

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
ISRO PROPULSION COMPLEX (IPRC)
MAHENDRAGIRI**

Tender for Supply of Gaseous Helium quads

Bids to be submitted online

Tender No.: IPRC/PURGP2/IP202400039401 dated 02-05-2024

A. Tender Details

Tender No :	IPRC/PURGP2/IP202400039401
Tender Date :	02-05-2024
Tender Classification:	GOODS
Purchase Entity :	PURGP2
Centre :	ISRO PROPULSION COMPLEX (IPRC)

Supply of Gaseous Helium quads

Kindly go through the instruction carefully and quote.

Foreign vendors are not permitted to quote.

Only Class-I and Class-II Local suppliers as per Make in India (MII) Policy are eligible to participate in the bid and submit the MII declaration certificate which is mandatory.

The percentage of local content is mandatory and it should be specifically mentioned in the offer. Preference will be given to Class-I Local Supplier and in their absence, Class-II Local Supplier will be considered.

MSME preference is applicable only against the claim of the manufacturer and production of documentary evidence by the manufacturers for the registration of particular item under MSME.

Last minute clarification on tenders will not be entertained.

This is an e-Tender. Hence Postal/Fax/Email tenders will not be accepted.

Acceptance of Guarantee / Warranty, PBG, SD, LD & AMC shall be complied

Please mention your Government E market Place (GeM) Seller ID for our reference.

Option Clause:-The purchaser reserves the right to increase/decrease the ordered quantity by up to 25-30 percent at any time, till final delivery date (or the extended delivery date of the contract), by giving reasonable notice even though the quantity ordered initially has been supplied in full before the last date of the delivery period (or the extended delivery period)

A.1 Tender Schedule

Bid Submission Start Date :	02-05-2024 11:00
Bid Clarification Due Date :	10-05-2024 11:30
Bid Submission Due Date :	20-05-2024 11:30

Bid Opening Date :

20-05-2024 11:31

B. Tender Attachments

Technical Write-up/Drawings

[Document : Technical specification](#)

[Document : Terms and conditions](#)

Instructions To Vendors

3. General Instructions

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.
3. If a vendor is not able to submit bid against this tender due to any reason, such vendor is requested to post their REGRET message in the e-procurement portal with clear reasons or email to psogroup2@iprc.gov.in. Non submission of bids without regrets will be viewed seriously.
4. IPRC reserves the right to split the tendered quantity in part or whole on its sole discretion without assigning any reason.
5. IPRC has the right to cancel the tender without assigning any reason etc.
6. If any vendor submits forged / false documents along with the tender, offer of such vendors will be summarily rejected and such bidders will be blacklisted for all future tenders.
7. Option Clause:-The purchaser reserves the right to increase/decrease the ordered quantity by up to 25-30 percent at any time, till final delivery date (or the extended delivery date of the contract), by giving reasonable notice even though the quantity ordered initially has been supplied in full before the last date of the delivery period (or the extended delivery period)

4. Format for Self Certification under Preference to MAKE IN INDIA Policy CERTIFICATE

1. In line with Government Public Procurement Order No. P-45021/2/2017-BE-II dt. 15.06.2017, as amended from time to time and as applicable on the date of submission of tender, we hereby certify that we M/s. _____(supplier name) are local supplier meeting the requirement of minimum Local content _____% as defined in above orders for the materials against Tender Enquiry No.

_____Dt:_____ The items considered for local value

addition are:

2. 1. -----

2. -----

3. -----

(if required add more rows and items)

Details of location at which local value addition will be made is as follows:

3. We also understand, false declarations will be in breach of the Code in Integrity under Rule 175(1) (i) (h) of the General Financial Rule 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.

4. For (COMPANY NAME)

Authorized Signatory

5. Conditions for BIDDER FROM A COUNTRY WHICH SHARES LAND BORDER WITH INDIA

1. Any false declaration and non-compliance of the above would be a ground for immediate rejection of offer or termination of the contract and further legal action in accordance with the laws.

2. As per the Rule 144(xi) of General Financial Rule, 2017, any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the competent authority i.e., Department for Promotion of Industry and Internal

Trade (DPIIT).

3. Hence, Vendors or Agents of a Vendor (Indian or others) from a country sharing border with India shall submit copy of valid registration made with Department for Promotion of Industry and Internal Trade (DPIIT), Government of India along with the tender mandatorily, without which the offer will be treated as invalid.

4. Model Certificate for Tenders

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered

5. Validity of Registration: Registration should be valid at the time of submission of bids and should be valid at the time of placement of order.

6. STANDARD TERMS AND CONDITIONS (DOS PM:19)

1. a. 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 systems of unit must be furnished.

2. Arbitration in the event of any dispute or difference arising under these terms & conditions or any condition contained in the Purchase Order or in connection with this Contract. (except as to any matter the decision of which is specially provided for by these conditions), the same shall be referred to the sole arbitration of the Head of the Purchase Office or of some other person appointed by him, and the dispute further processed in terms of the Arbitration & Conciliation Act, 1996. There will be no objection that the arbitrator is a Government Servant that he had to deal with matter which the Contract relates to or that in the course of his duties as Government Servant has expressed views on all or any of the matters in dispute or difference. The award of the arbitrator shall be final and binding on the parties of this Contract.

3. As per the Rule 144(xi) of General Financial Rule, 2017, any bidder from a country which shares a land border with India will be eligible to bid in any procurement whether of goods, services (including consultancy services and non-consultancy services) or works (including turnkey projects) only if the bidder is registered with the competent authority ie., Department for Promotion of Industry and Internal Trade (DPIIT).

Hence, Vendors or Agents of a Vendor (Indian or others) from a country sharing border with India shall submit copy of valid registration made with Department for Promotion of Industry and Internal Trade (DPIIT), Government of India along with the tender mandatorily, without which the offer will be treated as invalid.

4. b. Corrections, if any, in the quotation must be attested. All amounts shall be indicated both in words as well as in figures. When there is difference between the amount quoted in words and figures, the amount quoted in words shall prevail.

5. GST/ other duties/levies, where legally leviable and intended to be claimed, should be distinctly shown separately in the tender.

6. Guarantee: The stores offered should be guaranteed for a minimum period of twelve months against defective stores design, operation or manufacture. For defects noticed during the guarantee period, replacement/repair should be arranged free of cost within a reasonable period of such notification. In cases where our specifications call for a guarantee period more than 12 months specifically, then such a period shall apply

7. If the arbitrator is a person appointed by the Head of the Purchase Office, In the event of his denying or neglecting or refusing to act, or resigning or being unable to act, for any reason, shall be lawful for the Head of the Purchase Office either to proceed with the reference himself or to appoint another person as arbitrator in place of the outgoing arbitrator subject, as aforesaid, to the Arbitration and Conciliation Act, 1996, and the rules thereunder and any statutory modifications thereof for the time being in force shall be deemed to apply to the arbitration proceeding under the clause. The Arbitrator shall have the power to extend with the consent of the Purchaser and the Contractor the time for making and publishing the award. The venue of arbitration shall be the place as the Purchaser in his absolute discretion may determine. Work under the Contract shall, if reasonably possible, continue during Arbitration Proceedings.

8. If the arbitrator is the Head of the Purchase Office :

(i) In the event of his being transferred or vacating his office by resignation or otherwise, it shall be lawful for his successor in office either to proceed with the reference himself for to appoint another person as arbitrator, or In the event of his being unwilling or unable to act for any reason, it shall be lawful for the Head of the Purchase Office to appoint another person as arbitrator

9. Late Tenders will not be considered

10. Model Certificate for Tenders:

I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has

been registered with the Competent Authority. I hereby certify that this bidder fulfils all requirements in this regard and is eligible to be considered

11. Packing and Forwarding: 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 to the Contractor.

12. Payment terms are full payment within 30 days from the date of receipt and acceptance of material ordered. Our Bankers are State Bank of India, Mahendragiri.

13. Quotation should be valid for at least 120 days from the date of opening of the tender.

14. Specifications: Stores offered should strictly conform to Purchasers specifications. Deviations, if any, shall 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 quotation. Test certificate, wherever necessary, should be forwarded along with supplies. Wherever options are called for in our specifications, the tenderer should address all such options, wherever specifically mentioned by us, and the tenderer could suggest changes to specifications with appropriate response for the same. Even in such case, the tenderer should state why he cannot meet our specifications and why he is suggesting the change.

15. Successful tenderer will have to furnish in the form of a Bank Guarantee or in any other form as called for by the Purchaser towards adequate security for the materials/property provided by the purchaser for the due execution for the Contract.

16. TERMS AND CONDITIONS OF TENDER:

Price quoted should be on the basis of FOR IPRC, Mahendragiri or delivery at site

The Purchaser will not pay separately for transit insurance, and the risk and cost during transit shall be exclusively the responsibility of the Contractor and the purchaser shall pay only for such stores as are actually received in good condition in accordance with the Contract.

17. The Contractor shall at all times indemnify the Purchaser against all claims which may be in respect of the stores for infringement of any right protected by Patent, Registration or design or Trade Mark and shall take all risks of accidents or damage which may cause a failure of the supply from whatever causes arising and the entire responsibility for the sufficiency of all means used by him for the fulfilment of the Contract

18. The Purchaser reserves the right to accept or reject any quotation fully or partly without assigning

any reason therefore.

19. The time for and the date of delivery of the stores stipulated in the Purchase Order shall be deemed to be the essence of the Contract and delivery must be completed not later than the date specified therein, and failure to do so, without adequate justification, may involve cancellation of the Contract at the discretion of the Purchaser.

20. Vendors may please note that in case of two-part tender, the price details shall be mentioned only in the price-bid template. If the price details either in part or full are indicated in the technical bid, the bid will be disqualified.

21. Where counter terms and conditions/printed or cyclostyled conditions of sale have been offered by the tenders, the same shall not be deemed to have been accepted by the Purchaser unless the Purchaser's specific written acceptance thereof is obtained

7. STANDARD TERMS AND CONDITIONS (DOS PM: 20)

1. 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. 8 (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.

2. DELIVERY:

(a) The time for and the date of delivery of the stores stipulated in the Purchase Order shall be deemed to be the essence of the Contract and delivery must be completed on or before the specified

dates.

(b) Should the Contractor fail to deliver the stores or any consignment thereof within the period prescribed for such delivery, the purchaser shall be entitled at his option either.

(i) to recover from the Contractor as agreed liquidated damages and not by way of penalty, a sum of 0.5% per week of the price of any stores which the Contractor has failed to deliver as aforesaid or during which the delivery of such store may be in arrears subject to a minimum of 10%, or

(ii) to purchase from elsewhere, without notice to the Contractor on the account and at the risk of the Contractor, the stores not delivered or others of a similar description (where others exactly complying with the particulars, are not, in the opinion of the purchaser, readily procurable, such opinion being final) without cancelling the Contract in respect of the consignment (s) not yet due for delivery, or

(iii) to cancel the Contract or a portion thereof and if so desired to purchase or authorise the purchase of stores not so delivered or others of a similar description (where others exactly complying with the particulars are not, in the opinion of the purchaser, readily procurable, such opinion final) at the risk and cost of the Contractor.

In the event of action being taken under sub-clause (ii) & (iii) of clause 10 (b) above, the Contractor shall be liable for any loss which the purchaser may sustain on that account, provided that the re-purchase or if there is an agreement to re-purchase then such agreement is made within six months from the date of such failure. But the Contractor shall not be entitled to any gain on such re-purchase made against default. The manner and method of such re-purchase shall be at the discretion of the purchaser, whose decision shall be final. It shall not be necessary for the purchaser to serve a notice of such re-purchase on the defaulting Contractor. This right shall be without prejudice to the right of the purchaser to recover damages for breach of Contract by the Contractor.

3. DISPATCH:

The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods dispatched. The consignment should be dispatched 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.

4. ERECTION OF PLANT & MACHINERY:

Wherever erection of a plant or machinery is the responsibility of the Contractor as per the

terms of the Contract and in case the Contractor fails to carry out the erection as and when called upon to do so within the period specified by the purchaser, the purchaser shall have the right to get the erection done through any source of his choice. In such an event, the Contractor shall be liable to bear any additional expenditure that the purchaser is liable to incur towards erection. The Contractor shall, however, not be entitled to any gain due to such an action by the purchaser.

5. EXTENSION OF TIME:

As soon as it is apparent that the Contract dates cannot be adhered to, an application shall be sent by the Contractor to the purchaser. If failure, on the part of the Contractor, to deliver the stores in proper time shall have arisen from any cause which the purchaser may admit as reasonable ground for an extension of the time (and his decision shall be final) he may allow such additional time as he considers it to be justified by circumstances, of the case without prejudice to the purchaser's right to recover liquidated damages under clause 10 thereof.

6. 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 as to whether the nature of the defects requires renewal or replacement, shall be final, conclusive and binding on the Contractor.

(f) To fulfill guarantee conditions outlined in clause 4 (a) to (e) above, the Contractor shall, at the option of the purchaser, furnish a Bank Guarantee (as prescribed by the purchaser) from a Bank approved by the purchaser for an amount equivalent to 3% of the value of the Contract along with first shipment documents. On the performance and completion of the Contract in all respects, the Bank Guarantee will be returned to the Contractor without any interest.

(g) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of the stores at purchaser site.

(h) Even while the 12 months guarantee applies to all stores, in case where a greater period is called for by our specifications then such a specification shall apply in such cases the period of 14 months referred to in para 4 (b) & (c) shall be the guarantee period plus two months.

7. PERFORMANCE BANK GUARANTEE:

Supplier has to submit an interest free Performance Bank Guarantee for an amount equivalent to 3% (THREE PERCENT) of order value obtained from any scheduled Banks executed on Rs.200/- non-judicial stamp paper and shall be valid for a period of sixty days beyond expiry date of warranty period. The same shall be submitted along with Invoice towards final payment.

8. 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.

9. 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.

10. REJECTED STORES:

Rejected stores will remain at destination at the Contractor 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.

11. SECURITY DEPOSIT(SD):

The Supplier shall provide Bank Guarantee for an amount equivalent to the 3% (Three PERCENT) of the total Order value towards Security Deposit for the due performance of the Purchase Order. The Security Deposit can be submitted in the form of Bank Guarantee (format enclosed) or Fixed Deposit receipt obtained from any Nationalized/ Scheduled Bank and it shall be kept valid for a period of sixty days beyond the date of completion of the Purchase Order. This Security Deposit will be returned to the Supplier only upon successful completion of all the contractual obligations or shall be adjusted/ forfeited against non-fulfilment of any of the contractual obligations. The Security Deposit shall be submitted within 30 days from the date of receipt of Purchase Order.

12. TEST CERTIFICATE:

Wherever required, test certificates should be sent along with the dispatch documents.

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

8. GeM Seller ID

1. GeM Seller Registration: All vendors shall register themselves in GeM Portal (gem.gov.in) and provide GeM Seller unique ID in the tender documents, as this ID is mandatory for award of contract.

C. Bid Templates

C.1 Technical Bid - Supply of Gaseous Helium quads

1. HELIUM: Gaseous Helium quads: Supply of gaseous Helium quads of 4 x 3 matrix

2. HELIUM: Gaseous Helium quads: Supply of gaseous Helium quads of 4 x 4 matrix

3. TRANSPORTATION CHARGES

Common Specifications (Applicable for all items)

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Documentation: 1(d) The supplier has to furnish the following details along with quotation:	Details of fabrication unit.	Yes / No / Explain		
2	Documentation: 1(e) The supplier has to furnish the following details along with quotation:	The list of companies / clients to whom GHe quad was supplied during last three years along with copy of purchase orders. The quad size, cylinder water capacity and no. of cylinders shall be given along with quotation. This will be considered as key criteria for evaluation of Supplier's capability.	Yes / No / Explain		
3	Documentation: 1(f) The supplier has to furnish the following details along with quotation:	Third Party Inspection Charges for stage wise inspection shall be included in basic price.	Yes / No / Explain		
4	Documentation: 1(g) The supplier has to furnish the following details along with quotation:	The supplier must furnish the compliance statement with respect to the technical specification indicating clearly deviations if any.	Yes / No / Explain		

5	Documentation: 1(h) The supplier has to furnish the following details along with quotation:	Any other details relevant to the fabrication of quads.	Yes / No / Explain		
6	Documentation: 2 (a) The following certificates to be furnished before fabrication of quads for clearance and acceptance of new cylinders.	Copy of approval from PESO, Nagpur for filling GHe in cylinders.	Yes / No / Explain		
7	Documentation: 2 (b) The following certificates to be furnished before fabrication of quads for clearance and acceptance of new cylinders:	Copy of Cylinders inspection certificate, material testing certificate issued by cylinder manufacturer as per IS-7285 / BIS certificate.	Yes / No / Explain		
8	Documentation: 3(a) The following documents shall be submitted along with quads:	Guarantee certificate of Helium cylinders, Valves fitted in cylinders, valves mounted in manifolds, pressure gauges and manifolds, etc.	Yes / No / Explain		
9	Documentation: 3(b) The following documents shall be submitted along with quads:	Copy of approval from PESO, Nagpur for filling GHe in cylinders duly endorsed by TPI.	Yes / No / Explain		
10	Documentation: 3(c) The following documents shall be submitted along with quads:	Cylinders inspection certificate, material testing certificate issued by cylinder manufacturer as per IS-7285 / BIS certificate duly endorsed by TPI agency.	Yes / No / Explain		

11	Documentation: 3(d) The following documents shall be submitted along with quads:	Pressure Gauges calibration certificates duly endorsed by TPI.	Yes / No / Explain		
12	Documentation: 3(e) The following documents shall be submitted along with quads:	The material certificates, detailing the physical and chemical properties of MS square frame, channel, backing plate & top plate and Copper manifold / pig tail/hose tubes duly endorsed by TPI.	Yes / No / Explain		
13	Documentation: 3(f) The following documents shall be submitted along with quads:	Test Certificates of Cylinder valves and Manifold valves duly endorsed by TPI.	Yes / No / Explain		
14	Documentation: 3(g) The following documents shall be submitted along with quads:	Test certificates and inspection reports duly endorsed by TPI as per QAP (Table: 1).	Yes / No / Explain		
15	Pre-Qualification criteria:1	The bidder shall be either ISO certified cylinder manufacturer or they have to get cylinders from ISO certified manufacturer. The make of cylinders shall be specified by the bidder.	Yes / No / Explain		
16	Pre-Qualification criteria:2	The bidder shall provide proof for having executed similar type of orders for fabrication & supply of Gaseous Helium quads with the minimum pressure of 20 MPa and volume of 50 litre within last three years (from 2021 to 2023). Purchase order copy and Third party inspection release note or acceptance note from the client shall be provided.	Yes / No / Explain		

17	FABRICATIO N & SUPPLY OF GASEOUS HELIUM QUADS:		-		
18	Description:	Design, procurement of 50 liters cylinders, components, structural & plumbing materials, fabrication, installation and testing of Gaseous Helium (GHe) Quads. Indigenous, empty, brand new, high pressure, Flat type, concave bottom seamless steel gas cylinders with PESO, Nagpur permission for GHe filling, shall be arranged as 4 x 4 matrixes (4 nos.) & 4 x 3 matrixes (2 nos.) in a square frame. Each cylinder shall be connected to a common header.	Yes / No / Explain		
19	SPECIFICATI ON OF CYLINDERS:		-		
20	Item description	Rama/EKC/Eurotech/ MKC make, empty, brand new, high pressure, seamless steel gas cylinders, flat type, concave bottom, cylinders as per IS-7285 Part:II (2017); complete with neck ring and wheel operated valves as per IS-3224. It will be painted as specified under gas cylinders rules 2004 & supported with manufacturers test certificates and permission for GHe filling from Petroleum and Explosives Safety Organisation, Nagpur.	Yes / No / Explain		
21	Service	Helium	Yes / No / Explain		
22	Standard	IS – 7285 (PART-II):2017	Yes / No / Explain		

23	Water capacity	50 liters nominal	Yes / No / Explain		
24	Hydrostatic test pressure	334 barg	Yes / No / Explain		
25	Maximum Allowable working pressure at 15 deg C	200 barg	Yes / No / Explain		
26	Minimum wall thickness (approx)	5.3 mm	Yes / No / Explain		
27	Outer diameter (approx)	232.0 mm	Yes / No / Explain		
28	Cylinder length (approx)	1450 mm (nominal length)	Yes / No / Explain		
29	Cylinder weight (approx)	57.0 Kg.	Yes / No / Explain		
30	Gas capacity	10.0 Cu.m.	Yes / No / Explain		
31	Valve (Inlet & outlet)	Wheel operated valves as per IS-3224	Yes / No / Explain		
32	Bottom shape	Concave	Yes / No / Explain		
33	Cylinder colour	Middle brown. As per gas cylinder rules, 2004.	Yes / No / Explain		
34	Inspection	All cylinders inspection certificate, material testing certificate issued by cylinder manufacturer as per IS-7285 / BIS certificate and GHe filling permission from PESO shall be provided.	Yes / No / Explain		
35	Scope of inspection	Visual inspection, material property testing, hydrostatic pressure testing, etc., shall be carried out by the manufacturer only at reputed laboratories and /or at their works.	Yes / No / Explain		
36	Testing	Cylinders shall be designed, manufactured, tested and accepted as per IS-7285.	Yes / No / Explain		

37	Valves	Each cylinder shall be fitted with wheel operated Brass IS-3224 valves suitable for Helium services. All outlet connections shall be with Female end. The certificates for the same also to be submitted along with supply.	Yes / No / Explain		
38	Conditioning the cylinders	All cylinders, after hydro testing shall be cleaned, dried and filled with dry air/Nitrogen at a partial pressure of 0.5 MPa in order to avoid corrosion in the cylinder.	Yes / No / Explain		
39	Guarantee	12 months from the date of receipt of items at IPRC, Mahendragiri. Guarantee certificate shall be sent along with the supply.	Yes / No / Explain		
40	Certificate from PESO, Nagpur	Cylinder manufacturer is responsible to get permission from PESO, Nagpur for Gaseous Helium filling in cylinders.	Yes / No / Explain		
41	SPECIFICATION OF QUADS:		-		
42	Specification of Quads : 1. The number of quads to be fabricated:	4 x 4 matrixes - 4 Nos. 4 x 3 matrixes - 2 nos.	Yes / No / Explain		
43	Specification of Quads : 2	Cylinders should be arranged vertically.	Yes / No / Explain		
44	Specification of Quads : 3	Design, Procurement of components, structural & plumbing materials, fabrication, installation and testing of GHe quads.	Yes / No / Explain		

45	Specification of Quads : 4	All brand new GHe cylinders test certificates along with permission from PESO, Nagpur for Gaseous Helium filling in cylinders shall be forwarded to IPRC, Mahendragiri for verification and acceptance. The fabrication of Gaseous Helium quads shall be started only after getting the clearance and acceptance of new cylinders by IPRC, Mahendragiri.	Yes / No / Explain		
46	Specification of Quads : 5	The final drawings indicating dimensional details, bill of materials, etc., shall be submitted to IPRC, Mahendragiri for approval. After obtaining approval from IPRC, Mahendragiri only, the supplier has to go ahead for fabrication.	Yes / No / Explain		
47	Specification of Quads : 6. Number of cylinders to be housed vertically in each quad:	For 4 x 4 matrix = 16 cylinders and For 4 x 3 matrix = 12 cylinders	Yes / No / Explain		
48	Specification of Quads : 7. Maximum allowable working pressure of quad (approx) :	200 barg	Yes / No / Explain		
49	Specification of Quads : 8. The pressure gauge shall have isolation block valve (3 port & 2 way valve) with vent port.	a. The pressure gauge range is 0 to 250 bar. b. The pressure gauge should be properly position inside the main square frame to avoid transit damage.	Yes / No / Explain		
50	Specification of Quads : 9. Size of the Main valve (Inlet & outlet)	Inlet : Type-4 Size-2 Outlet: 5/8" BSP	Yes / No / Explain		

51	Specification of Quads : 10. Material of construction: a) Square frame/ Channel / Backing plate / Top Holding plate	Mild steel	Yes / No / Explain		
52	Specification of Quads : 10. Material of construction: b) Manifold / Pig tail / Hose	Copper with brass connection	Yes / No / Explain		
53	Specification of Quads : 11. The size of materials: a) Main square frame	50 mm x 50 mm x 6 mm thickness	Yes / No / Explain		
54	Specification of Quads : 11. The size of materials: b) Manifold cover square frame	50 mm x 50 mm x 4 mm thickness	Yes / No / Explain		
55	Specification of Quads : 11. The size of materials: c) All channels/ backing plate/ Top holding plate	50 mm x 4 mm thickness.	Yes / No / Explain		
56	Specification of Quads : 12. Copper manifold size	Annealed copper pipe OD: 20 mm, ID: 10 mm as per BS 2871.	Yes / No / Explain		
57	Specification of Quads : 13. Pig tail/ hose size	Annealed copper tube OD: 8 mm, ID: 3 mm as per BS 2871.	Yes / No / Explain		
58	Specification of Quads : 14. Clamping scheme	All copper tubes and female end valves shall be properly clamped. The clamping details shall be submitted by fabricator before starting fabrication.	Yes / No / Explain		

59	Specification of Quads : 15. Painting	Two coats of Red oxide will be applied on structure and two coats of middle brown paint will be applied. The name "IPRC, MAHENDRAGIRI" shall be written in all sides of quads.	Yes / No / Explain		
60	Specification of Quads : 16	All quads should have lifting hook and forklift provision for lifting.	Yes / No / Explain		
61	Specification of quads : 17. Brazing	The brazing will be carried out as per the standard ASME IX-2004 edition.	Yes / No / Explain		
62	Specification of Quads : 18. Tests	The following tests shall be carried out and all test certificates shall be produced at the time of final inspection and dispatch clearance.	Yes / No / Explain		
63	Specification of Quads: 18 (a) Material test:	The material certificates, detailing the physical and chemical properties of MS square frame, channel, backing plate & top plate and Copper manifold / pig tail/hose tubes shall be produced.	Yes / No / Explain		
64	Specification of Quads: 18 (b) Dimensional check:	The overall dimensions of quads including the thickness of main square frame, manifold cover square frame and all channels / backing plate / Top holding plate thickness shall be verified and certified.	Yes / No / Explain		
65	Specification of Quads: 18 (c) Dye penetration test:	All the joints will be qualified by DP test.	Yes / No / Explain		
66	Specification of Quads: 18 (d) Leak test:	It shall be carried out at 200 barg. No bubble leakage is admissible with snoop solution in all welding joints, valves and threaded portion. There will not be any pressure drop for the minimum test duration of 30 minutes.	Yes / No / Explain		

67	Specification of Quads: 18 (e) Pneumatic test:	The pneumatic test of manifold or piping/tubing shall be carried out at 1.1 times of MAWP.	Yes / No / Explain		
68	Specification of Quads: 19, Inspection:	The third party inspection agency shall witness all above mentioned tests. The name of the TPI agency shall be mentioned along with your quotation. Leak test and pneumatic test shall be witnessed by both IPRC Engineer and TPI agency. All other test reports duly approved by TPI agency shall be reviewed by IPRC representative at the time of leak or pneumatic tests. Final dispatch clearance shall be issued by IPRC.	Yes / No / Explain		
69	Specification of Quads: 20 (a) Conditioning of the quad prior to dispatch:	After completing all tests, the quads shall be cleaned, dried, media substituted with Gaseous Nitrogen. The media substitution shall be carried out to reduce impurities level as given below: Oxygen : ≤ 3 ppm Moisture : ≤ 5 ppm	Yes / No / Explain		
70	Specification of Quads: 20 (b) Conditioning of the quad prior to dispatch:	The quads shall be filled with gaseous Nitrogen at a partial pressure of 5 barg. The purity of Nitrogen gas in quads after media substitution shall be confirmed by producing analysis report.	Yes / No / Explain		

71	Specification of Quads: 21 (a) The fabricator shall use wheel operated valves and gauges procured only from the following reputed manufacturers and relevant test certificates shall be produced along with the consignment.	Cylinder valves: Make: Swagelok / Tekno / Sherwood / Harrison / Parker	Yes / No / Explain		
72	Specification of Quads: 21 (b) The fabricator shall use wheel operated valves and gauges procured only from the following reputed manufacturers and relevant test certificates shall be produced along with the consignment.	Pressure Gauges: Make: Odin / Wika / Swagelok / DH-Buderberg / Ametek	Yes / No / Explain		
73	Specification of Quads: 22	Quads will be dispatched after obtaining dispatch clearance note from IPRC, Mahendragiri.	Yes / No / Explain		
74	DOCUMENTATION:		-		
75	Documentation: 1(a) The supplier has to furnish the following details along with quotation:	Make of cylinders, wheel operated valves fitted in cylinders including part numbers, wheel operated valves mounted in manifolds and pressure gauges with detailed specification and catalogue.	Yes / No / Explain		

76	Documentation: 1(b) The supplier has to furnish the following details along with quotation:	Detailed specification of wheel operated cylinder valves with part no. and make.	Yes / No / Explain		
77	Documentation: 1(c) The supplier has to furnish the following details along with quotation:	Details of TPI agency.	Yes / No / Explain		

Supporting Documents required from Vendor

1. Last three years purchase order copies with TPI clearance note for the supply of similar or higher matrix quads.

2. ISO certificate of the company.

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	The valve of all quads should be wheel operated.	Yes / No / Explain	
2	The quads shall be guaranteed / warranted for satisfactory performance over a period of 12 months from the date of delivery.	Yes / No / Explain	
3	All quads should be supplied with Nitrogen gas having a positive pressure of 5 barg.	Yes / No / Explain	
4	GHe quads should be packed in good condition to avoid any transit damages.	Yes / No / Explain	
5	Quads should be supplied to IPRC, Mahendragiri.	Yes / No / Explain	
6	Taxes and other costs, if any: (Specify). IPRC/ISRO is eligible to avail Concessional rate of GST@5% shall be paid extra against Ministry of Finance, Dept. of Revenue Notification No. 1/2017 Integrated Tax (Rate), Schedule-I; Sl. No. 243B dated 28/06/2017 as amended by Notification No. 07/2018 & 25/2018 Integrated Tax (Rate) dated 31.12.2018	Yes / No / Explain	
7	Delivery Period (specify)	Yes / No / Explain	
8	Delivery Terms: Normal delivery terms - FOR Destination (i.e., IPRC, Mahendragiri)	Yes / No / Explain	
9	Payment Terms: 100% within 30 days after receipt and acceptance of items (No advance payment is acceptable). Specify your Payment Terms.	Yes / No / Explain	

10	<p>Security Deposit: The Supplier shall provide Bank Guarantee for an amount equivalent to the 3% (THREE PERCENT) of the total Order value towards Security Deposit for the due performance of the Purchase Order. The Security Deposit can be submitted in the form of Bank Guarantee or Fixed Deposit Receipt obtained from any Nationalized/ Scheduled Bank and it shall be kept valid for a period of sixty days beyond the date of completion of the Purchase Order. This Security Deposit will be returned to the Supplier only upon successful completion of all the contractual obligations or shall be adjusted/ forfeited against non-fulfilment of any of the contractual obligations. The Security Deposit shall be submitted within 30 days from the date of receipt of Purchase Order.</p>	Yes / No / Explain	
11	<p>Confirm: Conditions for BIDDER FROM A COUNTRY WHICH SHARES LAND BORDER WITH INDIA</p>	Yes / No / Explain	
12	<p>Liquidated Damages: The delivery period / completion period shall be the essence of the Purchase Order. If the Supplier fails to meet delivery date within the time specified above or any extension thereof, the Department will recover from the Supplier as Liquidated Damages (LD) a sum of 0.5% of the total order value for each calendar week of delay subject to a maximum of 10% of the total order value. Confirm your acceptance.</p>	Yes / No / Explain	
13	<p>Name, Address, Contact No, E-mail Id etc. (specify):</p>	Yes / No / Explain	
14	<p>Validity of Offer (specify)</p>	Yes / No / Explain	
15	<p>Warranty / Guarantee Period: (specify)</p>	Yes / No / Explain	
16	<p>Performance Bank Guarantee: Performance Bank Guarantee (PBG) for 3% of the order value shall be submitted along with your Invoice/prior to final payment. It shall be valid till the warranty/ guarantee period and shall have an additional claim period of 60 days.</p>	Yes / No / Explain	

17	Only Class-I and Class-II Local suppliers as per Make in India Policy are eligible to participate in the bid. Percentage of Local Content for the offered item / items shall be specified	Yes / No / Explain	
18	MSME preference is applicable only against the claim of the manufacturer and production of documentary evidence by the manufacturer	Yes / No / Explain	
19	Bank Details (State Bank of India, Mahendragiri, Tirunelveli (Dist) - 627 133) Details of your bank shall be furnished.	Yes / No / Explain	
20	Percentage of Local Content	Yes / No / Explain	
21	Any other terms	Yes / No / Explain	

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	HELIUM: Gaseous Helium quads: Supply of gaseous Helium quads of 4 x 3 matrix	2.00 Nos.		-		
2	HELIUM: Gaseous Helium quads: Supply of gaseous Helium quads of 4 x 4 matrix	4.00 Nos.		-		
3	TRANSPORTATION CHARGES	1.00 Lumsm		-		