

NATIONAL INSTITUTE OF TECHNOLOGY CALICUT

N.I.T. Campus (P.O.), Kerala - 673601,

India Tel.: 0495 228 6155, 6134

EMAIL :purchase@nitc.ac.in

QUOTATION NOTICE

MAIN STORE

Date: 30.09.2026

SEALED QUOTATIONS are invited for the supply of the stores given in Schedule C. **The tenderers are requested to send their quotations (as per the format given in Schedule D) in sealed covers with the quotation reference number and last date for receipt of quotation super scribed.** Wherever indicated, samples may be furnished at the tenderer's expense unless otherwise specified. The tenderers are requested to follow the instructions given in Schedule A. This Institute cannot accept terms and conditions of payment other than the alternative given in Schedule B.

1. Quotation Ref No. **NITC/S&P/S6/237/CED(P)/EQPT/2026-27**
2. Last Date for receipt of Quotation **22.10.2026** Upto (IST) Time **4:00 PM**
3. The quoted rates should be valid up to **4 Months**
4. Address to which quotations are to be sent

**The Assistant Registrar (Store & Purchase),
NIT Calicut, NIT Campus (P.O.) 673 601.**



AR (S&P)

[Handwritten signature]

To

1.

**सहायक कुलसचिव (एस & पी)
Assistant Registrar (S & P)
राष्ट्रीय प्रौद्योगिकी संस्थान कालिकट
National Institute of Technology Calicut
केरल - ६७३६०१ / Kerala - 673601**

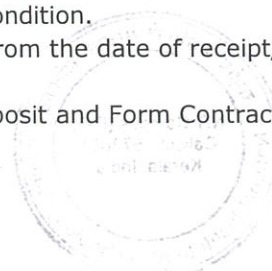
SCHEDULED A - INSTRUCTIONS TO TENDERERS

- (a) Quotations should contain the complete specification and brand names.
- (b) All taxes, packing and forwarding charges (if any) and any other charges should be clearly shown
- (c) Prices quoted should be for delivering at the premises of NIT CALICUT.
- (d) The period within which the items can be supplied on firm order should be clearly mentioned.
- (e) Quotations containing conditions like "subject to prior sale" may not be considered.
- (f) Quotations received after the due date are liable to be rejected.
- (g) An integrity pact should be executed between the buyer and the bidder/vendor for all the contracts.

SCHEDULED B - CONDITIONS OF PAYMENT

One of the following conditions of payment should be accepted if the quotation is to be considered.

- (a) 100% payment after the receipt of the items in good condition.
Normally, complete payment will be made within 45 days from the date of receipt/installation of the items in good condition.
- (b) The supplier shall furnish the Performance Security Deposit and Form Contract as follows:



- (i) Execute a Form of contract as per the Institute's standard format on Govt. of India stamp paper worth Rs.200/-.
- (ii) In case of the value of the supply order above Rs.10,00,000/- with warranty for the item, furnish a performance security deposit@3% of the total cost for the due fulfilment of the contract. This security shall be in the form of DD in favour of the Director, NIT Calicut, payable at SBI, Calicut REC Branch (Code2207) or Bank Guarantee from any nationalised bank/Scheduled commercial Banks valid for a period of sixty days beyond the contractual obligations, including warranty

(c) In case the supplier fails to deposit the required security and execute the contract bond on stamped paper of GOI or Govt. of Kerala (Specimen enclosed) by the due date, the contract is liable to be cancelled without prejudice to taking any further action to recover damages for any loss sustained by THE DIRECTOR as a result of supplier's refusal to abide by the terms of contract

- (a) Invoice number and date
- (b) Customer name
- (c) Customer and taxpayer's GSTIN (if registered)
- (d) Place of supply
- (e) Item details, i.e. description, quantity (number), unit (meter, kg, etc.), total value
- (f) Taxable value and discounts
- (g) Rate and amount of GST tax rates.
- (h) Signature of the supplier.
- (i) PAN number should be indicated.

SCHEDULED C - Technical Specification and Delivery Terms

(See Annexure - I)

SCHEDULED D - Format of Quotations

(For use of the bidder. See note below)

Format of Quotations

Quotation Ref. No.:

Last Date:

Sl.No.	Description of Goods (Attach necessary brochures)	Specification	Qty.	Unit	GST	Other Charges (if any)	Total Cost
GRAND TOTAL							

1. We agree to supply the above goods in accordance with the technical specification for a total contract price of Rs. _____ (amount in figures) (Rupees _____ only) (amount in words) within the period specified in the Invitation for Quotations.
2. We also confirm that commercial warranty/guarantee of _____ months shall apply to the offered goods from the date of installation/commissioning.
3. We undertake that in competing for (and if the award is made to us in executing) the above contract of supply of goods. We will strictly observe the laws against fraud and corruption in force in the Republic of India as required by National Institute of Technology Calicut.

Place:

Date:



Signature of the Bidder

Note:

1. Above tabular form is applicable while bids are being invited for more than one item and will be evaluated for all the items together. Modify the format accordingly where evaluation would be made for each item separately.
2. Quotation should be submitted on the official stationery of the bidder.

Sr. No.	Detailed Description	Approx Quantity	Whether Samples are to be sent
1.	Hydraulic Jacks with Power Pack (Detailed Specification Attached)		



Technical Specifications for Hydraulic Jacks with Power Pack

Schedule of Requirements

Sl. No.	Description	Quantity
1	Hydraulic Jack, 20 Ton Capacity, Single Acting	2 Nos.
2	Hydraulic Jack, 50 Ton Capacity, Single Acting	2 Nos.
3	Hydraulic Jack, 50 Ton Capacity, Double Acting	1 Nos.
4	Hydraulic Jack, 100 Ton Capacity, Single Acting	2 Nos.
5	Hydraulic Power Pack, 5 HP	1 No.
6	Hydraulic Hand Pump	1 No.
7	Related accessories (High-Pressure Hydraulic Hose, 5 m length, Quick Change Coupler with Dust Cap, Pressure Gauges, Shut-off Valve / Flow Control Valve and other relevant components)	As required for operation
8	OEM-recommended hydraulic oil	Required for operation

Scope of Supply: The hydraulic jacks shall be supplied as a complete operational package, including power pack, hydraulic oil, hoses, couplers, gauges, valves, mounting accessories, installation, and demonstration. The required quantity of OEM-recommended hydraulic oil for commissioning and operation of the complete hydraulic system shall be included in the scope of supply.

Contact details:

Dr. Kondalraj R
Assistant Professor,
Department of Civil Engineering, NIT Calicut
kondalrajr@nitc.ac.in
+91-9952856868



Technical Specifications for Hydraulic Jacks with Power Pack

1. Hydraulic Jack – 20 Ton Capacity (Single Acting)

Parameter	Specification
Type	Single-Acting Hydraulic Jack
Rated Capacity	20 Ton (200 kN)
Stroke Length	200 mm minimum
Return Mechanism	Spring Return
Ram Type	Plain Ram
Closed Height	≤ 300 mm
Operating Pressure	700 bar minimum
Construction	High-strength alloy steel with corrosion protection
Mounting Provision	Bottom-tapped holes for mounting
Warranty	Minimum 12 months

2. Hydraulic Jack – 50 Ton Capacity (Single Acting)

Parameter	Specification
Type	Single-Acting Hydraulic Jack
Rated Capacity	50 Ton (500 kN)
Stroke Length	300 mm minimum
Return Mechanism	Spring Return
Ram Type	Threaded Ram
Safety Feature	Mechanical Safety Lock Nut
Saddle	Self-aligning / Tilt Saddle
Closed Height	≤ 500 mm
Operating Pressure	700 bar minimum
Construction	High-strength alloy steel with corrosion protection
Mounting Provision	Bottom-tapped holes for mounting
Warranty	Minimum 12 months

3. Hydraulic Jack – 50 Ton Capacity (Double Acting)

Parameter	Specification
Type	Double-Acting Hydraulic Jack
Rated Capacity	50 Ton (500 kN)
Stroke Length	300 mm minimum



Parameter	Specification
Ram Return	Hydraulic Return
Ram Type	Threaded Ram
Safety Feature	Mechanical Safety Lock Nut
Saddle	Self-aligning / Tilt Saddle
Closed Height	≤ 550 mm
Operating Pressure	700 bar minimum
Construction	High-strength alloy steel with corrosion protection
Mounting Provision	Bottom-tapped holes for mounting
Warranty	Minimum 12 months

Additional Requirement for 50 Ton Double-Acting Hydraulic Jack

- The hydraulic jack shall be suitable for both compression and tension loading applications.
- The ram end shall be provided with a threaded mounting arrangement or equivalent mechanical attachment provision for fixing loading plates, clevises, pull rods, grips, brackets, and other test fixtures.
- The threaded ram end shall be capable of transmitting the full rated tensile and compressive load of the hydraulic jack safely.
- Necessary lock nuts, adapters, and mounting accessories required for attachment of loading fixtures shall be supplied.
- The hydraulic jack shall be suitable for operation in both push and pull modes without reduction in rated capacity.
- The bidder shall clearly indicate the ram-end thread size, thread type, and attachment details in the technical datasheet.
- Detailed dimensional drawings showing ram-end mounting arrangement and attachment provisions shall be submitted along with the technical bid.

4. Hydraulic Jack – 100 Ton Capacity (Single Acting)

Parameter	Specification
Type	Single-Acting Hydraulic Jack
Rated Capacity	100 Ton (1000 kN)
Stroke Length	300 mm minimum
Return Mechanism	Spring Return
Ram Type	Threaded Ram
Safety Feature	Mechanical Safety Lock Nut
Saddle	Self-aligning / Tilt Saddle



Parameter	Specification
Closed Height	≤ 520 mm
Operating Pressure	700 bar minimum
Construction	High-strength alloy steel with corrosion protection
Mounting Provision	Bottom-tapped holes for mounting
Warranty	Minimum 12 months

5. Hydraulic Power Pack

Parameter	Specification
Motor Rating	5 HP minimum
Power Supply	415 V, 3 Phase, 50 Hz
Oil Tank Capacity	50 Litres minimum
Flow Rate	Minimum 2.5 L/min
Working Pressure	650 bar minimum
Maximum Pressure	700 bar minimum
Pump Type	Radial Piston Pump or Equivalent
Mounting	Portable unit with wheels
Directional Control Valve	Hand Lever Operated
Pressure Relief Valve	Mandatory
Pressure Gauge	Mandatory
Distributor Block	Minimum 2 Nos., 1 Inlet × 2 Outlet
Flow Control	Individual Needle Valves for each outlet
Tank Accessories	Filler Breather, Suction Strainer and Oil Level Indicator

Additional Functional Requirement

The hydraulic power pack shall be capable of operating at least two hydraulic jacks simultaneously, including both single-acting and double-acting cylinders. The system shall provide independent hydraulic outlets with separate control valves, enabling independent operation and pressure control of each hydraulic jack. It shall be possible to apply, maintain, and regulate different pressures in individual jacks without affecting the operation of the other connected jack. The power pack shall be supplied with a suitable motor starter, overload protection, short-circuit protection, and emergency stop provision. The power pack shall permit future expansion by connecting additional hydraulic circuits/jacks via suitable manifold arrangements.

6. Hydraulic Hand Pump (Suitable for operating the supplied hydraulic jacks, wherever applicable)

Parameter	Specification
Type	Two-Stage Hydraulic Hand Pump
Oil Tank Capacity	Minimum 1.4 Litres
Working Pressure	700 bar minimum
Pressure Gauge	63 mm dial minimum
Gauge Range	0–1000 bar
Gauge Type	Glycerine Filled
Construction	Corrosion-Resistant Metal Construction
Features	Relief Valve, Oil Level Indicator, Filler Breather, Drain Plug and Carrying Handle

7. Hydraulic Accessories

High-Pressure Hose

- Thermoplastic hydraulic hose.
- Internal diameter: 3/8 inch minimum.
- Length: 5 m minimum.
- Suitable for 700 bar working pressure.
- Complete with end fittings.
- Quantities: As required for independent operation and pressure control of the supplied hydraulic system and for routine laboratory testing applications

Quick Change Coupler

- 3/8-inch NPT or equivalent.
- Male coupler with dust cap.
- Suitable for 700 bar operation.
- Quantities: As required for independent operation and pressure control of the supplied hydraulic system and for routine laboratory testing applications

Pressure Gauge

- Dial size: 63 mm minimum.
- Glycerine-filled.
- Range: 0–1000 bar.
- Quantities: As required for independent operation and pressure control of the supplied hydraulic system and for routine laboratory testing applications



Shut off / Flow Control Valve

- Suitable for 700 bar hydraulic systems.
 - Compatible with supplied hoses and couplers.
 - Quantities: As required for independent operation and pressure control of the supplied hydraulic system and for routine laboratory testing applications
-

Hydraulic Oil Requirement

- The supplier shall provide the required quantity of hydraulic oil suitable for the supplied hydraulic jacks, hydraulic power pack, hand pump, hoses, valves, and accessories.
 - The hydraulic oil shall be recommended by the OEM and shall be compatible with the operating pressure, seals, and hydraulic components of the supplied system.
 - The bidder shall clearly specify the grade, viscosity, and quantity of hydraulic oil required for operation of the complete system.
 - The cost of hydraulic oil, filling, commissioning, and initial operation shall be included in the quoted price.
 - The supplier shall provide details of recommended replacement intervals and maintenance requirements for the hydraulic oil.
 - The supplied hydraulic oil shall be suitable for operation under the specified ambient operating temperature range of the laboratory.
 - The supplier shall provide an additional quantity of hydraulic oil equivalent to at least one complete refill of the hand pump and a minimum of 10 litres of spare hydraulic oil for future maintenance.
-

General Technical Requirements

1. The hydraulic loading system shall be suitable for structural engineering laboratory applications, including testing of reinforced concrete, steel, masonry, composite, and other structural specimens.
2. All hydraulic jacks shall be designed for repeated static and quasi-static loading applications and shall be suitable for laboratory use.
3. Hydraulic jacks shall be manufactured from high-strength alloy steel and shall be provided with a corrosion-resistant surface finish.
4. The minimum design safety factor of all hydraulic jacks shall be 1.5 times the rated load capacity.



5. Hydraulic jacks shall be capable of withstanding occasional overloads in accordance with the manufacturer's standard design practices without permanent deformation.
6. The hydraulic system shall be leak-proof under rated operating pressure and load conditions.
7. No visible hydraulic oil leakage shall occur from the cylinder, hose assemblies, couplers, valves, fittings, or accessories during operation at rated pressure.
8. All hydraulic jacks shall be provided with bottom mounting holes/tapped holes for integration with laboratory loading frames and reaction systems.
9. Hydraulic jacks shall be suitable for operation in both vertical and horizontal mounting orientations without adverse effect on performance, sealing effectiveness, load carrying capacity, or operational safety.
10. Threaded ram hydraulic jacks shall be provided with a mechanical safety lock nut for safe load holding during testing.
11. Hydraulic jacks intended for structural loading applications shall be supplied with self-aligning (tilt) saddles wherever applicable to ensure uniform load transfer.
12. The hydraulic jack and associated hydraulic power pack shall be capable of maintaining the applied load under sustained loading conditions for a minimum duration of 30 minutes, with pressure loss not exceeding 2% of the applied load, when operated within the rated capacity and working pressure limits of the system. The bidder shall provide documentary evidence from OEM literature, test reports, or performance data supporting the specified load-holding capability.
13. The hydraulic system shall provide smooth and controlled load application without sudden pressure fluctuations or jerky movements during loading and unloading operations.
14. All hydraulic hoses, couplers, valves, gauges, fittings, and accessories shall be rated for operation at the maximum working pressure of the hydraulic system.
15. Operating Temperature Range:
 - i. Ambient Operating Temperature: 0°C to 50°C minimum
 - ii. Storage Temperature: -10°C to 60°C minimum
16. Pressure gauges shall be glycerine-filled and protected against vibration and pressure fluctuations.
17. All hydraulic hoses shall be abrasion-resistant and suitable for repeated laboratory usage.
18. Quick-connect couplers shall be supplied with dust caps to prevent contamination of the hydraulic system.
19. All hydraulic jacks, pressure gauges, and hydraulic systems shall be supplied with manufacturer's inspection reports and test certificates. Calibration certificates shall be supplied wherever applicable.



20. The complete system shall be supplied with operation manuals, maintenance manuals, and recommended maintenance schedules.
21. The supplier shall provide installation, testing, commissioning, and demonstration at NIT Calicut.
22. Relevant test certificates, inspection reports, and quality assurance documents shall be supplied along with the equipment wherever applicable.
23. The supplier shall provide all necessary mounting accessories, adapters, brackets, loading plates, connectors, fixtures, and interface components required for integrating the supplied hydraulic jacks with the existing structural loading frame available in the laboratory.
24. The hydraulic jacks shall be supplied with suitable mounting arrangements to facilitate both compression and tension loading applications wherever applicable.
25. The bidder shall ensure compatibility of the supplied hydraulic jacks, power pack, hoses, and accessories with the existing loading frame and reaction system available in the laboratory.
26. Detailed dimensions, mounting requirements, and interface details of the existing loading frame may be obtained from the Institute prior to submission of the bid. Bidders are advised to contact the concerned faculty coordinator for necessary information regarding the loading frame configuration and mounting requirements.
27. Any additional mounting accessories required for the successful installation, operation, and integration of the hydraulic loading system with the existing laboratory loading frame shall be included in the scope of supply.

Compliance Requirements

The bidder shall submit the manufacturer's original technical datasheet/catalogue for the offered model. Merely stating "Complied", "Yes", or reproducing the tender specification in the compliance statement shall not be accepted, and such bids are liable to be rejected.

All offered specifications shall be clearly highlighted and traceable in the manufacturer's published datasheet/catalogue. The bidder shall provide page-wise references against each specification. Any specification claimed by the bidder but not supported by the OEM's datasheet, catalogue, calibration certificate, test certificate, or other supporting technical documents shall be treated as non-compliant.

The bidder shall submit a point-by-point compliance statement indicating the exact page number and clause number of the submitted datasheet against each tender specification.

The bidder shall be the OEM or an OEM-authorised supplier. Preference will be given to OEMs. For an authorised supplier, a valid OEM authorisation, a back-to-back warranty, and a service support commitment from the OEM shall be submitted. A



manufacturer/supplier attempting to quote for equipment for which they are not the OEM or an OEM-authorised supplier will be summarily rejected. No third-party vendors/suppliers other than the OEM or an OEM-authorised supplier will be entertained.

The bidder/OEM shall furnish documentary evidence of successful supply, installation, and commissioning of similar hydraulic loading systems, hydraulic jacks, or structural testing equipment in IITs, NITs, IISc, IISERs, CSIR laboratories, DRDO laboratories, ISRO centres, Central Universities, or other nationally reputed academic and research institutions. Copies of Purchase Orders, Installation Certificates, User Certificates, or Performance Certificates shall be submitted along with the bid.

Preference will be given to OEMs or OEM-authorised suppliers having prior successful installations of similar equipment in reputed academic and research institutions.

The Institute reserves the right to verify the submitted credentials and performance records from the respective end users.

The bidder shall arrange an online technical demonstration/presentation of the proposed hydraulic loading system, if requested by the Institute during technical evaluation, to demonstrate compliance with the tender specifications and operational capabilities of the offered equipment.

Maintenance and service support of the equipment during and after the warranty period.

The vendor should have a competent, reliable service network in India for quick, necessary repair and maintenance of the equipment. Details of the service support the firm can provide should be included with the quotation. The firm should commit to providing maintenance service and supplying necessary spares for the equipment for at least 15 years after successful delivery and installation. The details provided by the vendor in this regard should be convincing to NIT Calicut. In case NIT Calicut is not convinced with the nature of maintenance and service support to be provided by the vendor, such offers will not be considered.

Installation and commissioning

The firm should take full responsibility for supply, installation and commissioning of the equipment. Installation and commissioning should be carried out at the NIT Calicut and performance of the system demonstrated to the satisfaction of the users/responsible faculty members/committee in-charge at NIT Calicut.

Operation and maintenance manuals



Operation manuals along with all necessary drawings should be supplied along with the test system.

Warranty requirement

Minimum 12 months comprehensive warranty from the date of successful installation, commissioning, and acceptance.

Delivery schedule

The total system should be supplied within 45 days of order.

