



Tender Ref. No.: NTSC/RAJ/MTL/2021-22/01

**TENDER DOCUMENT
FOR
SUPPLY, INSTALLATION AND
COMMISSIONING OF
SERVO CONTROLLED UNIVERSAL
TESTING MACHINE (40 TON)**

NSIC- Technical Services Centre

(A Government of India Enterprise)
Aji Industrial Area, Opp Gujarat Forging,
Rajkot-360003 (Gujarat)
Tel No. 0281-2387730, 2387397/98
Fax: - 0281-2387729

Email: ntscraj@nsic.co.in

Website: www.nsic.co.in or, www.eprocure.gov.in



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**NOTICE INVITING TENDER**

The National Small Industries Corporation Ltd. (NSIC), Rajkot invites sealed tender in **Single stage, two envelope method** (i.e. Technical & Financial bid in two separate envelopes) from eligible and qualified Original Equipment Manufacturer/ Authorized Distributors of OEM / Authorized Dealers of OEM for the Supply, Installation and Commissioning of Servo Controlled Universal Testing Machine (40 Ton).

The details are summarized below:-

a)	Tender number	Reference number for inviting bids through this tender is NTSC/RAJ/MTL/2021-22/01
b)	Purchaser	The National Small Industries Corporation Ltd. which is a Government of India Enterprise under the Ministry of Micro, Small & Medium Enterprises.
c)	Usage of Machine	The purchaser would place the Servo Controlled Universal Testing Machine (40 Ton) in existing laboratory and shall be utilized for Material Testing.
d)	Scope of Tender	Supply, Installation, Commissioning of Servo Controlled Universal Testing Machine (40 Ton) (details in para 4 of Instructions to the Tenderers).
e)	Specification/ Details of machine	The detailed specifications of machine are specified in tender and placed at Annexure-A
f)	Web page for details of tender	Web page: http://www.nsic.co.in/tenders.asp or www.eprocure.gov.in The prospective Bidders are advised to remain in touch with the website for any update in respect of this tender.
g)	Locations of supplies	The Servo Controlled Universal Testing Machine (40 Ton) is/are proposed to be supplied at NSIC-Technical Services Centers, Aji
h)	Earnest Money Deposit (EMD) along with Tender	EMD of Rs. 25,000/- (Rupees Twenty Five Thousand only) shall be submitted in the form of D.D. in favour of “NSIC Ltd” payable at Rajkot and to be placed in the Technical Bid envelope while submitting the tender.
i)	Exemption from the payment of EMD and Tender fee	The exemption for the payment of EMD as well as tender fee will be applicable to the U A M / Udyam Certificate / NSIC/ District Industry Centre registered units for the goods for which said tender is floated.



j)	Cost of Tender Documents	The tender document can be collected from the office of the General Manager, NSIC-Technical Services Centre, Aji Industrial Area, Rajkot in between the period from 16th July 2021 to 09th August 2021 (except Saturday & Sunday) between 10:30 hours to 15:45 hours against payment of Rs. 500/- (Rupees Five Hundred only) (Non- refundable) by way of demand draft, in favour of “NSIC Ltd.” payable at Rajkot. Alternatively tender form can be downloaded from website www.nsic.co.in or www.eprocure.gov.in from 16th July 2021 to 09th August 2021 . In case the tender downloaded for submission of offer, the tender fee of Rs. 500/- in form of demand draft in favour of “NSIC Ltd” payable at Rajkot shall be enclosed with Technical Bid of the tender while submitting the tender.
k)	Last date of submission of tender	Tender must be delivered to the address below on or before 9th, August 2021 up to 15.45 hours. Late bids will be rejected. The General Manager, NSIC- Technical Services Centre, Aji Industrial Area, Opp Gujarat Forging, Rajkot-360003
l)	Date of opening of Technical Bid (Envelope-1)	The technical bid for the tender shall be opened on 09th, August 2021 at 16:00 hours at the address as under: The General Manager, NSIC- Technical Services Centre, Aji Industrial Area, Rajkot-360003
m)	Date of opening of Financial Bid (Envelope-2)	The date for opening second envelope containing Financial Bid will be intimated to the qualified Bidders separately.

Note: In case of any further details required, the same can be collected from the office of The General Manager, NSIC-Technical Services Centre, Aji Industrial Area, Rajkot-360003 from **16th July 2021 to 09th August 2021** (except Saturday & Sunday) between 10:00 hours to 15:45 hours.

General Manager
NSIC- Technical Services Centre Rajkot



INSTRUCTIONS TO THE TENDERERS

The Tender shall be submitted in accordance with these instructions, as under.

1. Abbreviations:

Throughout this tender document”, the word/ term:

- a) “NTSC” means NSIC-Technical Services Centre
- b) “NSIC” means The National Small Industries Corporation Ltd.
- c) “day” means Calendar day
- d) “working day” means Monday to Friday in week
- e) “tender” means tender number NTSC/RAJ/MTL/2021-22/01
- f) “machine” means the Servo Controlled Universal Testing Machine (40 Ton) as detailed at Annexure-A.
- g) If context so requires, “singular” means “plural” and vice versa.
- h) “EMD” means Earnest Money Deposit.
- i) “Purchaser” means The National Small Industries Corporation Ltd
- j) “Bid” means the document and financial details submitted by Bidder.
- k) “Bidder” means the eligible and qualified Original Equipment Manufacturers / Authorized Distributors/ Authorized Dealers.
- l) “Tenderer” means the eligible and qualified Original Equipment Manufacturers / Authorized Distributors/ Authorized Dealers.
- m)“OEM” means Original Equipment Manufacturers

2. Eligible Bidder:

- a) The intending Bidder, in case of Original Equipment Manufacturers shall submit a self-declaration on their letter-head, along with the Technical Bid, confirming that they are regular in manufacturing & supplying the similar Machines, as asked in this tender, for the last five (5) years.
- b) The intending Bidder, in case of Authorized Distributor of OEM / Authorized Dealer of OEM/ Service provider of machine shall possess valid authorized Distributorship / Dealership license from Original Equipment Manufacturers and shall be engaged in regular supplying of similar machine for the last five (5) years. The Bidder shall enclose the copy of valid license document in Technical bid while submitting the tender.

3. Location of supplies:

- a) The details of location where the machine(s) supplied through this tender are as under:

#	Location	Address for supplies
1	Rajkot, Gujarat	NSIC- Technical Services Centre, Aji Industrial Area, Rajkot, Gujarat



- b) The Bidder is free to inspect the location & the premises before submitting the bid under this tender.
- c) NTSC Rajkot has full rights to cancel for supplies even after calling for the offers from Bidders but before the issue of supply order to execute the supply by the Bidder. The reason for cancellation of supply may not be disclosed.

4. Scope of Supplies:

- a) The machine shall be supplied in compliance to the specifications mentioned in Annexure- A of the tender.
- b) The specifications of the Machine as mentioned in the Annexure-A are the requirements of tender, however higher specifications of Machine may be considered subject to their price economics i.e. competitiveness in financial terms.
- c) After the supply of Machine as mentioned in the Annexure A, the Bidder has to execute its installation and commissioning at the designated site in the location. Prices shall be deemed to be included in the offered price.
- d) After the installation and commissioning of Machine, the training to the local operator shall be given for two (2) working days wherein the training shall be about the operations instructions, maintenance as well as trouble shooting & all other areas which are necessary for smooth functioning of Machine, shall be provided to at least two person designated by purchaser, at site, by the Bidder. Prices shall be deemed to be included in the offered price.
- e) The Bidder shall offer on-site comprehensive warranty of machine for at least one year from the date of successful commissioning of machine at the designated location. The purchaser is not liable to pay any extra charges on any account during warranty period.
- f) The Bidder shall cover the machine(s) under comprehensive Maintenance Contract for two years after the expiry of warranty period without asking for any additional financial charges from purchaser.

5. Delivery

- a) The purchaser intends for complete delivery of machine by the Bidder within forty five (45) calendar days from the date of issue of supply order. However, the Bidder has an option to submit the best delivery time, but in any case the delivery should be within 45 days from the date of issue of supply order by purchaser.
- b) The machine shall be inspected on receipt at site and Bidder shall be responsible for any damage during the transit of machine.
- c) The Bidder shall not arrange part shipments and/or trans-shipments without the permission of purchaser. The insurance cover including insuring the goods against the loss or damage incidental to manufacture or acquisition, transportation, storage and delivery/Installation & commissioning shall be obtained by the Bidder in his own name and not in the name of purchaser. The purchaser will as soon as possible but not later than 30 days from the date of arrival of goods at destination shall notify the Bidder of any loss or damage to the goods.



6. Warranty

- a) The Bidder shall offer on-site comprehensive warranty of machine for one year from the date of successful commissioning of machine at the designated location & shall cover each and every part of the machine including parts having limited life etc. The purchaser is not liable to pay any extra charges on any account during warranty period.
- b) The Bidder shall pay to the purchaser such compensations that may arise by reasons of the warranty therein contained but not attended by the Bidder.
- c) Any part or parts fail or proved defective within the on-site warranty period specified above, owing to defect in design, material or workmanship, the Bidder shall have to replace them at the place of installation without asking for any charges.
- d) During the warranty period, service personnel shall be deputed at site by the Bidder within three working days from the date of request from purchaser, to rectify and fixing the defects of machine at the location where machine(s) are supplied. The cost of deputation of service personnel and any other associated expenditure shall be borne by the Bidder.

7. Two Years Comprehensive Maintenance Contract

The Bidder shall cover the commissioned machine(s) at site under Comprehensive Maintenance Contract for two (02) years after the expiry of warranty period without claiming any additional financial charges from purchaser. The financial bid for the machine(s) shall be quoted accordingly.

8. After Sales Services

- a) The Bidder shall ensure to render after sales services during the warranty period to the satisfaction of purchaser.
- b) The Bidder will depute their engineer within three working days to attend the service call received in writing from purchaser.

9. Manuals:

The Bidder to supply three (03) sets of the following manuals in hard copy and soft copy along with supplied machine(s):

- i. Installation Manual
- ii. Operation Manual
- iii. Maintenance Manual

Note: All manuals shall be latest and duly signed/stamped by the bidder

10. Tender documents:

- a) The tender document can be collected from the office of the General Manager, NSIC-Technical Services Centre, Aji Industrial Area, Rajkot in between the period from **16th July 2021 to 09th August 2021** (except Saturday & Sunday) between 10:00 hours to 15:45 hours against payment of Rs. 500/- (Rupees Five Hundred only) (Non-refundable) by way of demand draft, in favour of “**NSIC Ltd**” payable at Rajkot.

Alternatively tender form can be downloaded from our website www.nsic.co.in or www.eprocure.gov.in from **16th July 2021 to 09th August 2021**. In case the tender downloaded for submission of offer, the tender fee of Rs. 500/- in form of demand draft in favour of “**NSIC Ltd**” payable at Rajkot shall be enclosed with Technical Bid of the tender while submitting the tender.

The other option is to pay Rs. 500/- by RTGS/NEFT to the bank of purchaser as detailed under:

ACCOUNT NAME	BANK NAME	BANK A/C NO.	BANK IFSC CODE
NSIC LTD	STATE BANK OF INDIA	56068001625	SBIN0060068



The Bidder is requested to attach the Bank Statement / RTGS Slip in the Technical Bid, to prove the transfer of payment to the purchaser's Account.

- b) At any time prior to the deadline for submission of bids, the Purchaser may amend the Bidding Documents by issuing addendum. The prospective Bidders are advised to remain in touch with the Website for any update in respect of this tender.

11. Authorization for Submission of Tender:

- a) The original and all copies of the bid shall be signed by a person duly authorized to sign on behalf of the Bidder. The written confirmation of authorization (in form of letter on the Bidder's letter head) to sign on behalf of the Bidder confirming the signature as a person duly authorized to sign should be attached with the technical bid of the tender.
- b) The person signing the tender form or any other documents on behalf of the Bidder shall be deemed to warrant that he has authority to bind the Bidder. If it subsequently comes to light that the person so signed had no authority to do so, the purchaser may without prejudice to any other civil & criminal remedies cancel the tender and hold the Bidder liable for all costs, charges and damages.

12. Earnest Money & Tender Fees Deposit:

- a) The EMD amount of Rs. 25,000/- (Rupees Twenty Five Thousand only) shall be submitted in the first envelope super-scribed as "Technical Bid", of prescribed amount by way of Demand Draft drawn in favour of "NSIC Ltd", only for the Machine(s) quoted by the Bidder. No cash towards EMD shall be accepted. The offers without EMD from the Bidders shall be rejected.
- b) In case tender documents downloaded from website, Tender Fee of Rs. 500/- shall be submitted by way of D.D. drawn in favour of "NSIC Ltd" along with the Technical Bid of the tender documents. Tender fee is non-refundable. The option for payment by RTGS/NEFT is also available and bank details of purchaser, are as under:

ACCOUNT NAME	BANK NAME	BANK A/C NO.	BANK IFSC CODE
NSIC LTD	STATE BANK OF INDIA	56068001625	SBIN0060068

The Bidder is requested to attach the Bank Statement / RTGS Slip in the Technical Bid, to prove the transfer of payment to the purchaser's Account.

- c) EMD and tender fee submission is exempted for the Bidders those having valid registration under UAM/Udyam Registration Certificate, Single Point Registration Scheme of NSIC and all micro and small enterprises registered with Director of Industries from DIC for the machine for which this is tender issued. To support this, the self-certified scan copy of such valid registration/ exemption certificate is to be attached with technical bid.
- d) The Purchaser shall not be liable for payment of any interest on EMD.
- e) Any request by the Bidders to consider their EMD already furnished by them to any of the other office of the purchaser, for any other contract/ tender will not be considered as EMD for this tender.
- f) The EMD will be returned to the unsuccessful Bidders soon after the orders are placed on the successful Bidder. In case of successful Bidder, the EMD will be returned along with 20% payment as per payment terms mentioned at Para 25 of Instructions to the Tenderers.



13. Submission of Tender:

- a) The Bidder to examine all instructions, forms, terms and specifications in the tender documents and to furnish with its bid all documents or information as required by bidding document.
- b) The language for all the correspondence and documents related to the tender shall be in English/Hindi only. Moreover, the printed literature/technical details for the machine shall also be in English/Hindi.
- c) The tender must be placed in a properly sealed bigger envelope addressed to The General Manager, NSIC-Technical Services Centre, Aji Industrial Area, Rajkot - 360003 and the said bigger envelope shall contain two sealed envelopes containing Technical & Financial bids. The bigger envelope must be super-scribed "Tender for Supply, Installation & Commissioning of Servo Controlled Universal Testing Machine (40 Ton)" with tender inquiry number and its due date. The two sealed envelopes inside the bigger envelope must be super-scribed as:

***Envelope No-1:** The said envelope is for technical bid & shall be super- scribed as "Tender for Supply, Installation & Commissioning of Servo Controlled Universal Testing Machine (40 Ton) - Technical Bid"*

***Envelope No-2:** The said envelope is for Financial bid & shall be super- scribed as "Tender for Supply, Installation & Commissioning of Servo Controlled Universal Testing Machine (40 Ton) - Financial Bid".*

- d) If both or either of the envelopes are not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the bid.
- e) All the columns of the tender shall be duly, properly and exhaustively filled in. Any cutting/over writing etc. in the tender must be signed by the person who is signing the tender.
- f) Tenders received in open covers/ letters/ fax/ email will not be considered.

14. Financial Bid Submission:

- a) Bidder shall take into account all costs including unloading at the location of purchaser, cartage etc. for giving delivery of machine at site(s) as detailed at Para 3 of Instructions to Tenderers before quoting the rates. In this regard no claim what so ever shall be entertained.
- b) The price quoted in financial bid shall be firm and shall include all incidental charges and GST. Any variation in GST or statutory charges till commissioning of machines to the location(s) within specified delivery period shall be borne by NTSC but after that shall be to Bidders account.
- c) No extra payment shall be paid on account of any discrepancy in nomenclature of items. The Bidder shall seek clarifications (if any) before submitting the tender.
- d) No representation for the enhancement of the prices of the accepted tender or alteration of the terms and conditions will be entertained till supplies are completed to the designated location(s).

15. Last date of Submission of Tender:

- a) The tender should reach the office of the General Manager, NSIC-Technical Services Centre, Aji Industrial Area, Rajkot by **09th August 2021 up to 15.45 hours.**
- b) The purchaser may, at its discretion, extend the deadline for the submission of bids by amending the Tender Documents, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended. The prospective Bidders are advised to remain in touch with website for any update in respect of their tender.
- c) The purchaser shall not consider any bid that arrives after the deadline for submission of bids.



Any bid received by the Purchaser after the deadline for submission of bids shall be declared late, rejected and returned unopened to the Bidder.

16. Opening of Technical Bid:

- a) The technical bid of tenders will be opened at NTSC-Rajkot on **09th August 2021 at 16:00 Hours**. The Bidder or their authorized representative (One person only) may be present at the time of opening of the tender.

17. Opening of Financial Bid:

- a) The Financial Bid of only technically qualified Bidders will be opened on the stipulated date. The date & time for opening of Financial Bid shall be intimated to the technically qualified Bidders through email, sms, telephone call, etc after completion of evaluation of Technical Bid.

18. Validity of Tender:

- a) The tender shall be valid for a period of 90 days from the date of opening of the Technical Bid of tender. Terms and financial details submitted in the bid shall be treated as firm during the said period of 90 days.
- b) In exceptional circumstances, prior to the expiry of the bid validity period, the Purchaser may request Bidders to extend the period of validity of their bids. The request and the responses shall be made in writing.

19. Evaluation of Bids:

- a) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected.
- b) If there is an error in a total corresponding to the addition or subtraction of sub totals, the subtotals shall prevail and the total shall be corrected; and
- c) If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail subject to (a) and (b) above.
- d) To assist in the examination, evaluation, comparison of the bids and qualification of the Bidders, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid. Any clarification submitted by a Bidder in respect to its Bid and that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing only.
- e) If a Bidder does not provide clarifications of its bid by the date and time set in the Purchaser's request for clarification, its bid may be rejected.
- f) The Purchaser reserves the right to accept or reject any bid, and to annul the bidding process and reject all bids at any time prior to supply order, without thereby incurring any liability to Bidders. In case of annulment, all bids submitted and specifically Bid document, EMD deposits shall be promptly returned to the Bidders.
- g) The Purchaser shall compare the evaluated prices of all substantially responsive bids to determine the lowest evaluated bid. The comparison shall be on the basis of landed cost at destination, and the lowest offering Bidder shall be adjudged successful Bidder.



h) At the time the Contract award, the Purchaser may increase the Quantity of machine without any change in the unit prices or other terms & conditions of the Tender subject to the acceptance of Bidder in writing for the same.

j) The purchaser have right to verify the particulars furnished by the Bidder independently.

20. Earnest Money Forfeit:

a) If any Bidder withdraws his tender before the period of 90 days from the date opening of technical bid or makes any modifications in the terms and the conditions of the tender which are not acceptable to the purchaser, then the purchaser shall, without prejudice to any other rights or remedy, be at liberty to forfeit the EMD and also blacklist the Bidder for one year.

b) The EMD will also be forfeited in following cases:

- i. If the Bidder fails to accept the order based on his offer (bid) and within the prescribed time.
- ii. If the Bidder fails to supply the Machine with specifications as mentioned in Annexure –A
- iii. If the Bidder delays supplies beyond a reasonable time resulting in disruption of project.
- iv. Bidder for any reason whatsoever withdraws the tender after it is accepted or become unable or fails to execute the orders within stipulated delivery period.
- v. Submission of misleading/contradictory/false statement or information and fabricated/invalid documents is detected before or after the issue of order to execute the supplies.

21. Notification of Award:

Prior to the expiry of the period of bid validity, the purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted. The notification letter shall specify the sum that the Purchaser will pay to the Bidder in consideration of the supply of machine's with the details of selected location(s).

22. Pre-dispatch Inspection:

A pre-dispatch inspection of machine/s by 3rd party/ technical team of purchaser may be carried out at Bidder's site of manufacturing machines. This pre-dispatch inspection will not absolve Bidder's responsibility to execute supply in accordance with the tender terms.

23. Packing:

a) The Bidder shall provide packing of the machine/ equipment, as is required to prevent their damages or deterioration during the transit to their final destination. The packing shall be sufficient to withstand, without limitation, rough handling during transit. In case the consignment received with damaged packaging, the purchaser would not accept the delivery.

b) The machine shall be securely boxed, crated and protected from mechanical damage, moisture etc. suitable for both storage and transit according to the nature of the material and mode of transport. The Bidder shall be responsible for any loss/ damage during transportation to the designated location.

24. Delivery Time:

a) The Bidder shall indicate the period within which the ordered quantity will be supplied. The Bidder shall note that in case Bidder fails to supply within the period of delivery indicated by the Bidder in technical bid of this tender, penalty @ 1% of value of the order per week of delay would be levied subject to maximum five (5) weeks. It means, the Bidder shall have the liability of delayed supply to the maximum of five (5) weeks after expiry of scheduled delivery date. After that the supply



Order shall be cancelled and EMD will be forfeited and Bidder will be debarred from participation in any future tenders.

b) The successful Bidder shall, within a week from the date of receipt of communication of acceptance of quotes from purchaser shall intimate his acceptance of the order. The successful Bidder shall complete supplies strictly as per the accepted delivery period.

25. Payment:

- a) The 70% payment of total bill will be made by the purchaser by crossed account payee cheque/RTGS/NEFT for which the Bidder shall send bills in duplicate (original + copy) after Supply, Installation & Commissioning of machine, giving the reference number of the purchase order along with copies of delivery note & satisfactory report on the Installation of machine(s), from designated purchaser department. The details about the designated purchaser department who is authorized to take the delivery of machine(s) shall be informed to the successful Bidder through the supply order placed for the supply of machine(s).
- b) The 20% payment of total bill along with EMD deposit will be released to Bidder after one month from the date of completion of training to trainers at site and on submission of Indemnity Bond by the successful Bidder for rendering services during warranty period and maintenance period.
- c) The remaining 10% payment will be retained and shall be released against submission of Performance Bank Guarantee by the successful Bidder of equal value of 10% till the period of three (3) years from the date of commissioning.

26. Causes of Rejection of Tender:

- a) While submitting the tender, if any of the prescribed conditions are not fulfilled or are incomplete in any form, the tender is liable to be rejected.
- b) If any Bidder stipulates any condition of his own, such conditional tender is liable to be rejected.

27. Claims:

- a) If the material supplied are found to be of size and shape different than those in the accepted offer and are of specifications lower than those stipulated in the accepted offer, the purchaser shall have right to totally reject the machine/ equipment and/or to claim for compensation from Bidder. The Bidder shall reimburse to purchaser, the claim lodged in writing within 15 (fifteen) days of its demand. The Bidder shall also compensate for losses, if any, sustained by purchaser due to defective packing and/or wrong marking of the machine/ equipment.
- b) The Bidder shall be responsible for arranging the rejected machine/ equipment to be removed at his cost from purchaser premises.

28. Address for communication / clarification:

a) All the communication / clarification with respect to the tender shall be addressed to:

The General Manager,
NSIC- Technical Services Centre,
Aji Industrial Area, Opp Gujarat Forging, Rajkot – 360003
Phone No: 0281-2387729/7398 **email: ntscraj@nsic.co.in**



29. Force Majeure:

- a) In the event of any unforeseen circumstances directly interfering with the supply of goods/work/service arising during the execution of order such as war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, floods, earthquakes, explosions, epidemics, quarantine restrictions, strikes, lockouts, or acts of God, the Bidder shall, within a week from the commencement thereof, notify the same in writing to the Purchaser with reasonable evidence thereof. Either party shall have the option to terminate the contract on expiry of 90 days of commencement of such force majeure by giving 14 days notice to the other party in writing. In case of such termination, no damages shall be claimed by either party against the other.

30. Code of Ethics:

- a) The Purchaser as well as the Bidder shall observe the highest standard of ethics including laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988", during the procurement or execution of such contracts. If the Bidders are found in Bid pooling or against law, fraud and corruption then their firms will be blacklisted.

31. Jurisdiction:

- a) In the event of any dispute the legal matter shall be subjected to the jurisdiction of Rajkot Court only.
We confirm with our acceptance to the instructions (S.No-1 to 31 above) as given above.

BIDDER'S NAME & SIGNATURE WITH SEAL

These duly signed "Instructions to the Tenders" as under shall be attached with technical bid of the tender as a mark of acceptance of Bidder and any tender not confirming the instructions as under is liable to be rejected.



**DETAILS OF REQUIREMENTS AND TECHNICAL SPECIFICATIONS FOR
SERVO CONTROLLED UNIVERSAL TESTING MACHINE (40 TON)**

Features of Servo controlled Universal Testing Machine of 40 ton capacity

- Motorized control valve
- Load accuracy as high as $\pm 1\%$
- Straining at variable speeds to suit wide range of materials
- Printer & PC graphs enable study of behavior of materials
- Motor driven threaded columns for quick effortless adjustment of middle crosshead to facilitate rapid fixing of test specimen
- Simplicity in reading because of digital readouts
- Wide range of special & standard accessories
- Easy change from plain to screwed specimen
- Large effective clearance between columns enables testing of standard specimens as well as structures.
- Simple control for the ease of operation
- Robust straining frame of an extremely rigid construction (Spheroidal Graphite iron)
- Fully enclosed & protected pressure transducer
- RS 232 serial port for PC control of machine

Application:

Machine will be used for testing metals & other materials under tension, compression, bending, transverse & shear loads. Hardness test on metals can also be conducted.

Principle of operation:

Load is applied by hydrostatically lubricated ram. Main cylinder pressure is transmitted to the pressure transducer housed in control panel. The transducer gives signal to the electronic display unit, corresponding to the load exerted by the main ram. Simultaneously the digital encoder fitted on the straining unit gives the mechanical displacement.

UTM right control valve need to be Servo controlled in close loop mode as per the mode selection. Following control modes to be available:

- Standard manual control.
- Potentiometric control
- Load rate control
- Elongation rate control
- Load hold mode
- Strain rate control
- Stress rate control

Apart from the above control modes auto start, potentiometric start & initial valve open start options to be available for starting the test & to take care of slippage & different specimen types.

- Control range- 5% to 100% per min
- Control tolerance = $\pm 5\%$



The machine should consist of:

Straining Unit:

- To be consists of a cylinder motor with chain & sprocket drive & a table coupled with the ram of the hydraulic cylinder, mounted on to the robust base. The cylinder & the ram are to be individually lapped to eliminate friction.
- The upper crosshead is to be rigidly fixed to the table by two strengthened columns.
- The lower crosshead is to be connected to two screwed columns which are driven by a motor. Axial loading of the ram is to be ensured by relieving the cylinder & ram of any possible side loading by the provision of ball seating.
- An encoder of resolution 0.1mm is to be provided to measure the deformation of the specimen.
- Tension test is to be conducted by gripping the test specimen between the upper & lower crossheads.
- Compression, transverse, bending, shear & hardness tests are to be conducted between the lower crosshead & the table.
- The lower crosshead can be raised or lowered rapidly by operating the screwed columns, thus facilitating ease of fixing of test specimen.

Control Panel:

- The control panel to be consists of power pack complete with drive motor & an oil tank, control valves & electronic display unit.

Power Pack:

- The power pack generates a maximum pressure of 200kg/cm². The hydraulic pump provides continuously non-pulsating oil flow. Hence the load application needs to be very smooth.

Hydraulic Controls:

- Hand operated release valve & motorized control valve are to be used to control the flow to & from the hydraulic cylinder. The regulation of the oil flow is infinitely variable. Incorporated in the hydraulic system is a regulating valve which maintains a practically constant rate of piston movement. Control by this valve allows extensometer reading to be taken.

Electronic Control Panel (Servo):

- In electronic panel 8085 microprocessor is to be used for basic UTM operation & 8 bit dedicated microcontroller is to be used for close loop & servo control.
- Panel is to have parallel printer port, RS 232 C serial port for PC interface.
- 2 lines x 8 digits 7 segment display & membrane keyboard for data entry.
- 20 data sets & 50 result storage.

Software:

Windows based extensometer software for servo control is to be in the basic scope of supply.

- Real time graph & user friendly software.
- Extensive graphics on screen for curve plotting, magnification & zooming.
- Software features include graph comparison, point tracing facility. Different unit selection for load & displacement.
- Statistical evaluation of data with water fall diagram, mean deviation, frequency distribution, skew diagram, histogram. Also calculates max. & min value, mean value, variance, standard deviation. Selectable batch & statistical printouts
- Evaluation of wide range of user selectable parameters such as % elongation, reduction in area, Young's modulus, yield stress, proof stress etc.
- Total elongation at max. Force in accordance with IS: 1608

**Accuracy & Calibration:**

Servo controlled universal testing machine is to be closely controlled for sensitivity, accuracy & calibration. Machine need to be calibrated over each of its measuring ranges in accordance with the standards as laid down in British standards. 1610: Part1: 1992 & IS: 1828: Part1: 2005.

Machine need to comply with Grade “A” of BS: 1610-Part1:1992 & Class 1 of IS: 1828-Part 1: 2005. An accuracy of $\pm 1\%$ is to be guaranteed from 2% to 100% of the capacity of the machine.

Below 20% of the selected range the maximum possible error is to be 0.2% of the full load reading.

Technical Features machine:

Max. Capacity: 400 kN

Measuring Range: 0-400 kN

Load resolution: 20N

Load Range with accuracy of measurement $\pm 1.0\%$: 8 to 400 KN

Resolution of piston movement: 0.01

Clearance for tensile at fully descended working piston: 50-700

Clearance for compression test at fully descended working piston: 0-700

Clearance between columns: 500 mm

Ram stroke: 200 mm

Straining/piston speeds: 0-150 mm/min

Power: (2.5 to 3.5) HP, Voltage: 400-440V, Number of phases= (3) three

Standard Accessories to be supplied with machine:

S. No.	Item	Description	Qty	
1	For Tension Test	Grips for round specimen (Dia-mm) $\Phi 10\sim\Phi 20$, $\Phi 20\sim\Phi 30$, $\Phi 30\sim\Phi 40$	3 sets	
		Grips for flat specimen (Thickness) 0~10mm, 10-20mm, (Width-65mm), 20-30mm	3sets	
2	For transverse test	Table with adjustable rollers	Width of rollers-160mm	1 set
		Diameter of rollers	30mm	
		Max. clearance between supports	500mm	
		Radius of punch tops	12mm, 16mm	
3	Pair of Compression plates	Dia. 120mm	1 set	
4	Pressure cell	Pressure cell +/-400kN	1 set	
5	High precision rotary encoder	Measuring the displacement with resolution 0.01mm	1 set	
6	High pressure hydraulic pack	Hydraulic pack for loading hydraulically.	1 set	
7	Measuring control unit and amplifier	Microprocessor based control panel	1 set	
8	Basic software	Includes real time graph, statistics & basic data transfer, % elongation, Ultimate stress etc.	1 no	



Additional Accessories: Electronic Extensometer

Electronic Extensometer is to be supplied with machine having following specifications:

S No	Item	Description
1	Measuring Range (Extension)	0-2 mm
2	Least Count	0.001 mm
3	Gauge Length (Adjustable)	25, 30, 45 & 50 mm
4	Thickness or diameter of specimen	1 to 20 mm
5	Excitation	± 5 V DC
6	Output (Approx)	20 mV full scale



(Undertaking from Bidder on their official stationery)

To,
The General Manager
NSIC- Technical Services Centre,
Aji Industrial Area, Rajkot-360003

Sir,

Subject: Undertaking for the participation in the tender No. NTSC/RAJ/MTL/2021-22/01 Due for opening of technical bid on **09th August, 2021.**

Dear Sir,

HAVING EXAMINED AND PERUSED THE FOLLOWING DOCUMENTS

1. Notice Inviting Tender
2. Instruction to the Tenderer
3. Technical Specifications of machine (Annexure-A)
4. Annexure – C (Technical Bid)
5. Annexure – D (Financial Bid)

I/Wedo hereby submit the above tender in prescribed formats duly completed in all respects in accordance with the conditions applicable. If this tender is accepted, I/We agree to abide by and fulfill all the terms and conditions in the tender documents

I/We hereby distinctly and expressly declare and acknowledge that before the submission of this tender, I/We have carefully followed the instructions and I/We have understood the existing system of supply at the location(s) of purchaser including the scope and nature of duties expected from the Bidder.

I/We distinctly agree that I/We would hereafter make no claim or demand upon the purchaser based upon or arising out of any alleged misunderstanding or misconceptions or mistake on my/our part of the said stipulations, restrictions and conditions.

I/ We declare that our unit has never made any default in supplying the machine/ equipment to Government / Semi Government/ Central or State Public sector enterprise(s) in terms of quality and financial agreed supply conditions.

Any notice required to be served on me/us shall be sufficiently served on me/us by post (registered or ordinary) or courier or left at my/our address furnished herein.

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.....

I/We fully understand the terms and conditions in the tender documents.

I/We understood that the purchaser is not bound to accept any proposal that it may receive without assigning any reason.

Dated this.....day of.....2021

Authorized Signatory
Seal

**FORMAT & REQUIREMENTS FOR SUBMITTING TECHNICAL BID**

1. **Tender Ref. No:** NTSC/RAJ/MTL/2021-22/01
2. **Name of Bidder:**
3. **Complete office address of Bidder**
4. **Tender fee payment details** (if tender document downloaded from website)
Details of DD/RTGS/NEFT by which tender fee paid.....
5. **Confirmation of acceptance of Technical Specifications for the supply of machine:**

S.No	Technical Specifications	Acceptance to the Specification as placed at Annexure-A and agreed to supply with required Quantity (write YES/ NO only)	If marked "NO" in the column before, specify the deviation in specification of the machine offered for the supply.
A	Servo Controlled Universal Testing Machine - One Number		
	Max. capacity: 400 kN Measuring Range: 0-400 kN Load resolution: 20N Load Range with accuracy of measurement $\pm 1.0\%$: 8 to 400 KN Resolution of piston movement: 0.01 Clearance for tensile at fully descended working piston: 50-700 Clearance for compression test at fully descended working piston: 0-700 Clearance between columns: 500 mm Ram stroke: 200 mm Straining/piston speeds: 0-150 mm/min Power: (2.5 to 3.5) HP, Voltage: 400-440V, No. of Phase=3 All other technical specifications and Standard Accessories as mentioned in Annexure A		
B	Additional Accessories - Electronic Extensometer - One Number		
	As per technical specification mentioned in Annexure - A		

Note-It is mandatory to quote for all the above mentioned machines.



6. Confirmation for supply to the location(s):

#	Details	Location
		Rajkot (Gujarat)
1	Quantity required	As per Tender
2	Consent to supply: (write YES/ NO only in the cells placed under location)	

7. EMD payment details (Not applicable if the Bidder is holding valid registration/ exemption certificate, as per Para 12 (c) of Instruction to Tenderers): Details of DD/RTGS/NEFT by which EMD paid

.....
The EMD of Rs. 25,000/- (Rupees Twenty Five Thousand Only) shall be submitted.

8. PAN of Bidder (self-attested copy to be enclosed)

9. GST registration number of Bidder (self-attested copy to be enclosed)

.....
10. Delivery period after receipt of supply order from purchaser: The purchaser intends for complete delivery of machine by the Bidder within forty five (45) calendar days from the date of issue of supply order. However, the Bidder has an option to submit the best delivery time, but in any case the delivery should be within 45 days from the date of issue of supply order by purchaser.

11. Details of address with contact details from where the Bidder plans to offer After Sales Services during the Warranty (Bidder to provide details by filling below table):

#	Locations
	Rajkot (Gujarat)
Details of address of Bidder for rendering After Sales Services	

12. Documents - Details to be enclosed with the Technical bid by Bidder are as under:

- a) In case the Bidder is Original Machine Manufacturer, the Bidder to submit a self-declaration on their letter-head, confirming that they are regular in manufacturing & supplying the similar machine, as asked in this tender, for the last five (5) years.
- b) In case the Bidder is Authorized Distributor of OEM / Authorized Dealer of OEM/ Service provider of machine, the Bidder to attach self-attested valid authorized Distributorship / Dealership license from Original Equipment Manufacturer and shall be engaged in regular supplying of similar machine for the last five (5) years.
- c) Undertaking as per annexure-B on official stationery.
- d) Duly signed all pages of “Instructions to Tenderers” of the tender document as a mark of acceptance.



- e) Technical Literature of machine(s) with particular reference to the model of machine proposed to supply against this tender along with reference of website to assess the further features.
- f) Authorization letter in favor of personnel to sign the tender behalf of Bidder.
- g) Self-attested copy of valid certificate for claiming EMD exemption.
- h) Self-attested copy of valid certificate for claiming Tender Fee exemption.
- i) Self-attested copy of valid GST registration.
- j) Self-attested copy of valid PAN.
- k) The Bidders shall furnish complete Technical details of Machine/equipment offered to supply through the participation of this tender (use separate sheet to elaborate the details of technical specifications)
- l) To submit all supporting information with respect to the technical data, drawings or booklets of product. Any product brief, test certificates available may be enclosed.

I/We as Bidder certify that:

- a. The tender shall remain valid for acceptance for 90 days from the date of opening the Technical Bid of the tender.
- b. Agree to offer services for onsite comprehensive warranty of 1 year on the machine(s) supplied through this tender.
- c. Agree to offer services for comprehensive maintenance contract for the next two (02) years for the machine(s) supplied through this tender.
- d. Agree to impart onsite training to the designated personnel of purchaser for two (2) working day.
- e. No price of any Machine/ Equipment/ Spares/ Accessories shall be given in Technical Bid.
- f. All above machines should be provided with safety features/ curtains etc. wherever applicable.
- g. All consumables, electrical and electronic parts of the product conform to national/ international standard(s).

Name & Signature of the authorized Bidder with stamp
Contact details of authorized person of Bidder who have signed the tender.

Name.....
Designation.....
Phone (office).....
Phone (Mobile).....
E mail.....



FINANCIAL - BID

(to be submitted separately in a sealed envelope)

1. Tender Ref. No: NTSC/RAJ/MTL/2021-22/01
2. Name of the Bidder:
3. The financial offer to execute the supply as per the tender:

a. Supply of Machine to Rajkot location:

#	Details	Price for supply, installation & commissioning of machines at Rajkot (in Rs.)	GST amount (in % / amount)	Total Price Including GST (in Rs.) (in Figure)
	1	2	3	4
1.	Offered financials for Supply, Installation and Commissioning of Servo Controlled Universal Testing Machine along with Electronic Extensometer which includes one year comprehensive warranty and thereafter two years on-site comprehensive maintenance and after-sales Services (as per tender no. NTSC/RAJ/MTL/2021-22/01)			
A	Servo Controlled Universal Testing Machine (40 Ton) – One Number			
B	Additional Accessories - Electronic Extensometer - One Number			
2.	Total Price for supply, installation and commissioning of all machine at Rajkot including GST as detailed at row “1A and 1B” above to Rajkot location (in Rupees)(in words)			



Notes:

- a. It is mandatory to quote for all the above mentioned machines.
- b. The Purchaser will not issue any form (“C” and “D”) toward rebate / exclusion of GST, etc.
- c. The Bidder will not be entitled to any increase in offered price during the execution of contract even if there is delay in supplies / completion attributed to him.
- d. Any increase in GST or statutory charges within specified delivery period shall be borne by NTSC, but beyond delivery period is to be borne by Bidder.
- e. The Total Price quoted above shall be inclusive of supply, installation, commissioning, all incidental charges, Packing-forwarding and Transportation, (including transit Insurance, Loading/ Unloading at site, etc.), Demonstration & Training and on-site one year warranty and comprehensive two years maintenance, etc.
- f. The price competitiveness shall be given due consideration while evaluating the Financial Bid.

I/We as Bidder certify that:

- a. The offer price shall remain valid for acceptance for a period of 90 days from the date of opening of Technical Bid.
- b. Agree to offer services for **onsite comprehensive warranty of one (1) year on the machine(s)** supplied through this tender.
- c. Agree to offer services for **comprehensive maintenance contract for the next two (02) years for the machine(s)** supplied through this tender.
- d. Agree to impart onsite training to the designated personnels of purchaser for two (2) working day.
- e. Agree to provide three (03) sets of the Installation, Operation and Maintenance Manuals with machine.

I/We confirm and agree with the tender terms and conditions specified in “Instructions to Tenderers” and if selected, the execution of supplies would be made in compliance.

Name & Signature of the authorized Bidder with stamp
Contact details of authorized person of Bidder who have signed the tender.

Name.....
Designation.....
Phone (office).....
Phone (Mobile).....
E mail.....