

भारत सरकार  
अंतरिक्ष विभाग  
सतीश धवन अंतरिक्ष केंद्र शार  
श्रीहरिकोटा रेंज डा.घ. 524 124  
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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/01/2024-2025

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. SI No	संदर्भ सं. Ref. No.	विवरण Description	मात्रा Qty.
01.	SDSC SHAR /LSSF PURCHASE /LSSF/ 2024000057 [Public Tender - Two Part]	Supply of Stainless Steel wire braided PTFE inner core convoluted hoses.	318 Nos.

निविदा दस्तावेजों को डाउनलोड करने की अंतिम तिथि Last Date for downloading of tender documents : 02.05.2024 at 16:00 hrs.  
ऑनलाइन निविदा जमा करने की अंतिम तिथि Due Date for submission of bids online : 02.05.2024 at 16:00 hrs.  
निविदाएं खोलने की नियत तिथि Due Date for opening of tenders : 03.05.2024 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-प्रोकुरमेंट [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 NEW E-PROCUREMENT website [www.eproc.vssc.gov.in](http://www.eproc.vssc.gov.in) and submit the offer online 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-प्रोकुरमेंट 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 downloaded and offer can be submitted online 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 02.05.2024 को 16 00 बजे तक डाउनलोड करने के लिए उपलब्ध रहेंगे तथा निविदा ऑनलाइन जमा करने की अंतिम तिथि 02.05.2024 को 1600 बजे तक है। निविदाएं दिनांक 03.05.2024 को 14:30 बजे खोली जाएंगी। / The tender documents are available for download up to 02.05.2024 at 16 00 hrs. and last date for submission of tenders on line 02.05.2024 at 16 00 hrs. and Tender Opening on 03.05.2024 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 GARPTS Report ID: GEM/GARPTS /01042024/FYRD50RGX2EQ

दिनांक DT: 01.04.2024

भारतीय अंतरिक्ष अनुसंधान संगठन



वरि. प्रधान क्रय एवं भंडार  
Sr. HEAD PURCHASE AND STORES  
Indian Space Research Organisation

**Tender specification****For Supply of Stainless Steel wire braided PTFE inner core convoluted flexible hoses and smooth bore flexible hoses**

- 1.0. Introduction:** SS wire braided hoses of both PTFE convoluted bore and smooth bore are used for aerospace applications (Fluid media handled Strong Acid, Strong Base & GN<sub>2</sub>). 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 specifications laid down in this tender specification document. Supplier shall note that the nominal bore of hose 2 inch (50NB) are of PTFE convoluted inner core hoses and less than 2 inch (50NB) are of PTFE smooth bore as inner core.
- 3.0. Specification :**
- 3.1 All hoses shall be made of Teflon (PTFE) Inner Core, reinforced with stainless steel SS 304 or SS 304L 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 or 304L materials. (However No welding shall be attempted on the end fittings). Loose flanges shall be of A 182 F 316 / 304 materials. All end fittings shall be supplied with end closures. Required fittings shall be procured from the reputed Indian manufacturers only. Purchasers clearance shall be obtained for procuring the end fittings as per the indent.
- 3.3 The hoses end fittings shall be attached to hoses by crimping process only.
- 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/Applicable Aerospace standard) Supplier has to submit the drawings for approval at purchasers end before start of the production and also need to specify recommended minimum static and dynamic bend radius of hose in it.
- 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.
- 3.9 Part order acceptance shall be confirmed without any conditional clauses otherwise the bid shall not be considered.

#### 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.
- ✓ On successful completion of the hydro and pneumatic tests all the hoses shall be subjected to MSLD checks as per the below table.

Test Name	Test Pressure	Test Duration	Allowed leak rate in m.bar-lt/sec
MSLD check with GHe as tracer gas By bagging method	2 bar(g)	15 minutes	Hose location: Better than $1 \times 10^{-2}$ Crimping location: Better than $1 \times 10^{-3}$

#### 4.1 Supply Details:

Detailed description of the required hoses in terms of its length, required end-fitting /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. Specification compliance table is described in annexure-4
- 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 after placement of P.O.

#### 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: (Fill the tabel-3 provided in Annexure-3)**

- Technical specifications
- 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. Supplier shall ensure the delivery period with in six months from the date of Purchase Order (PO) acceptance.
- Bidder needs to submit the details as per the bidder evaluation mentioned in Clause No. 7 for bidders offer evaluation.
- 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.
- 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.
- Compliance format mentioned in Annexure-4 has to be filled and submitted.

## 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 provided in the Annexure-2
- Price bid should be submitted in the format provided in **Table-2** with price break-up. (Refer Annexure-3)

## **7. Bid evaluation criteria**

Bidder's offer will be evaluated based on the following criteria. Vendor is requested to provide all the necessary supporting documents.

Sl.No	Description	Vendor Compliance with Supporting Documents (as applicable)
1	Name of the company	
2	Address of Company	
3	Type of Company (Pvt.Ltd /Public Ltd/Joint Venture/Consortium)	Document of registration
4	Name & Designation of the officer of the Bidder to whom all correspondence shall be made for expeditious technical/	Details as indicated

<b>Sl.No</b>	<b>Description</b>	<b>Vendor Compliance with Supporting Documents (as applicable)</b>
	commercial co-ordination. Telephone number, Fax number, E-mail address	
5	Only manufacturers shall quote. Dealers, Stockists/agents not allowed to quote.	Manufacturer
6	<ul style="list-style-type: none"> <li>Supplier should have executed a purchase order of value not less than Rs.65 Lakhs (in the last five years) as a single order (or) at least two purchase orders of worth Rs.50 Lakhs</li> <li>Average annual turnover of Rs.300 Lakhs in the last three years.</li> </ul> Relevant supporting documents are to be submitted by the bidder.	List of documents
7	Bid validity:120 days from due date of bid submission	Yes/No
8	Willingness for Part order acceptance	Yes/No
9	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	List of documents
10	In addition to the listed documents in the S.No.9 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	List of documents
11	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	List of documents
12	Technical proposal of the bidder, has to substantiate/satisfy the claims made by them with respect to the technical requirements laid down in this tender.	List of documents
13	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.	Yes/No
14	Bidder shall not quote separately for testing charges. Prices shall be quoted for the items are inclusive of all the testing charges as per the QAP.	Yes/No

<b>Sl.No</b>	<b>Description</b>	<b>Vendor Compliance with Supporting Documents (as applicable)</b>
15	Bidder has to give acceptance to all the tender specifications. As a confirmation, all the tender documents has to be signed and stamped and submitted along with the offer.	If there is no deviation, each page of this document has to be signed, stamped and submitted along with offer.
16	Bidder shall upload the filled checklist provided in annexure-5	Signed copy of check list to be uploaded

**Signature of Authorized Person with Seal**

Quality Assurance plan (QAP)					
				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
	MSLD checks with Helium as tracer gas	At 2 bar(g)	15 minutes hold	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	Packing in wooden box	Visual	100% R	100% R
11	Complete Report	---	Review	100% R	100% R

**W- Witness; R-Review**

**\$- Purchaser shall review all the certificates before the dispatch of items from manufacturer.**

**Note:** All QAP charges shall be included in the base price of the item. Shall not be quoted separately.

**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 @ (Percentage only specified)				
3.	Freight Charges @ (Percentage only specified)				
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**

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			

**Price shall be quoted after Technical evaluation only**

Signature of Authorized Person with Seal

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

S.N	Hose Tag name	Hose size min bore in (mm)	Length (mm)	Bend Radius (min)	Operating pressure bar(a)	Pneumatic test pressure	Burst Pressure bar(a) (min)	End connections		Qty
								One End	Other End	
1	SLP-UT/MLP-N	50	2500	254	25	25	70	50 NB, 300# loose flange with stub end		15
2	SLP-UT/MLP-U	50	2500	254	15	15	70	50 NB, 150# loose flange with stub end		15
3	SLP-RFDS-GS2-N- MLP-2	50	800	254	25	25	70	50 NB, 300# loose flange with stub end	M60X2-6g Male thread	02
4	SLP-RFDS-GS2-U- MLP-2	50	850	254	15	15	70	50 NB, 150# loose flange with stub end	M60X2-6g Male thread	02
5	SLP-RFDS-L40 - N-C15	50	950	254	25	25	70	50 NB, 300# loose flange with stub end	M60X2-6g Male thread	08
6	SLP-RFDS-PS2-U- MLP-1	50	850	254	15	15	70	50 NB, 150# loose flange with stub end	M60X2-6g Male thread	02
7	SLP-RFDS-PS2-U- MLP-1	50	850	254	25	25	70	50 NB, 300# loose flange with stub end	M60X2-6g Male thread	02
8	SLP-RFDS-L40 - U-C15	50	950	254	15	15	70	50 NB, 150# loose flange with stub end	M60X2-6g Male thread	08
9	SLP-RFDS-L110 -N	50	2040	254	25	25	70	50 NB, 300# loose flange with stub end	M60X2-6g Male thread	01
10	SLP-RFDS-L110 -U	50	2100	254	15	15	70	50 NB, 150# loose flange with stub end	M60X2-6g Male thread	01
11	SLP-MLP-Stage-UVGPN/U	21.6	3000	185	30	30	70	M 30X1.5 Female Swivel Nut & Nipple		02
12	SLP-RFDS/PURGE-N / U	5.9	1500	51	30	30	700	M14X1.5 Female Swivel Nut & Nipple		24

S.N	Hose Tag name	Hose size min bore in (mm)	Length (mm)	Bend Radius (min)	Operating pressure bar(a)	Pneumatic test pressure	Burst Pressure bar(a) (min)	End connections		Qty
								One End	Other End	
13	SLP-RFDS/PURGE-L110-N / U	5.9	2500	51	30	30	700	M14X1.5 Female Swivel Nut & Nipple		02
14	SLP-RFDS/PV3-N/U	5.9	1500	51	30	30	700	M14X1.5 Female Swivel Nut & Nipple	M14X1.5 Female Swivel Nut & Nipple with 90° bend	24
15	SLP-RFDS/L110 / PV3-N/U	5.9	2500	51	30	30	700	M14X1.5 Female Swivel Nut & Nipple	M14X1.5 Female Swivel Nut & Nipple with 90° bend	02
16	FLP-UMN-FDH 1500	50	1500	254	25	25	70	50 NB, 300# loose flange with stub end		05
17	FLP-RFDS-PS2-N1000	50	1000	254	25	25	70	50 NB, 300# loose flange with stub end	M60X2-6g Male thread	05
18	FLP-UMU-FDH 1500	50	2500	254	15	15	70	50 NB, 150# loose flange with stub end		05
19	FLP -RFDS-PS2-U1000	50	850	254	15	15	70	50 NB, 150# loose flange with stub end	M60X2-6g Male thread	05
20	PS1-SITVC Filling hose FLP 1-4 SLP 5-10	25	10500	185	40	40	700	with Loose M42x1.5(F) Nut ends on both sides		10
21	PSOM-SITVC Filling hose FLP 1-3 SLP 4-10	20	10500	185	40	40	700	with Loose M26x1.5(F) Nut ends on both sides		10
22	SITVC Cart Pressurisation hose	3/8 inch	15000	51	40	40	700	with Loose M16x1.5(F) Nut ends on both sides		8

S.N	Hose Tag name	Hose size min bore in (inch)	Length (mm)	Bend Radius (min)	Operating pressure bar(a)	Pneumatic test pressure	Burst Pressure bar(a) (min)	End connections		Qty
								One End	Other End	
23	40 bar M16 hose 5.2	3/8	5200	51	40	40	700	With female swivel nuts on both ends of size M16X1.5		8
24	40 bar M16 hose 1.6	3/8	1600	51	40	40	700	With female swivel nuts on both ends of size M16X1.5		64
25	40 bar M16 hose 1.1	3/8	1100	51	40	40	700	With female swivel nuts on both ends of size M16X1.5		8
26	40 bar M16 hose 8	1/4	8000	51	40	40	700	With female swivel nuts on both ends of size M16X1.5		2
27	40 bar M16 hose 1.6	1/4	1600	51	40	40	700	With female swivel nuts on both ends of size M16X1.5		16
28	40 bar M16 hose 1.2	1/4	1200	51	40	40	700	With female swivel nuts on both ends of size M16X1.5		8
29	40 bar M16 hose 1.1	1/4	1100	51	40	40	700	With female swivel nuts on both ends of size M16X1.5		4
30	40 bar M14 hose 8	1/4	8000	51	40	40	700	With female swivel nuts on both ends of size M14X1.5		6
31	40 bar M14 hose 1.6	1/4	1600	51	40	40	700	With female swivel nuts on both ends of size M14X1.5		16
32	40 bar M14 hose 1.2	1/4	1200	51	40	40	700	With female swivel nuts on both ends of size M14X1.5		24
33	40 bar M14 hose 1.1	1/4	1100	51	40	40	700	With female swivel nuts on both ends of size M14X1.5		4

**Specific Test for clearance:** The burst pressure mentioned in this table is of indicative in nature. Supplier needs to carry out the following specific test before the commencement of the production of above hoses in presence of purchaser.

1. one number of 50 NB size hose of length 1 meter with 50 NB, 300# loose flange with stub end on one end and other end with M60X2-6g Male thread shall be subjected to pneumatic leak test at minimum bend radius followed by burst pressure test. (Number of hoses shall be subjected to burst test is one)
2. 40 bar hose one number with M16 end fittings and one number with M14 end fittings of length 1 meter shall be subjected to pneumatic leak test at minimum bend radius followed by burst pressure test. (Number of hoses shall be subjected to burst test is two)

## Specification Compliance Table

Annexure-4

S.No	Specification	Specification value	Compliance by vendor (yes/No)	Offered specification by vendor if compliance is NO	Remarks
1	<b>Scope of Supply:</b>	Manufacture, inspection, testing, packing and delivery of flexible hoses as per the given specification			
2	Hoses construction and features	All hoses shall be made of Teflon ( <b>PTFE</b> ) Inner Core, reinforced with stainless steel SS 304 or SS 304L wire braiding. Hoses(for both convoluted and smooth bore) shall be of Electro Static Dissipation conductive in nature.			
3	Number of wires required for braiding and braiding pattern shall be specified	To be given by supplier			
4	End fittings and loose flanges material of construction	All end fittings like; hoses ends, stub ends shall be of <b>A182 F 304 or 304L</b> materials. (However No welding shall be attempted on the end fittings). <b>Loose flanges shall be of A 182 F 304 / 304L materials.</b> All end fittings shall be supplied with End closures of Aluminium/SS Material. Flanged ends shall be covered with plastic covers.			
5	End fittings assembly mechanism	The hoses end fittings supplied shall confirm to the specifications and they shall be permanently attached to hoses by crimping or swaging.			
6	All stub ends and loose flanges shall confirm to	ANSI B 16.5 with serrations			
7	Manufacturing compliance standard and Bend radius of the hoses compliance details	All flexible hoses shall be manufactured in accordance with MIL standard or equivalent quality. Supplier has to submit the drawings and specify recommended minimum static and dynamic bend radius of hose. Bend radius of hose in accordance with <b>SAE AS 620, SAE AS 1946 or MIL-DTL-25579G.</b>			
8	Copper and its alloys should not be used anywhere in the hose assembly.	Confirm Copper content is Nil.			

Specification Compliance Table

9	End fittings: Raw material shall be procured only from reputed manufacturer with <b>Mil Test Certificates traceability</b> . Materials used for manufacturing the items shall be tested in Government approved lab for mechanical, chemical and IGC tests.	Mechanical test certificate, Chemical analysis test certificates, IGC test reports shall be provided			
10	Stub ends and forged loose flanges shall be procured from reputed manufacturers only with <b>material compliance test certificates</b> .	Mechanical test certificate, Chemical analysis test certificates, IGC test reports shall be provided			
11	Threaded end fittings shall be machined from	Forged stainless steel bars/rods. Material Test Certificates shall be provided			
12	All the hoses and end fittings should be cleaned .	as per standard procedure/practice/manufacturer's standard			
13	Splicing/jointing of hoses to make up the full length is not acceptable.	Not Acceptable			
14	Burst Pressure and bend radius details of all the hoses mentioned in the specification are minimum requirements however supplier needs to provide the designed/acchivable bend radius and burst pressures of the hoses in geneeral assembly drawings(GAD)	shall be specified BY SUPPLIER			
15	<b>INSPECTION:</b>	Inspection of hoses shall be carried out by the purchaser prior to dispatch at manufacturers site as per enclosed QAP and supplier shall ensure that QAP is strictly followed in all stages of manufacturing, Testing & Inspection.			

Specification Compliance Table

16	Documents to be supplied along with the consignment:	<p>1. Certificate of pneumatic leak test with Nitrogen (carried out on each hose assembly)</p> <p>2. Certificate of hydro static test test with DM water (carried out on each hose assembly)</p> <p>3. Certificate of Burst pressure type test results of similar hose size(Sample test report shall be provided)</p> <p>4. Visual, dimensional checks, material certificates (chemical, Mechanical &amp; IGC) and final inspection reports.</p> <p>5. Compliance certificates for Cleanliness , Thread Check and Ball check verification reports.</p>			
17	All the hoses shall be hydro tested at proof pressures value as specified in the manufacture catalogue. In addition to hydro test, all hoses shall be pneumatic leak tested with Nitrogen gas at operating pressure.	Hydro Test media: de-mineralized water of less than 25 ppm of chloride content			
18	Hose assemblies shall be supplied with SS/Aluminium tags,	Indicating Tag No., Size, and Material of construction, Year of manufacturing and maximum operating pressure.			
19	Wherever material of construction is not mentioned,	It shall be of SS 304/304L only. No carbon steel or any other material is accepted.			
20	Drawing: Detailed Drawing, indicating all Dimensions and Material of construction need to be submitted	For Purchaser's approval, after placement of Purchase Order and before commencing production. All correspondence should be made in English only.			



Specification Compliance Table

21	Burst Pressure of hose shall meet to the minimum requirement as per the table-3 provided in detailed specification sheet.	If required one 50NB hose shall be burst tested in presence of purchaser			
22	Hoses should be guaranteed for .	12 months from the date of receipt and acceptance of material at our site			
23	Packing and transport	Hoses should be packed properly to avoid damage /crushing during transportation, loading and unloading.			
24	Materials used for manufacturing the items shall be tested in Government approved lab for mechanical, chemical and IGC Practice-E in spite of availability of MIL test certificates.	(One sample per each heat/ lot & for each size of hose and each size of end fittings on selected samples) As per ASTM A240/ A182 / A262 Practice-E and Verification of material TC			

\*\*\*\*\*END of the Specification Compliance Table\*\*\*\*\*



✓ **Check List to be filled and submitted for technical bid evaluation**

S.No	Description	Suppliers/Vendors Remarks
1	The item needs to supply is Convolute PTFE inner core and Smooth PTFE inner core SS wire braided hoses.	
2	Supplier / Vendor shall have the experience in the manufacturing and testing of SS braided PTFE hoses	
3	The bids need to be submitted in two parts  Part-1: Techno commercial details  Part-2: Price details	<b>Price shall not be disclosed in Techno commercial bid.</b>
4	All the testing requirements are clearly understood and the cost incurred for testing is considered in the base price	
5	Bidder evaluation criteria/ clause mentioned in S.No. 7 of the specification is duly filled and uploaded.	
6	Testing requirements as per the Quality Assurance Plan (QAP) given in annexure-2 are considered in the base price of the item.	
7	Confirm the following documents are uploaded in the e-procurement portal 1. Annual turn over details for the financial years 2019,2020,2021,2022,2023. 2. Documents indicating that bidder/supplier is in the field of manufacturing / Supplying of SS braided PTFE hoses for the past 5 years. 3. Details of equipment / machinery 4. Company profile or credentials 5. Test certificates mentioned in bidder evaluation criteria table provided in clause no.7 of this document 6. Specification compliance table in Annexure-4	

**Signature of Authorized Person with Seal**

\*\*\*\*\***END of Specification Document**\*\*\*\*\*