VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, ODISHA

PO: Burla Engineering College Dist.: Sambalpur, PIN-768018 Odisha. www.vssut.ac.in



Phone: +91-663-2430211 Fax: +91-663-2430204 PBX: +91-663-2430-589-592

No.-VSSUT/PE 241

/17

Dated: 12.09.2017

Tender Call Notice for Supply, Installation and Training of Laboratory Equipment/Software for Department of Production Engineering

Registrar, Veer Surendra Sai University of Technology, Burla (VSSUT) invites offers from the Manufacturer/Authorized Dealers for Supply, Installation and Training of Laboratory Equipment/Software for the Department of Production Engineering, VSSUT, Burla. Tender papers with all specifications, terms and conditions will be available in the official website of the University (www.vssut.ac.in) which can be downloaded and submitted after filling it up completely. The cost of the tender paper is Rs. 500/- (Rupees five hundred sonly), which can be paid in the form of a demand draft drawn in favour of 'Veer Surendra Sai University of Technology, Burla" from any nationalized bank, Payable at Burla. The DD must be submitted along with the tender paper; otherwise the tender paper shall be liable for rejection. The tenders are to be submitted only by Registered Post/Speed Post. No hand delivery shall be accepted.

IMPORTANT DATES:

Last date for submission of tender papers Opening of tender Papers 04.00 PM of 10.10.2017 11.00 AM of 11.10.2017

Registrar
Dated 12/09/2017

Memo No. VSSUT/PE | 242 | 2017

Copy to:

- 1. M/s Display lines, 219, Saheed Nagar, Bhubaneswar-751007 with a request to publish the above advertisement in one issue of the Odisha daily edition (ALL ODISHA EDITION) of THE SAMAJ and the Odisha edition of The Indian Express using minimum space at I&PR approved/lowest rates. The bills may be sent to the Comptroller of Finance, VSSUT, Burla -768018 in TRIPLICATE along with copies of the paper in which the publication is made, for necessary payment.
- 2. The University/Department Notice Board for publicity
- 3. Dean F&P, with a request to hoist the tender call notice in the University web site www.vssut.ac.in for wide publicity.
- 4. SO Accounts, for information and necessary action. The expenses shall be met from Tools and equipment fund.

Registrar

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Section I: Invitation for Bids

Sealed Bids (properly stitched separately) in two separate covers (Technical Bid and Price Bid) are invited by the "The Registrar, Veer Surendra Sai University of Technology, Odisha" from the manufacturers/authorized distributors/ dealers for Supply, Installation and Training of Laboratory Equipment/Software for the Department of Production Engineering, VSSUT, Burla.

All bidders are required to submit EMD not less than 2% of the quoted amount in the shape of Demand draft drawn in favour of "Veer Surendra Sai University of Technology, Burla" payable at Burla only. The EMD shall be in Indian Rupees. Non-submission of EMD or submission of EMD of lesser amount than required shall result in rejection of bid. The EMD deposited against other bids cannot be adjusted or considered for this Bid. No interest is payable on EMD.

The Bidders may download the **Tender Documents** directly from the website available at **http://www.vssut.ac.in** and the Tender cost fee of Rs.500/- (Non-refundable) by way of separate Demand Draft drawn in favour of "Veer Surendra Sai University of Technology, **Burla**" payable at Burla should be enclosed along with the Bid. The Tender cost fee and the EMD amount should be submitted separately in separate demand drafts. In case of any bid clarification, responsibility lies with the bidders to collect the same from the website and the purchaser shall have no responsibility for any delay/omission on part of the bidder.

Time Schedule

- a) Date of commencement of downloading bidding document 12.09.2017 at 04.00 PM
- b) Last date and time for Receipt of bids 10.10.2017 up to 4.00 PM
- c) Time and date of opening of Tender & Technical Bid 11.10.2017 at 11.00 AM

Place of Receipt and Opening of Tender

The Registrar Veer Surendra Sai University of Technology, Odisha P.O.- Burla Engineering College, Dist-Sambalpur-768018, Tel. No-0663-2430211 Fax No-0663-2430204

Delivery as well as Billing Address

The Registrar Veer Surendra Sai University of Technology, Odisha Burla, Dist.- Sambalpur, Odisha, 768018

Registrar

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Section II: Terms and Conditions

- 1. The cost of Tender documents is Rs.500.00 (Rupees five hundred only) (Non-refundable). The Tender documents can be downloaded from the University website www.vssut.ac.in. A demand draft towards the cost of Tender documents drawn in favor of "Veer Surendra Sai University of Technology, Burla", payable at Burla must be submitted along with Tender.
- 2. This Tender documents must be filled up completely and signed by the authorized signatory of the bidder on all the pages as acceptance of all the guidelines, terms and conditions laid in this Tender document.
- 3. The completed document must reach to "The Registrar, Veer Surendra Sai University of Technology, Burla, PO. Burla, Dist. Sambalpur-768018 (Odisha)" by the last date of submission in a sealed cover by **Registered/Speed Post**. The tenders received after the due date and time are liable to be rejected. Tender by FAX/e-mail or any other media will not be entertained. The University is not responsible for delay, loss or non-receipt of Tender documents sent by post.
- 4. The tender comprises two parts i.e. 1.**Technical bid** and 2. **Financial Bid**. The first part is technical bid where the vendor is required to give the details of the firm and the confirmation on technical specification. If there is noncompliance in respect of any item, all details thereof must be provided. The second part is financial bid where the vendor is required to quote the rates only. No other information/condition is to be mentioned in the financial bid. Conditions if any, are to be given in the technical bid only. The technical and financial bids are to be submitted in separate envelopes.
- 5. The envelope containing the Tender must be super-scribed as "Supply, Installation and Training of Laboratory Equipment/Software for Department of Production Engineering".
- 6. The Tender should contain the following documents.
 - a) Tender application as per Annexure-I.
 - b) This Tender document must be signed on each page by the authorized signatory of the bidder.
 - c) Detail Name & address with Phone no. /FAX No, e-mail ID of the contact person.
 - d) Demand Draft (Non-refundable) towards the cost of Tender documents.
 - e) Self-attested copies of VAT clearance certificate/IT return/service tax clearance certificate and GST registration certificate.
 - f) Documentary evidences/ technical literature/catalogues in original for the model.
- 7. The quoted price must be inclusive of freight, packing, forwarding, transit insurance etc. for delivery at VSSUT, Burla. The installation, commissioning and demonstration shall be at the cost of the supplier.
- 8. The bidder may bid for all the packages, part thereof or part of a package from the schedule of requirements mentioned herewith.
- 9. The Tender and the quoted prices shall be valid for 90 days from the date of submission of the Tender.
- 10. The University will evaluate the technical & financial aspects of the Tenders. The University shall consider placement of orders for commercial supplies only on those eligible bidders whose offers are found to be technically, commercially and

- financially acceptable and who have accepted the terms and conditions as stipulated in this Tender document.
- 11. Tender should be filled with neat legible and correct entries. Indistinct figures should be avoided. Any erasures and alterations made while filling the tender or figure/figures are not permitted. Failure to comply with either of these conditions will render the tender void. No advice of any change in rate or conditions after opening of the will be entertained.
- 12. On all the matters relating to this Tender call document, the decision of the University shall be final and binding and the same cannot be referred to the court of law. The University reserves the right to reject any or all of the Tenders without assigning any reason what so ever.
- 13. For proprietary items, the certificate of proprietary item must be submitted along with the bid. If any item is supplied by an authorized firm, the manufacturer's authorization certificate must be submitted along with the bid.
- 14. Any deviation in technical specifications shall not be entertained ordinarily. The University reserves the right to modify the specifications during the execution stage of the purchase process. Wherever the technical specifications of items are changed either at the University request or at Bidder's request, revised price will be fixed, if necessary, by negotiations and as agreed upon by both parties.
- 15. The University reserves the right to order all or part or none of the items and/or services given in this document.
- 16. The quantities in the schedule may be increased or decreased to any extent depending upon the actual requirement.
- 17. Unless otherwise specified in the order, the order price shall remain firm and will not be subject to escalation of any description during the pendency of the order, notwithstanding the change in the cost of materials, labour and/or variations in the taxes, duties and other levies on raw materials and components may take place while the order is under execution even if the execution of the order is delayed beyond the completion date specified in the order for any reason whatsoever.
- 18. The University may reject the bid even if it is accepted but the successful bidder fails to execute any of the guidelines, terms and conditions mentioned in this Tender document.
- 19. All the items are to be door-delivered to the University within 6 weeks of the issue of the purchase order. In case the supplier fails to deliver the goods within the due period, the University reserves the right to cancel the purchase order and to place orders with other firms without assigning any reason thereof.
- 20. The supplier must supply all ordered items at a time. Part supplies are not acceptable and will not be entertained on any account. Any loss or damage during transit will be replaced at the cost of supplier.
- 21. All bidders are required to submit EMD not less than 2% of the quoted amount in shape of Demand draft drawn in favour of "Veer Surendra Sai University of Technology, Burla" payable at Burla only. The EMD shall be in Indian Rupees. Non-submission of EMD or submission of less EMD than the desired one shall result in

- rejection of Bid. The EMD deposited against other Bids cannot be adjusted or considered for this Bid. No interest is payable on EMD.
- 22. The EMD amount of the successful bidder will be kept as retention money and will be released only after supply and installation of the furniture in place. However, the EMD amount of other bidders will be returned back after the tendering process is completed.
- 23. The supplier shall be liable to complete all installation and demonstration of the instruments at the site within 30 days from the date of receipt. All packing must be opened at the site and be handed over to the consignee, at the supplier's cost.
- 24. The equipment supplied will be under warranty for a period of 2 years from the date of installation and demonstration. Free replacement of faulty parts including free technical support shall be provided during the warranty period. Warranty Certificate shall be submitted at the time of delivery.
- 25. The supplier is required to take care of change in technology and supply the higher version of the equipment available at the time of delivery at the same total cost as per the order. The operating manuals in original must be supplied at the time of delivery of the equipment.
- 26. The software supplied will be under warranty for a period of two years. Any upgrade of the software during the warranty period must be made available without any extra cost.
- 27. The supplier shall submit all bills in triplicate on printed forms to the University.
- 28. The supplier must submit valid and up-to-date VATCC and copy of IT return along with the bill before release of payment. The bidder shall also indicate the applicable prevailing VAT.
- 29. The University will make payments through account payee cheque in Indian Rupees. No interest on any deferred claim arising out of this purchase shall be payable in any case whatsoever. No payment will be made for instruments rejected at site during demonstration.
- 30. 100% payment of the billed amount will be made only after two weeks of receipt of equipment/software in good condition, as per the specifications and successful performance on site from the final date of demonstration/training.
- 31. The University reserves the right to cancel the purchase order if the equipment supplied fail to meet the specification mentioned within the terms and conditions of this Tender call document. The University shall not be held responsible for any loss or damage suffered by the bidder as a result of the cancellation of the purchase order.
- 32. Any dispute arising out of the deal shall be subjected to the jurisdiction of the court at Sambalpur within the State of Odisha.

Section III: Annexures and Forms

Annexure I: Tender Application

To.

The Registrar VSSUT, Burla

Sub: Supply, Installation and Training of Laboratory Equipment/Software for Department of Production Engineering.

Dear Sir,

I/We the undersigned have carefully gone through and clearly understood the specifications, quantities with terms and conditions mentioned in the tender document for the above mentioned work do hereby tender to execute and complete the supply in accordance with the priced bill of quantified and/or as per given specifications.

It is understood that the lowest or any tender will not necessarily be accepted and that you are not bound to assign any reason thereof for the same.

I/We agree to keep our offer open for 90 days from the date of opening of tender.

Having examined the schedule of requirements relating to the proposed tender for supply of equipment/software and having acquired the tenders invited by you, we the undersigned hereby offer to execute, complete and maintain the proposed work in strict accordance with the conditions and specifications described in the tender document at the item rates quoted by us in the tender.

We undertake to complete and deliver the total work within the stipulated time period from the date of issue of work order by the competent authority.

Place:	Signature & Stamp of Vendor
Date:	
	Name and address of the Vendor

Annexure II: Technical Bid

To be filled and signed by the authorized signatory of the firm & this is to be put in separate sealed cover superscribed with "Technical bid for Supply, Installation and Training of Laboratory Equipment/Software for Department of Production Engineering".

1	Name of the firm	
2	Address	
3	Contact No.	
4	Date of commencement of business	
5	PAN No. (Attach a copy)	
6	GST Registration No. (Attach a copy)	
7	Whether previous experience in the field (Attach proof)	
8	Warranty information.	Please attach list of items along with relevant warranty, if applicable
9	Product brochure/literature for each item	Attach copies of product brochure/literature for each item
10	Particulars of EMD attached	DD No
		Date
		Amount Rs.
		Issuing Bank Name

Signature of the Vendor with Seal

Name of the OEM/Business Partner of OEM:

Name of the Equipment/Software:	S/N
Make:	
Model:	
Base Price/Unit (C1)	1
GST @(C2)	2
Freight Charge (if any) (C3)	3
Any Other (If any) (C4) (such as loading/unloading, installation etc.)	4
Total Price C1+C2+C3+C4=	5
Total price in Words	6

Note- (i) Price Bid Proforma should be provided individually for each equipment/software.

(ii) Taxes like GST, Freight and or other taxes/ Charges, if any applicable must be explicitly mentioned in this price schedule. Any type of correction/ addition in price schedule shall not be permissible.

Annexure IV: Schedule of requirements and Technical Specifications

PACKAGE-1 (Non-Traditional Machining Laboratory)

S/N	Name of the Equipment	Technical Specifications	Ouantity
1			1
	Electro-Chemical Machining System	Supply Input: Hexa Phase 440 Volt AC, Machining Load: 0-25 V, 0-300 Amps variable, Chemical Flow Control: Variable with flow meter and pressure gauge: Machining Current Setting: Variable, Machining Voltage Setting: Variable, Machining Time: 0 to 3999 seconds, variable, Digital LED Display: For voltage, output current, Machining electrolyte temp., Protection: For Current overload, short circuit, USB port: For computerized data logging, All Setting Parameters: By LCD touch screen panel, Machining Cell: Pump Motor – 1/4 HP AC, Process table – 100 mm X 40 mm X 150 mm (approx), ECM Tools: half round, square & Hexagonal tool, Tool feed motor: Servo Motor with control on forward & reverse, feed rate settings, feed rate display. Through touch screen, Electrolyte capacity – 40 liter, Micromachining Facility: low voltage/current, Accessories: 40 KG NANO3, Tools, connecting cables, Anodic clamps 4 nos. clamping bolts 10 nos. *Additional optional accessories should be indicated separately along with their price. The above specifications are	Quantity 1
		desirable and the actual numbers achievable for your system should be	
2	Automatic Trinocular	indicated. 3-Axis (X-Y-Z) Digital Counter with	1
2	Automatic Trinocular Upright Measuring Microscope	LED Reflected Light Bright Field, Microscope body with manual Z-axis mechanism for axis counter, Minimum readout 0.1 μm, 50-50mm stage measurement accuracy 3+L/50μm, Z-movement minimum 50 mm, Z axis manual/coarse focus, Vertical movement 175mm maximum, Maximum measurable height 175mm, Measuring objectives 5X & 10X with objective adapter LED illumination with power	

supply, Eyepiece 10X (pair), 3-Axis
counter (X-Y-Z) 0.1 µm including power
supply, Digital scanning camera and
image analysis software along with latest
version of computer system, Camera: 3
Megapixel with C Mount Adapter 0.5X,
Basic Software should be quoted to
operate the system.

PACKAGE-2 (Metal Cutting Laboratory)

S/N	Name of the Equipment	Technical Specifications	Quantity
1	Milling Machine	Gear Head Universal Milling Machine having Longitudinal Feed Only Automatic while cross & vertical feeds are manually operated. Machine Complete with all standard accessories, Table size: 32" x 7", No. of T-Slots: 3, Size of T-Slots: ½, Swivel of Table: 45°, Longitudinal Traverse:15", Cross Traverse: 6", Vertical Traverse: 13", Standard Arbor: 1", Taper of Spindle:ISO-30, RPM of Spindle: 95-650 rpm, No. of Spindle Speed: 6 Nos., Required Motor Power: 1 HP,1440 rpm, 6" Milling Vice, 0.10 HP Electric Coolant Pump with Tank.	1
2	Lathe	Heavy duty, precision quality, all geared Lathe fitted with quick change Norton gear box, capable of cutting whitworth, metric threads, head stock fitted with tapper roller bearings, (machine bed guideways being flame hardened), complete with all standard accessories such as 1no. couplin, 2nos. dead centers and 1no. sleeve, belt guard, switch stand, thread dial indicator, square tool post, motor pulley & motor rails, Length of bed, 1370 mm(4'-6"), width of bed 225mm, height of center 165mm, admit between centers 750mm, max. swing over bed 320mm, max. swing over cross Slide 180mm, and spindle bore dia. 38mm. with 8 nos. speeds, swing in gap (dia.): 500mm, 8" dia. 4-jaw independent chuck, 1HP Motor AC/440v, 1440rpm with reversible switch & V-belts, 6" dia.3-jaw self-centering chuck with	1

		separate back plate, steady rest, face plate, follow rest, electric coolant pump of 0.10HP with separate tank & spout assembly, taper turning attachment for above.	
3.	Drilling Machine	Precision quality, Geared Pillar drilling machine, complete with standard accessories, machine having capability of drilling in Mild Steel 3/4", geared with 8 Nos. spindle speeds, rpm 60-2000, table sixe 250 x 250 to 500 x 500, spindle travel 250 mm, pillar length 1100-1500mm, pillar dia 70 -140mm, Motor 3 phase 1-2 HP.	1

PACKAGE-3 (Metal Cutting Laboratory)

S/N	Name of the Equipment	Technical Specifications	Quantity
1 1	Name of the Equipment Milling Tool Dynamometer	Capacity: 500Kg in X, Y & Z direction, Mounting Type :350(L) X 350(W)X 100(H)mm to mount on the machine bed, Sensor Type: Strain Gauge based 350 bridge, Job Mounting: Mounting holes M10 provided to fix machine vise, Display: 16x2 line LCD display, RTC: Inbuilt Real time clock with battery backup, Zero Balancing: TARE button on front panel, Resolution: 0.1 kg for all 3 component, Data Storage: 120 KB of inbuilt memory for data storing and retrieving to computer, Communication: USB (2.0) interface for data logging, Software: Data logging and data	Quantity 1
2	Lathe Tool Dynamometer	retrieving software with excel printing. Capacity: 500 Kg in X,Y & Z direction, Tool Size: 20 mm square, Dynamometer Mounting hole: 25 mm dia., hole to mount sensor on tool post, Sensor Type :Strain Gauge based 350 bridge, Connection :9 pin D connector with shielded cable.3 meter length, Housing :Metal Enclosure with chrome plating, Display :16x2 line LCD display to show X Y Z force simultaneously, ADC :16 Bit, Scan Rate :Settable from 1 to 8 steps, ranging from 3 samples/sec to 30samples/sec, Memory: 120 kb on broad memory to log the data, Scan time	1

		:Settable through menu from 0.1 sec to	
		999.9 sec., Communication: USB (2.0)	
		communication for data logging through computer, Software: ToolViewer (latest	
		version) for data logging and data	
		retrieving with excel printing	
3	Drilling Tool	Capacity: 500Kg Thrust load, 20	1
	Dynamometer	Kgm torque, Mounting: Flange type to	
		mount on the machine bed, Sensor Type	
		:Strain Gauge based 350 bridge, Job	
		Mounting :Slots provided on the flange	
		plate to mount the machine vise, Display:	
		16x2 line LCD display, RTC: Inbuilt	
		Real time clock with battery backup,	
		Zero Balancing: TARE button on front panel, Resolution: Torque 0.01 kg.m	
		Thrust 0.1 kg, Data Storage: 120 KB of	
		inbuilt memory for data storing and	
		retrieving to computer, Communication :	
		USB (2.0) interface for data logging,	
		Software : Data logging and data	
		retrieving software with excel printing.	
4	Data Acquisition Card-	Type-1 DAQ card for force, power	1
	Type-1	measurements: 16 analog inputs (16bit,	
		250kS/s), 4 digital inputs, 4 digital	
		outputs, 32-bit counters, Bus-powered USB for high mobility, Built-in signal	
		connectivity, signal streaming technology	
		to enable bidirectional high speed data	
		streams on USB, on-board amplifier.	
5	Data Acquisition Card-	Type-2 DAQ card for temperature	1
	Type-2	measurement: 16 channel, accuracy: less	
		than 1.5°C, cold junction compensation	
		(CJC) sensors, sensitivity: 0.02°C,	
		isothermal terminal block, Sampling rate:	
		60S/s or more, Noise correction	
		capability: 50Hz/60Hz, thermocouple	
		support for J, K, T, E, N, B, R type, operating environment of up to 60°C,	
		signal streaming technology to enable	
		bidirectional high speed data streams on	
		USB.	

PACKAGE-4 (Computer Aided Design Laboratory)

S/N	Name of the Equipment	Technical Specifications	Quantity
1	CAM Software	5-Axis Mill - Supports up to 5-axis simultaneous machining including 2.5-Axis Mill, 3-Axis Mill, and 4-Axis Mill and Rotary 2.5-Axis Milling cycles, Area Clearance, Pattern Project, Z Level, Constant Stepover, Pencil Mill, 3-Axis Rough and 3-Axis Finish cutting cycles, Curve Project, Flat Area and rest machining support for all 3-Axis cycles.4-Axis simultaneous machining. 3-Axis Mill w/Undercutting, and Rotary wrap add-on which supports cutting wrapped features defined from cylindrical faces or edges where the axis of the faces/edges is coincident with the 4th axis or turn axis (in a Mill-Turn environment).	1
		programming CNC lathe machines includes automatic roughing, finishing, grooving, threading, cutoff and single point (drilling, boring, reaming and tapping) cycles. Control of sub spindle operations and a second Turret via post processor options. 4X Wire EDM including programming of	
		2-through 4-axis Wire EDM CNC machines. 2-Axis Contour operations automatically generate rough, tab and skim cuts on 2.5-Axis features. 4-Axis Contour operations automatically generate rough, tab and skim cuts on 4-Axis features. License Type: Academic Perpetual, 30 users, with User Manual and Tutorials.	

PACKAGE-5 (Robotics and FMS Laboratory)

S/N	Name of the Equipment	Technical Specifications	Quantity
1	PLC Trainer Kit	Modular desktop rack type, width varying from 15-20 in with programming software	1
		and compatible power supply unit, digital and analog I/O, Simulator static module-	
		Process control, Manufacturing	

Automation Control etc., Simulator
dynamic module- sensor module, star-
delta module etc. with training media and
technical literature.

PACKAGE-6 (Condition Monitoring & Tribology Laboratory)

S/N	Name of the Equipment	Technical Specifications	Quantity
1	Dry Abrasion Tester	As per ASTM G65 standard, Normal load	1
		on specimen: 0.3,0.5,1,2&3Kg, Speed:	
		200 rpm or above with variable speed in	
		steps of 1rpm, Rubber wheel size	
		approx.220 mm dia. × 12 mm wide, Power	
		supply :Single phase, 50Hz.	

PACKAGE-7 (Virtual Manufacturing Laboratory)

1	Reverse Engineering Software	Direct capturing from scanner, Automatically extraction of the original design intent of a scanned part, Creation of CAD solids and surfaces directly from polygon meshes or point clouds, Transfer parametric models, with feature trees, into SolidWorks.	1
		Collection of data in real time with a liveScan enabled 3D scanner, Import of point clouds or meshes from any scanner or other source, Conversion of raw scans into high quality, polygon mesh models, Reduction of polygon mesh file size without losing accuracy, Creation of NURBS surface models for use in CAD/CAM and other downstream applications.	