

30003/DTK/19TF/ENQ-24/E3ES

10 Sep 2026



FOR ATTENTION OF ALL BIDDERS

There is an important instruction regarding place of submission of Bid due to restricted movement of goods and services across the border, in view of page No 7 of this RFP, amending the clause 2 of this RFP to that Extent.

Appendices

A	: List of Stores	F	: Format of Certificate of Acceptance
B	: Technical Bid ('T' Bid)	G	: Undertaking Certificate
C	: Price Bid ('Q' Bid)	H	: Specification of Automatic Compression Testing Machine
D	: EMD Bank Guarantee Format	J	: Self Declaration Certificate
E	: Performance Bank Guarantee		

INVITATION OF QUOTATION FOR SUPPLY & INSTALLATION OF CAT 'B' STORES (LAB ITEMS)

Dear Sir/Madam,

INVITATION OF QUOTATION

1. This Project requires stores as per Appendix 'A' accordingly invites OTE for the purpose. The RFP can be downloaded from CPP Website : <https://eprocure.gov.in/epublish/app>. The consignor can submit their offer by downloading the enquiries and sending it by Speed Post/Courier/Hand.

2. Quotations are invited in physical form containing 'T'-Bid (Technical bid) as per Appx 'B' and 'Q'-Bid (Price Bid) as per Appx 'C' for the above items. Please note that quotation will be received by the Headquarters Chief Engineer (P) Dantak, C/o 99 APO upto 1700 Hrs (BST) on 23 Sep 2026. 'T'-Bid will be opened on 28 Sep 2026 at 1200 Hrs (BST). After opening of 'T'-Bid and its evaluation 'Q'-Bid will be opened for the successful bidders.

3. Firms or their duly authorized representative who have submitted their quotation and who wish to be present at the time of opening of quotation may visit the office of Headquarters Chief Engineer (P) Dantak, C/o 99 APO at the above mentioned time and date for viewing the quotation opening process.

4. Bidding procedure shall be single stage-two bid system and bid documents are to be prepared in two parts as under:-

- Part-I. (Technical Bid : 'T' Bid) at Appendix 'B'.
Part-II (Price Bid : 'Q' Bid) at Appendix 'C'.

5. **Part-I Technical Bid ('T' Bid)**

5.1. The technical bid comprising of the following details shall be forwarded in a separate envelope only by the OEM/ Authorised Dealer/Consignor duly mentioning the Name of the firm, Enquiry reference and date of opening etc on top of the envelope.

(a) Details such as Name of firm, Address Contact number GSTIN number, Email, PAN No and other Registration details with HQ DGBR / Project Dantak / Any other BRO Project / Ministry of Defence Govt of India / Govt of Bhutan as per format enclosed at Appendix 'B' to the enquiry be provided. OEM, PSUs and Authorised Dealer enlisted with Central Purchase Organization and National Small Industries Corporation also to provide details of their registration in Appendix 'B'.

(b) In case, if the firm is NOT enlisted / Registered with HQ DGBR or Project Dantak as a registered contractor/ consignor or with Ministry of Defence Govt of India or Govt of Bhutan or CPO or NSIC & Micro, Small and Medium Enterprises (MSMEs), then details of EMD alongwith original copy of EMD be provided as per Ser No 9 of Appx 'B'. PSUs, OEM/ Authorised dealer, Original Manufacturers in Bhutan/ India registered with Dantak/ HQ DGBR/ RGoB are exempted from submission of EMD on producing of necessary document/ certificates, in this regard.

Contd...2/-

(c) OEM/ Authorised Dealer/ Consignor should have completed minimum one supply order of the items to any Govt agency/BRO projects for last seven financial years. Copy of such supply order to be mandatorily enclosed with 'T' Bid failing which the firm will not be considered for opening of 'Q' Bid. Firms enlisted with Project Dantak for supply of same items need not to submit the copy of supply order of similar items.

5.2 Eligibility Criteria for Technical Evaluation

5.2.1 The manufacturers/ consignor who have submitted the following documents in their 'T' Bid will only be eligible technically and for opening of their 'Q' Bid:-

- (a) Fulfilment of criteria & submission of documents as laid down at Para 5.1.
- (b) Copy of tender documents duly signed and stamped on each page.
- (c) **Complete details as per Appendix 'B' of enquiry**
- (d) **Registration details:**

- (i) Registration/Enlistment No
- (ii) With whom registered/enlisted
- (iii) Letter reference under which registered/enlisted. (Enclose copy)

Enlistment/ Registration details with HQ DGBR/ Project Dantak/ Ministry of Defence, Govt of Bhutan/CPO/NSIC be clearly mentioned or EMD be submitted by non enlisted/non registered firms.

(e) Original Manufacturers in Bhutan/India will have to submit EMD in case if they are not enlisted/ registered with HQ DGBR/Project Dantak or Government of Bhutan.

- (f) Copy of undertaking certificate duly signed (Format as per Para 13 (a) (iv) of RFP).
- (g) Copy of Importer- Exporter Code (IEC).
- (h) **Make & warranty of the items from original manufactures bidded for to be included as part of 'T' bid documents.**

5.3. — The bidder should meet all the technical evaluation criteria in order that the bid is considered to be technically responsive and the bidder qualifying to have its commercial bid opened. **BANNED FIRMS WILL NOT BE ENTERTAINED.**

5.4 REJECTION OF VENDORS

(a) **FIRMS APPLYING FOR THE SUBJECT TENDER WILL BE SCRUTINISED BASED ON THEIR PAST PERFORMANCE. BIDS OF FIRMS WHO HAVE SOUGHT TWO (02) OR MORE EXTENSION TO DELIVERY PERIOD WITH LD IN THE ONGOING (NON FRUCTIFIED) SUPPLY ORDERS ISSUED BY HQ CE (P) DANTAK WILL BE DISQUALIFIED.**

(b) **VENDORS WHO ARE BANNED FOR PARTICIPATION IN THE TENDER ENQUIRY BY ANY GOVERNMENT DEPARTMENT IN INDIA/ BHUTAN NEED NOT APPLY. SCRUTINY OF VENDORS WILL BE DONE STRICTLY ON THE BASIS OF THEIR PERFORMANCE WITH GOVERNMENT DEPARTMENTS.**

(c) **SELLER SHOULD SUBMIT ALL ABOVE DOCUMENTS WITH BID. IF ANY SELLER SUBMIT MISLEADING/FALSE INFORMATION IN BIDDING DOCUMENTS, SUCH SELLER WILL BE LIABLE TO BE DISQUALIFIED IN 'T' BID. NO REPRESENTATION IN THIS REGARDS WILL BE ENTERTAINED**

6. Part-II Price Bid ('Q' Bid)

6.1 The price bid ('Q' Bid) shall be forwarded in a separate envelope by the OEM/ Authorised Dealer/ Consignor duly mentioning the name of the firm, Enquiry reference and date of opening on top of the envelope.

6.2 Part-II Price Bids ('Q' Bid). Price Bid shall be quoted by bidder as per the format attached as Appendix 'C'.

6.3 'Q'-Bid evaluation. Price Bid of non qualified bidders, based on evaluation of 'T' Bid, will not be opened.

6.4 Price Bids shall only be furnished in attached format forming part of the bid documents.

7. 'T' Bid and 'Q' Bid be submitted in two separate envelopes duly superscribed and both these sealed covers are to be put in a bigger cover which should be sealed and duly superscribed. OEM/ Authorised Dealer/ Consignor who offer the Enquiry documents of 'T' Bid and 'Q' Bid in a single envelope will be rejected. On top of both 'T' Bid and 'Q' Bid, details such as Name of OEM/ Authorised Dealer/ Consignor of the items, Enquiry Reference and date of opening etc will be mentioned clearly.
8. No conditional offer other than conditions mentioned above will be entertained.
9. All necessary licenses, consents and permissions for import/ export from Govt/ Semi Govt/ Civic agencies in India & Bhutan for the performance of obligations under this supply orders shall be arranged by the OEM/ Authorised Dealer/ Consignor.
10. The OEM/ Authorised Dealer/ Consignor shall provide and pay for usage of labour, utilities, transportation and other miscellaneous services necessary for proper execution and completion of supply order at the designated FOR.
11. The complete expenses on preparation and submission of quotation shall be borne by the firms and it shall have no claim on this account.

Earnest Money and Security Deposit.

12. OEM/ Authorised Dealer/ Consignor who are NOT enlisted as per Para 5.1 (b) of this RFP will have to submit Earnest Money of Amount in Rs 3,50,000/- (Rupees Three lakhs fifty thousand only) in the form of fixed Deposit receipt, or Bank guarantee from any of the commercial banks drawn in favour of Chief Engineer, Project Dantak payable at SBI Hasimara having validity/maturity period of Six Months and will be enclosed with Technical Bid. Earnest Money of un-successful OEM/ Authorised Dealer/ Consignor shall be returned to them immediately on placing of Supply Order. Format of EMD as per Appendix 'D' enclosed. The MSME companies having valid Udyog Number, the EMD exemption as per DPM will be applicable.

13. **Performance Bank Guarantee.** Performance Bank Guarantee in the form of Bank Guarantee should be submitted by your firm @ 5% of the value of Supply Order amount within 14 days of receipt of the Supply Order, to HQ 19 BRTF, Phuentsholing. The Fixed Deposit Receipt or Bank Guarantee Bond be prepared having validity/maturity period of sixty days beyond the date of completion of all contractual obligations of the supplier including warranty obligation (Ref Rule-171 of GFR 2017). The PBG should be drawn in favour of HQ 19 BRTF payable at SBI, Hasimara. On receipt of Performance Bank Guarantee, the EMD will be returned to the firm. The Performance Bank Guarantee will be released after one month of release of completed payment against the supply order. If required, the extension of validity of Performance Bank Guarantee will be sought accordingly. Format of Performance Bank Guarantee as per Appendix 'E' enclosed. In terms of Para 6.1.2 (i) of Manual of Procurement of Goods (updated June 2022), submission of PBG for an Supply Order amount upto twenty five (25) lakh is not required.

(a) **Clause for Evaluation of L1.** To determine the L1, the quoted rates of consignor who have been found technically "Substantially Responsive", 'Q' Bid shall be evaluated as under:-

(i) Evaluation method for arriving to L1 bidders will be total value wise evaluation. Ranking of the commercial bid will be based on the lowest cost of sum total of all items to be delivered at 504 SS&TC (GREF) Phuentsholing (Bhutan) & Det 'A' 504 SS & TC (GREF) Samdrup Jongkhar (Bhutan) to be supplied separately which will comprise of Basic Cost of items, Freight insurance, except levies, Taxes and Duties levied by Central/State Local Govts such as Octroi/Entry Tax, etc as quoted by the Bidder in his 'Q' Bid. All these elements shall mandatorily be indicated separately. In case the firm does not enter the bid price for any particular item, the 'Q' bid of the firm will be treated as invalid.

(ii) Any Taxes and Duties not mentioned clearly in 'Q'-Bid will not be counted and the Bidder shall not have any claim on account of such omissions on his part.

(iii) **GST/ Sales Tax are not applicable for Project Dantak.** For any query regarding exemption of GST on import of goods and services from India to Bhutan, kindly refer to the following websites for detail information.

(aa) www.cbec.gov.in/htdocs-cbec/gst/index.

(ab) www.cbec.gov.in/resources/htdocs-cbec/gst/notfctn-42-igst-rate-english.pdf.

(ac) www.cbec.gov.in/resources/htdocs-cbec/gst/notfctn-300CGST-rate-english.pdf.

(iv) **For Indian Consignor Only.** As supply to Project Dantak located outside India, no GST is applicable. Indian consignor / Bidder shall attach undertaking certificate as per the following format mandatorily :-

Contd.....4/-

UNDERTAKING CERTIFICATE

"It is certified that the goods / materials given in the Enquiry No 30003/DTK/19TF/Enq-24/E3ES dt 10 Sep 2026 of HQ CE (P) Dantak will be supplied by me / our firm as export and for use in Bhutan. It is declared that no GST cost has been included by me in the rates quoted in above mentioned enquiry".

Signature with date :
Name of the bidder :
Name of firm with address:

(v) Certificate on account of GST as per Rule No 16 (1) of IGST Act 2017 will be issued on receipt of stores as format of certificate is as given under:-

(aa) It is certified that the goods supplied by your firm against SO No 30003/DTK/19TF/ SO.../E3ES dated ____ 2026 for the cost of Rs ____/- (Rupees _____ only) is a zero rated supply as per GST Rule No 16 (1) of IGST Act 2017 as the goods were supplied as an export and to be used in Bhutan by this Project.

(ab) It is further certified that no amount was paid to your firm by this Project on account of GST

Consignee Unit

GST : ZERO RATED SUPPLY CERTIFICATE



(b) **Force Majeure Clause** Should any force majeure circumstance arise, each of the contracting party shall be excused for the non fulfillment or for the delayed fulfillment of any of its contractual obligations, if the affected party within **14 days** of its occurrence informs in a written form the other party. Force majeure shall mean fires, floods, natural disasters or other acts such as war, turmoil, strikes, sabotage explosions, and quarantine restriction beyond the control of either party. In the event of either party being rendered unable by Force Majeure to perform any obligations required to be performed by them under the purchase order the relative obligations of the party affected by such force majeure shall upon notification to the other party be suspended for the period during which force majeure event lasts. The cost and loss sustained by the either party shall be borne by the respective parties. If the force majeure conditions persist for a period exceeding 90 days the Purchaser reserves the right to cancel the purchase order in full or in part.

Consignee, Delivery & Delivery Period

14. Supply will have to be completed within **45 days** from the date of effect of supply order. The stores are required to be delivered as per Appendix 'A' attached to this enquiry to the consignee unit **504 SS&TC (GREF) Phuentsholing (Bhutan) & Dett 'A' 504 SS & TC (GREF) Samdrup Jongkhar (Bhutan)**. **THE RESPONSIBILITY FOR LOADING AND UNLOADING OF STORES INCLUDING TRANSIT LOSS AND INSTALLATION OF MACHINE (WHEREVER REQUIRES) AT CONSIGNEE LOCATION SHALL REST WITH THE CONSIGNOR.** The firm who are unable to supply the desired items within original delivery period due to any reason and are contemplating/seeking extension of original delivery period must send their request by email giving detailed reason for seeking original delivery period extension and the request should reach seven clear working days before expiring of original delivery period failing which the supply order will be considered to be terminated and firm will be responsible for the same. The responsibility of shall rest with the consignor

Price Adjustment

15. **Prices** All the rates/prices mentioned in the purchase order shall remain firm throughout the delivery/ shipment of the goods/ performance of the services. Price escalation on any scores whatsoever due to increase in any statutory taxes or duties will NOT be entertained.

Manufacturer/ Authorised dealer (Consignor/ Distributor)

16. In case your firm is an original manufacturer of the product or an authorized dealer, a certificate to this effect shall be enclosed alongwith product catalogue and company price list, Discount, if any offered thereon shall be specified clearly. If the product is proprietary in nature, certificate to this effect that the firm is sole OEM/ Authorised Dealer/ Consignor of the product shall be enclosed with the offer.

Contd.....5/-

Freight/ Warranty

17. **Freight.** Packaging and freight will be complete responsibility of the consignor. Damages/ losses in transit shall be the responsibility of the consignor upto the delivery location specified by the respective consignees. No Defence vehicles will be provided to transport the stores. Stores will be securely packed without any additional cost to the Govt to avoid losses or damages during transit so as to reach this consignee, in perfect serviceable and fit for use condition. The consignor shall remain responsible for adequacy of packages during transit. The packages shall be marked with the Supply order and other necessary details for easy identification at the consignee's end. The consignor will be responsible for unloading at for and to ensure that the stores are delivered in sound condition without any damage.

18. **Warranty/Guarantee.** The stores supplied against the supply order shall bear a warranty against defective materials for a period of one year or as specified by the company/ consignor/firm (whichever is higher) from the date of completion of the supply order. In case of manufacturing failure or defect in any component within the warranty period, the consignee shall inform the consignor for joint inspection. Within a period of one week of the receipt of such information, the rejected material shall be removed and replaced by the consignor at the site at his own expense and no extra payment shall be made on this account. All stores to be supplied should be free from all defects and faults in material workmanship and manufacture. They should be of the highest grade and consistent with the established and generally accepted standards for material of the type used and in full conformity with the specifications, drawings or samples and shall, if operable, operate properly. The Consignor shall be bound to furnish a clear written warranty regarding the same. In the event of the ultimate consignee in Bhutan not finding the stores in accordance with the order, the Consignor will be required to replace them free of cost inclusive of all freight and handling charges. Such replacement will be done within ninety days to the claim report raised by the Consignee. These standard conditions will also apply in respect of replaced stores.

TERMINATION OF PURCHASE ORDER

19. **Termination for Non-performance.** The Purchaser without prejudice to any other remedy for breach of purchase order, by giving a written notice for non-performance to the Seller/consignor, may terminate the purchase order in whole or in part for following reasons:-

- (a) When the supplier fails to honour any part of the supply order including failure to deliver the supply order stores/ render services in time.
- (b) When the contractor is found to have made any false or fraudulent declaration or statement to get the supply order or he is found to be indulging in unethical or unfair trade practices.
- (c) When both parties mutually agree to terminate the supply order.
- (d) When the item offered by the supplier repeatedly fails in the inspection and/or the supplier is not in a position to either rectify the defects or offer items conforming to the stores quality standards.
- (e) Any special circumstances, which must be recorded to justify the cancellation or termination of a supply order.
- (f) If the Seller/ consignor, in the either of the above condition, does not cure his failure within a stipulated period of 30 days (or such a longer period may authorize by the Purchaser in writing) after receipt of notice of non-performance from the Purchaser.

Contact Address

20. For any further information/clarification on the subject the following Officer may be contacted during the office hours (i.e. 0830 Hrs to 1700 Hrs BST except Sunday/Holidays):-

SO-1 (Res)
Headquarters
Chief Engineer
Project Dantak
Tele No .009752351082/86/88
FAX No .009752351285

21. The accepting officer does not bind himself to accept the lowest quotation or any other quotation and reserves the right to accept or reject any of the quotation either in part or in full without assigning any reasons what so ever thereto.

Contd...6/-

22. No purchase against this enquiry is guaranteed.
23. The quantities of stores given is/are guidelines and may be decreased upto minus (-) 10% according to our requirement at the time of placing of supply order.
24. Quotation received after the expiry of time and date specified in Para 02 above will not be entertained.
25. Payment will be made on receipt of stores in full as there is no provision for making advance payment. **NO PART PAYMENT WILL BE APPLICABLE.**
26. **Repeat Order Clause** The Consignee may order upto 50% qty of SO within six months from the date of successful completion of the supply against this contract and at the same cost, terms and conditions of the contract. The Consignor is bound to supply the material.
27. **Sample Approval** If desired by consignee, the firm shall produce one sample of the item for approval to the consignee within 20 days of this Supply Order only the approved samples will be supplied in bulk as per the quantity given in Supply Order. Samples may be approved by producing actual samples or through a catalogue of desired make as per SO. Date of approval of sample will have no effect to the delivery period mentioned in the RFP/ Supply Order.
28. **Inspection** The stores supplied may be inspected by the BOO detailed by the CFA or his authorized rep at time of delivery and should be strictly according to the specifications provided in the supply order. In case the items are found not according to specifications/satisfaction of the Inspecting Officer, the stores are liable to be rejected and will have to be replaced within 30 days without any additional cost by the consignor/firms.
29. **Liquidated damages** The contractor / consignor shall be liable to pay as agreed, liquidated damages and not as penalty a sum equivalent to 1/2% (Half Percent) of the delivered price of the delayed goods for each week of delay or part thereof until actual delivery or performance. The consignor's liability for liquidated damages shall not exceed 10% (ten percent) of the contract price of items delayed. If the delivery is delayed beyond 10 weeks, the consignee may at his own option, terminate the contract / supply order.
30. **Validity** The rates should be valid for 120 days waf the date of submission of the offer.
31. Mentioning of GSTIN Nos and quoting rates in words is compulsory, without which enquiry will not be considered for placing supply order. Clear description/specification of items is also mandatory.
32. Rates be quoted for items as per specification in enquiry only.
33. **EMD** In case non supply of stores against this supply order, then EMD/ Performance Bank Guarantee Bank Guarantee will be ceased by department.
34. Acceptance certificate forward to HQ CE (P) Dantak against this enquiry Supply Order No 30003/DTK/19TF/SO-____/E3ES dated ____/____/ 2026. Format as per Appx 'F'.
35. **TAXES** ANY TAXES TO BE LEVIED / EXEMPTION TO BE GRANTED WILL BE APPLICABLE AS PER THE NEW GST RULES 2026 IMPLEMENTED WITH EFFECT FROM 01 JAN 2026 IN KINGDOM OF BHUTAN & PROCEDURES INVOLVED THEREBY.

Contd.....7/-

37. In addition to the existing facility/provision of receiving bids at HQ CE (P) Dantak and as mentioned in clause 2 of this RFP, a facility has been created on Indian side border town of Jaigaon to facilitate submission of bids by Indian Bidders. The bidders can exercise following option and address:-

(a) **Existing facility at HQ CE (P) Dantak Thimphu:-**

(i) **If sending bids by post:-**

HQ CE (P) Dantak
PIN - 931 708
C/o 99 APO

(ii) **Manual Submission** - Dropping of bids in tender Box kept in HQ CE (P) Dantak premises.

(b) **Additional facility at Jaigaon:-**

(i) **If sending bids by post:-**

OIC Liaison Cell
Supervisor Mess, HQ 19 BRTF (GREF)
Jaigaon (W.B.)
PIN - 736 182
Contact details/ Phone No - 9970889254

(ii) **Manual submission** - Dropping of bids in tender Box kept in Supervisor Mess, HQ 19 BRTF (GREF) Jaigaon (W.B).

Address:-

OIC Liaison Cell
Supervisor Mess, HQ 19 BRTF (GREF)
Jaigaon (W.B.)
PIN - 736 182
Contact details/ Phone No - 9970889254

Please take acknowledgement from OIC Liaison Cell in case of manual submission at Jaigaon.

Note:- Last date and time for submission of bids will be same for both the location and bids from both the places will be collected and opened on fixed date by the nominated BOO at HQ CE (P) Dantak.

Your's faithfully,



(Vinod Kumar Sharma)
Lt Col
SO-1 (Res)
for Chief Engineer



Contd.....8/-

LIST OF STORES**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026**

Ser No	Nomenclature	A/U	Qty
Stores to be supplied to 504 SS&TC (GREF), Phuentsholing (Bhutan)			
1.	Liquid Limit Cone Penetrometer, Automatic Specification :- Standard: IS 2720 (Part 5): 1985 (Reaffirmed 2020) Cone: Stainless steel cone, apex angle $30^\circ \pm 30'$, total sliding weight 148g (cone + assembly). Release Timer: Digital timer set to 5 seconds. Penetration Measurement: Digital or analog depth gauge with 0.1 mm least count. Accessories: Sample containers, penetration measuring scale, calibration tools. Usage: For determining liquid limit of soil using cone penetration method.	Nos	1
2.	Laboratory CBR machine Digital Specification:- Standard: IS 2720 (Part 16): 1987 Capacity: Minimum 50 kN (5 Tonne). Platen Speed: Fixed at 1.25 mm/min. Load Measurement: Digital proving ring or load cell. Displacement Measurement: Dial gauge or digital with 0.01 mm least count. Accessories: CBR moulds, surcharge weights, spacer disc, penetration piston. Usage: For determining California Bearing Ratio of soil subgrade.	Nos	1
3.	CORE DRILLING MACHINE (CUT CORES LARGER THAN 150MM) It is a compact drilling machine that can drill through hard Rock, Concrete, Bitumen, tiles, and marbles. Adequate fixtures are provided to drill cores of 100 from 150 mm diameter Gyratory samples and multiple cores from slab of 410x 260x (max) 100mm height. The unit have a rigid, stable and vibration free platform. The unit have arrangement for both Lateral and longitudinal movement of the main sample holding jig to facilitate coring from bigger diameter cores and multi cores from slabs. The sample is moveable in X Y direction and the main frame is stationary and have Z movement. Due to the flexibility in multi direction multiple cores of different sizes can be cored from slab of the size given above. Salient Features 1. Ideal for drilling test cores in laboratory environment from larger 150 mm diameter Gyratory cores. Ideal for drilling extracting 3 Nos x 100 mm diameter cores for slabs Ideal for extracting multiple cores of different sizes from slabs 2. A stainless steel container with water arrangement is provided with clamping fixture for 150 mm diameter core and 410x 260x 100mm (max) . 3. Clamping is rigid and positive. 4. Facility for taking out 3 cores of 100 mm diameter from the above mentioned size slab Rigid floor fixing. 5. Water swivel for circulation and cooling of the tip. 6. Core depth up to 450mm. 7. Power of the Motor: 2200 Watts Multiple Speeds: (3 speeds): 450,1200,2500 rpm Power Supply: 230 Volts, 50 Hz AC. 8. Travel on the pillar about 600 mm. 9. Bits Core diameter 100mm 5 No. 10. Core diameter 150mm 2 No. 11. Barrels For 100 mm bit 1 No For 150 mm bit 1 No. (HEICO or equivalent)	Nos	1
4.	Digital Rebound Hammer Specification:- Standard: IS 13311 (Part 2): 1992 Impact Energy: 2.207 Nm. Measurement Range: 10 to 70 N/mm ² . Display: Digital with memory storage and USB/Bluetooth data transfer. Calibration: With standard anvil as per IS. Usage: For non-destructive testing of concrete compressive strength.	Nos	1
5.	Density Basket Specification:- Standard: IS 2386 (Part 3): 1963 Material: Non-corrodible wire mesh (stainless steel). Size: Approx. 20 cm diameter x 20 cm height. Mesh Size: 6.3mm. Accessories: Wire handle and water bath frame. Usage: For specific gravity and water absorption test of aggregates.	Nos	1
6.	Ring and Ball Apparatus, Electrically Operated Specification:- Standard: IS 1205: 1978 Heating System: Electric with digital temperature control. Temperature Range: Ambient to 200°C. Accessories: Brass rings, steel balls, thermometer (ASTM 15°C to 300°C), beaker, stirrer. Usage: For softening point determination of bituminous materials.	Nos	1
7.	Muffle Furnace Specification:- Standard: IS 4031 (Part 8): 1988 Temperature Range: Up to 1000°C Chamber Size: Minimum 6" x 6" x 12" Controller: Digital PID with programmable timer. Heating Element: Kanthal A1 wire or equivalent. Safety: Thermocouple with auto cut-off. Usage: For loss on ignition, gravimetric and ash content tests.	Nos	1

Contd.....8/-

LIST OF STORES**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026**

Ser No	Nomenclature	A/U	Qty
Stores to be supplied to 504 SS&TC (GREF), Phuentsholing (Bhutan)			
8.	Benzene Specification:- IS 2848:1986 (Reaffirmed 2020)	Ltrs	7
9.	Digital thermometer for Bitumen Temperature, with ISI Certification Mark Specification :- Minimum (-50 degree celcius) to accommodate the range of bitumen temperatures. Maximum : 200 degree celcius or higher, depending on specific needs for bitumen production process Material : Stainless Steel is the preferred material for the probe due to its durability and resistance to corrosion in bitumen	Nos	5
10.	Extractor filter rings for bitumen extraction Specifications : Filter paper for extractor test 24cm dia pkt of 100 circles	Nos	1
11.	Marshal stability & flow value machine Specification :- Load capacity : 50 KN (50,000N) or 5000 kgf Load Measurement : Strain gauge load cell with a specified accuracy Flow Measurement : Dial gauge or displacement transducer with a resolution of 0.01mm or 0.25mm increments Maximum Flow : Typically measured up to 25mm Maximum Flow : typically measured up to 25mm Platen speed : 50.8mm/Min (2 inches/min) Vertical travel : 70mm maximum	Nos	1
12.	Digital thermometer gun Specification : Wide Range Measurement (-50 degree celcius) to (+ 600 degree celcius) Heavy duty plastic durable ABS material with a UV coating provided resistance to scratches, extreme temperature and accidently drop Dynamic Instant Reading Press trigger for live, dynamic reading Non Contact digital handheld temperature gun with back light LCD Dials Industrial Thermometer for Industrial	Nos	6
13.	Core cutting machine : Specification : 10 CM dia Diamond Cutting Edge Dimensions 3.5 Feet X 3 Feet Height 4.5 Feet Model type -Petrol Engine, Weight 200 Kg Engine Capacity 5.5 HP	Nos	1
14.	NON-Nuclear Asphalt Density Gauge. IWIN or equivalent	Nos	1
15.	Light Weight Deflectometer Weight:- 15Kgs Drop Weight:- 10Kgs Maximum Impact Force: 7.07KN Diameter:- 300mm Thickness:- 20mm	Nos	1



Registration No. of Firm
TIN No. of Firm
Firm Seal
Fax & Tele No.

(Vinod Kumar Sharma)
Lt Col
SO -1 (Res)
for Chief Engineer

Contd.....10/-

LIST OF STORES**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026**

Ser No	Nomenclature	A/U	Qty
Stores to be supplied to Dett 'A' 504 SS&TC (GREF), Samdrup Jongkhar (Bhutan)			
16.	Total Station with complete accessories Make: & Type:- Sokkia im-55 model or equivalent Telescope Magnification/Resolving Power : 30x/2.5" Others : Length : 171 mm, Objective aperture : 45 mm (48 mm for EDM), Image : Erect, Field of View : 1o30' Minimum focus : 1.3 m, Reticle illumination : 5 brightness levels Angle Measurement Minimum display (Selectable)" 1"/5" Accuracy (ISO 17123-3-2001) : 2" Collimation compensation : On/Off Selectable Distance measurement Laser output: Reflectorless mode : Class 3R/ Prism/ Sheet Mode : Class1 Measuring range (under average conditions) Reflectorless : 0.3 to 500 m Measuring range (under average conditions) Reflective sheet : RS90N-K : 1.3 to 500 mm RS50N-k : 1.3 to 300 mm Rs10N-K - 1.3 to 100 m Supplied complete with One big prism set, one mini prism, one heavy duty fibre tripod double lock.	Nos	1
17.	Mild Steel Digital Schmidt Rebound Hammer Proceq ST Type N (a) Language independent user interface (b) Data acquisition & processing (c) Impact energy: 2.207 Nm (1.63 lbf.ft) (d) Concrete Compressive Strength Range: 10 - 100 N/mm² (1450-14500 psi) (e) Weight: 570 g (1.3 lb) (f) Display: 17 x 71 pixel (g) graphic (h) Battery life: >5000 impacts between charges (i) Charger connection: USB type B (5 V 70 - 100 mA) (j) Operating temperature: 0 to 50 _C (32 to 122 _F) (k) Storage temperature: -10 to 70 _C (14 to 158 _F) (l) Conforms to ASTM C-805 (m) BS-1881-202 (n) IS 13311	Nos	1
18.	G ₁ sieves 300 mm dia. Sizes 100mm, 80mm, 63mm,40mm, 25mm, 20mm, 12.5mm, 4.75mm, 6.3mm with Lid & Pan	Set	1
19.	Sieves 200 mm dia, spun brass frame size 4.75 mm, 2.36 mm, 1.18 mm, 600 mic, 300 mic, 150 mic, 75 mic, lid and pan	Set	1
20	SLUMP TEST APPARATUS IS:7320-1974 Used for determination of slump of fresh concrete mix as a measure of its consistency where the nominal size of aggregate does not exceed 38 mm. It comprises the following :- (i) A slump cone 100 mm dia at the top, 200 mm dia at the bottom, and 300 mm high with two cleats and lifting handles (ii) A base plate with clamping arrangement for the slump cone and a swivel handle which also serves as the datum for measuring the slump. iii) A tamping rod 1.6 cm dia and 60 cm long with one end rounded and graduated from 0 to 15 cm in 0.5 cm spacing to measure the slump. (HEICO or equivalent)	Nos	1
21	CUBE MOULD (150 MM) WITH I.S.I MARK AS PER IS:10086-1982 Cube Mould made of cast iron having an internal size of 150mm with a tolerance of ± 0.2 and planeness of ± 0.03 mm. Cube Moulds are ISI Marked. Weight of the cube mould approx 13-14 kg. A 150 mm concrete cube mould is essential for preparing standardized specimens to assess the compressive strength of concrete. In India, the specifications for such moulds are outlined in IS 10086:1982, titled "Specification for Moulds for Use in Tests of Cement and Concrete. Below are the key specifications and requirements for a 150 mm cube mould as per this standard: Dimensions and Tolerances: • Internal Dimensions: The distance between opposite faces is 150 mm with a permissible tolerance of ± 0.2 mm. • Height: The mould's height is 150 mm ± 0.2 mm. • Base Plate Dimensions: • Length: 280 mm • Width: 215 mm • Thickness: 8 mm Material: Cube moulds are typically constructed from materials such as cast iron to ensure durability and dimensional stability. The side and base plates are often made of cast iron, providing the necessary strength and rigidity	Nos	54

LIST OF STORES**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026**

Ser No	Nomenclature	A/U	Qty
Stores to be supplied to Dett 'A' 504 SS&TC (GREF), Samdrup Jongkhar (Bhutan)			
22	COMPRESSION TESTING MACHINE WITH DIGITAL READOUT UNIT (4 KEY) - 1000kN Load Frame Load frame is a steel welded structure. It is designed to withstand a few million times of full cycles of loading without any sign of distortion or fatigue. These frames are light in weight. The base carries a fine finished hydraulic ram and the lower platen. The top plate has the spherical seating to take care of any irregularity of the specimen surface or slight misplacement of the specimen from the central position. As a safety precaution front cover is provided, as a protection to the operator while at the same time giving an unobstructive view of the specimen under test. Pumping Unit Pumping unit is attached on the right hand side of the loading unit. It is a multi plunger pump with booster arrangement. This facility is for fast raising of ram without load. Pump is submerged in the tank and is powered by 1.5 kW electric motor. Operating on 220 volts 50Hz AC supply (other voltages optional). Power pack gives nonpulsating flow to the hydraulic ram. This ensures smooth loading of the specimen which can be seen by the movement of the load gauge/digital display. The flow of the oil can be precisely controlled by the strain control knob located at a convenient height. With the proper check on the oil, the life of the pumping unit and the hydraulic ram is almost as long as, life of machine. Keeping in view the operators safety regulations, safety features like expanded sheet metal door, overload relief valve is provided as standard in the hydraulic circuit. Indication of load is on digital display system, which is directly indicated, in respective engineering unit. The electronic display unit is totally microprocessor based with a built in RS232 serial port. It has indication for load, peak load, and pace rate indicator. Pace rate is achieved manually by controlling the flow control knob and the system is released manually after the peak load is achieved. Readings can be transferred through the serial port to the computer at an interval of 1 sec till specimen failure. Capacity : 1000kN Max. Ram Travel : 50mm Day Light Clearance : 340mm Horizontal Clearance : 300mm Platen Size Diameter 256mm. (HEICO or equivalent)	Nos	1
23	AGGREGATE IMPACT TEST APPARATUS WITH COUNTER Required for determining the Impact Value of coarse aggregate. It consists of the following : i) Fitted with an auto-matic blow counter. ii) A heavy circular base with two vertical guides fitted with a cross bar at the top. iii) A hammer of 13.75 kg mass which can be raised and allowed to fall freely through 380 +5 mm with locking arrangement. iv) A cylindrical cup, a metal measure and a tamping rod 10 mm dia x 230 mm long. (HEICO or equivalent)	Nos	1
24	CENTRIFUGE EXTRACTOR (MOTORISED) For determining the quantity of bitumen in hot mixed paving mixtures and pavement samples. It is a portable unit for use in field and laboratory. It consists of a constant aluminium bowl. The bowl is coupled directly to a motor through flexible coupling. A variac is provided, which is preset to give 3500 r.p.m. to the bowl. The unit is suitable for operation on 220 V, single phase, 50 Hz supply. Capacity 1500gm. Suitable for operation on 220 V, 50 Hz, single phase supply. (HEICO or equivalent)	Nos	1
25	Automatic Compression Testing Machine Complete Specification as per Appx 'H' Attached. (HEICO or equivalent)	Set	1
26	Hot Air Oven (450 x 450 x 450 mm (200 deg.C) Inside chamber stainless steel with digital Temperature controller Temperature range ambient to 200 degree centigrade	Nos	1
27	LIQUID LIMIT DEVICE. The apparatus consists of a brass cup, a crank and cam mechanism, mounted on a rubber base of a specified hardness. A brass pin having a knurled end for easy removal holds the brass cup. The height of fall of the cup can be adjusted by a horizontal lead screw. Fitted with a F.H.P. motor to drive the operating mechanism of cup at 120 rpm ensuring uniformity in performing test. Works on 220 V, 50 Hz, single Phase, and is supplied with Grooving Tool Type 'A', 'B', & 'C' and gauge block as per IS :9259, IS:2720 (Part-V). (HEICO or equivalent)	Nos	1
28	LENGTH GAUGE, IS:2386 (PART-1) Non ISI 1963 Required for determining the elongation index of coarse aggregate. It consists of a metal plate on which 8 steel pins are vertically mounted with specified distances in between. This assembly is mounted on a hardwood base. (HEICO or equivalent)	Nos	1

Contd.....124

LIST OF STORES**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026**

Ser No	Nomenclature	A/U	Qty
Stores to be supplied to Dett 'A' 504 SS&TC (GREF), Samdrup Jongkhar (Bhutan)			
29	THICKNESS GAUGE, IS:2386 (PART-1) Non ISI 1963 Used for determining the Flakiness Index of aggregates. It consists of a panel having accurately cut slots of different standard lengths and widths, (HEICO or equivalent)	Nos	1
30	FLOW TABLE (HAND OPERATED) IS : 712-1964 Used for determining the workability of building lime. It comprises : i) One 300 mm dia polished steel table with three engraved circles of 70 mm, 110 mm and 190 mm dia at the top face. ii) A frame having a horizontal shaft carrying a cam on one side and a wheel on the other, adjusted to raise the table by 12.5 mm and allow it to fall freely. iii) Truncated conical mould 65 mm inside dia at the bottom, 40 mm inside dia at top and 90 mm high (HEICO or equivalent)	Nos	1
31	Enamel tray 600 x 450 x 50 mm	Nos	4
32	V FUNNEL The V- Funnel flow (with stand & tray) time is the period a defined volume of SCC (self consolidating concrete) needs to pass a narrow opening and gives an indication of the filling ability of SCC provided that blocking and or segregation do not take place, the flow time of the V-Funnel test is to some degree related to the plastic viscosity. Technical specifications are given below:- Top opening of hopper : 515mm x 75mm Bottom opening of hopper :65mm x 75mm Paper height : 450mm Straight height :150mm (HEICO or equivalent)	Nos	1
33	Filter paper 110 mm (Packet of 100 pcs) (Whatman or equivalent)	Nos	1
34	Thermometer 100 deg.c.	Nos	2
35	Digital electronic weighing machine 20 kg capacity	Nos	1
36	SIEVE SHAKER – MOTORISED Having a sturdy cast iron body, the sieve shaker has an inclined sieve table which can accommodate a maximum of seven sieves of 200 mm or 300 mm diameter. To hold the sieves an adjustable top clamping plate is provided. The table has a gyratory motion in addition to tapping action. The operating gear assembly is enclosed in an oil bath fitted with a transparent oil level indicator window. Suitable for operation on 220 V, 50 Hz, single phase supply. Fitted with time switch (HEICO or equivalent)	Nos	1
37	Bulk Density Apparatus 3,15,30 Ltr	Set	1
38	VICAT APPARATUS, WITH DASHPOT CONFIRMING TO IS:5513-1976 Without ISI Mark For determination of consistency of standard cement paste and initial and final setting times of cement. The equipment comprises the following :- i) A frame with a vertically movable rod having a cap at the top. ii) Vicat mould in the form of frustum of a cone with internal diameter of 60 mm at the top, 70mm at the bottom and a height of 40 mm. iii) Glass base plate for the mould. iv) Initial Setting Time Needle. v) Final Setting Time Needle. vi) Consistency plunger. (HEICO or equivalent)	Nos	1
39	LE-CHATELIER MOULD CONFORMING IS:5514-1969 Used for determination of soundness of cement, and class-A and class-B limes. The apparatus consists of the following :- i) One split cylinder 30 mm dia x 30 mm high made of spring brass with two indicator arms. ii) Two glass plates. iii) One lead weight approximately 100 gms (HEICO or equivalent)	Nos	1
40	Measuring cylinder Glass(250 ml & 500 ml)	Nos	3

Contd....13/-

LIST OF STORES**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026**

Ser No	Nomenclature	A/U	Qty
Stores to be supplied to Dett 'A' 504 SS&TC (GREF), Samdrup Jongkhar (Bhutan)			
41	Digital thermometer for Bitumen Temperature, with ISI Certification Mark Digital thermometer for Bitumen Temperature, with ISI Certification Mark Specification :- Minimum (-50 degree Celsius) to accommodate the range of bitumen temperatures. Maximum : 200 degree Celsius or higher, depending on specific needs for bitumen production process. Material : Stainless Steel is the preferred material for the probe due to its durability and resistance to corrosion in bitumen	Nos	6
42	Chemical benzene for bitumen extraction	Ltr	60
43	Extractor filter rings for bitumen extraction Specifications : Filter paper for extractor test 24cm dia pkt of 100 circles	Nos	300
44	Marshal stability & flow value machine Specification :- Load capacity : 50 KN (50,000N) or 5000 kgf Load Measurement : Strain gauge load cell with a specified accuracy Flow Measurement : Dial gauge or displacement transducer with a resolution of 0.01mm or 0.25mm increments Maximum Flow : Typically measured up to 25mm Maximum Flow : typically measured up to 25mm Platen speed : 50.8mm/Min (2 inches/min) Vertical travel : 70mm maximum	Nos	1
45	Digital thermometer gun Specification : Wide Range Measurement (-50 degree Celsius) to (+ 600 degree Celsius) Heavy duty plastic durable ABS material with a UV coating provided resistance to scratches, extreme temperature and accidently drop Dynamic Instant Reading Press trigger for live, dynamic reading Non-Contact digital handled temperature gun with back light LCD Display Industrial Thermometer for industrial	Nos	6



Registration No. of Firm
TIN No. of Firm
Firm Seal
Fax & Tele No.


(Vinod Kumar Sharma)
Lt Col
SO -1 (Res)
for Chief Engineer

Contd..... 14/-

TECHNICAL BID ('T' BID)**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026****(As per Clause Para 5)**

PARTICULAR OF FIRM			
SER NO	ITEMS	DETAILS	
1.	Name of firms		
2.	Legal Status of the firm	Individual company (Incorporated un-incorporated)/ Partnership firm / public limited	
3.	Address		
4.	Contact Telephone, Mobile & Fax No		
5.	E-mail address		
6.	GSTIN No		
7.	PAN No		
8.	Registration details :-		
	(a) Registration/Enlistment No.		
	(b) With whom registered /enlisted		
	(c) Letter ref under which registered/enlisted (Enclose copy)		
9.	EMD (For unregistered consignor / firm only) EMD in the form of cheque is not acceptable. EMD be submitted in the form of Fixed Deposit Receipt or Bank Guarantee only	Amount Rs 3,50,000/- Fixed Deposit Receipt or Bank Guarantee Number _____ Dated : _____	
Date		(Signature of authorized rep of firm with seal)	

Note:

1. Firm enlisted with HQ CE (Project) Dantak need not enclose photocopy of GSTIN No, PAN No and copy of letters reference under which registered. Rest all firms should enclose relevant photocopies.
2. Firms should enclose all relevant documents as mentioned under Para 5 of this Enquiry in addition to the above details, failing which the firm will be rejected during 'T' Bid evaluation.



(Signature of consignor)

(Vinod Kumar Sharma)
Lt Col
SO-1 (Res)
for Chief Engineer

Contd..... 15/-

PRICE BID ('Q' BID)**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026**

Ser No	Nomenclature	A/U	Qty	Basic Price (Unit price including Freight Charges)	Bhutan GST (Excl (e))	Total Amt
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Stores to be supplied to 504 SS&TC (GREF), Phuentsholing (Bhutan)						
1.	Liquid Limit Cone Penetrometer, Automatic Specification - Standard: IS 2720 (Part 5): 1985 (Reaffirmed 2020) Cone: Stainless steel cone, apex angle 30° ± 30', total sliding weight 148g (cone + assembly). Release Timer: Digital timer set to 5 seconds. Penetration Measurement: Digital or analog depth gauge with 0.1 mm least count. Accessories: Sample containers, penetration measuring scale, calibration tools. Usage: For determining liquid limit of soil using cone penetration method.	Nos	1			
2.	Laboratory CBR machine Digital Specification :- Standard: IS 2720 (Part 16): 1987 Capacity: Minimum 50 kN (5 Ton). Platen Speed: Fixed at 1.25 mm/min. Load Measurement: Digital proving ring or load cell. Displacement Measurement: Dial gauge or digital with 0.01 mm least count. Accessories: CBR moulds, surcharge weights, spacer disc, penetration piston. Usage: For determining California Bearing Ratio of soil subgrade.	Nos	1			
3.	CORE DRILLING MACHINE (CUT CORES LARGER THAN 150MM) It is a compact drilling machine that can drill through hard Rock, Concrete, Bitumen, tiles, and marbles. Adequate fixtures are provided to drill cores of 100 from 150 mm diameter Gyrotory samples and multiple cores from slab of 410x 260x (max) 100mm height. The unit have a rigid, stable and vibration free platform. The unit have arrangement for both Lateral and longitudinal movement of the main sample holding jig to facilitate coring from bigger diameter cores and multi cores from slabs. The sample is moveable in X-Y direction and the main frame is stationary and have Z movement. Due to the flexibility in multi direction multiple cores of different sizes can be cored from slab of the size given above. Salient Features 1. Ideal for drilling test cores in laboratory environment from larger 150 mm diameter Gyrotory cores; Ideal for drilling extracting 3 Nos x 100 mm diameter cores for slabs Ideal for extracting multiple cores of different sizes from slabs 2. A stainless steel container with water arrangement is provided with clamping fixture for 150 mm diameter core and 410x 260x 100mm (max). 3. Clamping is rigid and positive. 4. Facility for taking out 3 cores of 100 mm diameter from the above mentioned size slab Rigid floor fixing. 5. Water swivel for circulation and cooling of the tip. 6. Core depth up to 450mm. 7. Power of the Motor: 2200 Watts Multiple Speeds: (3 speeds): 450,1200,2500 rpm Power Supply: 230 Volts, 50 Hz AC. 8. Travel on the pillar about 600 mm. 9. Bits Core diameter 100mm 5 No. 10. Core diameter 150mm 2 No. 11. Barrels For 100 mm bit 1 No For 150 mm bit 1 No. (HEICO or equivalent)	Nos	1			

Contd....16/-

PRICE BID ('G' BID)**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026**

Ser No	Nomenclature	A/U	Qty	Basic Price (Unit price including Freight Charges)	Bhutan GST (Excl (e))	Total Amt
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Stores to be supplied to 504 SS&TC (GREF), Phuentsholing (Bhutan)						
4.	Digital Rebound Hammer Specification:- Standard: IS 13311 (Part 2): 1992 Impact Energy: 2.207 Nm. Measurement Range: 10 to 70 N/mm ² . Display: Digital with memory storage and USB/Bluetooth data transfer. Calibration: With standard anvil as per IS. Usage: For non-destructive testing of concrete compressive strength.	Nos	1			
5.	Density Basket Specification:- Standard: IS 2386 (Part 3): 1963 Material: Non-corrodible wire mesh (stainless steel). Size: Approx. 20 cm diameter x 20 cm height. Mesh Size: 6.3mm. Accessories: Wire handle and water bath frame. Usage: For specific gravity and water absorption test of aggregates.	Nos	1			
6.	Ring and Ball Apparatus, Electrically Operated Specification:- Standard: IS 1205: 1978 Heating System. Electric with digital temperature control. Temperature Range: Ambient to 200°C. Accessories: Brass rings, steel balls, thermometer (ASTM 15°C to 300°C), beaker, stirrer. Usage: For softening point determination of bituminous materials.	Nos	1			
	Muffle Furnace Specification:- Standard: IS 4031 (Part 2): 1968 Temperature Range: Up to 1000°C. Chamber Size: Minimum 6" x 6" x 12". Controller: Digital PID with programmable timer. Heating Element: Kanthal A1 wire or equivalent. Safety: Thermocouple with auto cut-off. Usage: For loss on ignition, gravimetric and ash content tests.	Nos	1			
8.	Benzene Specification:- IS 2848:1986 (Reaffirmed 2020)	Ltrs	7			
9.	Digital thermometer for Bitumen Temperature, with ISI Certification Mark Specification :- Minimum (-50 degree Celsius) to accommodate the range of bitumen temperatures. Maximum : 200 degree Celsius or higher, depending on specific needs for bitumen production process. Material : Stainless Steel is the preferred material for the probe due to its durability and resistance to corrosion in bitumen.	Nos	5			
10.	Extractor filter rings for bitumen extraction Specifications : Filter paper for extractor test 24cm dia pkt of 100 circles	Nos	1			
11.	Marshal stability & flow value machine Specification :- Load capacity : 50 KN (50,000N) or 5000 kgf Load Measurement : Strain gauge load cell with a specified accuracy Flow Measurement : Dial gauge or displacement transducer with a resolution of 0.01mm or 0.25mm increments Maximum Flow : Typically measured up to 25mm Maximum Flow : typically measured up to 25mm Platen speed : 50.8mm/Min (2 inches/min) Vertical travel : 70mm maximum	Nos	1			

Contd.....17/-

PRICE BID ('Q' BID)**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/EJES dt 10 Sep 2026**

Ser No	Nomenclature	A/U	Qty	Basic Price (Unit price including Freight Charges)	Bhutan GST (Excl (e))	Total Amt
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Stores to be supplied to 504 SS&TC (GREF), Phuentsholing (Bhutan)						
12.	Digital thermometer gun Specification : Wide Range Measurement (-50 degree Celsius) to (+ 600 degree Celsius) Heavy duty plastic durable ABS material with a UV coating provided resistance to scratches, extreme temperature and accidently drop Dynamic Instant Reading Press trigger for live, dynamic reading Non Contact digital handed temperature gun with back light LCD Display Industrial Thermometer for industrial	Nos	8			
13.	Core cutting machine : Specification : 10 CM Dia Diamond Cutting Edge Dimensions 3.5 Feet X 3 Feet Height 4.5 Feet Model type -Petrol Engine, Weight 200 Kg Engine Capacity 5.5 HP	Nos	1			
14.	NON-Nuclear Asphalt Density Gauge, IWIN or equivalent	Nos	1			
15.	Light Weight Deflectometer Weight:- 15Kgs Drop Weight:- 10Kgs Maximum Impact Force: 7.07KN Diameter:- 300mm Thickness:- 20mm	Nos	1			



Registration No. of Firm
TIN No. of Firm
Firm Seal
Fax & Tele No.

(Vinod Kumar Sharma)
Lt Col
SO -1 (Res)
for Chief Engineer

Contd....18/-

PRICE BID ('Q' BID)

HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENG-24/E3ES dt 10 Sep 2026

Ser No	Nomenclature	A/U	Qty	Basic Price (Unit price including Freight Charges)	Bhutan GST (Excl (e))	Total Amt
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Stores to be supplied to Dett 'A' 504 SS&TC (GREF), Samdrup Jongkhar (Bhutan)						
16.	Total Station with complete accessories Make: & Type: Sokkia Im-55 model or equivalent <u>Telescope</u> Magnification/Resolving Power : 30x/2.6" Others : Length : 171 mm, Objective aperture : 45 mm (48 mm for EDM), Image : Erect, Field of View : 1o30' Minimum focus : 1.3 m, Reticle illumination : 5 brightness levels <u>Angle Measurement</u> Minimum display (Selectable) : 1"/5" Accuracy (ISO 17123-3-2001) : 2" Collimation compensation : On/Off Selectable <u>Distance measurement</u> Laser output : Reflectorless mode : Class 3R/ Prism/ Sheet Mode : Class1 Measuring range (under average conditions) Reflectorless : 0.3 to 500 m Measuring range (under average conditions) Reflective sheet : RS60N-K : 1.3 to 500 mm RS60N-k : 1.3 to 300 mm RS10N-K - 1.3 to 100 m Supplied complete with One big prism set, one mini prism, one heavy duty fibre tripod double lock.	Nos	1			
	<u>Mild Steel Digital Schmidt Rebound Hammer Proceq ST/Type N</u> (a) Language independent user interface (b) Data acquisition & processing (c) Impact energy: 2.207 Nm (1.63 lbf) (d) Concrete Compressive Strength Range: 10 - 100 N/mm² (1450-14500 psi) (e) Weight: 570 g (1.3 lb) (f) Display: 17 x 71 pixel (g) graphic (h) Battery life: >5000 impacts between charges (i) Charger connection: USB type B (5 V 10. 100 mA) (j) Operating temperature: 0 to 50 _C (32 to 122 _F) (k) Storage temperature: -10 to 70 _C (14 to 158 _F) (l) Conforms to ASTM C-805 (m) BS-1881-202 (n) IS 13311	Nos	1			
18.	G.I. sieves 300 mm dia. Sizes 100mm, 80mm, 63mm, 40mm, 25mm, 20mm, 12.5mm, 4.75mm, 6.3mm with Lid & Pan	Set	1			
19.	Sieves 200 mm dia. spun brass frame size 4.75 mm, 2.36 mm, 1.18 mm, 600 mic, 300 mic, 150 mic, 75 mic, lid and pan	Set	1			
20.	SLUMP TEST APPARATUS IS: 7320-1974 Used for determination of slump of fresh concrete mix as a measure of its consistency where the nominal size of aggregate does not exceed 38 mm. It comprises the following :- (i) A slump cone 100 mm dia at the top, 200 mm dia at the bottom, and 300 mm high with two cleats and lifting handles (ii) A base plate with clamping arrangement for the slump cone and a swivel handle which also serves as the datum for measuring the slump. (iii) A tamping rod 1.6 cm dia and 60 cm long with one end rounded and graduated from 0 to 15 cm in 0.5 cm spacing to measure the slump (HEICO or equivalent)	Nos	1			

PRICE BID ('C' BID)

HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026

Ser No	Nomenclature	A/U	Qty	Basic Price (Unit price including Freight Charges)	Bhutan GST (Excl (e))	Total Amt
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Stores to be supplied to Dett 'A' 504 SS&TC (GREF), Samdrup Jongkhar (Bhutan)						
21.	CUBE MOULD (150 MM) WITH ISI MARK AS PER IS-10086-1982 Cube Mould made of cast iron having an internal size of 150mm with a tolerance of ± 0.2 and planeness of ± 0.03 mm. Cube Moulds are ISI Marked. Weight of the cube mould approx 13-14 kg. A 150 mm concrete cube mould is essential for preparing standardized specimens to assess the compressive strength of concrete. In India, the specifications for such moulds are outlined in IS 10086:1982, titled "Specification for Moulds for Use in Tests of Cement and Concrete. Below are the key specifications and requirements for a 150 mm cube mould as per this standard: Dimensions and Tolerances: • Internal Dimensions: The distance between opposite faces is 150 mm with a permissible tolerance of ± 0.2 mm. • Height: The mould's height is 150 mm ± 0.2 mm. • Base Plate Dimensions: • Length: 280 mm • Width: 215 mm • Thickness: 8 mm Material: Cube moulds are typically constructed from materials such as cast iron to ensure durability and dimensional stability. The side and base plates are often made of cast iron, providing the necessary strength and rigidity.	Nos	54			
22.	COMPRESSION TESTING MACHINE WITH DIGITAL READOUT UNIT (4 KEY) 1000kN Load Frame Load frame is a steel welded structure. It is designed to withstand a few million times of full cycle of loading without any sign of distortion or fatigue. These frames are light in weight. The base carries a fine finished hydraulic ram and the lower platen. The top plate has the spherical seating to take care of any irregularity of the specimen surface or slight misplacement of the specimen from the central position. As a safety precaution front cover is provided, as a protection to the operator while at the same time giving an unobstructive view of the specimen under test. Pumping Unit Pumping unit is attached on the right hand side of the loading unit. It is a multi plunger pump with booster arrangement. This facility is for fast raising of ram without load. Pump is submerged in the tank and is powered by 1.5 kW electric motor. Operating on 220 volts 50Hz AC supply (other voltages optional). Power pack gives nonpulsating flow to the hydraulic ram. This ensures smooth loading of the specimen which can be seen by the movement of the load gauge/digital display. The flow of the oil can be precisely controlled by the strain control knob located at a convenient height. With the proper check on the oil, the life of the pumping unit and the hydraulic ram is almost as long as, life of machine. Keeping in view the operators safety regulations, safety features like expanded sheet metal door, overload relief valve is provided as standard in the hydraulic circuit. Indication of load is on digital display system, which is directly indicated, in respective engineering unit. The electronic display unit is totally microprocessor based with a built in RS232 serial port. It has indication for load, peak load, and pace rate indicator. Pace rate is achieved manually by controlling the flow control knob and the system is released manually after the peak load is achieved. Readings can be transferred through the serial port to the computer at an interval of 1 sec till specimen failure. Capacity : 1000kN Max. Ram Travel : 50mm Day Light Clearance : 340mm Horizontal Clearance : 300mm Platen Size Diameter : 256mm (HEICO or equivalent)	Nos	1			

PRICE BID ('Q' BID)

HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026

Ser No	Nomenclature	A/U	Qty	Basic Price (Unit price Including Freight Charges)	Bhutan GST (Excl (e))	Total Amt
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Stores to be supplied to Dett 'A' 504 SS&TC (GREF), Samdrup Jongkhar (Bhutan)						
23	AGGREGATE IMPACT TEST APPARATUS WITH COUNTER Required for determining the Impact Value of coarse aggregate. It consists of the following :- i) Fitted with an auto-matic blow counter. ii) A heavy circular base with two vertical guides fitted with a cross bar at the top. iii) A hammer of 13.75 kg mass which can be raised and allowed to fall freely through 380 +5 mm with locking arrangement. iv) A cylindrical cup, a metal measure and a tamping rod 10 mm dia x 230 mm long. (HEICO or equivalent)	Nos	1			
24	CENTRIFUGE EXTRACTOR (MOTORISED) For determining the quantity of bitumen in hot mixed paving mixtures and pavement samples. It is a portable unit for use in field and laboratory. It consists of a constant aluminium bowl. The bowl is coupled directly to a motor through flexible coupling. A variac is provided, which is preset to give 3500 r.p.m. to the bowl. The unit is suitable for operation on 220 V, single phase, 50 Hz supply. Capacity 1500gm. Suitable for operation on 220 V, 50 Hz, single phase supply. (HEICO or equivalent)	Nos	1			
25	Automatic Compression Testing Machine Complete Specification as per Appx 'H' Attached. (HEICO or equivalent)	Set	1			
26	Hot Air Oven (450 x 450 x 450 mm (200 deg.C) Inside chamber stainless steel with digital Temperature controller Temperature range ambient to 200 degree centigrade	Nos	1			
27	LIQUID LIMIT DEVICE, The apparatus consists of a brass cup, a crank and cam mechanism, mounted on a rubber base of a specified hardness. A brass pin having a knurled end for easy removal holds the brass cup. The height of fall of the cup can be adjusted by a horizontal lead screw. Fitted with a F.H.P. motor to drive the operating mechanism of cup at 120 rpm ensuring uniformity in performing test. Works on 220 V, 50 Hz, single Phase, and is supplied with Grooving Tool Type 'A', 'B', & 'C' and gauge block as per IS :9259, IS:2720 (Part-V). (HEICO or equivalent)	Nos	1			
28	LENGTH GAUGE, IS:2386 (PART-1) Non ISI 1963 Required for determining the elongation index of coarse aggregate. It consists of a metal plate on which 8 steel pins are vertically mounted with specified distances in between. This assembly is mounted on a hardwood base. (HEICO or equivalent)	Nos	1			
29	THICKNESS GAUGE, IS:2386 (PART-1) Non ISI 1963. Used for determining the Flakiness Index of aggregates. It consists of a panel having accurately cut slots of different standard lengths and widths. (HEICO or equivalent)	Nos	1			
30	FLOW TABLE (HAND OPERATED) IS : 712-1984 Used for determining the workability of building lime. It comprises : i) One 300 mm dia polished steel table with three engraved circles of 70 mm, 110 mm and 190 mm dia at the top face. ii) A frame having a horizontal shaft carrying a cam on one side and a wheel on the other, adjusted to raise the table by 12.5 mm and allow it to fall freely. iii) Truncated conical mould 65 mm inside dia at the bottom, 40 mm inside dia at top and 90 mm high (HEICO or equivalent)	Nos	1			

Contd.....21/-

PRICE BID ('Q' BID)**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026**

Ser No	Nomenclature	A/U	Qty	Basic Price (Unit price Including Freight Charges)	Bhutan GST (Excl (e))	Total Amt
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Stores to be supplied to Dett 'A' 504 SS&TC (GREF), Samdrup Jongkhar (Bhutan)						
31	Enamel tray 600 x 450 x 50 mm	Nos	4			
32	V FUNNEL The V- Funnel flow (with stand & tray) time is the period a defined volume of SCC (self consolidating concrete) needs to pass a narrow opening and gives an indication of the filling ability of SCC provided that blocking and or segregation do not take place. the flow time of the V- Funnel test is to some degree related to the plastic viscosity. Technical specifications are given below:- Top opening of hopper : 515mm x 75mm Bottom opening of hopper :65mm x 75mm Taper height : 450mm Straight height: 150mm (HEICO or equivalent)	Nos	1			
33	Filter paper 110 mm (Packet of 100 pcs) (Whatman or equivalent)	Nos	1			
34	Thermometer 100 deg.c.	Nos	2			
35	Digital electronic weighing machine 20 kg capacity	Nos	1			
36	SIEVE SHAKER - MOTORISED Having a sturdy cast iron body, the sieve shaker has an inclined sieve table which can accommodate a maximum of seven sieves of 200 mm or 300 mm diameter. To hold the sieves an adjustable top clamping plate is provided. The table has a gyratory motion in addition to tapping action. The operating gear assembly is enclosed in an oil bath fitted with a transparent oil level indicator window. Suitable for operation on 220 V, 50 Hz, single phase supply. Fitted with time switch	Nos	1			
37	Bulk Density Apparatus 3,15,30 Ltr	Set	1			
38	VICAT APPARATUS, WITH DASHPOT CONFIRMING TO IS:5513-1976 Without ISI Mark For determination of consistency of standard cement paste and initial and final setting times of cement. The equipment comprises the following :- i) A frame with a vertically movable rod having a cap at the top. ii) Vicat mould in the form of frustum of a cone with internal diameter of 60 mm at the top, 70mm at the bottom and a height of 40 mm. iii) Glass base plate for the mould. iv) Initial Setting Time Needle. v) Final Setting Time Needle. vi) Consistency plunger. (HEICO or equivalent)	Nos	1			
39	LE-CHATELIER MOULD CONFORMING IS:5514-1969 Used for determination of soundness of cement, and class-A and class-B limes. The apparatus consists of the following :- i) One split cylinder 30 mm dia x 30 mm high made of spring brass with two indicator arms. ii) Two glass plates. iii) One lead weight approximately 100 gms (HEICO or equivalent)	Nos	1			
40	Measuring cylinder Glass(250 ml & 500 ml)	Nos	3			

Contd.....22/-

PRICE BID ('Q' BID)**HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENG-24/E3ES dt 10 Sep 2026**

Ser No	Nomenclature	A/U	Qty	Basic Price (Unit price including Freight Charges)	Bhutan GST (Excl (e))	Total Amt
(a)	(b)	(c)	(d)	(e)	(f)	(g)
Stores to be supplied to Dett 'A' 504 SS&TC (GREF), Samdrup Jongkhar (Bhutan)						
41	Digital thermometer for Bitumen Temperature, with ISI Certification Mark Digital thermometer for Bitumen Temperature, with ISI Certification Mark Specification :- Minimum (-50 degree Celsius) to accommodate the range of bitumen temperatures. Maximum : 200 degree Celsius or higher, depending on specific needs for bitumen production process Material : Stainless Steel is the preferred material for the probe due to its durability and resistance to corrosion in bitumen	Nos	5			
42	Chemical benzene for bitumen extraction	Ltr	60			
43	Extractor filter rings for bitumen extraction Specifications : Filter paper for extractor test 24cm dia pkt of 100 circles	Nos	300			
44	Marshal stability & flow value machine Specification :- Load capacity : 50 KN (50,000N) or 5000 kgf Load Measurement : Strain gauge load cell with a specified accuracy Flow Measurement : Dial gauge or displacement transducer with a resolution of 0.01mm or 0.25mm increments Maximum Flow : Typically measured up to 25mm Maximum Flow : typically measured up to 25mm Platen speed : 50.8mm/Min (2 inches/min) Vertical travel : 70mm maximum	Nos	1			
45	Digital thermometer gun Specification : Wide Range Measurement (-50 degree Celsius) to (+ 500 degree Celsius) Heavy duty plastic durable ABS material with a UV coating provided resistance to scratches, extreme temperature and accidently drop Dynamic Instant Reading Press trigger for live, dynamic reading Non Contact digital handled temperature gun with back light LCD Display Industrial Thermometer for industrial	Nos	5			



Registration No. of Firm
TIN No. of Firm
Firm Seal
Fax & Tele No.

(Vinod Kumar Sharma)
Lt Col
SO -1 (Res)
for Chief Engineer

Contd.... 23/-

EMD BANK GUARANTEE FORMATHQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026

Whereas (hereinafter called the "Bidder") has submitted their offer against enquiry No 30003/DTK/19TF/ENQ-24/E3ES dated 10 Sep 2026 for the supply of stores (hereinafter called the "Bid") against the Buyer's Request for proposal No 30003/DTK/19TF/SO-/E3ES dated ____/____/2026 KNOW ALL MEN by these presents that we of having our registered office at are bound unto (hereinafter called the "Buyer") in the sum of for which payment will and truly to be made to the said Buyer, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this day of ____/____/2026.

The conditions of obligations are:-

1. If the Bidder withdraws or amends, impairs or derogates from the Bid in any respect within the period of validity of this tender.
2. If the Bidder having been notified of the acceptance of his tender by the Buyer during the period of its validity.
3. If the Bidder fails to furnish the Performance Bank Guarantee for the due performance of the supply order.
4. Fails or refuses to accept/execute the supply order.

WE undertake to pay the Buyer up to the above amount upon receipt of its first written demand, without the Buyer having to substantiate its demand, provided that in its demand the Buyer will note that the amount claimed by it is due to it owing to the occurrence of one or both the two conditions, specifying the occurred condition or conditions. This guarantee will remain in force upto and including 90 days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

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(Signature of the authorized officer of the Bank)

Name and designation of the officer

Seal, name & address of the Bank and address of the Branch

Contd.....24/-

PERFORMANCE BANK GUARANTEE FORMATHQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026

From: _____
 Bank _____
 To: _____

.....

Dear Sir,

1. Whereas you have entered into a supply order No 30003/DTK/19TF/SO- /E3ES dated ____/____/2026 (hereinafter referred to as the said supply order) with _____, hereinafter referred to as the "seller/consignor" for supply of goods as per Part-II of the said supply order to the said seller/consignor and whereas the Seller/consignor has undertaken to produce a bank guarantee for (5%) of total supply order value amounting to _____ to secure its obligations to the HQ CE (P) Dantak. We the _____ bank hereby expressly, irrevocably and unreservedly undertake and guarantee as principal obligors on behalf of the seller/consignor that, in the event that the HQ CE (P) Dantak declares to us that the goods have not been supplied according to the performance obligations under the aforementioned supply order, we will pay you, on demand and without demur, all and any sum up to a maximum of _____ (Rupees _____ only). Your written demand shall be conclusive evidence to us that such repayment is due under the terms of the said supply order. We undertake to effect payment upon receipt of such written demand.

2. We shall not be discharged or released from this undertaking and guarantee by any arrangements, variations made between you and the Seller/consignor, indulgence to the Seller/consignor by you, or by any alterations in the obligations of the Seller/consignor or by any forbearance whether as to payment, time performance or otherwise.

3. In no case shall the amount of this guarantee be increased.

4. This guarantee shall remain valid for months from the date of acceptance of consignment in India/Bhutan or until all the store, spares and documentation have been supplied according to the performance obligations under the said supply order at the destination FOR.

6. Unless a demand or claim under this guarantee is made on us in writing or on before the aforesaid expiry date as provided in the above referred supply order or unless this guarantee is extended by us, all your rights under this guarantee shall be forfeited and we shall be discharged from the liabilities hereunder.

7. This guarantee shall be a continuing guarantee and shall not be discharged by and change in the constitution of the Bank or in the constitution of M/s _____

Contd... 25/-

FORMAT OF CERTIFICATE OF ACCEPTANCEHQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026CERTIFICATE OF ACCEPTANCE

1. Certified that the M/s _____, hereby accepts the supply order No 30003/DTK/19TF/SO- /E3ES dated __ / __ /2026 of the against enquiry No 30003/DTK/19TF/ENQ-24/E3ES dated 10 Sep 2026 as per the supply order assigned to them and handed over the same to HQ CE (P) Dantak at _____ hours, on this _____ day of the month _____ in the year two thousand and twenty six.

2. The list of liabilities as on date is placed at annexure to this certificate.

3. Signed on _____ day of _____ two thousand and twenty six.



REP _____
FOR AND ON BEHALF OF
THE CHIEF ENGINEER PROJECT DANTAK

REP OF _____
M/s _____

Note: This certificate of acceptance will remain in force till the validity of supply order.

Contd...26/-

HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026

UNDERTAKING CERTIFICATE

It is certified that the goods / materials given in the Enquiry No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026 of HQ CE (P) Dantak will be supplied by me / our firm as export and for use in Bhutan. It is declared that no GST cost has been included by me in the rates quoted in above mentioned enquiry".

Stamp & Signature with date :

Name of the bidder :

Name of firm with address :

Contd...27/-

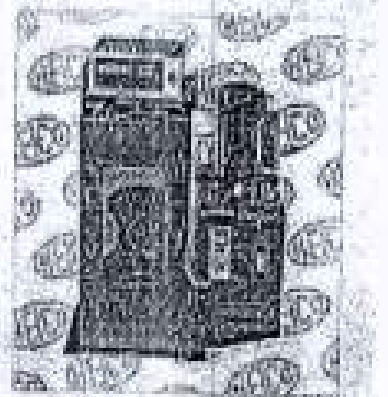
HQ CE (PI) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026

SPECIFICATION OF AUTOMATIC COMPRESSION TESTING MACHINE

5. HLM392.301 COMPRESSION TESTING MACHINE WITH DIGITAL READOUT UNIT - 2000kN

Load Frame

Load frame is a steel welded structure. It is designed to withstand a few million times of full cycles of loading without any sign of distortion or fatigue. These frames are light in weight. The base carries a fine finished hydraulic ram and the lower platen. The top plate has the spherical seating to take care of any irregularity of the specimen surface or slight misplacement of the specimen from the central position. As a safety precaution front cover is provided, as a protection to the operator while at the same time giving an unobstructive view of the specimen under test.



Pumping Unit

Pumping unit is attached on the right hand side of the loading unit. It is a multi plunger pump with booster arrangement. This facility is for fast raising of ram without load. Pump is submerged in the tank and is powered by 1.5 kW electric motor. Operating on 220 volts 50Hz AC supply (other voltages optional). Power pack gives nonpulsating flow to the hydraulic ram. This ensures smooth loading of the specimen which can be seen by the movement of the load gauge/digital display. The flow of the oil can be precisely controlled by the strain control knob located at a convenient height. With the proper check on the oil, the life of the pumping unit and the hydraulic ram is almost as long as, life of machine. Keeping in view the operators safety regulations, safety features like expanded sheet metal door, overload relief valve is provided as standard in the hydraulic circuit. Indication of load is on digital display system, which is directly indicated, in respective engineering unit. The electronic display unit is totally microprocessor based with a built in RS232 serial port. It has indication for load, peak load, and pace rate indicator. Pace rate is achieved manually by controlling the flow control knob and the system is released manually after the peak load is achieved. Readings can be transferred through the serial port to the computer at an interval of 1 sec till specimen failure.

Capacity : 2000kN Max.

Ram Travel : 50mm

Day Light Clearance : 340mm

Horizontal Clearance : 300mm

Platen Size Diameter : 255 mm

Supplied complete with NABL Calibration Certificate

6. Automatic Compression Testing Machine (Load Control) 2000 kN with NABL Calibration Certificate

Automatic Compression Testing Machine is capable of conducting compression tests on concrete specimens (Cubes and Cylinders) and allied products as per IS: 516/IS: 4031 Part 6: 1988/ASTM C 39 and conforms to requirement of IS : 14858-2000. These compression Testing Machine are state of the art machines based on the principle of CLOSE LOOP. The system can be loaded in load/stress control basis. The system accuracy is better than $\pm 1\%$ of indicated value of load. A special type of 4 piece of tiled spherical seating is provided conforming to IS : 14858-2000.

HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENO-24/E3ES dt 10 Sep 2026

The system has an arrangement for automatic pacing system based on closed loop feed back principle, which is achieved by the combination of advance hydraulic and electronic system. Control signal from the electronic system is passed on to the control drive of the motor through the P.I.D. Controller which in turns control the flow to the hydraulic ram thereby keeping the pace rate within $\pm 2\%$ of the pre programmed value.

Salient Features:-

1. Conforming to Testing Procedures laid down in IS : 516/IS : 4031 : Part 6: 1986/ASTM C39 for concrete specimen.
2. Machine conforming to IS : 14858.
3. Microprocessor based touch panel graphic display to control the machine operation and display of data.
4. Programmable rate of loading (Pace rate) and other sample parameters.
5. Real time display of load and peak load value with pace rate deviation bars.
6. Inching/fast lift operation to adjust gap between sample and upper platen.
7. Automatic release facility after sample failure
8. Automatic strength calculation and display
9. Peak stress calculation based on sample type, shape and dimensions
10. Storing of results in user defined file with sample parameter and other details
11. Transfer of result sheet to USB drive for printing and further analysis
12. Safety limits for Over Load and Over Displacement ranges.



The complete system consists of Load Frame, Hydraulic Pumping Unit, Microprocessor based touch panel display and control system & various height spacers to accommodate different size specimen.

1) Load Frame

Load frame is steel welded fabricated structure. It is designed to withstand a few million times of full cycles of loading without any sign of distortion or fatigue. These frames are light in weight. The base carries a fine finished hydraulic ram and the lower platen. The top plate has the oil filled spherical seating to take care of any irregularity of the specimen surface or slight misplacement of the specimen from the central position. Front cover is provided as a protection to the operator while at the same time giving an unobstructive view of the specimen under test. Proximity switch/ limit switch is provided as safe guard against over travel.

Technical specifications

Capacity	: 2000kN
Max. Ram travel	: 50 mm
Day Light clearance	: 340 mm
Horizontal clearance	: 350 mm

HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026

Size of platen : 256
mm

2) Hydraulic Pumping System

Hydraulic pumping system, housed in an elegant console for low noise, consists of multi plunger pump driven by a suitable servo motor operated on 220 V, Single Phase, 50 Hz. This pump gives a continuous non pulsating oil flow to the ram of the loading frame. Pressure switch is provided for additional safety against over load. Release valve is also placed at a convenient location to release the load manually after sample failure.

3) Microprocessor based Touch panel display & Control system

Control system provides the digital servo control, Ramp generation for the machine, data acquisition etc. for the continuous operation of the system

Specification of Controlled Unit

1. Automatic pace rate control as programmed in the controller
2. Control Channel - Load/Stress
3. Load ranges 0-2000 kN
4. Least count 0.1 kN
5. Supply input : 220-240 VAC, 50 Hz.

Salient features of System

1. Menu Driven Interface
2. Facility to perform various operations such as TARE, PROGRAMMING, START, STOP Etc. from touch panel display
3. Programmable rate of loading (Pace rate) and sample parameters (Shape, Dimension etc.) through touch panel display
4. Standalone system to operate the machine (Start, stop and hold) without computer
5. Microprocessor based touch panel graphic display to control the machine operation and display of data
6. Fully automated operation to start, stop and hold loading with automatic pace rate control from 1-10 kN/sec.,
7. Automatic strength calculation and display
8. Automatic pace rate control at preset value with pace deviation bar,
9. On-Line display of Load and Peak load with recording of peak load along other sample details
10. Peak stress calculation based on sample type, shape and dimensions
11. Configurable Engineering Units for machine selection
12. Storing of results in user defined file with sample parameter and other details
13. Real time clock check to keep automatic track of the date, time and runs
14. Test results can be stored in the electronic unit with unique record no. and can be retrieved and transferred to USB drive for printing
15. Transmission of Data to computer through Ethernet/USB/RS232 Port.]

HQ CE (P) Dantak Eng No 30003/DTK/19TF/ENQ-24/E3ES dt 10 Sep 2026

SELF DECLARATION CERTIFICATE



It is certified that my firm M/s _____ is not under ban from participation in tenders by any Govt. organization of India/Bhutan. In the event of my declaration being found as not true, my bid be cancelled and I will have no objection to it.

Stamp & Signature with date :

Name of the bidder :

Name of firm with address :