould and daylight of 1500mm, min having sufficient loading capacity, stroke speed to take care of the compound's scorch time. Platen parallelism under</p>	Yes / No / Explain		
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		<p>any condition should be better than 0.5mm. Platen guide should be sturdy and accurate to take care of offset loads in mould cavity during moulding. The alignment of the mould and load centre of press should be ensured by design. It should have precision controllers for pressure and temperature setting.</p> <p>6.Mixing mill/Heating ovens identified shall be of proper capacity suitable for compound and product processing.</p> <p>7.Calibrated electronic top pan balance (resolution: 0.5g or better) for weighing of blank and product. Capacity: 20kg (max)</p> <p>8.Should have facility for handling heavy moulds in an adequately clean environment.</p> <p>9.Party shall submit point by point compliance on technical requirements, as discussed in document, approved by competent authorities.</p>			
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Document : drawing

Document : compliance chart

Document : terms and conditions

### 3. MOULDING (Final)

#### Item specifications for MOULDING

Sl No	Specification	Value	Compliance	Offered Specification	Remark
1	Compound specification	ML (dNm) 18 (Max) 2Ts2 (min) 2 (Min) 3MH (dNm) 60 (Min) 4TC90 (min) 20 (Min)	Yes / No / Explain		

**Supporting Documents required from Vendor**

**1. Price bid in pdf (Price Bid Related)**

**2. Techno Commercial Document WITHOUT price deatils in PDF format**

5 additional documents can be uploaded by the vendor

## C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	packed properly to avoid damage during transit	Yes / No / Explain	
2	Part Supply	Yes / No / Explain	
3	Security Deposit (Applicable if Offer Value is Rs. 5 Lakhs or above. MSME/NSIC Units are NOT EXEMPTED from the payment of SD. Bank Guarantee @ 3% of Order Value valid till 60 days from the date of supply to be submitted. Mandatory compliance required. Only Government Bodies/PSUs/PSEs can submit Indemnity Bond in lieu of BG. In the event of non-performance of contractual obligations, SD will be forfeited).	Yes / No / Explain	
4	Delivery Period	Yes / No / Explain	
5	Liquidated Damages (Applicable beyond the delivery period mentioned in this tender @ 0.5% per week or part thereof on the undelivered portion subject to a maximum of 10% of the contract value. Mandatory compliance required).	Yes / No / Explain	
6	Bank Guarantee for FIM: FIM as mentioned in FIM DETAILS TAB will be provided to your for design and fabrication of MOULD. You have to submit a Bank Guarantee equivalent to the cost of FIM issued [Rs 50,000] from a Nationalized/Scheduled bank in Rs.200/- Non-judicial stamp paper which shall be valid till completion & acceptance of moulds at our site..	Yes / No / Explain	
7	Payment Term: (Our Default payment term: 100% within 30 days after receipt and acceptance of item at our site.	Yes / No / Explain	

8	<p>Definitions: A supplier or service provider, whose goods, services or works offered for procurement, has local content:</p> <p>a) Equal to or more than 50% : Class-I local supplier.</p> <p>b) More than 20% but less than 50% : Class-II local supplier.</p> <p>c) Less than or equal to 20% : Non-local supplier.</p> <p>Mention your category.</p>	Yes / No / Explain	
9	PO Placement Address (with Name and Contact Details of sales person concerned).	Yes / No / Explain	
10	VSSC reserves the right of acceptance of the whole or any part of the tender or portions of the quantity offered and the tenderers shall supply the same at the rates quoted. Confirm Acceptance.	Yes / No / Explain	
11	Offer Validity-Minimum 180days	Yes / No / Explain	
12	Taxes and other duties- GST @ 5% extra. As per the GST vide Notification No. 01/2017-IGST dated 28-06-2017 as amended by Notification No. 07/2018 IGST dated 25-01-2018 and Notification No. 25/2018- IGST dated 31-12-2018. Necessary Concessional Certificate shall be issued.	Yes / No / Explain	
13	Delivery Terms.	Yes / No / Explain	
14	Local content means the amount of value added in India (i.e. indigenous items/services added in the offered products/services/works) be the total value of the item offered (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties/IGST) as a proportion of the total value (excluding net domestic indirect taxes), in percent. Indicate extent of Minimum Local Content in offered product/service and location of such value additions.	Yes / No / Explain	

15	The Class-I & II local supplier should provide a Self Certification along with your offer in PDF format indicating that the item offered meets the minimum local content as called for in the tender as mentioned above and provide the % of local content along with details of the location(s) at which the local value addition is made. In case of two part tenders, it is mandatory to indicate compliance to MLC(minimum local content) in technical bid itself. Confirm attachment of Self declaration along with the Techno commercial bid.	Yes / No / Explain	
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### C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Packing & Forwarding	Taxes & duties	Remark
1	DESIGN AND FABRICATION OF MOULD FOR RLV ORV DIAPHRAGM	1.00 Nos.		-				
2	MOULDING (Developmental)	4.00 Nos.		-				
3	MOULDING (Final)	6.00 Nos.		-				

### Common charges (Applicable for all items)

Freight charge	
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D. Free Issue Material (FIM) Details

FIM Readiness Date : 01-01-2024

SI No	FIM Item Name	Size if applicable	Unit	Quantity	Value
1	EPDM material	30	KG	1.00	50000.00