

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE
LIQUID PROPULSION SYSTEMS CENTRE, VALIAMALA (LPSC)
THIRUVANANTHAPURAM**

**Tender for Supply, Installation, Commissioning, Prove out & Training
of Roundness Tester (Geometrical Parameter Measuring Machine)**

Bids to be submitted online

Tender No.: LPSC/LVF/LP202400004901 dated 17-01-2025

A. Tender Details

Tender No :	LPSC/LVF/LP202400004901
Tender Date :	17-01-2025
Tender Classification:	GOODS
Purchase Entity :	LVF
Centre :	LIQUID PROPULSION SYSTEMS CENTRE, VALIAMALA (LPSC)

Supply, Installation, Commissioning, Prove out & Training of Roundness Tester (Geometrical Parameter Measuring Machine)

For and on behalf of the President of India, the Head, Purchase and Stores, Liquid Propulsion Systems Centre (LPSC), Valiamala , Thiruvananthapuram invites tenders through e-procurement mode; <https://eproc.isro.gov.in>.

Prospective vendors interested in participating in the tendering process need to get registered in the portal by using Digital Signature Certificate. Offers submitted through our online portal only will be considered and no other means will be considered.

Detailed instructions for vendor registration, bid submission etc. are available in the portal <https://eproc.isro.gov.in>. A help desk is also functioning to assist the vendors whose details are available in the portal.

THIS IS A TWO PART TENDER. TECHNO-COMMERCIAL [PART-I] AND PRICE BID [PART-II] SHOULD BE SUBMITTED SEPARATELY. IF TECHNO-COMMERCIAL BID [PART-I] CONTAINS PRICE DETAILS OF ANY NATURE THEN THE OFFER WILL BE REJECTED SUMMARILY.

A.1 Tender Schedule

Bid Submission Start Date :	17-01-2025 14:30
Bid Clarification Due Date :	27-01-2025 12:00
Bid Submission Due Date :	17-02-2025 12:00
Bid Opening Date :	17-02-2025 12:05

Price Bid Opening Date :

24-02-2025 12:00

B. Tender Attachments

NA

Instructions To Vendors

1. INSTRUCTIONS TO INDIGENOUS TENDERERS

1. a) As far as implementation of provision for Public Procurement (Preference to Make in India) Order, 2017 is concerned, the Office orders vide No. P-4502/2/2017-B.E-II dt 15.06.2017, which is partially modified by Order No.P-45021/2/2017-PP (BE-II) dt 28.05.2018, Order P- 45021/2/2017-PP (BE-II) dt 29.05.2019, Order No. P-45021/2/2017-PP (BE-II) dt 04.06.2020 and Order No. P-45021/2/2017-PP (BE-II) 16.09.2020 and subsequent Amendments issued by the Department of Promotion of Industries and Internal Trade, Ministry of Commerce and Industry regarding Class-I/Class-II local suppliers, Purchase preference, verification of local contents etc shall be applicable to this tender. Therefore, bidders are requested to ensure compliance of the same while submitting tenders. b) Price Preference shall be extended to the MSEs under the Public Procurement Policy for MSEs. Such MSE s shall produce documentary proof of registration as per provisions of the Policy ie: registration with District Industries Centre (DIC) or Khadi and Village Industries Commission (KVIC) or Khadi and Industries Board (KVIB) or Coir Board or National Small Industries Commission (NSIC) or Directorate of Handicrafts and Handlooms or Udyog Aadhar Memorandum or any other body specified by Ministry of MSME.

2. Applicable Law: - The Contractor shall be interpreted, construed and governed by the Law of India.

3. Bank Details :- The offer should contain Bank details viz., Bankers Name, Address, Phone No. & Mail id, Bank Account No., IFSC code, PAN No., GST No., etc.

4. Contractors Default Liability :- The purchaser may upon written notice of default to the Contractor terminate the Contract in whole or in part in circumstances detailed hereunder: a) If in the judgement of the Purchaser the Contractor fails to make delivery of Stores within the time specified in the Contract/agreement or within the period for which extension has been granted by the Purchaser to the Contractor. b) If in the judgment of the Purchaser the Contractor fails to comply with any of the other provisions of this Contract.

5. Counter Terms and Conditions of suppliers: - Where counter terms and conditions / printed or cyclostyled conditions has been offered by the Supplier, the same shall not be deemed to have been accepted by the Purchaser unless specific written acceptance thereof is obtained.

6. DELIVERY AND LIQUIDATED DAMAGES (LD) :-

(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 maximum of 5% of the order value for the delayed period. However in case of inordinate delay i.e, delays of more than one-fourth (25%) of the total completion period, LD shall be applicable subject to a maximum 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 if 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 15 (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.

7. Delivery Period :- The time for and the date / period of delivery of the stores stipulated in the Tender / Purchase Order shall be deemed to be the essence of the contract and delivery must be completed on or before the specified dates.

8. Delivery Term :- Ex-Works / FOR LPSC

9. Extension of Time: - If the completion of supply of Stores is delayed due to reason of FORCE MAJEURE such as acts of God, acts of public enemy, acts of Government, fires, floods, epidemics, quarantine restrictions, strikes, and freight embargoes etc., the Contractor shall give notice within 15 days to the Purchaser in writing of his claim for an extension of time. The Purchaser on receipt of such notice after verification, if necessary, may agree to extend the Contract delivery date as may be reasonable but without prejudice to the other terms and conditions of the Contract.

10. 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 or for a period as specified in the tender document 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) All the replacement stores shall also be guaranteed for a period of 12 months from the date of arrival of the stores at purchaser's site.

11. Indemnity:- The Contractor shall warrant and be deemed to have warranted that all stores supplied against this Contract are free and clean of Infringement of any Patent, Copy right or Trade mark and shall at all times indemnify the Purchaser against all claims which may be made in respect of stores for infringement of any right protected by patent, registration of design or trade mark, and shall take all risk of accident or damage which may cause a failure of the supply from whatever cause arising and the entire responsibility for the sufficiency of all the means used by him for the fulfilment of the Contract.

12. Language and Measures :- All documents pertaining to the Contract including specification, schedule, notice, correspondence, operating and maintenance instructions, drawings or any other writings shall be written in English Language. The metric system of measurement shall be used exclusively in the Contract.

13. Mode of Despatch :- For supplies BY ROAD / BY RAIL:- The Contractor is responsible for obtaining a clear receipt from the Transport Authorities specifying the goods despatched. The consignment should be despatched with clear Railway Receipt/Lorry Receipt. If sent in any other mode, it shall be at the risk of the Contractor. Purchaser will take no responsibility for short deliveries or wrong supply of goods when the same are booked on 'said to contain' basis. Purchaser shall pay for only such stores as are actually received by them in accordance with the Contract. The Contractor will be held responsible for any demurrage / wharfage paid due to non-receipt of documents in time.

14. Offer Validity :- a) For Single Part Tender - Quotation should be valid for 90 days from the date of opening of the tender or any other period as specified in the tender. b) For Two Part Tender -

Quotation should be valid for 120 days from the date of opening of the tender or any other period as specified in the tender. Note :- Offer with validity lesser than that specified is liable for exclusion from the procurement process

15. Packing Forwarding & Insurance:- The Contractor will be held responsible for the stores being sufficiently and properly packed for transport by Rail / Road 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. b) Insurance : 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.

16. Payment :- 100% payment shall be made through RTGS within 30 days of receipt and acceptance of the item at our site against submission of PBG.

17. Performance Bank Guarantee (PBG) :- To fulfil guarantee conditions outlined in clause 2(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.

18. Price : a) Price should be firm and fixed and should be on the basis of FOR, LPSC / 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. b) Tenders 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 variations. c) Prices are required to be quoted according to the units indicated in the tender. 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.

19. Quantity (QTY) and Unit of Measure (UOM) Quote should be as per the quantity and unit of measure mentioned the tender. If dimensional details are available, the same should also be indicated in your offer.

20. Resolution of Disputes:- Any dispute, disagreement or question arising out of or relating to or in consequence of the contract or to its fulfillment, or the validity of enforcement thereof which cannot be settled mutually, or the settlement of which is not herein specifically provided for, shall within 30 (thirty) days from the date either party informs the other in writing that such dispute or disagreement exists be referred to arbitration by the sole arbitrator. The Arbitrator shall be appointed As per the Indian Arbitration and Conciliation Act 1996 and proceedings will be conducted in Trivandrum. The Arbitration

proceedings shall be conducted in accordance with and subject to the Arbitration and Conciliation Act 1996 (Act 26 of 1996) as amended from time to time and the decision of the Arbitrator shall be final and binding on the parties thereto. Each party shall bear its own cost of preparing and presenting its case. The cost of Arbitration including the fees and expenses of the Arbitrator shall be shared equally by the parties unless the award provides otherwise. Subject to provisions of this clause, the courts at Kerala shall have exclusive jurisdiction. Performance under this Contract shall, however continue during Arbitration proceeding and no payment due or payable by the parties hereto shall be withheld unless any such payment is/ or forms a part of the subject matter of the Arbitration proceedings.

21. Security Deposit (SD) :- Applicable for order value above INR 50 L.

On acceptance of the order, the Contractor shall, at the option of the Purchaser and within the period specified by him, deposit with him, in cash or in any other form as the Purchaser may determine, security deposit not exceeding three percent of the value of the Contract as the Purchaser shall specify. If the Contractor is called upon by the Purchaser to deposit, Security and the Contractor fails to provide the security within the period specified, such failure shall constitute a breach of the Contract, and the Purchaser shall be entitled to make other arrangements for the re-purchase of the stores Contracted at the risk of the Contractor in terms of Sub-Clause (ii) and (iii) of clause 15(b) hereof and/or to recover from the Contractor, damages arising from such cancellation.

22. Specifications:- a) Stores offered should strictly conform to Purchasers specifications. Deviations, if any, should be clearly indicated by the tenderer in his quotation. The tenderer should also indicate the Make/Type number of the stores offered and provide catalogues, technical literature and samples, wherever necessary, along with the quotations. Wherever options are called for in our specifications, the tenderer should address all such options. b) Samples, if called for, should be submitted free of all charges by the tenderer and the Purchaser shall not be responsible for any loss or damage thereof due to any reason whatsoever. In the event of non-acceptance of tender, the tenderer will have to remove the samples at his own expense.

23. Taxes :- The applicable GST / IGST shall be clearly mentioned in your offer along with HSN code of the offered items. We are eligible for IGST @ 5% as per the Department of Revenue Notification No. 25/2018 Integrated Tax (Rate) Schedule-I; Sl.No.243B dated 31.12.2018 (Amendment to Notification No. 7/2018 - Integrated Tax (Rate) dated 25.01.2018 and Notification No. 1/2017 - Integrated Tax (Rate) dated 28.06.2017

24. Training:- The Contractor shall, if required by the Purchaser, provide facilities for the practical training of Purchasers engineering / technical personnel from India and for the active association on the manufacturing processes throughout the manufacturing period of the Contract / Stores, number of such personnel to be mutually agreed upon.

25. LPSC shall have the right to place part order among the parties for the items for which they are the

lowest.

26. Option Clause : The Purchase reserves the right to increase/decrease the Ordered Quantity by up to 25% 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 delivery period (or the extended delivery period). It may please be noted that, this clause is not applicable for Development Orders.

C. Bid Templates

C.1 Technical Bid - Supply, Installation, Commissioning, Prove out & Training of Roundness Tester (Geometrical Parameter Measuring Machine)

1. ROUNDNESS MEASURING SYSTEM

Item specifications for ROUNDNESS MEASURING SYSTEM

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	Machine requirement 1	System shall be capable to measure, analyze and display all geometrical parameters like Roundness, Concentricity/Eccentricity, Flatness, Squareness, Parallelism, Vertical and Horizontal straightness, Cyclindricity, Runout, Partial arc etc.	Yes / No / Explain		
2	Machine requirement 2	Manual movement through joystick and fully automatic 'CNC' mode operation to be provided.	Yes / No / Explain		
3	Machine requirement 3	Automatic centering and leveling table with continuous spindle rotation shall be quoted.	Yes / No / Explain		

4	Machine requirement 4	Equipment shall consist of sturdy base unit, high precision spindle and work table: with air bearing, motorized vertical column and radial straightness unit, measuring gauge capable of measuring Roundness, different types of styli, computer with colour monitor, printer and user friendly software packages for measuring all geometrical parameters.	Yes / No / Explain		
5	Component Diameter	Ø400mm or higher	Yes / No / Explain		
6	Measuring Diameter	Ø350mm or higher	Yes / No / Explain		
7	Component Weight	60kg or higher	Yes / No / Explain		
8	COLOUMN (Z-AXIS)	Details as below	Yes / No / Explain		
9	Material	Precision machined cast iron or suitable	Yes / No / Explain		
10	Height	900 mm or higher	Yes / No / Explain		
11	Vertical Straightness	0.2 micron over 100mm or better	Yes / No / Explain		
12	Vertical Axis to Spindle axis parallelism	2 Microns over 900mm or better	Yes / No / Explain		
13	Speed of traverse (measuring):	1 to 10 mm/s	Yes / No / Explain		
14	Vertical Positional resolution	10µm or better	Yes / No / Explain		
15	SPINDLE AND WORKTABLE	Details as below	Yes / No / Explain		
16	Worktable Diameter	Ø280mm minimum	Yes / No / Explain		
17	Spindle Construction	Ultra precision AirBearing/Mechanical Bearing	Yes / No / Explain		

18	Speed of rotation	0.6 to 10 RPM, bi-directional	Yes / No / Explain		
19	Radial error (height above table):	$\pm(0.04 \text{ micron} + 0.0005 \text{ micron/mm})$ (height Above table) or better for standard stylus (100mm minimum).	Yes / No / Explain		
20	Radial Accuracy for stylus having more than 100mm length.	To be Provided by the party	Yes / No / Explain		
21	Axial Error (radius from centre):	$\pm(0.04 \text{ micron} + 0.0005 \text{ micron/mm})$ (radius from centre) or better for standard stylus (100mm minimum).	Yes / No / Explain		
22	Axial accuracy for stylus having more than 100mm length	To be Provided by the party	Yes / No / Explain		
23	Center and levelling Table control	Automatic	Yes / No / Explain		
24	Centering range	2mm or higher	Yes / No / Explain		
25	Levelling Range	$\pm 0.5^\circ$ or higher	Yes / No / Explain		
26	Internal bore reach	160 mm depth with standard stylus	Yes / No / Explain		
27	Maximum depth measurement	with probe extension upto 250 mm or 180mm with special stylus	Yes / No / Explain		
28	Horizontal Arm Axis	Details as below	Yes / No / Explain		
29	Horizontal arm	Radial Straightness Unit shall be provided.	Yes / No / Explain		
30	Arm construction	Suitable thermally stable material having high structural rigidity	Yes / No / Explain		
31	Horizontal movement	200mm or nearest possible higher size	Yes / No / Explain		
32	Horizontal straightness	0.5 micron over 100mm or better	Yes / No / Explain		
33	Squareness to spindle axis	2 micron over 200mm or better	Yes / No / Explain		
34	Positional control	± 10 micron or better	Yes / No / Explain		

35	Horizontal arm Positional resolution	1µm or better	Yes / No / Explain		
36	Gauge (Probe)	Details as below	Yes / No / Explain		
37	Measuring range :	±1mm minimum for 100mm length	Yes / No / Explain		
38	Resolution	0.03µm	Yes / No / Explain		
39	Gauge attitude/ Orientation	Manual / Automatic	Yes / No / Explain		
40	System measurement capabilities	Geometrical parameters like roundness, cylindricity, straightness, parallelism, Flatness, concentricity, eccentricity / co- axiality and run-out.	Yes / No / Explain		
41	Computer and software features 1	Provision for measurement, analysis and display of measured results, storage of datas and programmes.	Yes / No / Explain		
42	Computer and software features 2	Latest Software package for the measurement of all geometrical parameters like Roundness, Cylindricity, Vertical and Horizontal Straightness, Parallelism, Flatness (single or multiplane) Squareness, Concentricity, Eccentricity / Co- axiality, Run-out, etc.	Yes / No / Explain		
43	Computer and software features 3	'CNC' measurement and online programming facility to be provided.	Yes / No / Explain		
44	Computer and software features 4	Interrupted work piece measurement and unwanted data removal shall be possible automatically through software or manually using mouse on the screen.	Yes / No / Explain		

45	Computer and software features 5	Suitable latest version computer, with high resolution LED colour monitor (21" or more) and HP/ equivalent make laser colour printer preferably from local sources having advanced user friendly operating system shall be provided.	Yes / No / Explain		
46	Computer and software features 6	Uncertainties shall be in accordance with ISO guide to the expression of uncertainty in measurement (ISO GUM 1993) or equivalent.	Yes / No / Explain		
47	Computer and software features 7	Machine errors quoted shall be as maximum permissible errors (MPE).	Yes / No / Explain		
48	Computer and software features 8	Filters like 2CR, gaussian and polar filters upto 1500upr including band pass filters shall be provided for the measurement of all geometrical parameters.	Yes / No / Explain		
49	Styli requirement 1	Different stylus combination/ accessories are to be quoted with individual price for measurement at various depth with Ruby/ Sapphire balls (detailed indicative sketches are attached as annexure-A);	Yes / No / Explain		
50	Styli requirement 2	Tip diameter ϕ 1.00mm, 100mm length Ruby ball	Yes / No / Explain		
51	Styli requirement 3	Tip diameter ϕ 2.00mm, 100mm length Sapphire ball	Yes / No / Explain		
52	Styli requirement 4	Tip diameter ϕ 4.00mm, 100mm length Ruby ball	Yes / No / Explain		
53	Styli requirement 5	Tip diameter ϕ 2.00mm, 150mm length Sapphire ball	Yes / No / Explain		

54	Styli requirement 6	Ruby Ball Recess stylus with ϕ 1mm Tip diameter; 100mm length	Yes / No / Explain		
55	Styli requirement 7	Ruby Ball Recess stylus with 2.00mm Tip diameter, 5mm shank clearance and 100mm length	Yes / No / Explain		
56	Styli requirement 8	Ruby Ball Recess stylus with Tip diameter 2.00mm, 30mm shank clearance and 100mm length	Yes / No / Explain		
57	Styli requirement 9	Reach Recess Ruby ball styli with Tip diameter 2mm, shank clearance 100mm and 100mm effective length.	Yes / No / Explain		
58	Styli requirement 10	Special Ruby ball with Recess stylus with 1.00mm Tip diameter, shank clearance 2.5mm and 100mm length having a relief of 30mm	Yes / No / Explain		
59	Styli requirement 11	The figures of probe arms and styli are indicative considering the applications. The size and shape of each probe arm and styli can be varied slightly from the indicative sketch without changing the tip configuration with respect to the available Probe arm and stylus configuration with each manufacturer.	Yes / No / Explain		
60	Styli requirement 12	The holding portion mechanism of stylus to the gauge/ probe shall be as per the available configuration of each manufacture's gauge/probe	Yes / No / Explain		
61	Optional requirement 1	Tip diameter ϕ 0.50mm, 100mm length Ruby ball	Yes / No / Explain		

62	Optional requirement 2	Special Styli having diameter as small as 0.2 mm or wire stylus	Yes / No / Explain		
63	Optional requirement 3	Stylus having length of 300 mm with 2 mm Ruby ball or probe/gauge extensions having 200 mm length with 100 mm stylus.	Yes / No / Explain		
64	Optional requirement 4	Accessories like Chuck for holding cylindrical parts with dia. 5 to 50 mm, horizontal Test Glass, Bar Stylus shall be quoted.	Yes / No / Explain		
65	Optional requirement 5	Other calibration standards like precision test cylinder, glass flat 250mm dia, etc shall also be quoted.	Yes / No / Explain		

Document : Roundness tester-General specifications compliance matrix

Document : Roundness tester - Technical Specifications compliance matrix

Common Specifications (Applicable for all items)

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	General Requirement 1	English as operational language.	Yes / No / Explain		
2	General Requirement 2	Printout facility of results.	Yes / No / Explain		
3	General Requirement 3	All accessories including calibration standards, Measuring gauges, Different styli, Computer with colour monitor, Instruments desk & computer table and operation & maintenance manual shall be supplied. Various necessary calibration standards required for the measurement of Geometric Dimensioning & Tolerancing shall be supplied.	Yes / No / Explain		

4	General Requirement 4	Machine shall be installed and calibrated to the stated accuracy at LPSC VALIYAMALA and extensive 5 days training to be imparted to LPSC VALIYAMALA employees, Training shall include a) Operation of the system, b) Calibration, maintenance and troubleshooting, c) Usage of software in all aspects of measurement and data analysis, part programming, Post processing.	Yes / No / Explain		
5	General Requirement 5	Warranty shall be provided for minimum two year.	Yes / No / Explain		
6	General Requirement 6	Power requirement; 220-230V, 50Hz, single phase.	Yes / No / Explain		
7	General Requirement 7	Specifications details for Air Supply, UPS and Air Drier shall be provided.	Yes / No / Explain		
8	General Requirement 8	Compressed air requirement (if any): Overall compressed air supply specifications like pressure, flow rate, cleanness shall be indicated. Air pressure available at LPSC Valiyamala (4 to 7 bar). Party shall supply air pressure regulator along with machine to match with Input pressure.	Yes / No / Explain		
9	General Requirement 9	Supplier shall have prior experience of supply of Roundness Tester equipments for precision components inspection.	Yes / No / Explain		
10	General Requirement 10	All necessary calibration standards required for the calibration shall be brought by the party at the time of installation.	Yes / No / Explain		

11	General Requirement 11	Various necessary calibration standards required for the measurement of Geometric Dimensioning & Tolerancing shall be quoted.	Yes / No / Explain		
12	General Requirement 12	All software updates during the warranty period shall be supplied, installed and trained to the user on real time basis at free of cost.	Yes / No / Explain		
13	General Requirement 13	The quote shall be in two parts. Part '1' is technical cum commercial with price figures masked and part '2' is technical cum commercial with price.	Yes / No / Explain		
14	General Requirement 14	All optional accessories shall be quoted separately with individual cost and final selection shall be done by LPSC during Part '1' evaluation before price bid, opening depending upon the requirement.	Yes / No / Explain		
15	General Requirement 15	Supplier shall offer automated CNC measurement solution for aerospace components with requisite fixtures, accessories, styli etc at installation site.	Yes / No / Explain		
16	General Requirement 16	Supplier shall offer automated solution for automated inspection of aerospace components.	Yes / No / Explain		
17	General Requirement 17	Supplier to offer requisite fixtures, accessories, styli required for automated CNC measurement of aerospace components with requisite programming system to be done at installation site.	Yes / No / Explain		

18	General Requirement 18	Supplier shall have experience in programming aerospace components inspection.	Yes / No / Explain		
19	General Requirement 19	Party shall provide compliance matrix as per enclosed format. Wherever parameter is specified with numerals, the reply shall be in numerals and other statements like "Yes complied or agreed" alone are not acceptable and such offers shall not be considered.	Yes / No / Explain		
20	General Requirement 20	Offer would be considered only if, original catalogue (in English) embedded with all specifications of the quoted model for equipment, accessories, probes etc. are enclosed.	Yes / No / Explain		
21	General Requirement 21	After installation and commissioning of machine at LPSC VALIYAMALA. Party has to provide a Calibration certificate traceable to National and international standards.	Yes / No / Explain		
22	General Requirement 22	Two sets each of user manual and service manual (operation and maintenance manual) (for both mechanical and electronic hardware) in English language shall also be provided in soft and hard copy	Yes / No / Explain		
23	Special conditions 1	Pre-Qualification Criteria for bidders as below	Yes / No / Explain		

24	Special conditions 2	<p>The following details/document shall be provided with quotation: The bidder shall be an Original Equipment Manufacturer (OEM), or authorized dealer of OEM. Authorized dealer(s) shall provide an authorization letter from OEM. The Original Equipment Manufacturer (OEM) shall have a minimum of Three years of continuous experience in the field of design, manufacturing and supply of Roundness Tester machine. List of Roundness Tester machines supplied, installed and commissioned till date (with details of major specification, model and clientele indicating name of company, contact person, phone no., e-mail address in the past 3 years) shall be provided.</p>	Yes / No / Explain		
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25	Special conditions 3	OEM(s) shall have supplied and commissioned at least one Roundness Tester with(Radial error (height above table): $\pm(0.04 \text{ micron} + 0.0005) \text{ micron/ mm}$ (height above table) or better for standard stylus (100mm. minimum), Axial Error (radius from centre): $\pm(0.04 \text{ micron} + 0.0005) \text{ micron/ mm}$ (radius from centre) or better for standard stylus (100mm minimum) and Gauge resolution equal to or better than $0.03\mu\text{m}$ in the past three years to any industrial organization (preferably to ISRO, Aerospace or automobile Industries, etc.) and such machine shall be presently working satisfactorily. As a documentary proof, bidder shall provide copies of Purchase order, installation reports, calibration certificates, Performance Certificate, customer details with name of contact person, Phone No. and e-mail id.	Yes / No / Explain		
26	Special conditions 4	Offer would be considered only if, original catalogue (in English) embedded with all specifications of the quoted model for machine, accessories, probes etc. are enclosed.	Yes / No / Explain		
27	Special conditions 5	If any of the details required as per tender is not provided, the offer will be summarily rejected.	Yes / No / Explain		
28	Special conditions 6	Delivery Period: 18 Weeks from the date of Purchase Order.	Yes / No / Explain		

29	Special conditions 7	Pre-delivery inspection at the Supplier's site in presence of Purchaser's representative	Yes / No / Explain		
30	Special conditions 8	In house inspection of all the required aspects shall be completed by the party and inform to Purchaser for pre delivery inspection.	Yes / No / Explain		
31	Special conditions 9	All software features shall be demonstrated using the standard artefacts, as per the standards at purchaser's site.	Yes / No / Explain		
32	Special conditions 10	Machine acceptance criteria: All the accuracies- as mentioned above are to be proven as per relevant standards at LPSC VALIYAMALA after installation of machine.	Yes / No / Explain		
33	Special conditions 11	Warranty shall be provided for minimum two years from the date of installation and commissioning.	Yes / No / Explain		
34	Special conditions 12	Party shall also quote separately for Non-comprehensive AMC for a period of 3 (three) years after the warranty. The AMC shall include 4 (Four) preventive maintenance visits per year and to attend any number of breakdown calls.	Yes / No / Explain		
35	Special conditions 13	During the AMC period annually first preventive maintenance visit shall be combined with calibration.	Yes / No / Explain		
36	Special conditions 14	Payment for the AMC shall be on pro-rata basis and shall be paid after satisfactory completion of each preventive maintenance and calibration visit.	Yes / No / Explain		

37	Special conditions 15	The AMC shall be optional and LPSC VALIYAMALA reserves the right to not to choose the AMC along with procurement of the machine.	Yes / No / Explain		
38	Special conditions 16	Technical service support shall be made available for atleast 10 years after expiry of warranty period	Yes / No / Explain		
39	Special conditions 17	Factory trained service engineers/ application engineers shall be based in India to support the machine offered.	Yes / No / Explain		
40	Special conditions 18	List of essential spares, likely to be required during the Non-Comprehensive AMC and its cost, valid during the entire period of AMC, after the expiry of warranty shall be submitted along with the quotation.	Yes / No / Explain		
41	Special conditions 19	Charges towards NC-AMC for a period of 3 years after expiry of warranty shall also be taken into account, to arrive the L1 offer.	Yes / No / Explain		

Supporting Documents required from Vendor

1. PRICE DETAILS (Price Bid Related)

2. Warranty and calibration certificates of all parts

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

Sl. No.	Description	Compliance	Vendor Terms
1	Items to be neatly packed and supplied in suitable cases without damage, Delivery site LPSC Valiamala.	Yes / No / Explain	
2	<p>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 service 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.</p>	Yes / No / Explain	
3	<p>Whether applicable GST percentage mentioned in your offer.(We are eligible for IGST @ 5% as per the Department of Revenue Notification No. 25/2018 Integrated Tax (Rate) Schedule-I; Sl.No.243B dated 31.12.2018 (Amendment to Notification No. 7/2018 - Integrated Tax (Rate) dated 25.01.2018 and Notification No. 1/2017 - Integrated Tax (Rate) dated 28.06.2017) (If mentioned as EXTRA OR INCLUDED in your quote, please mention the percentage in Remarks Column).</p>	Yes / No / Explain	

4	ISRO is eligible for Customs Duty Concession vide Notification No.12/2012-Customs dated 17.03.2012. and Notification No. 50/2017-customs dtd 30.06.2017 [We will provide Customs Duty Concession Certificate for bought out items being imported for manufacturing the ordered items (List of items to be imported with quantities to be enclosed along with offer) OR for Orders placed on Foreign Vendors OR for High Sea Sale orders.]	Yes / No / Explain	
5	Installation Charges, if any, (If mentioned as EXTRA OR INCLUDED in your quote, please mention the percentage in Remarks Column).	Yes / No / Explain	
6	Delivery Term :- FOR : LPSC, VALIAMALA In case of Foreign orders, FOB or FCA. If "NO" specify the exact delivery term with relevant details in remarks column	Yes / No / Explain	
7	Delivery Period [for supply and installation] (If any specific delivery period is mentioned in the tender, please comply the same. If not agreed, please mention your delivery period in remarks column OR if already mentioned in your quote please mention as already furnished in the quote)	Yes / No / Explain	
8	Payment Term :- (a)100% payment shall be made through RTGS within 30 days of receipt ,installation, commissioning and acceptance of the item at our site. (b)In case of Foreign orders, Payment term shall be SIGHT DRAFT / 80% BY IRREVOCABLE LETTER OF CREDIT AND BALANCE 20% BY WIRE TRANSFER AFTER RECEIPT & ACCEPTANCE OF THE ORDERED ITEM.	Yes / No / Explain	

9	Liquidated Damages (LD) :- If the ordered items are not supplied within the delivery schedule, LD shall be levied from your bill @ 0.5% per week for the undelivered items subject to a maximum of 5% of the order value for the delayed period. However in case of inordinate delay i.e, delays of more than one-fourth (25%) of the total completion period, LD shall be applicable subject to a maximum of 10%.	Yes / No / Explain	
10	Warranty :- Warranty for the offered item shall be from the date of installation/acceptance of the item at our site for a minimum period of one years or as specified in the tender document.	Yes / No / Explain	
11	Security Deposit (SD) :- (only for order value above Rs.50 Lakh) You have to furnish a Bank Guarantee for 3% of the order value (from a bank of international repute in case of foreign vendors) within 10 days of receipt of Order towards the faithful execution of the order valid till the completion of the scope of work as per order plus sixty days. (This will be returned to you immediately on execution of the order satisfactorily as per order terms. In case of non-performance / poor performance, the amount will be forfeited).	Yes / No / Explain	
12	Performance Bank Guarantee (PBG) :- (only for order value above Rs.50 Lakh) You have to submit a PBG from a Nationalised / Scheduled Bank (from a bank of international repute incase of foreign vendors) for 3% of the order value towards the performance of the system at the time of supply valid till the completion of warranty period plus 60 days as per the format provided by the Department. OR 3% OF THE ORDER VALUE SHALL BE WITH HELD TILL THE COMPLETION OF WARRANTY PERIOD PLUS 60 DAYS.	Yes / No / Explain	

13	In case, if parties are unable to provide two separate BGs, i.e., one for SD and one for PBG, they can submit a combined BG for SD & PBG within 10 days of receipt of order for 3% of order value valid till the completion of total contractual obligation (i.e., supply period plus warranty period plus 60 days) as per the format provided by the Department.	Yes / No / Explain	
14	Insurance :- Being a Govt. Of India Dept., Insurance is not required at our cost. Please ensure the safe delivery of the ordered item with proper AIR / SEA / ROAD worthy packing.	Yes / No / Explain	
15	Validity of Offer :- (a)The validity of the offers should be 90 days (in case of single part tender) from the date of opening of the tenders. (b)The validity of the offers should be 120 days (in case two part tender) from the date of opening of the tenders. Note :- Tenders shorter than offer validity mentioned above will not be considered for evaluation.	Yes / No / Explain	
16	Bank Details, viz., Bank Name, Branch, Address, Account No., IFSC (Details to be given in Vendor Terms Column)	Yes / No / Explain	
17	PAN No. (Details to be furnished in Vendor Terms Column)	Yes / No / Explain	
18	GST No. (Details to be given in Vendor Terms Column)	Yes / No / Explain	
19	Purchase Order to be placed on whom (Please mention the Address, Phone No. & E-mail id)	Yes / No / Explain	
20	HSN Code of offered items	Yes / No / Explain	
21	Local content, if any, involved in the quoted item shall be declared/ certified in percentage.	Yes / No / Explain	
22	Furnish the details of place(s) where the value addition for the quoted item takes place.	Yes / No / Explain	
23	State whether MSE OEM or not. If yes, please provide the necessary documentary proof	Yes / No / Explain	
24	Confirm whether you have quoted for NC- AMC for a period of 3 years along with essential spares & its cost in price bid.	Yes / No / Explain	

C.3 Price Bid

Sl. No.	Item	Quantity	Unit Price	Currency	Total Price	Other Costs, if any	Remark
1	ROUNDNESS MEASURING SYSTEM	1.00 Nos.		-			

Common charges (Applicable for all items)

Additional Costs, if any	
Additional Costs, if any (Value)	