



**NATIONAL INSTITUTE OF TECHNOLOGY,
TIRUCHIRAPPALLI, TAMIL NADU – 620 015**

DEPARTMENT OF CHEMICAL ENGINEERING

TENDER FOR PROCUREMENT OF COMPRESSOR

BID SYNOPSIS

Tender Reference Number and Date	NITT/ CHL/ COMPRESSOR/ 2015-16/2 dated 10 th August, 2015
Brief Description of the item to be purchased	Tender for procurement of screw compressor for delivering atleast 200 m ³ /hr at 8 bar pressure.
Type of Tender	Two Bid System
Cost of Tender Document including 5% VAT (Non- refundable)	Rupees in figures 150/- (Rupees one hundred and fifty only) payable through Demand Draft drawn in favor of The Director, NIT, Tiruchirappalli, Tamilnadu Payable at Tiruchirappalli
Our web site address for downloading the Tender document	The tender document can be downloaded from our website www.nitt.edu
Earnest Money Deposit (Refundable)	Rupees 9,000/- (Rupees nine thousand only)-payable through Demand Draft drawn in favour of The Director, Tiruchirappalli, Tamilnadu Payable at Tiruchirappalli
Last Date and Time for receipt of tender	Friday 21 st August 2015 up to 3 P.M
Mode of submission of Tender	By Speed Post/ Register Post/ Courier/ Hand delivery at the postal dispatch section of NITT at the Administrative building.
Date, time & venue Opening of Tender	Friday 21 st August 2015 up to 3.30 P.M
Date and time of opening of Price bids	After evaluation of technical bids, the date, time and place of opening of the Price bid will be intimated to technically qualified bidders.
Address for submission of Tender With a Superscription	The Director, National Institute of Technology, Tiruchirappalli-15, Tamil Nadu, India With a Kind attention to: Dr. J. Sarat Chandra Babu, Professor and Head, Chemical Engineering Department, National Institute of Technology, Tiruchirappalli-15
Procedure for submission of Bid	Envelope 1 : EMD and Cost of Tender document Envelope 2 : Technical Bid Envelope 3: Price bid Envelope4: Larger size Outer Envelope (Wrapper)
Contact Person for technical queries	Dr. J. Sarat Chandra Babu, Professor and Head, Chemical Engineering Department, National Institute of Technology Tiruchirappalli – 620 015 E Mail : sarat@nitt.edu 0431 250 3107

NOTICE INVITING TENDER

Sir, National Institute of Technology, Tiruchirappalli, Tamil Nadu (herein after referred to as NITT) is an Educational Institution of National Importance, invites sealed tenders from reputed Original Equipment Manufacturers or their authorized agents/ dealers/ distributors/channel partners for Supply, Installation and Commissioning of the Screw Compressor with the following Specifications:

Sr. No.	Description/Specification of item/equipment	Quantity Required
(1)	<p>SPECIFICATIONS FOR COMPRESSOR</p> <p>Technical Data: Effective free air delivery of complete unit measured according to ISO 1217 Part C 3,62 m³/min at maximum compressor overpressure 8 bar Main drive motor nominal power 22,00 kW Protection type / Insulation class of the motor IP 55 / F Operating voltage (compressor) 400 V / 50 Hz Control voltage (compressor) 24 V AC / 24 V DC Cooling air flow volume (if connected to ducting) 3450,00 m³/h Suction or ambient temperature (min...max) +5...+45 °C Compressed air outlet temperature above ambient temperature 10 K Residual oil content in compressed air 1...3 mg/m³ Unit sound pressure level (in accordance with DIN EN ISO 2151) 69 dB(A) Compressed air connection (ball valve) G 1</p> <p>Maintenance Requirements</p> <ul style="list-style-type: none"> – For routine inspection and maintenance the entire inside must be easily accessible through large doors and removable sheeting in the cover – Very simple maintenance through common access opening for oil separator cartridge and high efficiency oil filter; valveless oil circuit <p>Additional Requirements</p> <ul style="list-style-type: none"> – Compressor unit must be isolated from mechanical vibration – Motor protection IP 55 with PTC thermistors needs to be provided – integrated electrical switch cabinet (IP 54) – Belt guard for safe operation and protection of the V-belt from dirt ingress – Constant low oil carry-over in all operating phases due to efficient pre-separation in the integral compressed air-oil separator – Compressed air aftercooler for low compressed air outlet temperatures – No condensate in the oil due to thermostatically controlled oil cooler – Powder coated surface, light blue, RAL 5012 <p>The control system Requirements</p> <ul style="list-style-type: none"> – Automatic selection of the optimum operating mode by synchronisation – Automatic optimisation of motor switching cycles – Monitoring of pressure via pressure transmitter – Network pressure adjusted from the keyboard – Integral test function for outputs – Messages via LC-Display / LEDs / contacts – Run on time (for short operating times) adjustable via keypad – Control voltages 230 V / 24 V AC – Connection for Master Control System – Non-resetting after power failure – Auto-restart function after power failure selectable 	1 No.

Display Requirements

- Green LED 'Ready' indicator (steady light) and display of 'soft' run down after manual switch off (flashing light)
- Final compression temperature
- Network pressure
- Load operation
- Idling
- Ready to operate
- Automatic selection of operating mode or continuous operation mode active
- Pressure control set to external
- Auto-restart function is active after power failure
- Operating hours - Total
- Operating hours - Idling
- Operating hours until next scheduled compressor service is due
- Operating hours until next motor service is due
- Load cycles until next receiver service due
- Load cycles until next suction regulator service due
- Function test for display elements
- Software-no.
- Warning message
- Red LED for fault messages (flashing light), maintenance (flickering light)

Monitoring as individual messages

- Max. service pressure too high
- Temperature too low (frost protection)
- Drive motor temperature outside limits
- Fault - network pressure transducer
- Single control button (On / Off / Info / Enter) defective
- Control save function defective

Messages

- Intermittent mode
- Continuous mode
- Ready to operate
- Operation
- Load operation
- Idling
- Lamp test

SPECIFICATIONS FOR AIR FILTER

Technical Data:

Volume flow measured at 20 °C, 1 bar and

7 bar operating pressure **3,60 m³/min**

Differential pressure when new **< 0,070bar**

Permissible operating pressure, maximum **16 bar**

Residual oil content when new < **0,6 mg/m³**

at maximum intake concentration **40 mg/m³**

Dimensions and weight (according to dimensioned drawing): **M 3200.0893**

Width / Depth / Height **130 / 130 / 349 mm**

Connections **G 1**

Weight **3,0 kg**

	<p>Maintenance Requirements</p> <ul style="list-style-type: none"> – No standing liquids when the filter is opened thanks to complete drainage using curved base <p>Performance Requirements</p> <ul style="list-style-type: none"> – To eliminate fine impurities from compressed air – Efficiency of 99.925%, based on particles larger than 1 µm – Significantly high dirt intake capacity – Increased filter area – Optimal flow control with lowest possible pressure resistance <p>Additional Requirements</p> <ul style="list-style-type: none"> – Certification according to ISO 8573-1, ISO 8573-5 and ISO 12500-1 – Filter with differential pressure gauge – Including automatic mechanical float condensate drain 	
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Important Note:

(1) In view of compatibility we require Screw Compressor only.

(2) In view of the emergency requirement, the Delivery should be immediately on placement of purchase order.

CHAPTER 1: GENERAL INSTRUCTIONS TO THE BIDDERS

1. The tender document and terms and conditions can be downloaded from our website www.nitt.edu.
2. **EMD amount and Tender application Fee:** Through two separate Demand Drafts, the bidder is required to furnish Earnest Money Deposit Rs. 9000 (Nine thousand only) and Cost of Tender Document Rupees 150 (One Hundred and fifty only)
3. **Without EMD and Cost of Tender Document, the technical bid will not be opened and the tender will be rejected summarily.**
4. **Due date and Time:** The sealed tender should be submitted on or before Friday 21st August 2015 3.00 P.M., through post or hand delivery and addressed to the Director, National Institute of Technology, Thuvakkudi, Tiruchirappalli-15, Tamil Nadu, India. Quotations/ bids received after deadline will be rejected summarily.
5. **Tender Opening:** While tender opening, at the first stage, the envelope containing EMD amount and Cost of Tender document will be opened and at the Second Stage the envelope containing Technical Bid will be opened on Friday 21st August 2015 at 3.30 P.M in the presence of the bidders or their authorized representatives, who choose to be present at the time of opening. The name of those who have submitted their offers along with the details of their remittance of EMD and Cost of Tender Document will only be read out and no other information/ details whatsoever will be shared at this stage.
6. If in any case, unscheduled holiday occurs on prescribed closing/ opening date, the next working day shall be the prescribed date of closing/ opening.
7. At the third stage, price bid of the technically acceptable offers will be opened for further evaluation and ranking for award of the contract/ purchase order.
8. The bidders are advised to go through the tender documents and understand the terms and conditions specified therein before submitting the tender.
9. Prescribed Format: The Tender document consisting of Technical Bid (along with all annexures to the technical bid) and Price Bid should be submitted in the Prescribed Format only.
10. The bidders are not allowed to make addition or alteration in the tender document.

11. Each and every page of the submitted bid shall carry the page numbers. The Vendor should stamp and sign on each page of the technical and price bid.
12. All pages of the tender document shall be signed by the person or persons duly authorized to sign, on behalf of the bidder.
13. No paper / page shall be detached from the tender document. No addition or alternation should be made in the tender document.
14. Conditional tender, late and delayed tender will not be accepted/ considered.
15. The NITT shall not be responsible for any postal delay in receipt of the offer. Tender should be properly sealed.
16. The NITT will not be responsible for pre mature opening of the tenders.
17. The offers submitted by telex/ telegram/ fax/ E-mail etc. shall not be accepted and will be summarily rejected.
19. Offers should be clearly written or typed without any cutting or over writing. All cutting / over writing must be initialed and stamped.
20. Bidders must confirm the acceptance of all the terms and conditions of the tender.
21. Making misleading or false representation in the bid document will lead to disqualification of the bidder resulting in forfeiture of EMD amount.
22. The tender should be submitted through Registered Post or Speed Post or through Hand delivery.
23. Any non-acceptance or deviations from the terms and conditions must be CLEARLY mentioned. However, bidder must note that any conditional offer or any deviation from the terms and conditions of this tender may render the bids liable for rejection.
24. Furnishing of any false information/ fabricated document would lead to rejection of tender at any stage.

24. Earnest Money Deposit (EMD):

- a. The quotation must be accompanied by Earnest Money Deposit (EMD). Tenders without EMD will be not be entertained.
- b. The above requirement, however, will not apply to bidders who are registered with the National Small Industries Corporation (NSIC). But, for claiming this exemption under NSIC registration, the bidders MUST furnish an self-attested copy of the exemption certificate indicating Date of registration, date till registration is valid, whether registered for items for which tender has been submitted.
- c. The EMD shall be in the form of Demand Draft drawn from any of the Nationalized Bank/ Scheduled Commercial Bank drawn in favour of the Director, NIT, Tiruchy, payable at Tiruchy. The bid security should be valid for 90 days. If the EMD is not found valid in terms of amount wise, period wise or otherwise, technical bid of the bidder shall not be opened.
- d. Earnest Money is liable to be forfeited and bid is liable to be rejected, if the tendered withdraw or amends / impairs or derogates from the tender in any respect.
- e. The EMD of the technically disqualified bidders will be returned within 21 days from the date of opening of the technical bids.
- f. The EMD of those bidders who are successful in technical bid but unsuccessful in the financial/ price bid shall be refunded within 14 days from the date of opening of financial/ price bid.
- g. The EMD of the successful bidders shall be refunded on receipt of Performance Bank Guarantee.
- h. No interest will be payable by the NITT on the Earnest Money Deposit.

CHAPTER 2: SPECIAL INSTRUCTIONS TO THE BIDDERS

Procedure for Sealing and Marking of bids: The Tender / Bid Cover shall contain the following:

- a) **FIRST** envelope should contain the Earnest Money Deposit and Cost of Tender Document. The envelope should be sealed and super scribed as “EMD COVER”
- b) **SECOND** envelope should contain the Technical Bid along with enclosures desired in the Tender document. This envelope should be sealed and super scribed as “TECHNICAL BID” Cover.
- c) **THIRD** envelope should contain the Price Bid. This envelope should be sealed and super scribed as “PRICE BID” Cover.

- d) All the above mentioned THREE SEPARATE ENVELOPS are to be sealed and kept in one single Larger size outer envelope (**FOURTH** envelope) which should also be sealed and super scribed.
- e) **Each of the FOUR ENVELOPS** shall be super scribed with following details:

Tender/ Notice inviting Quotation Numberfor supply of

Due date of tenderand time

Name of the intending Department of NITT

Name and Complete address of the Bidder

- f) If all the THREE inner envelopes and the ONE outer envelope (i.e., larger envelope) are not sealed and marked as instructed, NITT will assume no responsibility for the misplacement or premature opening of any of the envelope. An envelope opened prematurely will be rejected.
- g) There shall NOT be any price indication in the technical bid. If for any reason, it is found that the technical bid reveals the price bid related details in any manner whatsoever, or, the price bid is enclosed in the envelope super scribed, "Technical Bid", the bid document will be summarily rejected in the first instance itself. Any offer containing both the Technical bid and Price bids in the same envelop will also be out rightly rejected.

CHAPTER 3: TERMS AND CONDITIONS FOR PURCHASE

This Institute: The National Institute of Technology, Tiruchirappalli-15 is a Central Statutory Autonomous Body, functioning under the direct control of Ministry of Human Resources Development, Government of India. If the bidders have any special rates for the Government of India organizations/ academic institutions, they may quote those rates. If the bidders/ suppliers can supply goods on DGS&D rates that fact should be specifically mentioned in the quotation along with a copy of the DGS&D rate contract. However, no forms will be given in this regard by this Institute.

Technical Specifications: Specifications are basic essence of the product. It must be ensured that the offers are strictly as per our specifications. At the same time, it must also be kept in mind that merely copying our specifications in their quotation shall not make firms eligible for consideration. The quotations should contain information on make, model, manufacturer, number, country of origin etc., of the goods offered. A quotation has to be supported with the printed technical leaflet / brochure/ Templates and the specifications mentioned in the quotation must be reflected / supported by such printed technical leaflet / literature model quoted / tendered specifications should invariably be highlighted in the leaflet/ literature for easy reference.

PRICE: Price / Rates for Indigenous items must be quoted on **DOOR DELIVERY** Basis (i.e., FOR Destination basis). The price quoted shall be inclusive of all taxes, duties, levies, freight, transportation, insurance, loading and unloading etc. The NIT, Tiruchy will pay only for such goods as are actually received in Good condition and in accordance with the Purchase order.

EXEMPTION FROM EXCISE DUTY AND CUSTOMS DUTY: The NITT being a Research Oriented Higher Technical Institution is exempted from paying Central Excise Duty and eligible for Concessional Rate of Customs Duty. Wherever applicable, we will provide exemption certificate issued by Government of India to enable the vendor to clear the goods without payment of Excise Duty or Clearance of Imports at Concessional Rate of Customs Duty i.e., 5.15% (Basic Customs Duty, 2% Educational Cess on Basic Customs Duty, 1% Higher Education Cess on Education Cess).

SALES TAX: For Sales Tax Concession, NITT is not authorized to issue C or D Form Sales Tax Certificate. Hence, the bidder may claim Sales Tax at the Legally Leviable Rate. However, we request the bidder that Tamil Nadu VAT and Central Sales Tax may be charged at concessional rates, if any, applicable to Educational and Research Institutions run without profit motive, for which necessary End User Certificate will be issued at the time of retirement of document.

SERVICE TAX: Being an educational institution, NITT is exempted from payment of service tax in respect of

following “services received” by NITT (a) Catering Services (b) Security Services (c) House Keeping Services (d) Transportation services and (e) Conduct of examination through outsourced agency. In respect of all other services received by it, NITT is liable to pay service tax.

VALIDITY OF THE OFFER: For Indigenous Purchase the offer should be valid for 90 days and for Foreign Purchase it should be valid for 120 days, from the date of submission of tender.

WARRANTY: The equipment must be warranted against all manufacturing defects for a minimum one year or as per standard warranty/ guarantee of the bidder, whichever is more from the date of satisfactory Supply, installation and commissioning. If any defect develops during the warranty period due to faulty material, design workmanship etc., the supplier shall remedy the defects at their cost. They shall replace defective portions of the goods or replace the material / equipment as a whole, wherever necessary.

DELIVERY SCHEDULE: Unless otherwise specified, delivery of goods at NITT will have to be made within 45 days from the date of receipt of the Purchase Order or as stipulated in the Purchase Order. The Institute reserves the right to cancel the order, if the supplier fails to adhere to the delivery schedule. Goods/ Material / Equipment should be door delivered at NIT, Tiruchy. Supplier shall be liable for all or any damage, loss or destruction to any goods or property resulting in improper packing or handling by Supplier.

PAYMENT TERMS: As a matter of Policy, No advance payment will be made. No part payment will be made. Bills will be paid by way of Account Payee Cheque/ NEFT/ RGTS transfer. **For indigenous purchase of materials/ goods/ consumable items**, 100% payment will be made against delivery of items in good condition subject to submission of Performance Bank Guarantee equivalent to 10% of the Purchase Order value (5% in the case of order value less than one lakh).

If the vendor fails to furnish the Performance Bank Guarantee, an amount equal to 10% of the Purchase Order value will be deducted from the final bill. e. Payment will be generally through Electronics Transfer of Funds (EFT) system for which the successful bidder has to furnish the following information: Name of the bank with branch where the accounts exist, Bank Account Number, IFSC Code etc.,

PERFORMANCE BANK GUARANTEE (PBG): 1. As Performance Security, the successful bidder shall furnish an unconditional Performance Bank Guarantee (PBG) from a Nationalized Bank or scheduled commercial bank for an amount equal to 10% of the Purchase order value and it should be kept valid for a period of 60 days beyond the completion of the Warranty Period. 2. The Performance Bank Guarantee (PBG), shall be furnished in the Format specified by NITT.

Liquidated Damages: If the successful bidder fails to perform the supply installation and commissioning, within the stipulated time then penalty at the rate of 1% per week subject to a maximum of 10% of the order value will be levied and deducted.

Pre- installation: Pre installation facilities required for installation may be intimated in the technical bid. Subsequently, before the consignment lands in NIT, tiruchirappalli, the bidder shall confirm that the pre installation requirements are sufficient for installation of the equipment. In other words, the bidder should continuously monitor the pre installation requirements and see that everything is ready before the consignment is taken to the site for installation.

Manuels: The bidder/ tenderer should provide, free of cost, all original user’s manuals, technical documents, operating manuals, installation manual, Service manual, Circuit Diagram, system toolkit, application notes, user guides, equipment CDs and DVDs, and all printed / electronic media/ drawings, data / calibration certificates that comes with the equipment / items. The supplier shall supply licensed versions of the equipment system. NITT is not responsible for any consequences arising out of patent right problems.

Purchasers’ Right: Notwithstanding anything specified in this tender document, The Director, NITT, in his sole discretion, unconditionally and without assigning any reasons, reserve the rights (a) To accept or reject the lowest tender or any other tender or all the tenders, at any time prior to the award of the tender, without incurring any liability to the affected tenderer or tenderers (b) To accept any tender in full or in part (c) To reject the tender offer not confirming to the tender terms (d) To give purchase preference to Public Sector Undertaking wherever applicable as per Govt. Policy/ Guidelines.

No enquiry shall be made by the bidder(s) during the course of evaluation of the tender till final decision is

conveyed to the successful bidder(s). However, the Purchase Committee or its authorized representative can make any enquiry/seek clarification from the bidders. In such a situation, the bidder shall extend full co-operation. Any effort by the bidder to influence the scrutiny / evaluation committee of NITT or any of its members in the processing of tenders or award decisions may result in the rejection of the tender.

Interpretation: Interpretation of the clauses in the tender document/ Contract document: In case of any ambiguity/ dispute in the interpretation of any of the clauses in this tender document, Director, NITT's interpretation of the clauses shall be final and binding on all parties.

Arbitration: Dispute, if any, arising out of the supply of the Items shall be settled by Arbitration by SOLE Arbitrator to be nominated by the Director, NITT as per the provisions of Indian Arbitration Act 1996. The Place of Arbitration shall be Tiruchirappalli, Tamil Nadu. The decision of the Arbitrator shall be final and binding on both the parties.

Applicable law, Dispute and Jurisdiction: The contract shall be governed by the laws and procedures established by Government of India. Any Dispute or difference whatsoever arising between the supplier and purchaser unless resolved amicably, shall be settled by the Court of Law having Jurisdiction over Tiruchirappalli, Tamil Nadu.

Force Majeure: Any delay due to Force Majeure will not be attributable to the Vendor.

CHAPTER 5: PROFORMA FOR TECHNICAL BID

S.No	Item/ Requirement from the Bidder	Bidders Response should be definite, complete and legible
1	Details of remittance of Cost of Tender Document: (1) DD Number (2) Amount (3) Issuing banker	
2	Particulars of remittance of EMD: (1) DD Number (2) Amount (3) Issuing banker	
3	In case, the bidder claims exemption from EMD and tender fees, whether valid registration certificate with NSIC has been furnished? (Note: The validity of the NSIC certificate will be verified by NIT, T through online portal maintained by NSIC for verification)	
4	Name and Complete Postal address of the Applicant or Bidder with phone/ Fax/ mobile number	
5	Website Address of the Bidder firm / company (Optional)	
6	Legal Status/ Constitution of the Bidder: Sole Proprietor or Partnership or Private or Public Limited Company or Others (attach documentary proof)	
7	Classification of the bidder (a) Manufacturer or (b) Authorized Agent or (c) Authorized Dealer (d) Stockiest or (e) others	
8	Name, address, designation, phone, cell number and E Mail address of the Contract Person	
9	Income Tax Permanent Account Number (PAN Number) (Please Attach self-attested xerox copy)	
10	VAT/ TIN number (Please Attach self-attested xerox copy)	
11	Central Sales Tax (CST) Number (Please Attach self-attested xerox copy)	
12	Service Tax Registration Number (Please Attach self-attested xerox copy)	
13	If the bidder has already supplier SIMILAR item or similar equipment to NIT, Tiruchy the details of the same	
14	Whether you agreed to abide by the terms and conditions of the tender document? In the event of award of the contract, whether you agrees to give security deposit/ Performance Bank Guarantee against warranty obligations?	

Authorized signatory of Bidder with Seal
Name.....
Designation.....

CHAPTER 6 : PRICE BID FORMAT FOR INDIGENOUS PURCHASES

Tender No. & Date:

Name of the Bidder:

S. No.	Description of the item to be procured	Unit	Quantity	Basic Price in Rupees (Excluding all taxes and duties)	Excise Duty %	VAT/ CST in %	Service Tax in %	Total Amount in Rupees (Inclusive of all taxes and duties)
1	Supply Portion/ Main item (<i>under the letter head of the bidder Individual Item wise break price shall be attached as an Annexure to this price bid</i>)							
2	Additional / Optional items/ Accessories and Spares etc., (<i>Individual Item wise break price shall be attached as an Annexure to this price bid</i>)							
3	Installation and Commissioning Charges, if any							
4.	Packing and Forwarding Charges, if any							
5.	Freight and Transit Insurance Charges, if any							
6.	Any other charges, if any							
7.	TOTAL ALL INCLUSIVE PRICE (Supplied or Supplied, installed and commissioned at NITT on door delivery basis. (i.e., F.O.R. Destination Basis)							

Authorized signatory of Bidder with Seal
Name.....
Designation.....

Note 1: NITT is eligible for exemption from Excise Duty and Concessional Customs Duty. Please refer the tender document. As regards Service tax, As regards, sales tax NITT is not authorized to issue C or D forms for concessional VAT. However, it can issue end user certificate for claiming concessional VAT.

Note 2: Price bid Format should be supported with separate sheet duly typed and signed on the letter head of the bidding firm/ company indicating details i.e., different components/ parts/ units of the equipment (if any) with number, name and price of each part.

Note 3: DGS&D rate contract: If any of the items proposed to be procured under this tender is already under DGS&D (Director General of Supplies and Disposal) Rate Contract, the bidder may give us the advantage of rate contract rate, as ours is a premier educational and research institution sponsored by the Government.