

## राष्ट्रीय विज्ञान शिक्षा एवं अनुसंधान संस्थान, भुवनेश्वर

(परमाणु उर्जा विभाग, भारत सरकार का एक स्वयं शासित संस्थान) NATIONAL INSTITUTE OF SCIENCE EDUCATION AND RESEARCH, BHUBANESWAR

(AN AUTONOMOUS INSTITUTE UNDER DEPT. OF ATOMIC ENERGY, GOVT. OF INDIA)

Name of Work: - De-scaling of KIRLOSKAR make chiller 1800 TR (450TR X 4) (Model No-KSC087) at NISER Campus, Jatni.

NIT No. & Date: - NISER/MECH/CHILLER /2021-22/12, Dtd: 23.09.2021

Estimated cost of tender : Rs 2, 64,320 /-( Two Lakh Sixty Four

Thousand Three Hundred twenty only)
Earnest Money : Rs. 5,286

Completion time : 30 (Thirty days)

#### NOTE:

- 1. The details of tender notification can be downloaded from <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> or Tender Free View Link from NISER Website <a href="https://www.niser.ac.in/content/tender">https://www.niser.ac.in/content/tender</a>.
- 2. Vendors should obtain the USER ID and PASSWORD from **CPP Portal** by clicking on "https://eprocure.gov.in/eprocure/app" link in the homepage.
- 3. For further details on e-Tender participation, please contact Help desk as mentioned below: Telephone: 0120-4200 462/ 0120-4001 002/ 0120-4001 005/ 0120-6277 787, Email: <a href="mailto:support-eproc@nic.in">support-eproc@nic.in</a>
- 4. Tenders should be submitted only through **CPP portal** and obtain the Tender Acknowledgement copy as a proof of successful submission.
- 5. Tender documents for viewing only are also available in NISER web-site address: www.niser.ac.in.
- 6. All corrigendum and addendum will be published on NISER website and CPP Portal.
- 7. NISER is publishing all its public and limited tender on NISER website.

#### **Instructions for Online Bid Submission**

The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submitting their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>.

#### REGISTRATION

Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: https://eprocure.gov.in/eprocure/app) by clicking on the link "Online bidder Enrollment" on the CPP Portal which is free of charge. As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts. Bidders are advised to register their valid email address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal. Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile. Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead for misuse. Bidder then logs in to the site through the secured login by entering their user ID / password and the password of the DSC / e-Token.

#### **SEARCHING FOR TENDER DOCUMENTS**

There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include <u>Tender ID</u>, <u>Organization Name</u>, <u>Location</u>, <u>Date</u>, <u>Value</u>, <u>etc.</u> There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal. Once the bidders have selected the tenders they are interested in, they may download the required documents / tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS / email in case there is any corrigendum issued to the tender document. The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification / help from the Helpdesk.

#### PREPARATION OF BIDS

Bidder should take into account any corrigendum published on the tender document before submitting their bids. Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid: Please



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note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.

#### **TENDER DOCUMENTS**

#### File No. NISER/MECH/CHILLER /2021-22/12,

Name of work: - De-scaling of KIRLOSKAR make chiller 1800 TR (450TRX4) (Model No-KSC087) at NISER Campus, Jatni.

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NOTE: Tender can be downloaded and bided from website address: <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>. Tender documents for viewing only are also available in NISER web-site address: <a href="https://eprocure.gov.in/eprocure/app">www.niser.ac.in</a>

Sd/-FIC (EMW)

Dtd: 23.09.2021

## NAME OF THE WORK

# De-scaling of KIRLOSKAR make chiller 1800 TR (450TRX4) (Model No-KSC087) at NISER Campus, Jatni.

## **TECHNICAL BID**

#### **NOTE**

The tenderer should enclose the following documents along with the Technical Bid otherwise tender will be summarily rejected.

- a) Scanned copy of self-attested works completion certificate during the last seven years from Govt./Semi- Govt. organization/ Autonomous organization/ Reputed Private organization not below the rank of E.E as per NIT.
  - b) Scanned copy of self-attested valid Registration Certificate (State PWD/CPWD/Railways/MSME/Udyog Adhaar/MES).
  - c) Scanned copy of self-attested PAN card.
  - d) Scanned copy of self-attested GST Registration certificate.
  - e) Scanned copy of the EMD amount in the form of Demand Draft is as per NIT.
  - f) Scanned copy of ISO certificate, if any.
- Also, contractors shall submit the above documents (self-attested) with original for verification before opening of technical bid for verification with original DD for EMD. The bidder those who will not submit the self-attested hard copies of required documents in the office, the technical bid of the bidder will not be opened.
- 3) Incomplete/Partial bid or bid not submitted in prescribed format will be rejected.

#### **NOTICE INVITING TENDER**

Director, NISER invites E- tender in Single bids (Both Technical Bid and Financial Bid) for the following work: -

Name of the work: **De-scaling of KIRLOSKAR make chiller 1800 TR (450TRX4)** (**Model No-KSC087**) at **NISER Campus, Jatni.** 

Ref. NIT No. NISER/MECH/CHILLER /2021-22/12, Dtd: 23.09.2021

Estimated Cost:

Rs 2, 64,320 /

Earnest Money:

Rs. 5,286

Period of Completion:

30 (Thirty days)

Last date of submission of E- tender: 08.10.2021 to 12.30 AM.

Date of Original EMD cost submission: 11.10.2021at 3.45 P.M.

Date of Opening: 11.10.2021at 4.00 P.M

Tender can be downloaded and bided from website address: <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>. Tender documents for viewing only are also available in NISER website address: <a href="https://eprocure.gov.in/eprocure/app">www.niser.ac.in</a>

Sd/-

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#### **Tender Notice**

Director of NISER hereby invites E- tender in a single bid (both Technical Bid and Financial Bid) for the following work from experienced and capable agencies registered in CPWD/ MES/ Railways/ State PWDs/ MSME and/or those who have worked for DAE or its Organizations or Govt. /Semi Government organizations/ reputed private organizations and have successfully carried out minimum of **one/two/three similar works** of 80%/60%/40% respectively of the estimated cost or above, as indicated in the prescribed format of the E-Tender portal in last seven years. The eligible contractors may submit their bid along with supporting documents of fulfilling the above conditions otherwise the bid bear the risk of not being considered.

Note: Similar work means they should have experience of work in Chiller maintenance, installation and commissioning work.

Name of Work	Estimated Cost	Earnest Money	Duration of work
	₹	₹	
Name of the work: - De-scaling of KIRLOSKAR make chiller 1800 TR (450TRX4)( Model No-KSC087) at NISER Campus, Jatni.	2, 64,320.00	5,286	30 (Thirty- Days).

The Bidders are requested to give detailed tender in E-Tender portal in the prescribed forms in single bids (both Technical Bid and Financial Bid).

#### Tender process & award of contract.

The technical bid will be evaluated to shortlist the eligible bidders. The date of financial bid opening will be intimated later. The financial bid of only the short listed bidders shall be considered for further processing. Bidders whose technical offer is found acceptable and meeting the eligibility requirements as specified in this tender will be eligible for the financial bid evaluation.

The earnest money deposit and the cost of tender (Non Refundable) as indicated against the work should be send by post or by hand to "SO(C)-Mechanical, INSTITUTE WORKS DEPARTMENT, NISER, Jatni campus, PO-Bhimpur - Padanpur, Via-Jatni, District-Khurda, PIN- 752050" so that it reaches on or before the opening of the technical bid for e-tender system, in the form of Account Payee Bank Draft payable on any branch of Nationalized/Schedule Bank at Bhubaneswar/ Jatni in favor of Director, NISER payable at Bhubaneswar/Jatni in a sealed envelope. All tenders submitted without requisite amount of earnest money shall be rejected and their technical and financial bid shall not be opened. No interest is payable on EMD. Director of NISER, reserves the right to accept/reject any/all tenders without assigning any reason whatsoever. Part or incomplete tenders will be summarily rejected. No further correspondences whatsoever shall be entertained in this regard. Canvassing in any manner shall result in rejection of the tender.

Any dispute arising out of this shall subject to Bhubaneswar jurisdiction only.

Sd/-

FIC (EMW)

#### **General Terms and Conditions:**

- 1. Director of NISER hereby invites E- tender in a single bid (both Technical Bid and Financial Bid) for the following work from experienced and capable agencies registered in CPWD/ MES/ Railways/ State PWDs/ MSME and/or those who have worked for DAE or its Organizations or Govt. /Semi Government organizations/ reputed private organizations and have successfully carried out minimum of one/two/three similar works of 80%/60%/40% respectively of the estimated cost or above, as indicated in the prescribed format of the E-Tender portal in last seven years. The eligible contractors may submit their bid along with supporting documents of fulfilling the above conditions otherwise the bid bear the risk of not being considered. In support of fulfilling all the essential conditions mentioned in the previous paragraph the contractor shall submit the details through e-Tender in the prescribed format the past details, mentioning the name of work, estimated cost, date of commencement as per agreement & actual date of completion as per agreement along with schedule of quantities executed and any penalty levied due to delay in executing the work from an officer not below the rank of Executive Engineer.
  - 2. The estimated cost of the work is ₹ 2, 64,320 / /-( Two Lakh Sixty Four Thousand Three Hundred twenty only)
  - 3. Period for completion of the work will be **30** (**Thirty Days**) and the date of commencement shall be reckoned from the tenth day of issue of award letter.
  - 4. The earnest money deposit and the cost of tender (Non Refundable) as indicated against the work should be send by **post or by hand** to "SO(C)-Mechanical, INSTITUTE WORKS DEPARTMENT, NISER, Jatni Campus, PO-Bhimpur-Padanpur, Via-Jatni, District-Khurda, PIN- 752050" so that it reaches on or before the opening of the technical bid for e-tender system in the form of Account Payee Bank Draft payable on any branch of Nationalized/Schedule Bank at Bhubaneswar/ Jatni in favor of "Director, NISER payable at Bhubaneswar/Jatni" in a sealed envelope. All tenders submitted without requisite amount of earnest money shall be rejected and their technical and financial bid shall not be opened. No interest is payable on EMD. The EMD will be returned to the bidders(s)/Agents whose offer is not accepted by NISER within one month from the date of the placing of the final order(s) on the selected bidder(s). In case of the bidder(s) whose offer is accepted the EMD will be returned on submission of Performance Bank Guarantee (if applicable). However, if the return of EMD is delayed for any reason, no interest /penalty shall be payable to the bidders.
  - 5. The details of tender notification can be downloaded from <a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a> or Tender Free View Link from NISER Website <a href="https://www.niser.ac.in/content/tender">https://www.niser.ac.in/content/tender</a>. Vendors should obtain the USER ID and PASSWORD from CPP Portal by clicking on "<a href="https://eprocure.gov.in/eprocure/app">https://eprocure.gov.in/eprocure/app</a>" link in the homepage. Tenders should be submitted only through e-Tender portal and obtained the Tender Acknowledgement copy as a proof of successful submission.
  - 6. The Bidders are requested to give detailed tender in E-Tender portal in the prescribed forms in two bids (Comprising Technical Bid and Financial Bid).

Last date of submission of E- tender : 08.10.2021 to 12.30 AM. Opening of both Bid (Technical & Financial) : 11.10.2021at 4.00 P.M

#### 7. Tender process & award of contract.

The technical bid will be evaluated to shortlist the eligible bidders. The financial bid of only the short listed bidders shall be considered for further processing. Bidders whose technical offer is found acceptable and meeting the eligibility requirements as specified in this tender will be eligible for the financial bid evaluation. The date of financial bid opening will be intimated later.

- 8. Director of NISER does not bind himself to accept the lowest or any tender and reserves the right to accept the tender either in whole or in part. Director of NISER, reserves the right to accept/reject any/all tenders without assigning any reason whatsoever. The decision of the Director shall be final in this regard.
- 9. Canvassing in any manner or form will lead to rejection of the Bid.
- 10. The tenderer shall not be permitted to bid for works in any unit of DAE where any of his/her relatives are employed. He shall also intimate the names of any such persons who are working with him in any capacity or subsequently employed by him and whose relatives are working in DAE or its units.
- 11. Contact for Technical information: (Only E-mail enquiries will be entertained)

#### Mr. Sujit Kumar Raut

SA-C (Mechanical),

Institute Works Department, NISER.

E-mail – kumarsujit.raut@niser.ac.in

#### **NOTE:**

A person shall be deemed to be a relative of another if, (a) they are members of a Hindu undivided family; or (b) they are husband and wife; or (c) the one is related to the other in the following manner: Father, Mother (including step mother), Son (including step son), Son's wife, Daughter (including step daughter), Father's father, Son's son, Son's wife, Son's daughter, Son's daughter's husband, Daughter's husband, Daughter's son, Daughter's son's wife, Daughter's daughter, Daughter's husband, Brother (including step brother), Brother's wife, Sister (including step sister), Sister's husband.

- 12. **The Bid shall remain valid for a minimum period of 90 days** from the date of opening of the tender for the purpose of acceptance and award of work. Validity beyond 90 days from the date of opening shall be by mutual consent.
- 13. The tenderer should see and obtain the drawings. In case of any queries, necessary clarifications may please be sought from the office of the **Scientific Officer-C** (**Mechanical**). No claim whatsoever will be entertained in this regard for any alleged ignorance, thereof.

- 14. Before tendering, the tenderer may inspect the site to fully acquaint himself about the condition in regard to accessibility to site, nature and extent of ground, working condition of site and locality including stacking of materials, conditions affecting accommodations and movement of labor, etc., which are required for satisfactory execution of the work. No ignorance of the same, whatsoever shall be entertained under any circumstances.
- 15. EMD is liable to be forfeited if the contractor fails to commence the work as per award letter.
- 16. Some of the provisions of the contract are given below.
- a). DEFECT LIABILITY PERIOD NA
- b). MINIMUM VALUE OF WORK FOR THE INTERMEDIATE CERTIFICATE Intermediate certificate for a lesser amount can be admitted for payment at the discretion of the Institute.
- c). SECURITY DEPOSIT A sum @ 2.5% of the gross amount of the bill shall be deducted from each running bill/final bill as security deposit of the contractor. In addition, the contractor shall be required to deposit an amount equal to 5% of the tendered value of the contract as **Performance Guarantee** within the period prescribed for commencement of work in the letter of award issued to him.
- d) COMPENSATION In the event of any delay in completion of the work beyond the scheduled period, the contractor shall pay an amount equal to one per cent of the total cost of work or such smaller amount as decided by Director of NISER (whose decision shall be final) as compensation to the institute, for every month that the work remains uncommenced or unfinished. Compensation to be paid shall not exceed **ten per cent** of the estimated cost of the total work as per award letter.
- 17. STORES TO BE ISSUED: No material shall be issued by the Institute. The responsibility for arranging all materials from approved manufacturer as per award letter lies with the contractor.
- 18. The rate quoted by the tenderer shall be **inclusive of Taxes as per the Govt. rule.** There will be deduction of TAX from every RA bill and from the final bill of the contractor at the rate prescribed by govt. of India from time to time.
- 19. The successful bidder will be required to submit the names, qualifications and experiences of the supervising staff to be deployed for execution of the work. In case of any changes occurring during the course of execution of the said work, the same shall also be intimated by the bidder to the institute.
- 20. The tenderer should also submit the detail list of tools and plants/ machineries/ equipment, etc. that he proposes to place at the site of work.
- 21. The Contractor shall have to make his own arrangements for storage of materials required for execution of the work and NISER in any manner shall not be held responsible for the storage and safe custody of the said materials at work site.
- 22. Electricity will be supplied to the site of work at one point only if required and Contractor can do onward distribution with metering arrangement as per the requirement. Electricity charges; if any will be recovered from the Contractor's bill based on meter readings towards its consumption.

- 23. Before commencement of the work, the contractor has to submit the list of tools and plants brought to the site of work. No items other than the list submitted will be allowed to be taken out from the work site.
- 24. Cost escalation in any manner whatsoever, will not be accepted for the said work, where in the stipulated period of completion of work is **30** (**Thirty days**) or **less.**
- 25. The work will be executed as per CPWD guidelines and DAE works procedure under the supervision of Engineer-In-charge of NISER.

#### **Technical Specifications and Scope of Work**

- Work should be carried out as per **CPWD guidelines and DAE works procedure**.
- The agency is requested to visit and inspect the site thoroughly before participating in tender.
- The materials & services to be provided by the tenderer under this contract shall be as per the technical specifications as laid down under this tender document and work must be carried out to **the complete satisfaction of the Engineer-in-charge**.
- The contractor has to engage suitably skilled/licensed workers for execution of work & supervised by supervisors / Engineer of appropriate qualification & experience to ensure proper execution of work.
   They will carry out instructions of Engineer-in-charge & overall in charge of the

#### Testing, Balancing, Commissioning & process of working

work during progress of work.

 The contractor must perform all inspection and tests of the system as a whole and of components individually as required, under the supervision of the EIC, in accordance with the provisions of the applicable standards or approved equally. Appropriate leak test.

#### • Descaling of condenser in Kirloskar make chiller 450 TR

- 1. Process of descaling should be done by maintaining PH (potential of hydrogen) level in between 3-4 in gradually changing, as per site condition or as per engineer in charge instruction.
- 2. Condenser approach should be maintaining in between 0-1.5
- 3. 24-hour circulation of chemical water with two times changing the chemical water, in 3-hour interval.
- 4. Brushing should be done as per requirement for getting clean water without scaling
- 5. All other requirement for getting approach a mentioned above should be done by agency

#### • Descaling of Evaporator in Kirloskar make chiller 450 TR

- 1. Process of descaling should be done by maintaining PH (potential of hydrogen) level in between 3-4 in gradually changing, as per site condition or as per engineer in charge instruction.
- 2. Evaporator approach should be maintaining in between 0-1
- 3. 24-hour circulation of chemical water with two times changing the chemical water, in 3-hour interval.
- 4. Brushing should be done as per requirement for getting clean water, without any scaling.
- 5. All other requirement for getting approach a mentioned above should be done by agency

#### **MATERIALS:**

• All material used for the Descaling work should be approved make of OEM i.e. Kirloskar and shall be of the best quality, confirming to the relevant specifications.

- Other that spare parts all material must be the products of reliable manufactures of many years standing. Also followed as mentioned in BOQ.
- All tools and tackles shall be provided by the agency itself including ladder, rope ladder, scaffolding or any item required to carry out the work to the fullest satisfaction of EIC. NISER in any manner shall not be held liable for safekeeping of any material brought to sight.

#### **Delivery and documents:**

- Three copies of the supplier invoice showing Goods Description, Quantity, Unit Price and Total Amount.
- Service report signed by the EIC of NISER.

#### MEASUREMENT AND RA/FINAL BILL

- 1. The contractor shall submit his running and final bills with detail measurement for the purpose of payment & bills shall be processed by the various offices for payment, as per existing procedure.
- 2. The contractor shall extend all possible co-operations for checking the measurement. Decision of the engineer-in-charge (mechanical) of NISER shall prevail. In case of any dispute, the final decision lies with the Director of NISER, which shall be binding on both the parties.

#### **OTHERS**

If, the contractor has to remove/dismantle any old, damaged materials & fixtures etc. for the purpose of execution of the said work, the same shall be deposited with NISER Stock Yard along with the list of materials under intimate to the concerned Engineer in-Charge. No extra payment will be made by the institute for this purpose.

### **SCHEDULE OF QUANTITY**

		Unit	Qty.
S.No	Description		
1	Descaling of condenser in Kirloskar make chiller 450 TR  • Process of descaling should be done by maintaining PH (potential of hydrogen) level in between 3-4 in gradually changing, as per site condition or as per engineer in charge instruction.  • Condenser approach should be maintain in between 0-1.5  • 24 hour circulation of chemical water with two times changing the chemical water, in 3 hour interval.  • Brushing should be done as per requirement for getting clean water without scaling  • All other requirement for getting approach a mentioned above should be done by agency. Preferred Make: Chemical/Cleaning agent: NALCLEAN8940	Nos.	4
2	Descaling of Evaporator in Kirloskar make chiller 450 TR  • Process of descaling should be done by maintaining PH (potential of hydrogen) level in between 3-4 in gradually changing, as per site condition or as per engineer in charge instruction.  • Evaporator approach should be maintain in between 0-1 • 24 hour circulation of chemical water with two times changing the chemical water, in 3 hour interval.  • Brushing should be done as per requirement for getting clean water, without any scaling.  • All other requirement for getting approach a mentioned above should be done by agency. Preferred Make: Chemical/Cleaning agent: NALCLEAN8940	Nos.	4

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