



GOVERNMENT OF MAHARASHTRA

GOVERNMENT POLYTECHNIC, THANE

Phadke Pada, Dawale Post, Diva, Thane-400612

E-mail- principal.gpthane@dtmaharashtra.gov.in Web: www.gpthane.org.in

Enquiry No.GPT/STORE/DCA-APM+ME/M&E/2025-26/ 539

Date :- 13/03/2026

Invitation for Quotation (2-Envelope System)

Sealed quotations (2 -Envelope System) are invited from manufacturers /their authorized suppliers for the supply for the following machinery/equipment of Applied Mechanics & Mechanical Engineering departments of this Institute, subject to the terms and conditions mentioned below. The quotation, in the prescribed format along with the necessary supporting documents, should be sealed in an envelope (Envelope 1 (Technical Bid) and Envelope 2 (Financial Bid) to be packed and sealed in Third bigger Envelope) and submitted to the Administrative Office of this Institute on or before 23.03.2026 up to 2:00 P.M. The quotations will be opened on 23.03.2026 at 3:00 P.M in the Principal's Cabin, Administrative Building of this Institute.

***No quotation shall be accepted after the stipulated date and time under any circumstances. This office will not be responsible for any postal/courier delay or for reasons beyond the control of this office.**

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Priority Sr.No.	Name of the Item with specification	Qty. Required	Approx.Estimated Unit Cost of Equipment in Ruppees (Inclusive All)	Total Estimated Cost of Equipment in Ruppees (Inclusive All)	Name of User Dept.
1	Water cooler test rig with specification as follows <ul style="list-style-type: none">• <u>REFRIGERATION SYSTEM</u><ul style="list-style-type: none">○ Capacity -0.30TR ,○ cooling storage capacity 20-40 LPH; Rated test condition,○ Compressor- Hermetically sealed○ Condenser -Forced convection air cooled;○ Condenser fan -Axial flow	1	2,40,000.00	2,40,000.00	Mechai-cal Engg. Dept.

- type
- Evaporator- Direct expansion type;
- Expansion device- Capillary Tube
- Accumulator -Copper.
- shell suction line accumulator provided.
- Insulation -Polyurethane Foam (PUF)
- **Refrigerant -R-134 a.**
- **Power Input power- 1000 Watts.**
- Supply -230 Volts, 50 Hz, 1 phase.

- **CONTROLS & INDICATIONS**

- Temperature -Thermostat with Indication & 6 channel digital display
- Pressure -Pressure gauges 2 Nos. provided

- **ELECTRICAL SYSTEM**

- Energy-meters Provided for compressor

- **CONSTRUCTION**

- **Water Tank Stainless Steel**
- **Outer body Stainless steel / or powder coated.**
- Size 1000 x 1200 x 450 (L X H X D) mm
- Rotameters; HP/LP cut out switches Drier

Warranty- 03Years

2	<p>Hydraulic trainer kit with following <i>actual working components.</i></p> <ul style="list-style-type: none"> • <u>1-HP Power pack</u> (gear/ vane type pump Hydraulic power pack with sump tank, capacity: 25 Liters), with Oil level Indicator, Oil flow: 5 LPM at working pressure 35 bar, with pressure relief valve (adjustable from 0 – 60 bar), Pressure relief valve: pilot-operated pressure valve, Drip tray with steel table size of 1160 mm x 760 mm, • Pressure gauges at different locations with specification of Glycerin-damped, 	1 .	2,40,000.00	2,40,000.00	Mechai-cal Engg. Dept.
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(Indication range of: 0 – 100 bar)

- **Motor for gear/vane pump** (AC single phase) of 1 HP, 1440 RPM, 230V,
- Single acting cylinder, Double acting cylinder, pressure control valve, Flow Control Valves, Needle Valve
- Manifolds (Pressure & tank manifold)
- **Four-Way distributor:** with five ports, equipped with a pressure gauge
- **Rotary actuators** mounted on hydraulic trainer kit
 - Prepare speed control circuits for hydraulic actuators (meter in and meter out circuits)
 - Bleed in/ out circuit components
 - Prepare circuits using pressure relief and sequence valve (Pressure relief and sequence valve circuits)
- All connector hoses with quick release coupling – (ISI standards)
- **Work Table** – Size (Approx.) L-1200mm X W-900mm X H-900mm, with four castor wheels including two lockable wheels at the front side,
- Suitable Weight for vertical loading of hydraulic cylinder Mounting kit of weight to realize pulling and pushing load
- 3/2-way directional control valve with hand lever actuation.
- 4/2-way directional control Valve with hand lever actuation.
- 4/3 way directional control Valve
- 5/3 directional control valves with closed-center position, with hand lever actuation & solenoid operated Valves with limit switches and PLC control unit.
- Non-return valves
- Pilot-operated check valve with pilot to open.
- One-way flow control valve with integrated check valve.
- T-Connector with self-sealing coupling nipples (2 Nos.) and quick coupling socket (1 No.)
- Proximity Sensors (Optical)
- Proximity Sensors (Inductive)

ELECTRONIC HARDWARE:

- PLC with Interfacing Card & Ladder Diagram Software and Basic Computer System for Ladder Diagram.

ELECTRICAL DEVICES:

- Electro Magnetic Relay and Push Button Switch, Emergency Stop.

Warranty- 03Years

3	Computerized 4 Cylinder 4 Stroke Petrol Engine Test Rig :-	1	11,86,790.00	11,86,790.00	Mechai- cal Engg. Dept.
<p>1) Technical specifications:-</p> <ul style="list-style-type: none"> • 1000 CC engine with exhaust gas calorimeter, • Type of Loading: Hydraulic Dynamometer, • Air Intake Measuring System consisting of Air tank and manometer along with orifice, • Fuel monitoring system with temperature indicators and cooling water measuring system. • BHP measurement system, break Thermal efficiency measurement, • Measurement of heat rejected to water jacket. • Heat balance test, performance from no load to full load, Performance at various throttle positions. • Heat balance sheet and Morse Test consisting of Spark Cut-off switches of copper strips with handle/proper arrangement. • Combustion Pressure Sensor:- Piezoelectric Sensor with low noise cable • Torque Measurement:-Load Cell with Transmitter. • Temperature Sensors with Transmitters. • Water Flow Measurement:-By Rotameters for engine and calorimeter. • Exhaust Gas Calorimeter:- Pipe in pipe type made of Stainless Steel, insulated with ceramic wool and aluminum cladding calorimeter 600 LPH at 2kg/cm² • Engine Interface :- Load Transmitter, Temperature Transmitter, Air Flow Transmitter, Fuel Flow Transmitter, Combustion Pressure Sensor, • Crank Angle Sensor:-Resolution 1° with TDC pulse (Optional) <p><u><i>The whole set-up is well designed and to be arranged on a rigid structure painted with industrial PU Paint. (Very good proper</i></u></p>					

	<p>foundation arrangement), <u>with complete electrical connection arrangement, Water piping and exhaust hose system.</u></p> <p>2) Computer System:</p> <ul style="list-style-type: none"> Pentium IV Processor (CPU) Memory (RAM): 8GB (the typical practical limit for 32-bit Pentium 4 systems), utilizing dual-channel DDR2. <p>Printer to print performance graphs and charts with USB interface.</p> <p>Warranty- 05Years</p>				
4	<p>Concrete Beam Flexure Testing Machine (Capacity 100 kN)</p> <p>Ref. Std: IS:516</p> <p>The load is applied by the downward movement of the piston. A spacer is provided for testing different size of beams. The load is indicated on a digital type load gauge of range : 0 -100kNx0.5kN</p> <p>The load gauge is calibrated against National Physical Laboratory I National Council for Cement and Building Materials certified proving ring.</p> <p>The setup should support both Single & Double Point Loading</p> <p>Standard beam sizes tested:</p> <p>100 × 100 × 500 mm, 150 × 150 × 700 mm</p> <p>Roller Arrangement, Two lower support rollers</p> <p>Two upper loading rollers. Loading System Hydraulic loading system with Electrically Operated Motor, Suitable for Operation on 230 V, 50 Hz , AC Single Phase Supply. With Suitable Warranty and Guarantee as per Norms. NABL Calibration Certificate</p>	1 No.	1,93,388.00	1,93,388.00	Applied Mechanics Engineering

INSTRUCTIONS TO BIDDERS AND TERMS & CONDITIONS

1. The quotation must be submitted in a sealed envelope, in the prescribed format, with details of the enquiry superscribed on the envelope, following the 2-Envelope system. **Quotations submitted through email shall not be accepted.**
2. The quotation must be submitted along with necessary technical literature and other documents as specified in this document.
3. The bid price must be inclusive of all applicable taxes, cesses, transportation charges, cartage, packing, freight, warranty, installation/commissioning/erection/demonstration, pre-dispatch inspection, training (foundation, wiring, if required), etc. The warranty period for the equipment must be 3/5years.
4. Under no circumstances any extra/ additional taxes, duties,levies etc shall be payable to the bidder by this office unless such a tax, duty or levy has been newly introduced and notified by the State Government.
5. Delivery to the Stores shall be completed within 1-2 weeks from the date of issue of the Purchase Order. The undersigned reserves the right to reject the supply if delivery is delayed beyond the stipulated period.
6. Liquidated Damages: If the bidder fails to deliver any or all of the Goods within the stipulated delivery period specified in the purchase order,this institute will be entitled to deduct/recover the Liquidated Damages for the delay @ 0.5% of the purchase order value of delayed quantity per week of delayed period. However, in case of inordinate delay maximum deduction shall be 10% of the total purchase order value.
7. Rates quoted must remain valid up to 31st March 2026.
8. The bidder must not be a defaulter with any Government authority and must not have been blacklisted or debarred from the supply of goods. **An undertaking to this effect must be submitted.**
9. The quotation must strictly comply with all technical requirements of the user/concerned department. Mere quoting of lowest price will not be the criteria for award. Quotations shall be rejected if any deviation is found in the specifications. Incomplete or unsigned or conditional quotation will not be entertained.
10. The bidder must submit an undertaking regarding the quality and after-sales service/support of the machinery/equipment supplied after the expiry of the warranty period.
11. The machinery /equipment supplied must be of 'ISI' marked.
12. The quotations shall be opened by the Purchase Committee members of this institute on the above - mentioned date. Bidders may depute their authorized representatives at the time of opening. No disputes regarding the quotation-opening procedure shall be entertained thereafter.
13. The Financial Bids of only technically qualified bidders will be opened.
14. Materials not found in conformity with the technical specifications mentioned in the Purchase Order shall be strictly rejected and returned to the supplier at their own cost.
15. Installation/ Commissioning/Erection/Testing/Inspection/foundation must be carried out immediately against the delivery of the materials to this institute, at the department and the laboratory specified by the department. Alongwith necessary cables, boards,switches, control panel etc. Prior intimation of the same must be communicated via email to stores /concerned head of department. Training - if required must be provided to faculty members of the concerned user department.

16. Payment shall be made only after acceptance of materials in good condition as per technical specifications and satisfactory installation/commissioning/erection/testing/inspection and working trial, as certified by the concerned subject teacher, lab incharge and Head of Department.

17. No advance payment shall be made. Every case will be taken to clear up the bills in the least possible period. Payment will be done through Print payment Advice (PPA). Accordingly, bidder will have to submit the cancelled cheque, photocopies of PAN card & Aadhar card in hard copies or email the same in pdf format to Accounts section of this institute on office.gpthane@dtemaharashtra.gov.in against the confirm Purchase Order issued by this institute.

18. This is a 2-Envelope System. In the first stage, the Technical Bid shall be opened and evaluated. In the second stage, Financial Bids of technically qualified bidders shall be opened. This process is subject to approval by the competent authority.

19. All relevant rules and regulations of the Government of Maharashtra shall be applicable and binding on all bidders.

20. The undersigned reserves the right to reject any or all bids, order part quantities (with the supplier obligated to supply the ordered quantity at the accepted rates), and alter or amend any terms and conditions without prior notice and without assigning any reason(s) thereof.

List of documents to be attached :-

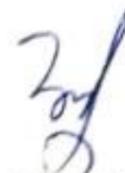
TYPE OF DOCUMENT TO BE ATTACHED IN BID OFFER ENVELOPE-1 (TECHNICAL BID)

1. Covering Letter with details of bidder -Address, Telephone number, Mobile number, Email ID, Name , Signature and seal, website address (if available),
2. Type of business entity, manufacturer /authorized dealer, any other (to be specified)
3. PAN card photocopy.
4. GST TIN number and proof of GST paid for the last quarter.
5. Offer letter on bidders letterhead stating make and model quoted (this offer letter should be separate from the other documents mentioned therein)
6. Technical specification literature of the item quoted / leaflet of Make and Model no. of equipment quoted.
7. IT returns of Last three years.
8. OEM Authorisation Certificate.
9. Financial Turnover Certificate for last 3 years
10. Shop ACT Certificate
11. Profit loss Certificate for last 3 years.
12. Minimum average annual turnover of Bidder/Supplier.
13. Company Registration Certificate.
14. Authorised service center in Maharashtra.

TYPE OF DOCUMENT TO BE ATTACHED IN BID OFFER ENVELOPE-2 (FINANCIAL BID)

1. Price quote along with the taxation, inclusions and exclusions, if any
2. Undertaking the bidder has not been blacklisted or debarred from supplying previously.
3. Undertaking about compliance of terms and conditions mentioned in the quotations.
4. Undertaking of the bidder regarding the quality and after-sales service and support of the machinery / equipment supplied after expiry of warranty period.

5. Envelope 3- Envelope 1 (Technical) & Envelope 2 (Financial) are to be sealed and packed in Envelope 3. Envelope 3 should be super scribed with Enquiry number and Date, "QUOTATION FOR MECHANICAL AND APPLIED MECHANICS DEPT., FOR THE MACHINERY", and address to the Principal, Govt. Polytechnic, Thane. Phadke Pada, Dawale Post, Diva, Thane-400612. This envelope should be submitted on or before the last date and time mentioned in this document.



(Dr. D. R. MAHAJAN)

I/C. PRINICIPAL

GOVERNMENT POLYTECHNIC, THANE

COPY SUBMITTED TO:-

1. THE DIRECTOR, DIRECTORATE OF TECHNICAL EDUCATION, DESK NO.11 – IT IS REQUESTED TO PUBLISH THIS QUOTATION ENQUIRY LETTER ON WEB PORTAL.
2. THE JOINT DIRECTOR, REGIONAL OFFICE MUMBAI - IT IS REQUESTED TO PUBLISH THIS QUOTATION ENQUIRY LETTER ON WEB PORTAL.
3. CO-ORDINATOR, GOVT.POLYTECHNIC, THANE – TO DISPLAY ON INSTITUTE'S WEB PORTAL
4. OFFICE SECTION, GOVERNMENT POLYTECHNIC, THANE- TO DISPLAY ON INSTITUTE'S NOTICE BOARD.
5. HEAD OF MECHANICAL ENGG. DEPT. GOVT.POLYTECHNIC, THANE - FOR NECESSARY INFORMATION AND DISPLAY ON DEPARTMENTS NOTICE BOARD.
6. HEAD OF APPLIED MECHANICS DEPT. GOVT.POLYTECHNIC, THANE - FOR NECESSARY INFORMATION AND DISPLAY ON DEPARTMENTS NOTICE BOARD.