

**भारत सरकार GOVERNMENT OF INDIA :: अंतरिक्ष विभाग DEPARTMENT OF SPACE**  
**सतीश धवन अंतरिक्ष केंद्र शार SATISH DHAWAN SPACE CENTER SHAR**  
**श्रीहरिकोटा SRIHARIKOTA :: तिरुपति जिला (आ.प्र.) TIRUPATI DISTRICT (A.P.)- 524 124**

**निविदा सूचना सं. TENDER NOTICE NO. SDSC SHAR/Sr.HPS/PT/RO-LSSF/31/2023-2024**

भारत के राष्ट्रपति की ओर से वरि. प्रधान क्रय एवं भंडार, सतीश धवन अंतरिक्ष केंद्र श्रीहरिकोटा निम्नलिखित वस्तुओं के लिए ऑनलाइन निविदाएं आमंत्रित करते हैं:- On behalf of President of India, Sr. Head Purchase and Stores, SDSC SHAR, SRIHARIKOTA invites on line quotations for the following.

क्र.सं. Sl No	संदर्भ सं. Ref. No.	विवरण Description	मात्रा Qty.
01.	SDSC SHAR /LSSF PURCHASE /LSSF/ 2023001546 [Public Tender - Two Part]	Supply of PTFE inner core convoluted SS wire braided hoses	08 Nos

निविदा दस्तावेजों को डाउनलोड करने की अंतिम तिथि Last Date for downloading of tender documents : 04.12.2023 at 16:00 hrs.  
ऑनलाइन निविदा जमा करने की अंतिम तिथि Due Date for submission of bids online : 04.12.2023 at 16:00 hrs.  
निविदाएं खोलने की नियत तिथि Due Date for opening of tenders : 05.12.2023 at 14:30 hrs.

**निविदाकार के लिए निर्देश Instructions to Tenderers:**

*निविदाएं ईजीपीएस के माध्यम से ही भेजी जाएं तथा कोई निविदा शुल्क लागू नहीं होगा।  
Bids shall be submitted on line through EGPS only and No tender fee shall be applicable.*

- कार्य के सम्पूर्ण विवरण/जानकारी तथा नियम व शर्तों इत्यादि के लिए संलग्न अनुलग्नक को देखें। / For full details/scope of work and terms and conditions etc., please see the enclosed annexures.
- इच्छुक निविदाकार इसरो की ई-खरीद वेबसाइट इसरो न्यू ई-प्रोक्यूरमेंट [www.eproc.vssc.gov.in](http://www.eproc.vssc.gov.in) से ई-निविदा डाउनलोड और अपनी निविदा ई-खरीद पोर्टल पर ऑनलाइन जमा कर सकते हैं। डाक / वाहक / स्वयं द्वारा प्राप्त निविदाओं पर विचार नहीं किया जाएगा। / Interested tenderers can download the e-tender from ISRO e-procurement website ISRO NEW E-PROCUREMENT [www.eproc.vssc.gov.in](http://www.eproc.vssc.gov.in) and submit the offer on line in the e-procurement portal. Offers sent physically by post/courier/in person will not be considered.
- निविदा दस्तावेज इसरो की वेबसाइट [www.isro.gov.in](http://www.isro.gov.in) इसरो न्यू ई-प्रोक्यूरमेंट वेबसाइट [www.eproc.vssc.gov.in](http://www.eproc.vssc.gov.in) तथा सतीश धवन अंतरिक्ष केंद्र शार की वेबसाइट [www.shar.gov.in](http://www.shar.gov.in) पर भी उपलब्ध हैं। इन्हें केवल ई-खरीद पोर्टल से डाउनलोड और निविदा ऑनलाइन जमा कर सकते हैं। / Tender documents are also available on ISRO website [www.isro.gov.in](http://www.isro.gov.in) ISRO New e-procurement website [www.eproc.vssc.gov.in](http://www.eproc.vssc.gov.in) and SDSC SHAR, Sriharikota website [www.shar.gov.in](http://www.shar.gov.in). The same can be down loaded and offer submitted on line in the new e-procurement portal only.
- निर्धारित तिथि/समय के पश्चात प्राप्त बोलियों पर विचार नहीं किया जाएगा। / Quotations received after the due date/time will not be considered.
- निविदा दस्तावेज दिनांक 04.12.2023 को 16 00 बजे तक डाउनलोड करने के लिए उपलब्ध रहेंगे तथा निविदा ऑनलाइन जमा करने की अंतिम तिथि 04.12.2023 को 1600 बजे तक है। निविदाएं दिनांक 05.12.2023 को 14:30 बजे खोली जाएंगी। / The tender documents are available for download upto 04.12.2023 at 16 00 hrs. and last date for submission of tenders on line 04.12.2023 at 16 00 hrs. and Tender Opening on 05.12.2023 at 14:30 hrs.
- इच्छुक विक्रेता विवरण जानने के लिए निविदा खोले जाने वाले सत्र में शामिल हो सकते हैं। निविदा के मूल्यांकन पर विचार करने के लिए उनकी उपस्थिति अनिवार्य नहीं है। / Interested vendors can attend the Bid opening sessions to know the details. Presence not mandatory to consider the quote for evaluation.
- वरि. प्रधान क्रय एवं भंडार, सतीश धवन अंतरिक्ष केंद्र श्रीहरिकोटा के पास किसी भी या सभी निविदाओं को स्वीकार / अस्वीकार करने का अधिकार है। / Sr. Head, Purchase and Stores, SDSC-SHAR, Sriharikota reserves the right to accept or reject any/or all the quotations.
- GeM ARPTS Report ID: GEM/GARPTS /06112023/0TEDHAOLHR1L

दिनांक DT: 08.11.2023

वरि. प्रधान क्रय एवं भंडार  
**Sr. HEAD PURCHASE AND STORES**

## Tender specification

### For Supply of Stainless Steel wire braided PTFE inner core convoluted flexible hoses

- 1.0. Introduction:** SS wire braided & PTFE convoluted bore hoses are used for aerospace applications (Fluid media handled: Strong Acid & Strong Base). The supplied hoses will be qualified separately at our end before inducting into the system.
- 2.0. Scope of supplier:** Manufacture, inspection, testing, packing and delivery of flexible hoses as per the following specifications
- 3.0. Specification :**
- 3.1 All hoses shall be made of Teflon (PTFE) Inner Core, reinforced with stainless steel SS 304/304L/316/316L wire braiding. Hoses shall be of Electro static Dissipation conductive in nature.
  - 3.2 All end fittings like hoses ends, stub ends shall be of A182 F 304/304L or 316/316L materials. (However, no welding shall be attempted on the end fittings). Loose flanges shall be of A 182 F 304/304L or 316/316L materials. All end fittings shall be supplied with metallic end closures.
  - 3.3 The hoses end fittings supplied shall be confirms to the specifications and they shall be attached to hoses by crimping.
  - 3.4 All stub ends and loose flanges shall confirm to ANSI B 16.5 and chemical analysis, mechanical testing as per ASTM-A370 and IGC test as per A262 Practice-E shall be carried out on the flanges and stub ends.
  - 3.5 All flexible hoses shall be manufactured in accordance with MIL standard (MIL-DTL-25579G) Supplier has to submit the drawings and specify recommended minimum static and dynamic bend radius of hoses
  - 3.6 Copper and its alloys should not be used anywhere in the hose assembly as they are not compatible with service media.
  - 3.7 All the hoses and end fittings should be cleaned as per standard practiced for oxygen service.
  - 3.8 Number of Splicing/jointing of hoses to make up the full length shall not be allowed.
- 4.0 INSPECTION:**
- Inspection to be carried out as per the Quality Assurance Plan (QAP) given in Annexure-2
- 100% hydrostatic, Pneumatic tests shall be as per the specification given in Table-3 to be carried out. (For hydro test DM water having chloride content less than 25 ppm only shall be used) DM water chloride content analysis certificate shall be provided.

- Supply Details: Detailed description of the required hoses in terms of its length, required end-fitting or connections and their operating pressure requirements are detailed in the table- 3

## 5.0 General conditions:

5.1 Bidder has to bring out the deviations with reference to specifications & general conditions, if any, clearly indicating proposed changes in the offer on ISRO e-Procurement Portal.

5.2 **Confidentiality:** All correspondences and documents exchanged between the supplier and the Purchaser in relevance to this transaction shall be maintained in strict confidentiality. No details, either direct or indirect, in relevance to this enquiry shall be disclosed to any third party.

## 5.3 Documents to be submitted:

Bidder has to submit details of equipment's available in his manufacturing facility Quality protocols being adopted in the work area.

## 6.0 Conditions for submission of offer:

6.1 Offer need to be submitted on **Two part bid basis** as per the details given below.

**Part-I & Part-II** should be submitted at the same time.

## 6.2 Part-1:Techno-Commercial bid:

- Bidder has to give acceptance to all the tender specifications and as a confirmation all the tender documents has to be signed and stamped and submitted along with the offer. Any change of specifications/ deviations (if any) shall be brought out in the offer.
- **Bidder needs to submit the details as per the bidder evaluation mentioned in Clause No. 7 for bidders offer evaluation.**
- Bidder need to furnish the details related to commercial terms indicating payment terms, Tax, P&F, freight details etc.
- The Bidder shall indicate clearly the delivery/time period for supplying the items to SDSC SHAR.
- One latest typical copy of product quality parameters being practiced during the realisation of the similar kind of hoses at the manufacturing facilities shall be provided. **If required** similar kind of hose shall be manufactured as a sample hose and the same shall be subject to the MIL standard tests / batch acceptance test to gain the confidence on the technical capability of the firm.

## 6.3. Part-2 Price bid indicating the price details.

- In the price bid supplier has to include all the testing charges and Quality Assurance Plan (QAP) tests incurred for realising this order. QAP details are provided in the Annexure-2

- Price bid should be submitted in the format provided in **Table-2** with price break-up.

## **7. Bid evaluation criteria**

- Bidder shall be a hose manufacturer, quotes from Agents or traders are not acceptable.
- Supplier should have executed a purchase order of value not less than Rs.5 Lakhs (in the last three years) as a single order.
- Average annual turnover of Rs 15 Lakhs in the last three years.
- Bid validity:90 days from due date of bid submission
- Supplier shall confirm the part order acceptance.
- Bidder shall send the following documents:
  - a) Profile of the company
  - b) Product Specifications and catalogue, if any,
  - c) Details of test facilities and equipment's
  - d) Certificate of Burst pressure test results of similar hose size Test certificates of previous supplies
  - e) Document indicating that bidder is in the field of manufacturing /supplying of similar type of hoses for the past 5 years
- Bidder shall provide the below compliance test certificates of similar hoses as per the MIL standard.
  - (a) Proof pressure test
  - (b) Room temperature burst pressure test
  - (c) Conductivity test
  - (d) Pneumatic effusion test
  - (e) Corrosion test
- Supplier should have manufactured and supplied the SS braided PTFE inner core convoluted hose of the size minimum bore 50NB or Hose size > 50NB. Documentary proof for the same shall be submitted

SDSC SHAR reserves the right to reject any bid if not meeting the technical/commercial requirements and terms & conditions. Such decisions by the SDSC SHAR shall bear no liability whatsoever consequent upon such decision.

Quality Assurance plan (QAP)					
Sl. No.	Characteristics/type of check	Specification	Method of check	Quantum of check	
				Manufacturer QC	Purchaser \$
1	Visual Inspection of hoses (internal, External)	No damage	Visual	100% W	100% W
2	Dimensional Check	As per approved drawing	Using Suitable measuring instrument	100% W	100% W
3	Thread Interface Check	As per approved drawing	Using Thread Gauge	100% W	100% W
4	Review of material compliance certificates	As per drawing	Review	100% R	100% R
5	Ball test	Size of the ball as per catalogue	Visual	100% W	100% W
6	Hydro test pressure	1.5 times of operating pressure	Pressure hold method	100% W	100% W
7	Pneumatic test	At operating pressure	Pressure hold method	100% W	100% W
8	Cleanliness	No visible particles	Visual	100% W	100% W
9	Verification of Hose Identification tag	As per approved drawing	Visual	100% R	100% W
10	Packing & Dispatch	---	Visual	100% R	100% R
11	Complete Report	---	Review	100% R	100% R
<b>W- Witness; R-Review</b> <b>\$- Purchaser shall review all the certificates before the dispatch of items from manufacturer.</b>					

**Table-1: FORMAT OF UN-PRICED PRICE BID**

**(To be confirmed by party: with the break-up without indicating the cost)**

Sl. No	Item description	Quantity (nos)	Unit Cost (Rs.)	Total cost (Rs.)	Compliance (Yes/No)
1.			un-priced	un-priced	Yes/No
2.	Packing and forwarding charges @				
3.	Freight Charges @				
4.	Taxes (as applicable), if any			un-priced	Yes/No
5.	Grand total cost			un-priced	Yes/No

**Note: Price should not be disclosed in this part of the Bid, otherwise offer shall be rejected**

Signature of Authorized Person with Seal

**Table-2: FORMAT OF PRICE BID**

**(To be provided separately)**

Sl. No	Item description	Quantity (nos)	Unit Cost (Rs.)	Total Cost (Unit cost x Quantity) (Rs.)
1.	Supply of			
2.	Packing and forwarding charges @			
3.	Freight Charges @			
4.	Taxes (as applicable), if any			
5.	Grand total cost			

Signature of Authorized Person with Seal

**Hose specifications and quantity requirement details (Table-3)**

N o	Hose Tag name	Hose size min bore in (mm)	Length (mm)	Bend Radius (min)	Operating pressure bar(g)	Hydrotest Pressure	Pneumati c test pressure	Burst Pressure bar(a) (min)	End connections		Qty.
									One End	Other End	
1	FLP-UMN	50	1500	254	25	37.5	25	70	50 NB, 300# loose flange with stub end		1
2	FLP-UMU	50	1500	254	15	22.5	15	70	50 NB, 150# loose flange with stub end		1
3	FLP-RFDS-TVD-N	50	2800	254	25	37.5	25	70	50 NB, 300# loose flange with stub end	M60X2-6g Male thread	3
4	FLP-RFDS-TVD-U	50	2800	254	15	22.5	15	70	50 NB, 150# loose flange with stub end	M60X2-6g Male thread	3

**Note:** The burst pressure mentioned in this table is of indicative in nature. If required one number of 50 NB size hose shall be subjected to pneumatic leak test at maximum bend radius followed by burst pressure test in presence of purchaser.