

Supply, installation, testing and commissioning of 350 TR air cooled screw chillers for HWCC Building at ACTREC, Kharghar, Navi Mumbai.

**TATA MEMORIAL CENTRE
A GRANT-IN-AID INSTITUTE UNDER DEPARTMENT OF ATOMIC ENERGY,
GOVERNMENT OF INDIA**

Website – <https://actrec.gov.in>



SPECIAL CONDITIONS OF CONTRACT

- Sub : Supply, installation, testing and commissioning of 350 TR air cooled screw chillers for HWCC Building at ACTREC, Kharghar, Navi Mumbai.**
- NIT No. : TMC/ACTREC/ENGG/HT/ET-28/Air cooled Chiller/ HWCC/2021**

SPECIAL CONDITIONS OF CONTRACT

1. Before submitting the quote agency should visit ACTREC to inspect the site in presence of EIC, Mechanical and confirm via email that they have visited the site and understood the nature of work and shall complete the work as per terms & conditions mentioned in tender document.

Vendor should submit the undertaking as per below format.

<p style="text-align: center;">SITE INSPECTION</p> <p>This is to certify that Shri. _____ of M/s. _____ has visited and inspected the site and understood the nature and scope of work under the subject work.</p>
--

2. Vendor should ensure that they clean the site before winding up the work & also shift their tools / tackles, welding machine or any other material / equipment brought to the site for execution.

This work schedule is to be followed for all week days i.e. from Monday to Saturday. On Sunday or Holiday agency can do the work full day / night with prior permission from Engineer-in-charge.

3. Vendor shall note that TMC will not pay any charges against overtime & vendor shall consider all additional charges due to evening / night works activities in their quote.
4. All hot jobs like welding / brazing to be carried out in presence of representative from Fire Dept of ACTREC.
5. Necessary Scaffolding if required to be arranged by the vendor at no cost to TMC. Necessary lifting / shifting & transporting is in vendor scope. Any civil opening & finishing of the same is in vendor scope.
6. Any damaged to the ACTREC property while doing the work will be recovered from the bills of vendor.
7. The agency should have a full fledged office / work shop and service set up for last 5 years in Mumbai/ nearby (50 km radius). Agency should submit list of employees and tools & tackles available at their Mumbai office.
8. Agency has to arrange all tools & tackles required to complete the work, ladders, power extension board, halogen lights, etc.
9. Disposal of all civil debris, insulation scrap, etc generated while carrying out the work is in the scope of agency.
10. All necessary foundation required for equipments are in scope of vendor.
11. Original Equipment Manufacturer (OEM) must have office / service facility in India for last 5 years or Authorized Agent/Service Provider in India since last Five Years
12. Authorized Dealer / Agent / System Provider must have Authorization Certificate from OEM for last Five years, in quoted Make/Brand
13. OEM will provide all the spares required for healthy functioning of the equipment for

total working life from the date of supply of equipment.

14. It is mandatory for each vendor to inspect the site before submitting their quote.
15. While execution of work, any damage to the existing finished work needs to be rectified and repaired by vendor to ensure the same has been finished as per earlier design. Else work will be carried out at the risk and cost of vendor, and repair amount will be recovered from the vendor bill.
16. All material lifting/shifting to be carried out through the staircase only. Proper care shall be taken to avoid any damage to the existing staircase finishes.

- **General**

The requirements under this Section shall be deemed to be general particulars & requirements related to HVAC Equipment Foundation Work and shall be applicable to all Sections, whether specifically mentioned or not. Work under this Contract shall be executed as shown on the Drawings and given in the Specifications and required at Site whether specifically shown or not.

- **Reference to other documents**

This Section shall be read in conjunction with the Conditions of the Contract, Technical specifications of work, Drawings & Bill of quantities and any other document forming part of this Contract where the context so requires.

The scope of work shall be generally as given in the specifications, bill of quantities, and the drawings as well as the detailed working drawings for the HVAC Equipment Foundation Work. The intents of the specifications, bill of quantities and the drawings are to give finished work of approved and standard quality and all duly tested and commissioned. All minor items or details that are not shown or indicated but necessary for the completion of the installation, including testing, commissioning and handing over are deemed to have been included in the work and in the rates quoted by the contractor. The contractor in accordance with these specifications, without any extra cost, shall carry out the entire HVAC Equipment Foundation Work.

- **Scope of Work**

The scope of work include Supply, Installation, Testing & Commissioning of the HVAC Work complete and including materials, handling, equipment/tools and tackles for lifting the equipment/material, etc in accordance with the drawings, Bill of Quantities and Specifications. The scope of work as indicated in the Specifications, Drawings and Bill of

Quantities are the minimum and not limited to the same in case of requirements demanded for safe and efficient operations of the electrical installation.

All work shall be done in accordance with the provisions of, ISI standards, Indian Electricity Act 1910 and Indian Electricity Rules 1956.

The Contractor shall arrange to obtain all approvals as required from the various statutory authorities that may be required for the complete electrical installation.

- **Civil & Associated Works**

The Contractor shall carry out all civil works including making of RCC/PCC foundations as recommended by the manufacturer of the various equipments incorporated in the works. The Contractor shall make all openings in floors/ceilings/walls that are connected with the HVAC/electrical works.

The Contractor shall repair and make good the damages caused by him to the civil structure while executing the HVAC Equipment Foundation Work.

All MS supporting structures like base frames etc that are required for the HVAC Equipment Foundation panels and equipments shall be arranged by the contractor and the cost for providing the same are deemed to be included in the rate of the item. No extra payment shall be made on these accounts. The supporting structures that are required for proper installation and completion of the work though these may not be mentioned along with the item are listed below but not limited to :-

Electrical Panels and Equipments,

The MS frames/supporting structure shall be duly painted with enamel painting of approved shades over 2 coats of suitable primer at no extra cost

All drawings for supporting MS framework etc shall be submitted for approval prior to fabrication of these items.

The quantities indicated in the BOQ /Tender schedule are only provisional and payments will be made as per actual as ascertained by site measurements.

The electrical work associated with HVAC Equipment Works shall be carried out generally in accordance with the General Specifications of MSR for electrical works of Maharashtra Government and specification for Electrical works 2008-09 of the Government of Maharashtra for installations and buildings and shall comply in all respects with the requirements of the latest (Indian Electricity)IE Rules.

- **Electricity & Water**

The HVAC Contractor shall arrange Electricity and water during the construction, testing and commissioning stages. It is the responsibility of the contractor to apply to the various authorities for the same and pay all associated charges.

All water/electricity required for pre commissioning test and final tests shall be arranged by the Contractor at no extra cost to the Employer.

The Contractor shall ensure that all regulations are strictly adhered to for the Electrical Work.

The contractor shall prepare and submit for approval of concerned authorities, any drawings that may be required.

- **Co-Ordination with Other Agencies**

The Contractor shall co-ordinate with the other agencies that are working at the site and whose progress of work is interdependent on each other. The contractor shall take utmost care in ensuring that the work of the other agencies is not held up or damaged due to him. He will also ensure to maintain good relations with other agencies so that his work in turn does not suffer.

- **Regulations and Standards:**

The installation shall conform in all respects to relevant Indian Standard code of Practice, Indian Electricity Rules, Indian Electricity Act & any other code or regulation that govern such types of installations.

- **Approvals**

The Contractor shall prepare all drawings/documents that may be required for submission to the various statutory authorities for obtaining approvals for the installation. The Contractor shall follow up the same and obtain the approval/s. All incidental costs for

obtaining the same shall be borne by the Contractor. Only official fees in the Employers name shall be reimbursed against original receipts.

- **Inspection and Tests**

List of the HVAC vendors shall be communicated in advance. TMC along with consultant's representative will carry out the inspection of the works executed & under execution of the agencies forwarding to check quality, workmanship and performance. Based on inspection list of approved. HVAC vendors will be founded for selection.

The Contractor shall carry out all tests at site in accordance with IE Rules and Regulations, ISI and any other norm that's that are necessary for such installations. All tests shall be witnessed by the TMC and the Consultant representative.

All testing instruments/equipments shall be arranged by the original manufacturer at no extra cost. Any costs for carrying out such tests are shall be borne by the Contractor.

The Contractor shall arrange for all tests as directed by the Consultant and TMC representative and shall follow up and pay all charges for the same.

- **Civil & HVAC Equipment Foundation Works**

All Civil & HVAC Equipment Foundation work under this contract shall be carried out strictly in conformity with the current rules and regulations of the local Electricity Authority, the Indian standards and with the directions of and to the entire satisfaction of the Engineer.

The works shall be carried out by an agency holding a valid Electrical Contractors license. Authorized persons shall also be employed for carrying out the work.

- **Material and Equipment:**

All material and equipment shall conform to the relevant standards and shall be of the approved make and design. Unless otherwise called for, only the best quality materials and equipment shall be used. The materials and equipment shall conform to relevant Indian Standards. The Contractor shall be responsible for the safe custody of all the materials and shall insure them against theft, damage by fire, earthquake etc. A list of items of materials and equipment, together with sample of each shall be submitted to the Engineer for approval. Any item which is proposed as a substitute, shall be accompanied by all technical

detail giving sizes, particulars of materials and the manufacturer's name and shall be submitted for approval.

- **Makes**

Only makes of materials as per approved list of materials shall be brought to the site for incorporation in the works. Where no makes are specified, the Contractor shall furnish technical data, samples and other documentation for approval by the Engineer prior to incorporation in the work.

- **Test Certificates**

The contractor shall submit test certificates, in triplicate, for all the equipments/materials incorporated in the electrical work.

- **Instruction Manual:**

The contractor shall prepare and furnish in triplicate (One original plus two copies) of all instruction, operation and maintenance manuals in English for the use, operation and the maintenance of the supplied equipment and installations, and submit to the Engineer at the time of handing over.

- **Samples and Catalogues:**

Before ordering the material necessary for the installations of electric work the contractor shall submit to the Engineer for approval, technical data/catalogues for all equipment/materials prior to placement of orders.

Samples of small items like fasteners, suspension rods, etc shall be furnished along with technical data for approval by the Engineer. In case of rejection of samples contractor shall submit further samples until such samples are approved. The materials rejected shall be removed forthwith by the contractor off the site.

No approval given by the Engineer shall in any way exempt the contractor from his liability to carry out the work in accordance with the terms of the contract.6

- **Drawings**

The Contractor shall prepare all shop/installation drawings for approval by the Engineer prior to taking up any work. The Contractor shall submit the required number of drawings as directed by the Engineer. All drawings shall be furnished in a scale of not less than 1:100. Drawings shall be either ammonia prints or original plots. Xerox copies of drawings are not acceptable.

- **As Built Drawings**

On completion of work and before issuance of certificate of completion the Contractor shall submit to the Engineer "As Built" drawing containing all details/corrections. 4 Sets (Four) of prints shall be furnished along with 2 CD's containing all the drawings and one set of reproducible tracings.

- **Safety of Materials:**

It shall be the Contractor's responsibility to store and safeguard the equipment/materials in a proper manner at his cost.

- **Site Staff**

The contractor shall employ adequate nos. of competent fully licensed qualified, full time engineers headed by a Project Engineer to direct the work of electrical installation in accordance with the drawings and specifications. The Project Engineer shall be available all times at site to receive instructions from the Engineer, in the day-to-day activities throughout the duration of contract. The Project Engineer shall correlate the progress of the work in conjunction with all the relevant requirements of the supply authority.

Work shall be carried out by skilled and licensed technicians in the best workman like manner. Any defect in the work or any changes in the design etc. shall be carried out by the contractor within tendered rates.

Adequate labor shall be employed by the contractor to ensure completion within stipulated time.