

**TECHNICAL SPECIFICATIONS FOR SUPPLY OF SEAMLESS
Monel 400 PIPES**

I. Scope:

Scope involves manufacturing of Monel 400 Pipes by **Cold Pilgering**. All the Pipes have to be manufactured strictly in accordance with detailed technical Specifications of the indent.

Technical Specifications for manufacturing and supply of Monel 400 Pipes**II. Pipe Specification**

1	Manufacturing Process	:	Cold Pilgering Process
2	Material of construction	:	Monel 400
3	End Finish	:	Square cut, Smooth & deburred ends
4	Length	:	5 to 7 m
5	Straightness	:	Shall be \pm 3 mm over a length of 3 m
6	Size	:	NPS ½”, Sch160
7	Quantity	:	360 meters

III. Codes and Standards:

A Monel 400 Pipes:			
1.	Standard	:	ASTM B 165
2.	Edge preparation	:	ANSI B 16.25
3.	Dimensional tolerance	:	ANSI B 36.19
4.	Chemical Composition & Mechanical testing	:	ASTM B 165
5.	Ultrasonic testing of Pipes	:	ASTM E-213
6.	Hydro test of Pipes	:	ASTM B 165
7.	Average Grain size determination	:	ASTM E 112
8.	Annealing (Stress relieving)	:	ASTM B 165
9.	Cleaning of Pipes	:	ASTM G 93

IV. Manufacturing of Monel Pipes:**1. Manufacturing of Mother Hollows:**

- a) All Mother hollows shall be manufactured by **HOT EXTRUSION PROCESS** only. **Hot pierced mother pipes are not acceptable.**

- b) The supplier has to produce **MIL certificates** for the mother hollows. In case of imported mother hollows from Other agencies, the supplier shall produce Air way/Cargo bill for raw material shipment (Original Cargo bill shall be produced for review). The same will be reviewed at the time of raw material inspection.
- c) The **Make of the Mother Hollows** shall be from the following suppliers only.

Indian Make Mother Hollows

- 1) M/s Sandvik Asia Ltd, India.
- 2) M/s Ratnamani Metals and Tubes, India
- 3) M/s Welspun Speciality Solutions, Gujarat.
- 4) M/s Nuclear Fuel Complex, Hyderabad.

Imported Mother Hollow Makes

- 1. M/s Nippon Steel & Sumitomo metal Corporation
 - 2. M/s KOBE Steel, Japan
 - 3. M/s POSCO (SeAH CCS), South Korea,
 - 4. M/s DK Corporation, Korea.
- d) In case of any change of *Indian make Mother hollows* other than specified in the tender, Prior approval for the new make shall be obtained from SDSC SHAR. *Vendor evaluation will be carried out by purchaser for that particular offered Indian make Mother hollows (Raw material). Based on satisfactory evaluation of the new MAKE, only acceptance will be given.*
 - e) **In case of Imported mother hollows (Raw material), The Supplier has to comply to Ministry of steel BIS Steel Quality Control Policy (SQCP). The Total responsibility for getting the necessary clearances lies with the Supplier only.**
 - f) Size of mother hollow/pipes selected for manufacture of finished pipes shall be minimum of **one order higher than the required pipe size and schedule**. Otherwise offer will not be considered. The supplier shall clearly specify the size of the mother hollow selected for each size of the finished pipe. **Deviations, if any shall be mentioned clearly.**

2. Manufacturing of Finished pipe:

- a) Manufacturer should have in-house cold pilgering facility for manufacturing of Monel pipes.

- b) **Hot extruded mother hollows/Pipes** shall be used for manufacturing of seamless pipes. **Hot pierced mother hollows are not acceptable.**
- c) All Pipes shall be manufactured by Cold pilgering process only.
- d) The Monel Pipe sample piece from each heat/Lot number (Sample Piece length:50 mm) shall be supplied to purchaser after cold pilgering process and before Heat treatment (Stress relieving process) to ensure the Cold pilgering manufacturing process of Pipes. The Sample shall be picked in presence of purchaser representative.
- e) All pipes shall be Stress relieved as per ASTM B165.
- f) Heat treatment (Stress relieving process) charts shall be submitted for purchaser & TPI for review and clearance.
- g) All pipes shall be visually examined for absence of scratches, dents, surface irregularities, etc.

V. Inspection and testing

All the tests shall be carried out in Government/NABL approved laboratory.

All the testing charges are inclusive of quoted price.

All the testing shall be carried out as specified in the Quality Assurance Plan and acceptance as per relevant code only.

1. Mother hollows testing:

- a) MIL certificates to be provided with chemical and mechanical tests for review.
- b) Detailed chemical analysis test and Mechanical testing like UTS, yield & percentage of elongation shall be carried out one per each heat/lot number during raw material inspection.

2. Finished pipes testing

- a) Detailed chemical analysis and Mechanical testing like UTS, yield & percentage of elongation shall be carried out one per each heat/lot number on finished Pipes.
- b) Average grain size shall be tested on finished product i.e. one sample from each size and heat or lot number as per ASTM E112.
- c) All the Pipes shall be hydrotested (100%).
- d) All the pipes shall be tested by Ultrasonic Test (100%).
- e) All pipes shall be cleaned as per ASTM G93 standard.
- f) Dimensional tolerance of the Pipes (i.e. ID, OD & wall thickness) shall comply to meet Code requirements

- g) All Test certificates shall be produced during inspection.
- h) Supplier has to inform the purchaser, the stage wise material readiness in advance at least 10 days for participating in inspection.
- i) Purchaser has the right to inspect the pipes at any stage during course of manufacturing.

VI. Third party Inspection

- 1) Third Party Inspection (TPI) shall be engaged by the supplier. TPI can be DNV/LIOYDS/BVIS/TUV. Scope of Third-Party Inspection is as per QAP given in **Annexure-II**.
- 2) The cost of TPI shall be exclusive of quoted price. The Scope of TPI is given in QAP as given in Annexure-II. Cost of TPI for witness of Cold pilgering process shall be mentioned separately in price bid format.
- 3) Any Deviations with respect to Scope of TPI inspection given in QAP shall be brought out clearly, if any.
- 4) Purchaser representative as well as TPI will carry out inspection as per QAP given in Annexure-II. Material shall be cleared by both department Engineer & TPI.

VII. Dispatch & Delivery

- 1) Pipes shall be cleaned and dried before dispatch. Ends shall be protected with suitable plastic caps to avoid entry of dust, water and foreign materials during storage and transportation.
- 2) **Allowable Variation in quantity:** One Length of Pipe on total quantity.
- 3) **Supplier shall deliver all the ordered items within 08 (Eight) months from the date of release of Purchase order.**
- 4) **Packing:** Material shall be wrapped in polythene sheet and packed in a wooden box as seaworthy package.
- 5) **MARKING:** All pipes shall be clearly marked on three places on each pipe indicating manufacturer's reference, material grade, dimensions (Pipe size & Schedule), Heat/ Lot number. The template shall be sent for purchaser's approval before marking.
- 6) Supplier shall obtain dispatch clearance from the purchaser for the items inspected. Stage wise internal inspection certificates & TPI certificates (as applicable) shall be submitted.
- 7) All pipes shall be visually examined for absence of scratches, dents, surface irregularities, etc.

VIII. Documentation

- 1) Test certificate for chemical analysis, mechanical tests, UT test and Hydrostatic tests shall be supplied along with dispatch documents.
- 2) **Production of master file:** Three hard copies of production master file shall be supplied along with digital copy (DVDs containing Scanned copies) which contain the following.
 - ✓ Dimensional and visual check reports
 - ✓ Raw material test certificates.
 - ✓ Finished product Mechanical, Chemical and micro structure examination test reports.
 - ✓ Hydro test reports.
 - ✓ Ultrasonic test reports.
 - ✓ Heat treatment (Stress relieving) charts.
 - ✓ Cleaning as per ASTM G93 standard.
 - ✓ All the above reports / test results shall be bound neatly.

IX. GENERAL CONDITIONS

- 1) **Manufacturers of Monel pipes only shall submit the quote. Offers from dealers & Traders are not acceptable.**
- 2) **Compliance: Point wise compliance** to the tender specifications shall be submitted and any deviation from the specification shall be highlighted clearly in the offer. Technical compliance duly filled by the party as per **Annexure-III** to be submitted along with the offer.
- 3) **Pricing:** Price quoted is inclusive of all the testing charges (i.e. Chemical, mechanical, ultrasonic testing, hydro testing and Cleaning of Pipes for oxygen service).
- 4) **Warranty:** The Pipes supplied shall be warranted for trouble free service of 12 months period from the date of receipt and acceptance at purchaser's premises.
- 5) Party shall provide the list of equipment required for manufacturing of Monel pipes. Non submission of proof of equipment shall lead to technical disqualification.

X. Make in India (MII) Clause:

- 1) For this procurement, bids from Class-I & class-II Local Suppliers are admissible. Hence provisions contained in Public Procurement (Preference to Make in India), Order 2017 issued by Department for Promotion of Industry and Internal Trade (DIPP), Ministry of Commerce & Industries vide letter No. P-45021/2/2017-PP(BE-II) dated 04.06.2020 and subsequent amendment & directives shall be followed. Accordingly, offer will be evaluated & processed in conformation with above referred GOI order (Specially mentioned below). The bidder shall provide compliance and undertaking as per order and hereafter amendments:
- 2) Order no: F.No.6/18/2019 PPD dated 23.07.2020 of Department of Expenditure), Ministry of Finance Under Public procurement division for the General Financial rule (GFRs).
- 3) Class-I local supplier means a supplier or service provider, whose goods, service or works offered for procurement, has local content equal to or more than 50%, as defined under order.
- 4) Class-II local supplier means a supplier or service provider, whose goods, services or works offered for procurement, has local content more than 20% but less than 50%, as defined under this Order.

5) Verification of local content

- a. The Class I local supplier/ Class- II local supplier at the time to tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for Class-I local supplier / Class II local supplier as the case may be. They shall also give details of the location(s) at which the local value addition is made.
- b. In case bid value is in excess of Rs. 10 Cr., Class-I local supplier / Class-II local supplier shall be required to 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 respect of suppliers other than companies) giving the percentage of local content.
- c. False declarations will be in breach of the code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules (GFR) for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the general Financial Rules along with such other actions as may be permissible under Law.
- d. A supplier who has been debarred by any procuring entry for violation of this order shall not be eligible for preference under this order for procurement by any other procuring entity for the duration of the debarment.
- 6) The percentage of local content should be specifically mentioned in the offer, without which it will be summarily rejected.
- 7) Preference will be given to Class-I Local supplier and in their absence, Class-II Local supplier will be considered.

1. Bid/Offer Submission details:

a) Supplier shall present the bids on **Two-part basis as highlighted below**:

- ✓ **Part-I: Techno-Commercial bid**
- ✓ **Part-II: Price bid.**

Part-I: Techno-Commercial bid:

The tenderer shall necessarily submit the following in the techno-commercial bid:

- The tenderer shall furnish **point-wise confirmation (Technical Compliance attached in Annexure-III)** for the technical specifications given in the enquiry. However, change of specifications/ deviations (if any) shall be brought out in the offer with detailed justification. Tenderer are expected to furnish quotations with best match to standards, materials of construction and other technical conditions
- The tenderer shall necessarily furnish the details of previously executed orders of **Monel pipes**. Necessary documentary evidence shall be submitted along with offer as a mandatory requirement. **Non-compliance of this requirement shall lead to rejection of the offer.**
- Tenderer need to furnish the details related to commercial terms indicating payment terms, details of bank guarantee in case of advance payments & name of Third-Party Inspection Agency proposed etc.
- Bidder need to submit unpriced price bid copy (as highlighted below) indicating the description of all the cost elements considered, without indicating the price. Tenderer shall note that indication of price in the techno-commercial bid shall lead to dis-qualification of bid.
- The price bids will be opened only after evaluation and acceptance of the technical bid of the respective tenderer.

✓ **Format of Un-Priced Price Bid:**

Sl. No	Item Description	Quantity (Mtrs)	Cost/ Meter (Rs)	Total Cost (Rs)	Separate Cost mentioned in price bid (YES/NO)
1.	NPS ½”, Sch160, Monel 400	360	Un-priced	Un-priced	

Part-II: Price bid indicating the price:

Price bid should be submitted by the tenderer in the following format with price break up.

Sl. No	Item Description	Quantity (Mtrs)	Cost/ Meter (Rs)	Total Cost (Rs)
1.	NPS ½”, Sch160, Monel 400	360		
2.	TPI Charges as per Quality Assurance plan (QAP) [Inclusive of Cold pilgering]			
3.	TPI Charges only for Cold pilgering process witness			
4.	Packing Charges			
5.	Transportation Charges			
6.	Taxes (as applicable), if any			

Bid Evaluation criteria: Total Landed cost at SDSC SHAR for item (Basic Cost of item+ Packing Charges + Transportation Charges from ex-works to SDSC-SHAR +TPI charges (including cold pilgering) + TPI charges (Exclusive of cold pilgering) + taxes applicable) will be the basis for evaluation of offer.

2. Offer Validity:

The validity of the offers / tenders should be 120 days from the date of opening of the tenders. **Tenders with offer validity less than the period mentioned above, will not be considered for evaluation.**

3. Taxes and Duties:

a. GST details are given below:

GSTIN: 37AAAGS1366J1Z1

LEGAL NAME: SATISH DHAWAN SPACE CENTRE SHAR

VALIDITY FROM : 29/08/2017

TYPE OF REGISTRATION: REGULAR

4. Payment Terms:

Option-1:

100% payment within 30 days after receipt and acceptance of items at purchaser's (SDSC-SHAR, Sriharikota) site.

Option-2:

- a) 20% of order value as advance against submission of Advance Bank Guarantee.
- b) 60% of order value against receipt and acceptance of items at SDSC SHAR based on the cost of each individual item on PRO-RATA basis within 30 days.
- c) Balance 20% of order value after supplying of all the items at SHAR and against submission of Performance Bank Guarantee.

Note: Supplier shall clearly indicate the quoted payment term (i.e. Option-1 or Option-2) in the techno-commercial bid.

- d) Wherever advance payment is requested, Bank Guarantee from any Nationalized Bank/Scheduled Bank should be furnished. In case of advance payments, if the vendor/supplier is not supplying the material within the delivery schedule, interest will be levied as per the Marginal Cost of Lending Rate (MCLR) of SBI plus 2% penal interest.
- e) Interest will be loaded for advance payments/stage payments as per the MCLR of SBI and will be added to the landed cost for comparison purpose. In case of different milestone payments submitted by the parties, a standard and transparent methodology like NPV will be adopted for evaluating the offers.

5. Mode of Payment:

Bidders can submit the banker details and payments can be made through NEFT/RTGS/ECS through PFMS.

6. Liquidated Damages:

In all cases, delivery schedule indicated in the Purchase Order/Contract is the essence of the contract and if the party fails to deliver the material within the delivery schedule, Liquidated Damages will be levied @ 0.5% per week or part thereof subject to a maximum of 10% of total order value.

7. Performance Bank Guarantee:

Performance Bank Guarantee for 3% of the order value should be furnished in the form of Bank Guarantee from nationalized/scheduled bank till warranty period plus sixty days.

8. Security Deposit:

Security Deposit for 3% of the order value is mandatory. Party shall furnish the Security Deposit in the form of Bank Guarantee from nationalized/scheduled bank or by Demand Draft valid till completion of the contract period plus sixty days for faithful execution of the contract.

9. Arbitration:

In the event of any dispute/s, difference/s or claim/s arising out of or relating to the interpretation and application of the Contract, such dispute/s or difference/s or claim/s shall be settled amicably by mutual consultations of the good Offices of the respective Parties and recognizing their mutual interests attempt to reach a solution satisfactory to both the parties. If such a resolution is not possible, within 30 days from the date of receipt of written notice of the existence of such dispute/s, then the unresolved dispute/s or difference/s or claim/s shall be referred to the Sole Arbitrator appointed by the Parties by mutual consent in accordance with the rules and procedures of Arbitration and Conciliation Act 1996 as amended from time to time. The arbitration shall be conducted in Bengaluru in the Arbitration and Conciliation Centre –Bengaluru (Domestic and International) as per its rules and regulations. The expenses for the Arbitration shall be shared equally or as may be determined by the Arbitrator. The considered and

written decision of the Arbitrator shall be final and binding between the Parties. The applicable language for Arbitration shall be “English” only. Work under the Contract shall be continued by the CONTRACTOR during the pendency of arbitration proceedings, without prejudice to a final adjustment in accordance with the decision of the Arbitrator unless otherwise directed in writing by the DEPARTMENT or unless the matter is such that the works cannot be possibly continued until the decision (whether final or interim) of the Arbitrator is obtained.

10. Minimum Qualification criteria:

- a. **Manufacturers of Monel pipes only shall submit the quote. Offers from dealers & Traders are not acceptable.**
- b. Tenderers should have satisfactorily executed the following Seamless Monel Pipe manufacturing during the last 5 years.
 - Single order of value not less than Rs. 38 Lakhs. (or)
 - Two orders of value not less than Rs. 28 Lakhs each. (or)
 - Three orders of value not less than Rs.20 Lakhs each.
 - Details of the last five years purchase orders shall be submitted along with offer
- c. Tenderers should have average annual turnover for the last three years (FY: 2021-22, 2022-23 & 2023-24) of Rs.58 Lakhs.
- d. The Bidders shall submit Profit & Loss Accounts, Balance Sheets duly certified by the auditor and IT returns for the last three financial years with acknowledgement from IT Department up to last 3 years (ending with 31-03-2024). Necessary documents shall be submitted.
- e. Latest Solvency certificate form any Nationalized/Scheduled bank shall be submitted for a value of minimum Rs.20 Lakhs. The Solvency certificate must have been issued during current financial year.
- f. The firm must provide a self-declaration that there is no complaint/vigilance inquiry against them in any Govt./Department/PSU and they have not been black listed by any Govt. Department/PSU.
- g. Technical proposal of the bidder, which is not able to substantiate/satisfy the claims made by it with respect to the technical requirements laid down in tender document, will be summarily rejected.

11. Bid Evaluation criteria:

- a. In respect of Two-Bid system, the technical Bids forwarded by the Bidders will be evaluated by the Department with reference to the technical specifications. The compliance of Technical Bids would be determined on the basis of the parameters specified in the tender document. The Price Bids of only those Bidders will be opened whose Technical Bids would clear the technical evaluation.
- b. During evaluation, SDSC SHAR may request Bidder for any additional clarification/document on the bid, if required.
- c. Performance of Bidder on similar nature of works executed/ under execution will be taken into consideration before selecting the Bidder for opening his price bid (as per qualification criteria).
- d. 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.
- e. Purchaser reserves the right for evaluation of any bidder by visiting his manufacturing premises towards acceptance of the techno-commercial bid. The decision of the purchaser is final in this regard.
- f. The purchaser has right to cancel the order at any stage, if the supplier is not meeting the specifications and QAP.

12. Quality Assurance Plan (QAP)

Sl. No	Characteristics/ Type of check	Reference documents	Method of check	Supplier's QC	TPI Scope	Purchaser's Inspector
A Mother Hollow						
1.	Identification of raw material with MIL test certificates (Minimum one order high in size and schedule) per heat/lot.	-----	Raw material Identification and test certificates review.	H 100%	W 100%	R 100%
2.	Chemical and Mechanical test reports for production (Parent material/mother hollows check) @	-----	TC review of parent material	H 100%	R 100%	R 100%
B Pipe Manufacturing						
3.	Verification of cold pilgering process	As per PO Specifications	Witnessing	H 100%	W 100%	W 100%
4.	Verification of Heat Treatment (Stress relieving) process	As per PO Specifications	Witnessing	H 100%	W 100%	W/R 100%
C Finished Pipe						
5.	After final production Chemical analysis and Mechanical tests (One sample per each heat/lot) on selected samples.	As per ASTM B165	Review of material test certificates	H 100%	R 100%	R 100%
6.	Grain Size examination (one per each size and heat no)	As per ASTM E112	Verification	H 100%	R 100%	R 100%
7.	Ultrasonic testing of finished pipes.	As per ASTM E 213	Witnessing	H 100%	W 100%	W 100%
8.	Rockwell Hardness test	As per ASTM E 18	Witnessing	H 100%	R 100%	W/R 10%

Tender Technical specifications for Supply of Monel Pipes

Sl. No	Characteristics/ Type of check	Reference documents	Method of check	Supplier's QC	TPI Scope	Purchaser's Inspector
9.	Hydro test	As per ASTM B165	Witnessing	H 100%	W 100%	W 10% (RN)
10.	Cleaning Pipes	As per ASTM G93	Witnessing	H 100%	W 100%	W/R 10% (RN)
11.	Visual & Dimensional check	As per ANSI B 36.19	Witnessing	H 100%	W 100%	W 10%(RN)

Legend: R – Review, RN – Randomly, W-Witnessing, H – Hold

@ Supplier has to procure the raw material with MIL certificate with traceability

Technical Compliance
(To be submitted by the bidder along with Technical Bid)

Tenderer shall furnish point-wise confirmation for the following. Change of specifications/ deviations (if any) shall be brought out in the offer with detailed justification.

Sl. No	ISRO Description	Technical Compliance (To be filled by the Manufacturer)						
I. Technical Specifications								
1.	Manufacturing process	Cold Pilgering						
2.	Material of construction for Pipes: Monel 400							
3.	End finish for tubes: Square cut, smooth & deburred ends							
4.	Length shall be 5 to 7 m							
5.	Straightness shall be ± 3 mm over a length of 3 m.							
6.	Compliance of the supplier on the given size of the Pipe and quantity as per the Table shall be provided. If any change shall be brought out.							
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8.	Manufacturing of Mother Hollows: All Mother hollows shall be manufactured by HOT EXTRUSION PROCESS only . Hot pierced mother pipes are not acceptable.							
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	way/Cargo bill for raw material shipment (Original Cargo bill shall be produced for review). The same will be reviewed at the time of raw material inspection.									
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16.	All Pipes shall be manufactured by Cold pilgering process only.	
17.	The Monel Pipe sample piece from each heat/Lot number (Sample Piece length:50 mm) shall be supplied to purchaser after cold pilgering process and before Heat treatment (Stress relieving process) to ensure the Cold pilgering manufacturing process of Pipes. The Sample shall be picked in presence of purchaser representative.	
18.	All pipes shall be Stress relieved as per ASTM B165.	
19.	Heat treatment (Stress relieving process) charts shall be submitted for purchaser & TPI for review and clearance.	
20.	All pipes shall be visually examined for absence of scratches, dents, surface irregularities, etc.	
21.	Inspection &Testing:	
22.	All the tests shall be carried out in Government/NABL approved laboratory. All the testing charges are inclusive of quoted price.	
23.	Mother hollows testing: a) MIL certificates to be provided with chemical and mechanical tests for review. b) Detailed chemical analysis test and Mechanical testing like UTS, yield & percentage of elongation shall be carried out one per each heat/lot number during raw material inspection.	
24.	Finished pipes testing a) Detailed chemical analysis and Mechanical testing like UTS, yield & percentage of elongation shall be carried out one per each heat/lot number on finished Pipes. b) Average grain size shall be tested on finished product i.e. one sample from each size and heat or lot number as per ASTM E112. c) All the Pipes shall be hydrotested (100%). d) All the pipes shall be tested by Ultrasonic Test (100%).	

Sl. No	ISRO Description	Technical Compliance (To be filled by the Manufacturer)
	e) All pipes shall be cleaned as per ASTM G93 standard. f) Dimensional tolerance of the Pipes (i.e. ID, OD & wall thickness) shall comply to meet Code requirements g) All Test certificates shall be produced during inspection. h) Supplier has to inform the purchaser, the stage wise material readiness in advance at least 10 days for participating in inspection. i) Purchaser has the right to inspect the pipes at any stage during course of manufacturing.	
25.	Third party Inspection:	
26.	Third Party Inspection (TPI) shall be engaged by the supplier. TPI can be DNV/LIOYDS/BVIS/TUV. Scope of Third-Party Inspection is as per QAP given in Annexure-II.	
27.	The cost of TPI shall be exclusive of quoted price. The Scope of TPI is given in QAP as given in Annexure-II. Cost of TPI for witness of Cold pilgering process shall be mentioned separately in price bid format.	
28.	Any Deviations with respect to Scope of TPI inspection given in QAP shall be brought out clearly, if any.	
29.	Purchaser representative as well as TPI will carry out inspection as per QAP given in Annexure-II. Material shall be cleared by both department Engineer & TPI.	
30.	Dispatch & Delivery:	
31.	Pipes shall be cleaned and dried before dispatch. Ends shall be protected with suitable plastic caps to avoid entry of dust, water and foreign materials during storage and transportation.	
32.	Allowable Variation in quantity: One Length of Pipe on total quantity.	
33.	Supplier shall deliver all the ordered items within 08 (Eight) months from the date of release of Purchase order.	
34.	Packing: Material shall be wrapped in polythene sheet and packed in a wooden box as seaworthy package.	
35.	MARKING: All pipes shall be clearly marked on three places on each pipe indicating manufacturer's reference, material grade, dimensions (Pipe size &	

Sl. No	ISRO Description	Technical Compliance (To be filled by the Manufacturer)
	Schedule), Heat/ Lot number. The template shall be sent for purchaser's approval before marking.	
36.	Supplier shall obtain dispatch clearance from the purchaser for the items inspected. Stage wise internal inspection certificates & TPI certificates (as applicable) shall be submitted.	
37.	All pipes shall be visually examined for absence of scratches, dents, surface irregularities, etc.	
38.	Documentation:	
39.	Test certificate for chemical analysis, mechanical tests, UT test and Hydrostatic tests shall be supplied along with dispatch documents.	
40.	<p>Production of master file: Three hard copies of production master file shall be supplied along with digital copy (DVDs containing Scanned copies) which contain the following.</p> <ul style="list-style-type: none"> ✓ Dimensional and visual check reports ✓ Raw material test certificates. ✓ Finished product Mechanical, Chemical and micro structure examination test reports. ✓ Hydro test reports. ✓ Ultrasonic test reports. ✓ Heat treatment (Stress relieving) charts. ✓ Cleaning as per ASTM G93 standard. ✓ All the above reports / test results shall be bound neatly. 	
41.	GENERAL CONDITIONS	
42.	Manufacturers of Monel pipes only shall submit the quote. Offers from dealers & Traders are not acceptable.	
43.	Compliance: Point wise compliance to the tender specifications shall be submitted and any deviation from the specification shall be highlighted clearly in the offer. Technical compliance duly filled by the party as per Annexure-III to be submitted along with the offer.	
44.	Pricing: Price quoted is inclusive of all the testing charges (i.e. Chemical, mechanical, ultrasonic testing, hydro testing and Cleaning of Pipes for oxygen service.	

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45.	Warranty: The Pipes supplied shall be warranted for trouble free service of 12 months period from the date of receipt and acceptance at purchaser's premises.	
46.	Party shall provide the list of equipment required for manufacturing of Monel pipes. Non-submission of proof of equipment shall lead to technical disqualification.	
47.	Manufacturers of Monel pipes only shall submit the quote. Offers from dealers & Traders are not acceptable.	
48.	Compliance: Point wise compliance to the tender specifications shall be submitted and any deviation from the specification shall be highlighted clearly in the offer. Technical compliance duly filled by the party as per Annexure-III to be submitted along with the offer.	
49.	Pricing: Price quoted is inclusive of all the testing charges (i.e. Chemical, mechanical, ultrasonic testing, hydro testing and Cleaning of Pipes for oxygen service.	
50.	Make In India (MII) Clause	
51.	For this procurement, bids from Class-I & class-II Local Suppliers are admissible. Hence provisions contained in Public Procurement (Preference to Make in India), Order 2017 issued by Department for Promotion of Industry and Internal Trade (DIPP), Ministry of Commerce & Industries vide letter No. P-45021/2/2017-PP(BE-II) dated 04.06.2020 and subsequent amendment & directives shall be followed. Accordingly, offer will be evaluated & processed in conformation with above referred GOI order (Specially mentioned below). The bidder shall provide compliance and undertaking as per order and hereafter amendments	
52.	Order no: F.No.6/18/2019 PPD dated 23.07.2020 of Department of Expenditure), Ministry of Finance Under Public procurement division for the General Financial rule (GFRs).	
53.	Class-I local supplier means a supplier or service provider, whose goods, service or works offered for procurement, has local content equal to or more than 50%, as defined under order.	
54.	Class-II local supplier means a supplier or service provider, whose goods, services or works offered for	

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	procurement, has local content more than 20% but less than 50%, as defined under this Order.	
55.	Verification of local content	
56.	The Class I local supplier/ Class- II local supplier at the time to tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for Class-I local supplier / Class II local supplier as the case may be. They shall also give details of the location(s) at which the local value addition is made	
57.	In case bid value is in excess of Rs. 10 Cr., Class-I local supplier / Class-II local supplier shall be required to 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 respect of suppliers other than companies) giving the percentage of local content	
58.	False declarations will be in breach of the code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules (GFR) for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the general Financial Rules along with such other actions as may be permissible under Law	
59.	A supplier who has been debarred by any procuring entry for violation of this order shall not be eligible for preference under this order for procurement by any other procuring entity for the duration of the debarment	
60.	Percentage of local content should be specifically mentioned in the offer, without which it will be summarily rejected	
61.	Preference will be given to Class-I Local supplier and in their absence, Class-II Local supplier will be considered	
62.	Note: The purchaser has right to cancel the order at any stage, if the supplier is not meeting the specifications and QAP	
63.	Part-I: Techno-Commercial bid	
64.	The tenderer shall furnish point-wise confirmation (Technical Compliance attached in Annexure-III) for	

Sl. No	ISRO Description	Technical Compliance (To be filled by the Manufacturer)
	the technical specifications given in the enquiry. However, change of specifications/ deviations (if any) shall be brought out in the offer with detailed justification. Tenderer are expected to furnish quotations with best match to standards, materials of construction and other technical conditions.	
65.	The tenderer shall necessarily furnish the details of previously executed orders of Monel pipes. Necessary documentary evidence shall be submitted along with offer as a mandatory requirement. Non-compliance of this requirement shall lead to rejection of the offer.	
66.	Tenderer need to furnish the details related to commercial terms indicating payment terms, details of bank guarantee in case of advance payments & name of Third-Party Inspection Agency proposed etc.	
67.	Bidder need to submit unpriced price bid copy (as highlighted below) indicating the description of all the cost elements considered, without indicating the price. Tenderer shall note that indication of price in the techno-commercial bid shall lead to dis-qualification of bid.	
68.	Minimum Qualification criteria:	
69.	<p>Manufacturers of Monel pipes only shall submit the quote. Offers from dealers & Traders are not acceptable.</p> <p>Tenderers should have satisfactorily executed the following Seamless Monel Pipe manufacturing during the last 5 years.</p> <ul style="list-style-type: none"> ▪ Single order of value not less than Rs. 38 Lakhs. (or) ▪ Two orders of value not less than Rs. 28 Lakhs each. (or) ▪ Three orders of value not less than Rs.20 Lakhs each. ▪ Details of the last five years purchase orders shall be submitted along with offer 	
70.	Tenderers should have average annual turnover for the last three years (FY: 2021-22, 2022-23 & 2023-24) of Rs.58 Lakhs.	

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71.	The Bidders shall submit Profit & Loss Accounts, Balance Sheets duly certified by the auditor and IT returns for the last three financial years with acknowledgement from IT Department up to last 3 years (ending with 31-03-2024). Necessary documents shall be submitted.	
72.	Latest Solvency certificate form any Nationalized/Scheduled bank shall be submitted for a value of minimum Rs.20 Lakhs. The Solvency certificate must have been issued during current financial year.	
73.	The firm must provide a self-declaration that there is no complaint/vigilance inquiry against them in any Govt./Department/PSU and they have not been black listed by any Govt. Department/PSU.	
74.	Technical proposal of the bidder, which is not able to substantiate/satisfy the claims made by it with respect to the technical requirements laid down in tender document, will be summarily rejected.	
75.	Bid Evaluation criteria:	
76.	In respect of Two-Bid system, the technical Bids forwarded by the Bidders will be evaluated by the Department with reference to the technical specifications. The compliance of Technical Bids would be determined on the basis of the parameters specified in the tender document. The Price Bids of only those Bidders will be opened whose Technical Bids would clear the technical evaluation.	
77.	During evaluation, SDSC SHAR may request Bidder for any additional clarification/document on the bid, if required.	
78.	Performance of Bidder on similar nature of works executed/ under execution will be taken into consideration before selecting the Bidder for opening his price bid (as per qualification criteria).	
79.	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.	

Sl. No	ISRO Description	Technical Compliance (To be filled by the Manufacturer)
80.	Purchaser reserves the right for evaluation of any bidder by visiting his manufacturing premises towards acceptance of the techno-commercial bid. The decision of the purchaser is final in this regard.	
81.	The purchaser has right to cancel the order at any stage, if the supplier is not meeting the specifications and QAP.	