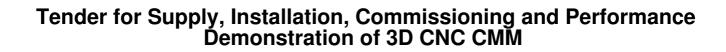
GOVERNMENT OF INDIA DEPARTMENT OF SPACE ISRO PROPULSION COMPLEX (IPRC) MAHENDRAGIRI



Bids to be submitted online

Tender No.: IPRC/PURGP2/IP202500038101 dated 19-05-2025

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Tender No: IPRC/PURGP2/IP202500038101

A. Tender Details

Tender No: IPRC/PURGP2/IP202500038101

Tender Date : 19-05-2025

Tender Classification: GOODS

Purchase Entity: PURGP2

Centre: ISRO PROPULSION COMPLEX (IPRC)

Supply, Installation, Commissioning and Performance Demonstration of 3D CNC CMM

1] KINDLY READ ALL INSTRUCTIONS BEFORE QUOTING.

2] THIS IS A PUBLIC TWO PART TENDER. PART I: TECHNICAL BID AND PART II- COMMERCIAL BID. TECHNICAL BID PART IS FOR ALL TECHNICAL DETAILS. COMMERCIAL BID SHOULD CONTAIN ALL PRICE DETAILS.PRICE RELATED DOCUMENT SHOULD BE UPLOADED IN HEADER. SUPPORTING DOCUMENTS FROM VENDOR (PRICE DETAILS). IF PRICE RELATED INFORMATION IS MENTIONED ANYWHERE OTHER THAN HEADER. PRICE BID AND SUPPORTING DOCUMENTS FROM VENDOR (PRICE DETAILS), YOUR OFFER IS LIKELY TO GET REJECTED.PRICE BID WILL BE OPENED ONLY AFTER TECHNICAL BID EVALUATION ON A LATER DATE.

3) Foreign vendors are not permitted to quote.

4]Only Class-I and Class-II Local suppliers as per Make in India Policy are eligible to participate in the bid.

- e.The percentage of local content should be specifically mentioned in the offer, without which it will be summarily rejected.
- f.Preference will be given to Class-I Local Supplier and in their absence, Class- II Local Supplier will be considered.

5]Last minute clarification on tenders will not be entertained.

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

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7]Acceptance of Guarantee / Warranty, PBG, SD & LD are specified in your offer .

- 8] MSE preference is applicable only against the claim of the manufacturer and production of documentary evidence by the manufacturer for the registration of particular item under MSE
- 9] Items as per the Tender is eligible for Concessional rate of GST (i.e., @ 5%) as per Ministry of Finance, Dept. of Revenue Notification No. 24/2018 Central Tax (Rate) Schedule-I; SI. No. 243B dated 31.12.2018 (Amendment to Notification No. 6/2018 Central Tax (Rate) dated 25.01.2018 and Notification No. 1/2017 dated 28.06.2017) and Government of Tamil Nadu, Commercial Taxes & Registration (B1) Department G.O(Ms) No.18 Dtd. 25/01/2018 & Schedule-I; SI. No. 243 B as per the amendment dated 31.12.2018 (Amendment G.O(Ms)No.170 dated 31/12/2018). Necessary concessional GST certificate will be issued. Please confirm your acceptance.

A.1 Tender Schedule

Bid Submission Start Date : 19-05-2025 17:00

Bid Clarification Due Date : 25-06-2025 15:00

Bid Submission Due Date : 26-06-2025 14:00

Bid Opening Date : 26-06-2025 14:10

Price Bid Opening Date : **03-07-2025 14:00**

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B. Tender Attachments

Technical Write-up/Drawings

Document: Local Content declaration form

Instructions To Vendors

Tender No: IPRC/PURGP2/IP202500038101

1. In line with the Government Public Procurement Order No. P/45021/2/2017-BE-II dtd . 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.
are local supplier meeting the requirement of minimum local content,%
as defined above in the orders for the material against Tender Enquiry No dtd
2. The HSN No. of the item supplied is
Percentage of Local value addition , involved in the item are:
1.
2.
3.
3. This is also certified that the following factors are excluded in the above percentage: (strike out which are not applicable)
1. imported item sourced locally from resellers/distributors (value in% including tax, if applicable)
2. The license fee/royalties paid/technical charges paid out of india. (value in% including tax, if applicable)
3. Repackaged/refurbished/rebranded imported products (value in% including tax, if applicable)
4. The details of location at which the value addition will be made is as follows :

5. We also understand that , false declarations will be in breach of code of integrity, under rule 175 (1)
(i) (h), of the General Financial Rules, for which a bidder, or its successors can be debarred for up to 3 years under Rule 151 (iii) of the GFR along with such other actions as may be permissible under law.
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For (company name)

Authorised Signatory

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. 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 ie., 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

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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.

5. 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.

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- (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 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 10 (b) above, the Contractor shall be liable for any loss which the purchaser may sustain on that account, provided that the repurchase 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

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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,

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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

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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.

6. 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.

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C. Bid Templates

C.1 Technical Bid - Supply, Installation, Commissioning and Performance Demonstration of 3D CNC CMM

1. Precision Inspection Equipment- Supply, installation, commissioning, and performance demonstration of bridge type 3D CNC CMM

Item specifications for Precision Inspection Equipment- Supply, installation, commissioning, and performance demonstration of bridge type 3D CNC CMM

SIN	No Specification	Value	Compliance	Offered Specification	Remark
1	Supply, installation, commissioning, performance demonstration, and calibration of bridge type CNC CMM		-		

2. Precision Inspection Equipment - Programming of engine components on supplied the CMM

Common Specifications (Applicable for all items)

SI No	Specification	Value	Compliance	Offered Specification	Remark
1	I. SCOPE OF SUPPLY:		-		
2	1.The scope of supply includes a bridge-type coordinate measuring machine (CMM), complete with measurement software that provides:		-		

2.High-accuracy contact probing, Contact scanning using fixed and indexing probe heads, Part-to-CAD model comparison, Reverse engineering capabilities, Optional requirements include compatibility with laser attachments for non-contact scanning.		-		
indexing probe heads shall be provided, offering various stylus combinations for touch probing, contact scanning, and laser		-		
4. Workstation (computer) with the latest processor, necessary accessories, and a colour laser jet duplex network-enabled printer, capable of printing in A4 size on both sides		-		
	accuracy contact probing, Contact scanning using fixed and indexing probe heads, Part-to- CAD model comparison, Reverse engineering capabilities, Optional requirements include compatibility with laser attachments for non-contact scanning. 3. Fixed and indexing probe heads shall be provided, offering various stylus combinations for touch probing, contact scanning, and laser compatibility 4. Workstation (computer) with the latest processor, necessary accessories, and a colour laser jet duplex network- enabled printer, capable of printing in A4 size on both	accuracy contact probing, Contact scanning using fixed and indexing probe heads, Part-to- CAD model comparison, Reverse engineering capabilities, Optional requirements include compatibility with laser attachments for non-contact scanning. 3. Fixed and indexing probe heads shall be provided, offering various stylus combinations for touch probing, contact scanning, and laser compatibility 4. Workstation (computer) with the latest processor, necessary accessories, and a colour laser jet duplex network- enabled printer, capable of printing in A4 size on both	accuracy contact probing, Contact scanning using fixed and indexing probe heads, Part-to- CAD model comparison, Reverse engineering capabilities, Optional requirements include compatibility with laser attachments for non-contact scanning. 3. Fixed and indexing probe heads shall be provided, offering various stylus combinations for touch probing, contact scanning, and laser compatibility 4. Workstation (computer) with the latest processor, necessary accessories, and a colour laser jet duplex network- enabled printer, capable of printing in A4 size on both	accuracy contact probing, Contact probing, Contact scanning using fixed and indexing probe heads, Part-to-CAD model comparison, Reverse engineering capabilities, Optional requirements include compatibility with laser attachments for non-contact scanning. 3. Fixed and indexing probe heads shall be provided, offering various stylus combinations for touch probing, contact scanning, and laser compatibility 4. Workstation (computer) with the latest processor, necessary accessories, and a colour laser jet duplex network-enabled printer, capable of printing in A4 size on both

6	5.Supply, installation, commissioning, performance demonstration, and calibration at IPRC, Mahendragiri, including performance testing and accuracy demonstration as specified in the Technical Specification under Measuring Accuracy.	-	
7	6.Extensive application training on the application software, as well as basic maintenance training, shall be provided after installation at IPRC, Mahendragiri.	-	
8	II. TECHNICAL SPECIFICATI ON:	-	
9	Measuring capacity: The X and Y axes shall be interchangeable.	-	
10	X-axis measuring range: Minimum 1000 mm, maximum 1200 mm.	-	
11	Y: 1500 mm minimum and not exceeding 1800 mm	-	
12	Z-axis measuring range: Minimum 800 mm, maximum 1000 mm.	-	

13	Measuring Accuracy: The indexing probe head machine accuracy shall be in accordance with the latest ISO 10360 or equivalent standards, with a probing error as specified.	-	
14	Length Measuring Error (LME): In accordance with ISO 10360-2, the Maximum Permissible Error (MPEE) shall be: MPEE = 2.5 + (L/250) µm or better, where L is the measured length in mm.	-	
15	Probing Error: In accordance with ISO 10360-4, the Probing form Error of the single stylus (PFTU) / Maximum Permissible Error (MPEP) shall be: ≤ 2.5 µm or better.	-	
16	Scanning THP: 4 Micron or better	-	
17	Repeatability: 2.5 Micron or better	-	
18	Resolution: 0.1 Micron or better	-	

19	Error values for Multiple Stylus Probing, including MPEMF, MPEMS, and MPEML, shall be specified by the supplier in accordance with ISO 10360-5	-	
20	The above accuracies are to be established and demonstrated by the manufacturer at a temperature of 20 ± 0.5 degree Celsius	-	
21	The party shall prove the above mentioned accuracies with standard styli.	-	
22	Configuration Construction and Type:	-	
23	Construction:	-	
24	The coordinate measuring machine shall be of bridge-type construction, featuring a stiff design utilizing metal or ceramic materials to ensure high accuracy and longevity	-	
25	Machine table:	-	
26	Machine table must be stationary.	-	

27	The measuring table shall be made of granite and equipped with standard metric thread inserts for secure clamping of the workpiece. The supplier shall specify the size and spacing of the thread inserts.	-	
28	Operation mode:	-	
29	All axes shall feature motorized movement, with full Computer Numerical Control (CNC) mode for precise and automated control.	-	
30	A joystick shall be provided for manual mode operation	-	
31	The joystick operation shall enable movement of the machine in the part coordinate system	-	
32	Measuring system of axes scale:	-	
33	The measuring system for each axis shall utilize a high-precision scale, providing accurate position feedback	-	

34	The measuring system shall utilize non-contact linear transducers with scales made of steel, glass or suitable, ensuring high accuracy and reliability	-	
35	Air bearings:	-	
36	High-precision mechanical and/or air bearings shall be provided as guide ways for the machine axes, ensuring smooth and accurate movement.	-	
37	The machine shall be specifically designed and engineered to perform high-precision 3D coordinate measurements in a single setup, allowing for comprehensive inspection from multiple sides and orientations	-	
38	Drive system movements in all the axes should be motorized, all moving parts should slide on wear proof guide to achieve smooth motions and longer life with accuracy.	-	
39	Operating conditions:	-	

	The electrical		
40	power supply requirement shall be 230 V +/- 10%, 50 Hz +/- 2%, single phase. The supplier shall specify the required KVA rating	-	
41	Air Supply Quality: Class IP 54 according to EN60204	-	
42	Environment:	-	
43	The temperature range for the CMM room shall be 19 to 21 degree Celsius. Alternatively, the supplier shall specify the required temperature range to ensure the specified volumetric accuracy for the offered machine size.	-	
44	Relative Humidity: 50± 5%	-	
45	Probe Head:	-	
46	High Accuracy Indexing Probe Head: shall have the following features.	-	

47	The system shall support multiple stylus configurations for both discrete point probing (touch probing) and continuous contact scanning applications.	-	
48	Indexing shall be at least 7.5 degree or lesser.	-	
49	The Indexing Probe Head shall be designed to accommodate a High- Accuracy Laser Scanning Probe, allowing for seamless integration without the need to remove or replace the probe head.	-	
50	Shall be capable of handling probe extension up to 200 mm or more.	-	
51	Measurements shall be enabled with a single alignment, utilizing both touch probe and scanning probe capabilities, all within a single probe head	-	

The system				
shall be equipped with mechanical collision protection for both rotational axes (A and B), ensuring safe operation and preventing		-		
The system shall be equipped with a built-in safety feature that enables instantaneous automatic shutdown in the event of power interruption or system malfunction, preventing damage and ensuring operator safety.		-		
Probe type:		-		
The Universal CMM Precision Probe shall support both touch probing (discrete point measurement) and continuous contact scanning capabilities.		-		
Probe resolution 0.1 micron or better		-		
	equipped with mechanical collision protection for both rotational axes (A and B), ensuring safe operation and preventing damage The system shall be equipped with a built-in safety feature that enables instantaneous automatic shutdown in the event of power interruption or system malfunction, preventing damage and ensuring operator safety. Probe type: The Universal CMM Precision Probe shall support both touch probing (discrete point measurement) and continuous contact scanning capabilities. Probe resolution 0.1 micron or	equipped with mechanical collision protection for both rotational axes (A and B), ensuring safe operation and preventing damage The system shall be equipped with a built-in safety feature that enables instantaneous automatic shutdown in the event of power interruption or system malfunction, preventing damage and ensuring operator safety. Probe type: The Universal CMM Precision Probe shall support both touch probing (discrete point measurement) and continuous contact scanning capabilities. Probe resolution 0.1 micron or	equipped with mechanical collision protection for both rotational axes (A and B), ensuring safe operation and preventing damage The system shall be equipped with a built-in safety feature that enables instantaneous automatic shutdown in the event of power interruption or system malfunction, preventing damage and ensuring operator safety. Probe type: The Universal CMM Precision Probe shall support both touch probing (discrete point measurement) and continuous contact scanning capabilities. Probe robe robe type cannot be resolution 0.1 micron or	equipped with mechanical collision protection for both rotational axes (A and B), ensuring safe operation and preventing damage The system shall be equipped with a built-in safety feature that enables instantaneous automatic shutdown in the event of power interruption or system malfunction, preventing damage and ensuring operator safety. Probe type: The Universal CMM Precision Probe shall support both touch probing (discrete point measurement) and continuous contact scanning capabilities. Probe resolution 0.1 micron or

57	The Indexing Probe Styli Kit shall include a set of stylus tips with diameters of 1.0 mm, 1.5 mm, 2 mm, 3 mm, 4 mm, 5 mm, and 6 mm, each with a standard stem length. Three (3) pieces of each diameter shall be provided.	-	
58	Indexing Probe extension length, 50mm (3 nos.), 100 mm (3 Nos.) and 200 mm (2 Nos.).	-	
59	M3 to M2 styli adaptor 3 nos. and M2 to M3 styli adaptor 3 nos.	-	
60	Grade 5 calibration sphere with a dedicated stand shall be provided for qualifying and verifying the accuracy of the styli.	-	
61	Uninterrupted measurement capability during CNC operation, allowing for stylus changes without requiring recalibration.	-	

62	Maximum Star stylus capability: A styli kit for star probe(3 nos.) with various extensions (with a maximum possible stylus/extension length of 50 mm or better) shall be included, along with an adaptor. 2 nos. of star styli adaptor only for self assembly.		
63	The system shall support various probing modes, including single-point probing, self-centering, and continuous high-speed scanning, to facilitate accurate measurements	-	
64	The probe shall be of a type that supports active scanning and vector capability, with built-in compensation.	-	
65	A compatible automatic stylus changing rack with manual override capability shall be supplied along with the system.	-	

66	An automatic change rack(with at least Six rack slots for stylus holder and 3 racks for probe module) compatible with both touch probes and scanning probes shall be supplied.	-	
67	6 nos. of stylus holders for continuous scanning and touch probe shall be supplied. Holders shall be compatible with racks and probe modules. 1 no. of stylus holder shall support up to 50mm approx. effective length, 1 no. of stylus holder shall support effective length greater than 50mm.	-	
68	2 nos. of stylus holder shall support star stylus module, 1 no. of stylus holder shall support effective length up to 200mm approx., 1 no. shall support effective length more than 200mm approx.	-	

69	6 nos. of probe modules compatible with all stylus holders shall be supplied. (1 no. probe module for supporting stylus holder for approx. 50 mm effective length ,and 1 no. probe module for greater than 50mm approx. effective length.	-	
70	1 no. of probe module for supporting star probe stylus holder,1 no. of probe module for supporting stylus holder effective length up to 200mm,1 no. probe module for greater than 200mm, 1 no. probe module for supporting TP20 probe module	-	
71	Machine Control System:	-	
72	The system shall feature a microprocesso r-based control system, enabling closed-loop CNC operation and manual control via joystick operation	-	

73	Movement shall be precisely controlled by servomotors, which shall be integrated with and commanded by the machine controller.	-	
74	Controller shall have the provision for the accommodatio n of future firmware upgrades for next 10 years or more.	-	
75	Machine controller shall be capable of controlling the probes in continuous contact scanning mode and discrete probing mode	-	
76	The system shall include comprehensive collision protection, safeguarding the machine, probe head, and styliagainst accidental impact or damage.	-	
77	An operator console with joystick and Emergency Stop button to be provided.	-	

78	Temperature sensors for monitoring the workpiece and axes measuring system shall be provided, along with an interface to the controller, to enable accurate temperature compensation.	-	
79	A self- contained temperature compensation system shall be provided, ensuring accurate compensation for all measuring scales.	-	
80	Machine Safety Provision:	-	
81	The machine shall be equipped with a built-in safety feature that enables instantaneous automatic emergency stopping, without causing damage to the control system electronics.	-	
82	The machine should save the measured data in the event of power interruption or malfunction / collision.	-	

83	Protection devices are to be incorporated for the entire electrical system, control circuits and power distribution system and software.	-	
84	Air Filter System:	-	
85	The machine shall be supplied with a fully integrated air filter system, ensuring a clean operating environment	-	
86	The supplier shall provide a detailed specification of the air filtering system, including air dryer, oil separator, and all other relevant components.	-	
87	The supplier shall specify the required compressed air parameters, including pressure, flow rate, cleanliness, and any other relevant factors, necessary for optimal machine operation.	-	
88	Computer System:	-	

89	The supplier shall provide a high-performance workstation, compatible with the equipment and Windows 11 or later, to ensure optimal performance	-	
90	The workstation specifications shall include: Release year, storage capacity, RAM capacity and Software upgrade support for till warranty period.	-	
91	The supplier shall guarantee that the provided workstation meets or exceeds the equipment's requirements for seamless operation.	-	
92	Sufficient computer storage for CNC programs.	-	
93	The supplied computer shall come with all necessary measurement and diagnostic software preinstalled and thoroughly tested at the OEM's factory before delivery, ensuring seamless integration and optimal performance with the equipment.	-	

94	Minimum LED 24 inch monitor shall be provided along with the machine supply.	-	
95	Computer table and accessories shall be provided along with the machine supply.	-	
96	High speed Laser jet color printer with network enabled, duplex(back to back)printing to print in A4 size or bigger shall be provided along with the machine.	-	
97	Measurement and Application Software Features:	-	
98	The machine shall be capable of performing complete automatic inspection and measurement of precision-machined parts within the specified measuring ranges outlined in sl.no. 9, 10, and 11	-	

99	The machine must be able to perform inspection of all parameters on the 5 planes of the component from start to finish without operator intervention in CNC mode of operation.	-	
100	However, the operator shall be able to interrupt the CNC mode inspection process and proceed with the inspection in manual mode.	-	
101	Machine must be able to carry out the inspection without physical alignment of the work piece.	-	
102	All necessary provisions shall be made for offline programming using the same measurement software. Licenses shall be perpetual, and all other necessary provisions shall be provided.	-	
103	A Windows- based software shall be provided to control the operation of the machine, as well as for data backup and analysis.	-	

104	A data retrieval facility shall be provided to recover data in the event of a collision or crash.	-	
105	Additionally, a periodic autosaving facility shall be incorporated to automatically save programmed and measured data at regular intervals, without requiring operator intervention.	-	
106	Real time computer interface must be provided.	-	
107	User friendly controls with menu driven system.	-	
108	Actual measurements shall be available on the screen.	-	
109	The software shall be capable of the following functionalities:	-	
110	Direct joystick measurement, self-teach programming, 3D CNC programming, offline programming without a CAD model, offline programming with a CAD model including probe path simulation and verification.	-	

111	Additionally, the software shall feature a single-page, icon-based software and 3D solid model part representation.	-	
112	Basic geometric shape features:	-	
113	The software shall enable direct measurements of standard geometric elements, including points, lines, planes, circles, cylinders, cones, spheres, and arcs of circles etc.	-	
114	The software shall display direction cosines (i, j, k) for standard geometric elements.	-	
115	The software shall provide the maximum, minimum, standard deviation, and number of points measured for each geometric element, along with the output of the measured element, for all geometric shapes.	-	

116	The software shall be capable of computing geometrical Tolerances, including Angularity, Roundness, Concentricity, Cylindricity, Flatness, Parallelism, Position tolerance, Radial runout, Sphericity, Squareness, and Symmetry.	-	
117	The software shall be capable of computing geometric relations between geometric elements, including distance, projections, mid-elements, bisector, normal plane, intersections, angles, tangents, and others.	-	
118	Database of measured points for geometrical features. If required, some points may be deleted and should be possible to recalculate the feature without re-measuring the geometric feat ure.	-	

119	Capable to measure point coordinates of objects at particular cross section.	-	
120	Conversion of coordinates systems (Cartesian to polar and viceversa). User should be able to see geometric feature in the polar/ Cartesian coordinates.	-	
121	Geometric construction features	-	
122	Standard geometric features to be created with standard input data. The created geometric features to be used for measurement analysis.	-	
123	The software shall provide intersection capability between various geometrical elements, including but not limited to:line to circle, line to plane, plane to plane, sphere to plane, line to cylinder axis, Line to line, plane to cone surface, and others.	-	

124	The software shall provide an option for viewing the intersections of geometrical constructions graphically, with the capability to zoom in on the intersections as required, and display the intersection coordinates (X, Y, Z).	-	
125	The software shall provide an option for viewing the measurement output of geometrical and absolute parameters graphically, with the capability to zoom in on the graphical representation as required, and display measured values and labels.	-	
126	The software shall support the projection of basic geometric shapes onto a selected plane.	-	
127	Displacement:	-	

128	The system shall allow for the displacement of a point to a target point, whereby the starting point is translated to the target point, adopting its coordinates.	-	
129	The system shall allow for the parallel displacement of a line to a target point, whereby the line is translated to the target point, changing its position in space while maintaining its direction.	-	
130	The system shall allow for the displacement of a plane to a target point, supporting both parallel and perpendicular displacement, whereby the plane is translated to the target point while maintaining its orientation.	-	
131	The system shall allow for the displacement of a point in any direction perpendicular to a specified plane, by a specified distance, along a vector orthogonal to the plane.	-	

132	Displacement of a point by certain distance in direction of line.	-	
133	Mathematical Alignment/ Transformatio n Features	-	
134	3-2-1 alignment (feature based), best fit alignment.	-	
135	The system shall allow for the shifting of the origin of the coordinate system to a specified point, feature center, or absolute value, enabling the redefinition of the coordinate system's reference point.	-	
136	Creation of multiple coordinate systems with different alignment and switching between multiple coordinate systems should be possible.	-	
137	Rotation and Translation of the object/ feature about any axis or plane.	-	
138	2D curve / 3D surface measurement Features	-	

139	The system shall support the input of 2D and 3D nominal profiles through import and export functionality, with fully integrated support for at least one following file formats, I,e to IGES, DXF, IDEA, CATIA, STEP, and ASCII.	-	
140	During unknown 2D curve measurement, software to be capable of taking coordinate points of unknown curve at fixed coordinate axis.	-	
141	It should be possible to give coordinates of unknown curve at required grid station (after probe compensation in curve normal vector direction).	-	
142	Transformatio n of measured profile.	-	
143	Best fitting of measured profiles to nominal profile.	-	
144	2D/3D profile measurement and probe radius compensation through software.	-	

145	The graphical representation of profile results is rendered as a color plot with desired grid intervals displayed on the screen.	-	
146	The software should be capable of handling scan data from any complex 3D measured surface.	-	
147	During the measurement of unknown 3D surfaces, the coordinate points should be provided with compensation for the probe in the actual surface normal vector direction.	-	
148	The software should be capable of analyzing measured features in real-time for on-screen analysis.	-	
149	The controller and Software should be capable of Variable High speed Scanning i.e Scan Speed Automatically controlled depending on Curve Radius.	-	
150	CAD assisted inspection features.:	-	

151	Should allow user defined features to be created as a separate layer in the CAD model.	-	
152	The system should enable offline comparison between the CAD model and probed points, providing a detailed report of deviations between the CAD model and measured points, along with extensive analysis features.	-	
153	Create general solid model from measured data or nominal point input.	-	
154	User should be able to set unique names, tolerances, GD&T parameters in the model for any surface, feature or any other critical inspection item.	-	
155	Probe compensation - The software should automatically compensate for the probe offsets during the measurement of geometric elements including curves/profiles.	-	

156	Measurement software should have graphical interface based on icons and pop up windows and pull down menus.	-	
157	Element naming - Software should allow the user to give names to measured and constructed elements. If the user does not enter a name for an element, the system should automatically generate a default name based on type of the object.	-	
158	Software should allow all information pertaining to a measurement session to be saved at any point during the measurement process.	-	
159	Provision for Digital Read Out of coordinates in Cartesian and polar coordinate systems.	-	
160	The user should be allowed to retrieve all the information about the previously saved session.	-	

161	Visual representation of measured results & geometry relationship of features (colour coded) with online graphics output in screen/printers . Also real time output of text results.	-	
162	Graphical appearance of deviations should be in form of arrows, spikes, spheres, colour faces or cones, etc.,	-	
163	The system should allow for the storage of multiple probes and enable their utilization in the measurement process.	-	
164	Option for customizing the report i.e. header, graphic view, labels, pages etc. The machine shall be capable of producing print out detailing of all dimensions as inspected for each job	-	
165	The dimensions deviating from the laid out tolerance shall be indicated specifically with magnitude of deviations.	-	

166	Provision for model based inspection plan creation and automated inspection routines.	-	
167	The system should provide a graphical display of the measuring device onscreen, and automatically recognize and display the features being measured.	-	
168	Automatic probe/stylus re-qualification routines.	-	
169	Software to be capable of calculating deviations from cloud of points generated by high precision CMM system/any other measuring system (with minimum data loss) against 3D CAD model	-	
170	Software should be capable of constructing any type of complex solid Polygon model and curves from cloud of points generated by high precision CMM system	-	

171	The measurement software should have the advanced CAD capability of importing, designing, and reversing features as a whole,	-	
172	In addition to the following features. Detailed catalogue/ demo CD consisting of common features and advanced features also to be given by the party.	-	
173	Shall be compatible with Industry 4.0 smart factory	-	
174	Party shall offer latest version of PTB certified Software only.	-	
175	Software shall be supplied in CD/USB with operating instruction	-	
176	Party should provide required permanent software license for the CMM	-	
177	Warranty of the Machine:	-	

178	Warranty of the Machine shall be for a period of minimum two years from the day of Installation and commissioning , prove out and acceptance, for defect- free operation with specified accuracies.	-	
179	Any defect observed during the warranty period shall be repaired/ replaced at free of cost.	-	
180	Software updates during the warranty + AMC period shall be supplied and installed at free of cost on real time basis at our site.	-	
181	During warranty period party has to carry out once in 4month (3 visit/year) preventive maintenance to ensure the smooth operation of the machine with specified accuracies.	-	

182	In the last visit of warranty period (before the expiry of warranty period) machine has to be calibrated and necessary correction has to be done to meet the specified accuracy at free of cost	-	
183	In the last visit of warranty period (before the expiry of warranty period) any spares/consumables/accessories required to meet specified accuracy/oper ation of the machine has to be carried out by the party on free of cost.	-	
184	Availability of spare parts shall be ensured minimum for 10 years from the day of Installation and commissioning , prove out and acceptance.	-	
185	Service facilities and personnel availability with Indian office or Indian agent details shall be provided.	-	

186	Time required for service personnel to attend any fault after receipt of the information shall be within 2 -3 working days	-	
187	Delivery schedule:	-	
188	The party should supply and deliver all the items as per the purchase order to IPRC, Mahendragiri within 18 weeks from the date of receipt of the PO.	-	
189	Party should complete installation, commissioning, prove out, and application training of bridge type 3D coordinate measuring machine within 4 weeks from the date of supply of the item.	-	
190	Pre- Qualification Criteria for bidders:	-	
191	Either OEM / OEM authorized dealers only should quote against this tender.	-	

192	In case OEM authorized dealers submits the quote, then it should accompany the Authorization Letter from the OEM with	-	
193	validity In case OEM authorized dealers submits the quote, then authorizing the dealer for the submission of quote against this tender on their behalf confirming the tender document reference.	-	
194	The OEMs shall have a minimum of Five years of continuous Experience in the field of design, Manufacturing and Supply of Co-ordinate measuring machine.	-	
195	Only OEMs with a proven track record of supplying and commissioning at least one CMM to an industrial organization within the past five years, with the machine currently operating satisfactorily, are eligible to submit quotes	-	

196	Additionally, only OEMs with a very good performance record will be considered. The quote must include a list of major industries, ISRO, or DOS, along with purchase order references have been supplied and installed similar or better accuracy m/c with in last 5 years.	-	
197	Documentary evidence must be enclosed. Quotes without this information will not be considered for evaluation. Furthermore, IPRC reserves the right to conduct an onsite assessment of performance capability, if re quired.	-	
198	Certificate from the customers regarding satisfactory performance of such equipment shall be enclosed along with technical offer.	-	
199	IPRC-ISRO reserves the right to verify the information provided by vendor.	-	

200	In case the information provided by vendor is found to be false/incorrect, the offer shall be rejected.	-	
201	List of Co- ordinate measuring machine supplied, installed and commissioned till date (with details on equipment type / model and customer)	-	
202	Authorised dealer(s) shall provide an authorization letter from OEM.	-	
203	Evaluation of Offers	-	
204	A demonstration of the system, including all associated software, shall be conducted at the Vendor's site for performance evaluation if the documents provided by the party are insufficient for evaluating the offer.	-	
205	Parties will be provided with a detailed plan in advance to prepare for the demonstration, if required.	-	
206	Technical documentation :	-	

207	Party should provide each user manual and service manual (for both mechanical and electronic hardware) as well as application software manual in English 2 numbers of hard copy and 1 number soft copy for our reference	-	
208	Party should supply Original catalogue of the equipment along with technical bid	-	
209	Party should provide necessary layout diagram of the controller and the interface to the machine in English for our reference.	-	
210	All the calibration data and testing results of the CMM at manufacturer site should be properly documented and supplied to us.	-	
211	Calibration certificates (traceable to national and international standard) of all the artifacts/refere nce standards, used for the same, shall be provided to us.	-	

212	Machine commissioning and Acceptance criteria:	-	
213	The supply, installation, commissioning, testing, prove-out, training of coordinate measuring machine shall be at IPRC, Mahendragiri	-	
214	The installation, commissioning, testing, prove out and training of coordinate measuring machine shall be at free of cost.	-	
215	Machine accuracies shall be proved and demonstrated as per ISO 10360 (as in Technical specification under measuring accuracy) based on the program and standard cycles at manufacturer's site as well as at IPRC site for machine acceptance.	-	

216	All the accuracies shall be guaranteed in the standard operating temperature with a standard operating humidity level as per manufacturer catalogue.	-	
217	Basic Point and scan touch probe training minimum two(2) weeks shall be provided for IPRC Quality Personnel at Mahendragiri. The training should cover application software and basic maintenance / trouble shooting	-	
218	Measurement program generation for minimum 5 types of parts shall be done and measurement method shall be qualified during application training.	-	

219	Party shall bring all necessary calibration standards, slip gauge blocks, fixtures, and calibration equipment's for proving machine performance with valid traceability certificates at IPRC, Mahendragiri.	-	
220	Payment:	-	
221	Payment will be made separately for Item sl.no. 1 after completion of the machine installation, commissioning , demonstration & training and after successful demonstrate of the machine specification and acceptance of the machine payment shall be released.	-	
222	Item sl.no.2 can be started after completion of installation, commissioning , demonstration and training.	-	

223	Payment will be made for Item sl.no. 2 after completion and acceptance of CMM programming for engine components.	-	
224	work at IPRC: Annual Maintenance Contract.: The party shall agree to entire service contract after the expiry of warranty period for at least 10 years.	-	
225	The party shall include a separate quote for the non-comprehensive Annual Maintenance Contract (AMC) for a period of three years after the warranty period. AMC quote shall be considered for the price bid evaluation.	-	
226	The scope of work shall include two preventive maintenance visits per year, one calibration annually and two break down visit per year. The quote shall separately, include the cost of AMC, calibration and breakdown charges.	-	

227	The scope of the 3 annual visits (1st, 2nd, and 3rd year after the warranty period) includes preventive maintenance, which shall be carried out as per the OEM's recommended checklist and procedure, and machine calibration.	-	
228	Machine calibration shall be carried out as per ISO 10360 an nually.	-	
229	The party shall provide a separate quote for breakdown call visit charges. The breakdown charges shall be quoted separately, with distinct rates for the first day and subsequent days (all-inclusive) after the warranty perio d.	-	

230	While attending AMC Party shall bring all necessary calibration standards, slip gauge blocks, fixtures, and calibration equipment's for proving machine performance with valid traceability certificates at IPRC, Mahendragiri.	-	
231	Separate order will be placed for AMC after completion of warranty period.	-	
232	Performance bank guarantee will be release after the acceptenceof AMC by the bidder	-	
233	Other terms and conditions:	-	
234	Details of the bought-out items used in machine (make and specification) should be furnished. It should be ensured that the spare parts for the bought-out items are readily available.	-	

235	Party shall mention the Make and Model of the Machine Controller, Probe head, and Application Software version.	-	
236	The supplier shall have service engineers in India and shall get involved until supply, installation, commissioning, testing, prove out and training is successfully completed.	-	
237	Party should provide cost break up for all the Supply items / Scope of work for all items.	-	
238	Spares and accessories:	-	
239	Necessary spares for Mechanical, Computer and electronic parts shall be quoted separately for trouble free operation for ten years after expiry of warranty period and during AMC period.	-	

240	Local content declaration for the supply of basic machine with accessories: Bidder shall provide the local content declaration as per the attached format for the quoted 3D CNC Coordinate measuring machine.	-	
241	Local content declaration for the spares: Bidder shall provide the local content declaration as per the attached format for the quoted spares during warranty and after warranty period.	-	
242	IPRC, Mahendragiri Scope:	-	
243	Providing filtered, regulated & lubricated pneumatic air oil free supply is under IPRC scope. Party to indicate pneumatic pressure & flow rates.	-	
244	Electrical power supply will be at 230 V+/- 10%, 50Hz+/-5, single phase. Party shall indicater equirement in KVA rating and phase requirement	-	

245	The party shall specify the electric power consumption requirements in order to facilitate IPRC for procurement of an online UPS unit for the entire machine.	-	
246	Overall space requirement for installation and operation of CMM including control panels, computer etc. should be given along with machine layout diagram, door size for installation, weight of the heaviest module to be handled during installation.	-	
247	The civil requirements, including Foundation details if required, ceiling height of the proposed system shall be clearly specified and civil approval obtain from IPRC the scope of the party and IPRC shall be explicitly identified.	-	

248	The electrical interfacing requirements shall be clearly specified and the scope of the party and IPRC shall be explicitly identified. The available electrical inputs for India region shall be adopted.	-	
249	The proposed CMM shall be commissioned in IPRC, Mahendragiri, Tamil Nadu, India.	-	
250	The party shall mandatorily provide relevant brochures, technical documentation sheets to substantiate the conformance to the technical specifications.	-	
251	All data compliance wherever applicable shall be quantitative in nature and the compliance matrix shall be supplemented with necessary data wherever applicable.	-	
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252	All necessary documentation , including conformance to specifications shall be provided in soft as well as hard form 2 nos. each. The documentation shall be in English only.	-	
253	Party shall prove the quoted accuracies, as per tender specifications at the time of Tech. Evaluation of the m/c. Which is already Installed, commissioned and working satisfactorily. Preferably in any DOS / ISRO centres or any other industry in India.	-	
254	Party shall quote separately for i. Technical and commercial bid with masking the price (Part A) ii. Price bid (Part B)	-	
255	There shall no visible part of any amount in technical bid in the absence of the same offer will be rejected	-	

256	The offer should include compliance matrix showing each & every specification / scope of work items and details of offer made with numerical values instead of yes/complied if not specified offer will not be considered.	-	
257	Above this offer is necessary to ensure that all the items are addressed by the parties without fail.	-	
258	The offers received without compliance matrix (Techno commercial) and without specifying numerical values from the party will not be considered for evaluation and offer will not be considered	-	
259	CMM Programming Requirements:	-	
260	The party shall program 200 components for CMM inspection.	-	
261	Programming work shall be carried out based on inputs from the designated focal point.	-	

262	Programming work have to be carried out at IPRC.	-	
263	The party shall install the Probe changing racks as per the CMM supply PO.	-	
264	The party shall study the required dimensions for all 200 components and assemble 5-6 different TP20 Probe modules for inspecting all components in a single operation.	-	
265	All necessary probe modules, accessories, and tools will be supplied by the department or will be a part of standard scope of supply for the CMM.	-	
266	Each module shall assemble to achieve highest accuracy.	-	
267	The party shall position the assembled probe modules on the probe changing rack according to the instruction manual	-	
268	The party shall calibrate all styli of all probe modules with proper naming.	-	

269	The party shall automate the calibration procedure for all probe modules with styli	-	
270	For dimensional inspection, a minimum of 10 points shall be taken for evaluation, or as suggested by the focal point.	-	
271	The program output shall include minimum, maximum, and average values of dimensions, or any other values requested by the focal point.	-	
272	The output report shall contain upper and lower tolerance values.	-	
273	The CMM program output shall be input for a readymade Excel file, or the Excel file shall extract data from the output file using Excel VBA programming.	-	

274	An input application file, such as a Micro-enabled Excel file, shall be created for entering hardware details available on the CMM bed, and the program shall update these details and measured values in a database,.	-	
275	i.e against each nominal dimension, measured value shall be there to support report preparation.	-	
276	Programming codes shall be written in Excel VBA or another suitable language, as determined by the party.	-	
277	CMM programming and VBA codes shall have description inside the program for supporting the ease understanding of codes.	-	
278	Programming work shall be made as flexible as possible to incorporate changes after getting guidance from the focal point.	-	
279	General Terms and Conditions:	-	

280	The party shall arrange for transportation, canteen facilities, safety of personnel, medical amenities, and other necessary arrangements to complete the work within the contract period.	-	
281	The party shall deploy well-qualified personnel with a degree in Engineering and a minimum of 1 year of experience in CMM programming. The personnel shall be adept at reading engineering drawings and understanding geometric tolerance	-	
282	The party shall ensure that programming work is carried out without damage or loss to IPRC property. The party shall be liable for any damage or loss caused by negligence of their personnel.	-	

283	The CMM programmer shall adhere to the day-to-day instructions of the focal point and carry out programming work to the entire satisfaction of the focal point at IPRC.	-	
284	Acceptance of CMM programming will be only after successful demonstration of automation of inspection for all components.	-	
285	Delivery schedule for programming works within 12 weeks after installation, commissioning and acceptance of 3D CNC CMM at IPRC.	-	

Supporting Documents required from Vendor

1. (Original	product	catalogu	e
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- 2. Authorization letter
- 3. Break up cost for all accessories and products (Price Bid Related)
- 4. PO copies for supply of similar co-ordinate measuring machine to Aerospace industries in the past five years.

5. Supporting documents

5 additional documents can be uploaded by the vendor

C.2 Commercial Terms / Bid

SI. No.	Description	Compliance	Vendor Terms
1	Taxes and other costs, if any: (Specify)	Yes / No / Explain	
2	Validity of Offer (specify)	Yes / No / Explain	
3	Delivery Period (specify)	Yes / No / Explain	
4	Delivery Terms: Normal delivery terms - FOR Destination (i.e., IPRC, Mahendragiri)	Yes / No / Explain	
5	PAYMENT TERMS - 1. Payment will be made separately for Item sl.no. 1 after completion of the machine installation, commissioning, demonstration & training and after successful demonstrate of the machine specification and acceptance of the machine payment shall be released. 2. Item sl.no.2 can be started after completion of installation, commissioning, demonstration and training. 3. Payment will be made for Item sl.no. 2 after completion and acceptance of CMM programming for engine components. (No advance payment allowed). Specify your payment terms.	Yes / No / Explain	

Tender No: IPRC/PURGP2/IP202500038101

6	Security Deposit: Supplier shall submit an interest free Security Deposit for an amount equivalent to 3% of the order value, obtained through Bank Guarantee or fixed deposit receipt from any of the Nationalized/Scheduled Banks executed on non-judicial stamp paper of Rs.200/- value, and shall be kept valid for a period of sixty days beyond the date for completion of the Purchase Order. The Security Deposit can be submitted within 15 days from date of PO. 1.In case of BG, confirmation for issued BG may be sent by issuing Bank/Branch to: IFSC Code: SBIN0000880; SBI, Nagercoil Branch. 2.In case of FDR, the lien should be marked to Sr. Accounts Officer, IPRC, Mahendragiri. 3.In case of DD, it should be drawn in the favour of Sr. Accounts Officer, IPRC, Mahendragiri, payable at Mahendragiri.	Yes / No / Explain	
7	Confirm: Conditions for BIDDER FROM A COUNTRY WHICH SHARES LAND BORDER WITH INDIA	Yes / No / Explain	
8	Name of PRINCIPAL, Address, Contact No, E-mail Id etc. (specify):	Yes / No / Explain	
9	Currency quoted (specify)	Yes / No / Explain	
10	Warranty / Guarantee Period: (specify)	Yes / No / Explain	
11	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	
12	MSE preference is applicable only against the claim of the manufacturer and production of documentary evidence by the manufacturer	Yes / No / Explain	
13	Liquidated Damages - Delivery is the essence of the order. If delivery is delayed beyond the stipulated delivery period, LD at 0.5% per week shall be recovered subject to a maximum of 10% of order value of undelivered items	Yes / No / Explain	

14	Bank Details (State Bank of India, Mahendragiri, Tirunelveli (Dist) - 627 133) Details of your bank shall be furnished.	Yes / No / Explain	
15	Percentage of Local Content shall be declared in the prescribed format attached. For the items sold by the bidders as a resellers, Country of Origin Certificate from your OEM shall be submitted mandatorily.	Yes / No / Explain	
16	PERFORMANCE BANK GUARANTEE: Supplier shall furnish Performance Bank Guarantee for an amount equivalent 3% of order value on Non-Judicial stamp paper of appropriate value, obtained from any of the scheduled / nationalized Banks, valid for a period of 60 days beyond completion of warranty period.		
17	Please quote basic price and GST as extra with clearly mentioning the percentage. We are eligible for a concessional GST of 5% against a certificate to be issued from our end.	Yes / No / Explain	
18	Any other terms	-	

C.3 Price Bid

SI. No.	Item	Quantity	Unit Price	Currency	Total Price	Remark
1	Precision Inspection Equipment- Supply, installation, commissionin g, and performance demonstratio n of bridge type 3D CNC CMM	1.00 Sets		-		
2	Precision Inspection Equipment - Programming of engine components on supplied the CMM	1.00 Sets		-		