



Lady Reading Hospital (LRH)
Medical Teaching Institution (MTI)
Peshawar
Contact No: 091-9211430 EXT-1702

**AFTER PRE-BID
BID SOLICITATION DOCUMENTS
For
“HVAC Consumables 2024-26”
(Single Stage Single Envelop)**

Note: The prospective bidder is expected to examine the Bidding Documents carefully, including all Instructions, Terms & Conditions, and Specifications etc. Failure to furnish all information required by the Bidding documents or submission of a Bid not substantially responsive to the Bidding Documents in every respect would result in the rejection of the Bid.

Manager Material Management
LRH/MTI Peshawar

AD Legal
LRH/MTI Peshawar

HVAC Engineer
LRH/MTI Peshawar

Deputy Director Works
LRH/MTI Peshawar

Manager Maint: And engineering
LRH/MTI Peshawar

Director Finance
LRH/MTI Peshawar

Nursing Director
LRH/MTI Peshawar

Associate Hospital Director
LRH/MTI Peshawar

Medical Director
LRH/MTI Peshawar

Hospital Director
LRH/MTI Peshawar

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**Lady Reading Hospital
Medical Teaching institute
Peshawar
Phone: 091-9211927**

INVITATION FOR BIDS

Hospital Director, Medical Teaching Institute, **Lady Reading Hospital Peshawar** Invites sealed tenders under National Competitive Bidding for the procurement of **“HVAC Consumables 2024-26”** for Hospital, under rule 6(2) (b) **“single stage single envelope”** of KPPRA Rules 2014, from Income / Sales tax, reflected on Active Taxpayer List of FBR.

A detailed list of specification of required items can be obtained from the Material Management Department of LRH during working hours (**Monday to Friday**). The specification is also available on our web-site www.lrh.edu.pk

The bidders are required to submit bid security /- in the name of Hospital Director LRH-MTI Peshawar.

Pre-bid meeting with the interested bidders will be held on _____ at **11:00am** at Manager Material Management.

The tenders complete in all respect must reach the undersigned by on _____ at **11:00 am**, which will be opened at 11:30 AM on the same day in conference room / AHD office of the Hospital in the presence of the procurement committee and the bidders / representatives who may choose to attend.

Competent Authority reserves the right to reject any or all the bids as per provisions contained in Rule 47 of KPPRA Rules 2014.

1) INSTRUCTIONS TO BIDDERS:

1. This Bidding procedure will be conducted in light of Khyber Pakhtunkhwa Public Procurement Regulatory Authority (KPPRA) Laws, Rules made there under, along with Standard Bidding Documents.
2. **Any bid received after the deadline for submission of bids shall not be entertained and shall be returned unopened to the Bidder.**
3. The bid should be complete in all respect and must be signed by the bidder.
4. All prices quoted must be in Pak Rupees (PKR) and should include all applicable taxes. If not specifically mentioned in the Quotation, it will be presumed that the prices include all the taxes.
5. The bidder shall provide an undertaking that the bidder has not been declared black listed by any Governmental/ Semi-Governmental institutions from Stamp Paper.
6. Bidders shall not be eligible to bid if they are under a declaration of Ineligibility for corrupt and fraudulent practices issued by any government organization in accordance with the Section 44(1) KPP Rules 2014.
7. LRH Peshawar shall evaluate the proposal in a manner prescribed in advance, without reference to the price and reject any proposal which does not conform to the specified requirements.
8. Alternative bid shall not be considered and shall be rejected by the Competent Authority.
9. At any time prior to the deadline for submission of bids, LRH Peshawar may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder, modify the bidding documents by amendment.

10. If a bid is not substantially responsive, it will be rejected by the Procuring Entity and may not subsequently be made responsive by the Bidder by correction of the nonconformity.
11. **Bidders are essentially required to provide correct and latest postal/email/web addresses, phone/mobile/fax numbers for actively and timely communication.**
12. The Bidder may after its submission withdraw its bid prior to the expiry of the deadline prescribed for submission of bids. Withdrawn bids will be returned unopened to the Bidders.
13. Any bid not received as per terms and conditions laid down in this document are liable to be ignored. No offer shall be considered if:
 - a. Received without Bid Security;
 - b. It is received after the date and time fixed for its receipt;
 - c. The offer is ambiguous;
 - d. The offer is conditional i.e., advance payment, or currency fluctuations etc.;
 - e. The offer is from blacklisted firm in any Federal / Provincial Govt. Dept.;
 - f. Only typed tender on original prescribing letter pad, sealed & signed should be submitted, the quoted Price must be preprinted and hand written quoted price will not be acceptable. The tenders must be according to hospital specification; alternate rates (**Double rates for single Items**) will not be accepted.
14. Usage of correction fluid & corrections are strictly prohibited unless duly initialed.
15. Any erasing / cutting etc. appearing on the offer, must be properly signed by the person signing the tender.
16. Bids will be rejected if the Bid is in some way connected with bids submitted under names different from his own.
17. In case of Bid Tie, the decision will be taken by making toss/draw/Recall sealed quotation in front of the bidders.
18. Any direct or indirect effort by a bidding firm to influence this institution during the process of selection of a bidder or award of contract may besides rejection of its bid result into its disqualification from participation in the LRH Peshawar's future bids.
19. LRH MTI Peshawar may accept or reject any or all of the bids under Rule 47 of KPPRA Rules, 2014.
20. Brand and Pack size must be mentioned with each quoted item.
21. **Price valid till 30th June 2026.**

4. **BID Security**

Bid security Rs. 100,000/- in favor of "Hospital Director LRH Hospital"
The Bid Security in shape of Pay Order is not accepted

The bid security may be forfeited:

- i) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Form; or
- ii) In the case of a successful Bidder, if the Bidder fails to sign the contract
- iii) If a successful Bidder unable to supply the items after issuance of 3 reminders, order will be placed to the next lowest bidder.

5. **BID VALIDITY:**

- i) The bids should be valid for 180 days.
- ii) In exceptional circumstances, LRH Hospital may solicit the Bidder's consent to an extension of the period of validity reasons shall be recorded in writing. The request and the responses there to shall be made in writing. The bid security provided shall also be suitably extended. A Bidder may refuse the request without forfeiting its bid security. A Bidder granting the request will not be required nor permitted to modify its bid, except as provided in the bidding document.

6. **BLACKLISTMENT OF DEFAULTED BIDDER/CONTRACTOR**

Conditions for Blacklisting of Defaulted Bidder/Contractor under rule 44 of KPPRA Rules 2014

The following are the events which would lead to initiate (Rule 44 of KPPRA Rules 2014) blacklisting/debarment process;

- Consistent failure to provide satisfactory performances.
- Found involved in corrupt/fraudulent practices.
- Abandoned the place of work permanently

Conditions for debarment of Defaulted Bidder/Contractor

Failure or refusal to;

- Accept Purchases Order / Services order terms;
- Make supplies as per specifications agreed;
- Fulfill contractual obligations as per contract
- Non execution of work as per terms & condition of contract.
- Any unethical or unlawful professional or business behavior detrimental to good conduct and integrity of the public procurement process.
- Persistent and intentional violation of important conditions of contract.
- Non-adherence to quality specifications despite being importunately pointed out.
- Security consideration of the State i.e., any action that jeopardizes the security of the State or good repute of the Lady Reading Hospital Peshawar -LRH-MTI Peshawar.

Procedure for Blacklisting and debarment

1. Competent authority of Lady Reading Hospital -MTI Peshawar may on information, or on its own motion, issue show cause notice to the bidder.
2. The Show Cause notice shall contain the statement of allegation against the Bidder.
3. The bidder will be given maximum of seven days to submit the written reply of the show cause notice.
4. In case the bidder fails to submit written reply within the requisite time, the competent authority may proceed forth with ex-parte against the bidder.
5. Direct to issue notice of personal hearing to the bidder/ authorized representative of the bidder and the competent authority shall decide the matter on the basis of available record and personal hearing, if availed.
6. The competent authority shall decide the matter within thirty days from the initiation of proceedings.
7. The order of competent authority shall be communicated to the bidder by indicating reasons.
8. The order past as above shall be duly conveyed to the KPPRA and defaulting bidder within three days of passing order.
9. The duration of debarment may vary up to five years depending upon the nature of violation.

7. DISPUTES AND CONTROVERSIES/DISPUTE RESOLUTION

1. The purchaser shall constitute a committee comprising of disagreed & notified by the competent authority proper powers and authorizations to address the complaints of bidders that may occur prior to the entry into force of the procurement contract.
2. Any bidder feeling aggrieved by any act of the purchaser after the submission of his bid may lodge a written complaint concerning his grievances not later than 03 days after the announcement of the bid evaluation report.
3. The grievance redress Officer shall investigate and decide upon the complaint within 06 days of the receipt of the complaint. The report along with decision shall be forwarded to the purchaser officer within the prescribed period.

4. Mere fact of lodging of a complaint shall not warrant suspension of the procurement process.

Note: Grievance notified & designated who can invite appropriate official as co-opted member for grievance.

Any dispute or difference arising out of the Agreement which cannot be amicably settled between the Parties, shall be finally settled by KPPRA whose decision will final and binding on both the parties.

STATEMENT OF REQUIREMENT WITH SPECIFICATION

| HVAC PLANT MEDSURG BLOCK | | | | |
|----------------------------|--|------|---|------|
| Hitachi Absorption Chiller | | | | |
| HAU-CGN800EXWSPD | | | | |
| | ITEM | UNIT | Remarks/Brand | RATE |
| 1 | Solution Motor pump power 5.5kw 2900 Rpm | No's | For Chiller Parts, Only Authorized firm by the Principal Manufacturer And associated parts i.e. electronic etc. As per sample, preferably from, authorized sources of the relevant fields | |
| 2 | Solution Motor pump 1.3 KW, 1450RPM | No's | | |
| 3 | Refrigerant Motor Pump 1.3KW ,2900 rpm | No's | | |
| 4 | Vacuum motor pump 0.4KW, (3-phase) 4-pole ,1400 rpm | No's | | |
| 5 | Burner blower Motor 7.5KW | No's | | |
| 6 | Burner Diesel motor 0.75KW 1430 rpm | No's | | |
| 7 | Mechanical Seal for Vacuum Pump | No | | |
| 8 | Chiller PLC Hitachi Japan | No's | | |
| 9 | Chiller Programmer | No's | | |
| 10 | Absorption Chiller Inverter Mitsubishi FR-D740-7.5k | No's | | |
| 11 | Absorption chiller inverter Mitsubishi FR-D740-3.7k | No's | | |
| 12 | Absorption Chiller Charger HW550-24a input 100/240 output 24v DC | No's | | |
| 13 | Vacuum Pump for Absorption Chiller | | | |
| 14 | Diaphragm valve 1/2" (MS) | No's | | |
| 15 | Diaphragm valve 3/4" (MS) | No's | | |
| 16 | OLYMPIA OIL Pre-Heater Type 907 No: T-1661 4.0kw | No's | | |
| 17 | Ball valve 1/4" (Brass) | No's | | |
| 18 | Ball valve 1/2" (Brass) | No's | | |
| 19 | Ball valve 3/4" (Brass) | No's | | |
| 20 | Tubes for Chillers | No's | | |
| 21 | Servo motor SQM10-16502 | No's | | |
| 22 | Temperature gauges 0-100 C | No's | | |
| 23 | Pressure gauges 0-200Psi | No's | | |
| 24 | Main Switch breaker 60amp 3-pole | No's | | |
| 25 | Display card, Hit (Model # PFXGP4501TADW) | No's | | |
| 26 | Main PCB Controller (X61AA P01) | | | |
| 27 | Ignition transformer 270/200VA LECIP 10KV 2000-5074A | No's | | |

| | | | |
|----|--|------|--|
| 28 | Ignition rod | No's | |
| 29 | Ignition plug | No's | |
| 30 | Ignition Cable | No's | |
| 31 | level switch 1" | No's | |
| 32 | Chiller PLC Hitachi Japan | No's | |
| 33 | Chiller Exhaust Sensor Threaded ½" | No's | |
| 34 | Chiller Evaporator Sensor Chip Type | No's | |
| 35 | Chiller Absorber Sensor Chip Type | No's | |
| 36 | Chiller Condenser Sensor Chip Type | No's | |
| 37 | Gas Regulator 3-10, 3-50, 3-100 PSI | No's | |
| 38 | Transformer (in voltage 380v, 440v, 220. Out 120, 200, 220v) | No's | |
| 39 | Magnetic contactor 60Amp, 3-phase | No's | |
| 40 | Overload Relay 20Amp-50Amp | No's | |
| 41 | Chilled water temperature Sensor | No's | |
| 42 | | No's | |
| 43 | Solenoid valve 1/2" (220 volt) | No's | |
| 44 | Solenoid valve 1-1/2" (220 volt) | No's | |
| 45 | Gas pressure switch 1/4" | No's | |
| 46 | Gas Pressure gauge 1/4", 0-30Psi | No's | |
| 47 | Relay 220v, 8pin, 10Amp | No's | |
| 48 | Mechanical Seal for Vacuum Pump | No | |
| 49 | Chiller PLC Hitachi Japan | No's | |
| 50 | Chiller Exhaust Sensor Threaded ½" | No's | |
| 51 | Chiller Evaporator Sensor Chip Type | No's | |
| 52 | Chiller Absorber Sensor Chip Type | No's | |
| 53 | Chiller Condenser Sensor Chip Type | No's | |
| 54 | Gas Regulator 3-10, 3-50, 3-100 PSI | No's | |

Materials for MS/PVC Pipe Line (Black Carbon Steel)

| 55 | Item | Unit | Remarks/Brand | Rate |
|----|----------------------------|------|---------------|------|
| 56 | MS PIPE SCHEDULE 40 | | | |
| 57 | 1" | Rft | | |
| 58 | 1- ¼" | Rft | | |
| 59 | 1 - ½" | Rft | | |
| 60 | 2" | Rft | | |
| 61 | 3" | Rft | | |
| 62 | 4" | Rft | | |
| 63 | 6" | Rft | | |
| 64 | 8" | Rft | | |
| 65 | 10" | Rft | | |
| 66 | 12" | Rft | | |
| 67 | 14" | Rft | | |

| | | | |
|-----|-------------------------------------|------|--|
| 68 | GATE VALVE (Threaded, Brass) | No's | |
| 69 | 3/4" | No's | |
| 70 | 1" | No's | |
| 71 | 1-1/4" | No's | |
| 72 | 1-1/2" | No's | |
| 73 | 2" | No's | |
| 74 | MS GATE VALVE (Flange Type) | | |
| 75 | 3" | No's | |
| 76 | 4" | No's | |
| 77 | 5" | No's | |
| 78 | 6" | No's | |
| 79 | 8" | No's | |
| 80 | 10" | No's | |
| 81 | 12" | No's | |
| 82 | 14" | No's | |
| 83 | 2 WAY MOTORIZED VALVE | | |
| 84 | 1-1/4" | No's | |
| 85 | 1-1/2" | No's | |
| 86 | 2" | No's | |
| 87 | 2- 1/2" | No's | |
| 88 | Flow Switch for water line | No's | |
| 89 | STRAINER | No's | |
| 90 | Strainer 3/4" | No's | |
| 91 | 1" | No's | |
| 92 | 1-1/4" | No's | |
| 93 | 1-1/2" | No's | |
| 94 | 2" | No's | |
| 95 | 3" | No's | |
| 96 | 4" | No's | |
| 97 | 6" | No's | |
| 98 | 8" | No's | |
| 99 | 10" | No's | |
| 100 | 12" | No's | |
| 101 | GLOBE VALVE | | |
| 102 | 3/4" | No's | |
| 103 | 1" | No's | |
| 104 | 1-1/4" | No's | |
| 105 | 1-1/2" | No's | |
| 106 | 2" | No's | |
| 107 | 3" | No's | |
| 108 | 4" | No's | |

| | | | | |
|-----|--------------------------------|------|--|--|
| 109 | 6" | No's | | |
| 110 | 8" | No's | | |
| 111 | 10" | No's | | |
| 112 | 12" | No's | | |
| 113 | PRESSURE RELIEF VALVE | No's | | |
| 114 | 3/4" | No's | | |
| 115 | 1" | No's | | |
| 116 | 2" | No's | | |
| 117 | PRESSURE REDUCING VALVE | No's | | |
| 118 | 3/4" | No's | | |
| 119 | 1" | No's | | |
| 120 | AIR VENT | No's | | |
| 121 | 3/4" | No's | | |
| 122 | 1/2" | No's | | |
| 123 | 1" | No's | | |
| 124 | Brass Non-Return Valve 1" | No's | | |
| 125 | MS NON-RETURN VALVE | | | |
| 126 | 6" | No's | | |
| 127 | 8" | No's | | |
| 128 | 10" | No's | | |
| 129 | 12" | No's | | |
| 130 | 14" | No's | | |
| 131 | MS ELBOW | | | |
| 132 | 3/4" | No's | | |
| 133 | 1" | No's | | |
| 134 | 1- 1/4" | No's | | |
| 135 | 1- 1/2" | No's | | |
| 136 | 2" | No's | | |
| 137 | 3" | No's | | |
| 138 | 4" | No's | | |
| 139 | 6" | No's | | |
| 140 | 8" | No's | | |
| 141 | 10" | No's | | |
| 142 | 12" | No's | | |
| 143 | 14" | No's | | |
| 144 | MS SOCKETS | | | |
| 145 | 3/4" | No's | | |
| 146 | 1" | No's | | |
| 147 | 1/4" | No's | | |
| 148 | 1- 1/2" | No's | | |
| 149 | 2" | No's | | |

| | | | | |
|-----|--|------|--|--|
| 150 | 4" | No's | | |
| 151 | 1" | No's | | |
| 152 | Nipple | No's | | |
| 153 | ½ " | No's | | |
| 154 | ¾ " | No's | | |
| 155 | 1" | No's | | |
| 156 | 1 ½ " | No's | | |
| 157 | 1 ¼ " | No's | | |
| 158 | Threaded Rods | RFT | | |
| 159 | 8 mm | RFT | | |
| 160 | 10 mm | RFT | | |
| 161 | 12 mm | RFT | | |
| 162 | 14 mm | RFT | | |
| 163 | 16 mm | RFT | | |
| 164 | 18 mm | RFT | | |
| 165 | Fishers Nut Bolts & Washers | No | | |
| 166 | 8 mm | No's | | |
| 167 | 10 mm | No's | | |
| 168 | 12 mm | No's | | |
| 169 | 14 mm | No's | | |
| 170 | 16 mm | No's | | |
| 171 | 18 mm | No's | | |
| 172 | Chiller butterfly valve 4" | No's | | |
| 173 | Chiller butterfly valve 2- ½" | No's | | |
| 174 | PVC Elbow | No's | | |
| 175 | 0.5" | No's | | |
| 176 | 1" | No's | | |
| 177 | 2" | No's | | |
| 178 | 3" | No's | | |
| 179 | 4" | No's | | |
| 180 | PVC union 3/4" | No's | | |
| 181 | GI Elbow | No's | | |
| 182 | 1" | No's | | |
| 183 | 2" | No's | | |
| 184 | 2 ½ " | No's | | |
| 185 | 3" | No's | | |
| 186 | 4" | No's | | |
| 187 | 6" | No's | | |
| 188 | 8" | No's | | |
| 189 | GI Dead End plug 2" | No's | | |
| 190 | 2.5" | No's | | |
| 191 | 1" | No's | | |

| | | | | |
|------------------|---|--------|---|--|
| 192 | Fiber gas kit | Sq-ft | | |
| 193 | Gasket (As per sample) rubber/hard board | Sq-ft | | |
| CHEMICALS | | | | |
| 194 | Close circuit treatment Chemicals (Basic) | lot | Details of the Chemicals i.e. Individual Description, cost and consumption | |
| A | Per month | lot | | |
| B | Per Day | lot | | |
| 195 | Open circuit treatment Chemicals Per month | lot | | |
| A | Per month | lot | | |
| B | Per Day | lot | | |
| 196 | PH and TDS Meter | No | | |
| 197 | Corrosion Inhibitor | No's | | |
| 198 | Chemical 3204 or Equivalent | No's | | |
| 199 | Corrosion Inhibitor (Molybdate Based) | Liters | | |
| 200 | Corrosion Inhibitor (Phosphate-base) | Liter | | |
| 201 | Dispersant & Antifouling | Liter | | |
| 202 | Microbicide (Non-Oxidizing Biocides) | Liter | | |
| 203 | Anti-Scalant | Liter | | |
| 204 | Chemical Dosing pump 220v | Liter | | |
| 205 | Descaler | Liters | | |
| 206 | Descaling Pump 1/2 HP (steel Body) | No's | | |
| 207 | Calibration Solution PH | No's | | |
| 208 | Descaling agent Acid based scale remover (Liquid Descaler) | Liters | | |
| 209 | | No's | | |
| 210 | Lithium Bromide Chemical | Kg | | |
| 211 | Distilled water | Liter | | |
| 212 | Octyl Alcohol | Kg | | |
| 213 | Neutralizer Chemical | liter | | |
| 214 | HCL | Kg | | |
| 215 | Lithium Hydro Oxide | Kg | | |
| 216 | Neutralizer | Kg | | |
| 217 | Vacuum Oil (Robin air USA) | Liters | | |
| 218 | PH Paper | No's | | |

NOTE: For Circulation Chemicals defined as lot the details i.e. Description of the consumption per month, Chemicals, cost (per unit and per month), consumption per month etc. as per the details attached on page 19

| Materials for AHU's, Ducting and Associated Works | | | |
|--|------|---------------|------|
| Item | Unit | Remarks/Brand | Rate |

| | | | | |
|------------|---|------|--|--|
| 219 | Duct Temperature Sensor | No's | | |
| 220 | Humidity Sensor | No's | | |
| 221 | Room Temperature Sensor | No's | | |
| 222 | Immersion Temperature Sensor | No's | | |
| 223 | Fire State with manual Reset | No's | | |
| 224 | Room Humidity Sensor | No's | | |
| 225 | Relay 14 pin, 7Amp, 250v (Finder) | No's | | |
| 226 | Timer 1-6minutes, 250v | No's | | |
| 227 | Auto Controller (DDC) | No's | | |
| 228 | Pressure Deferential transmitter | No's | | |
| 229 | Outdoor Temperature sensor/ Humidity sensor | No's | | |
| 230 | Wet DP Transmitter | No's | | |
| 231 | Pressure Gauges | No's | | |
| 232 | Thermostat | No's | | |
| 233 | Universal Module | No's | | |
| 234 | Extension module | No's | | |
| 235 | Smoke detector | No's | | |
| 236 | Air DPS | No's | | |
| | FILTERS | | | |
| 237 | Pre filters 12"x24" | Set | For Filters AAF, Trox, Eco Air, or Equivalent | |
| 238 | Pre filters 20"x24" | Set | | |
| 239 | Pre filters 24"x24" | Set | | |
| 240 | Air filters 12"x12" | Set | | |
| 241 | HEPA Filters 12"x18" (As per Sample) | Set | | |
| 242 | HEPA Filters 12"x24" | Set | | |
| 243 | FCU filters 10 1/2"x47" | No's | | |
| 244 | Bag Filters 12"x24" | Set | | |
| 245 | Bag Filters 20"x24" | Set | | |
| 246 | Bag Filters 24"x24" | Set | | |
| 247 | Bag Filters 12"x12" | Set | | |
| | BALL BARINGS | | | |
| 248 | Ball Baring 6308 C3 | No's | Compatible, Best Quality / As per sample | |
| 249 | Ball Baring 6309 | No's | | |
| 250 | Ball Baring 63 | No's | | |
| 251 | Ball Baring 6317 | No's | | |
| 252 | Ball Baring 6313 | No's | | |
| 253 | Ball Baring 6312 | No's | | |
| 254 | Ball Baring 6211 | No's | | |
| 255 | Ball Baring 6319 | No's | | |
| 256 | Ball Baring 6319 | No's | | |
| | BELTS | | | |
| 257 | 1457 Belt size | No's | | |

| | | | |
|-----|---|-------|--|
| 258 | 1807 Belt size | No's | |
| 259 | 1425 Belt size | No's | |
| 260 | 2132 Belt size | No's | |
| 261 | 1832 Belt size | No's | |
| 262 | 1700 Belt size | No's | |
| 263 | 2000 Belt size | No's | |
| 264 | 1500 Belt size | No's | |
| 265 | 1632 Belt size | No's | |
| 266 | 1407 Belt size | No's | |
| 267 | 1257 Belt size | No's | |
| 268 | 1807 Belt size | No's | |
| 269 | 1757 Belt size | No's | |
| 270 | 1120 Belt size | No's | |
| 271 | 1400 Belt size | No's | |
| 272 | a-49 Belt size | No's | |
| 273 | 1257 Belt size | No's | |
| 274 | 1807 Belt size | No's | |
| 275 | A-69 Belt size | No's | |
| 276 | 1107 Belt size | No's | |
| 277 | 3816 Belt size | No's | |
| 278 | 1382 Belt size | No's | |
| 279 | A-45 Belt size | No's | |
| 280 | 1482 Belt size | No's | |
| 281 | 1582 Belt size | No's | |
| 282 | 1120 Belt size | No's | |
| 283 | 1900 Belt size | No's | |
| 284 | 1757 Belt size | No's | |
| 285 | 2057 Belt size | No's | |
| 286 | Emery paper | No's | |
| 287 | Aluminum tape/insulation tape/cotton tape | No's | |
| 288 | Thermo-pole | Sq-ft | |
| 289 | Exhaust duct grill | No's | |
| 290 | Magic epoxy/diepoxy | | |

| Materials for Associated WORKS & Accessories | | | Rate |
|---|----------------------|------|--|
| 291 | MAIN BREAKERS | No's | Schneider, ABB, Siemens, TERASAKI, EATON |
| 292 | 10 Amp | | |
| 293 | 15 A, | No's | |
| 294 | 20 A | No's | |
| 295 | 25 A | No's | |
| 296 | 30 A | No's | |
| 297 | 40 A | No's | |

| | | | | |
|-----|--|-------|--|--|
| 298 | 50 A | No's | | |
| 299 | 60 A | No's | | |
| 300 | 100 A | No's | | |
| 301 | MAIN PANEL BREAKER 1200 A (Chiller) 3-P | No's | | |
| 302 | OVERLOAD RELAY | | | |
| 303 | 7--10 A | No's | | |
| 304 | 9-13 A | No's | | |
| 305 | 12-18 A | No's | | |
| 306 | 15-25 A | No's | | |
| 307 | 18-25 A | No's | | |
| 308 | MAGNETIC CONTACTOR 3 POLE | | | |
| 309 | 10 A. | No's | | |
| 310 | 15 A. | No's | | |
| 311 | 25 A. | No's | | |
| 312 | 30 A | No's | | |
| 313 | 40 A | No's | | |
| 314 | 60 A | No's | | |
| 315 | 80 A | No's | | |
| 316 | 100 A | No's | | |
| 317 | 120 A | No's | | |
| 318 | 150 A | No's | | |
| 319 | 200 A | No's | | |
| 320 | MCCB 3-POLE | No's | | |
| 321 | 50 A | No's | | |
| 322 | 50 A | No's | | |
| 323 | 80 A | No's | | |
| 324 | 100 A | No's | | |
| 325 | 150 A | No's | | |
| 326 | 250 A | No's | | |
| 327 | 400 A | No's | | |
| 328 | MCB 1-pole 4 A | No's | | |
| 329 | MCB 1-pole 6 A | No's | | |
| 330 | MCB 1-pole 10 A | No's | | |
| 331 | MCB 1-pole 16 A | No's | | |
| 332 | ACB 3-pole 630 A ABB, SIEMENS, SCHNEIDIER (SACE E6.2H) | No's | | |
| 333 | ACB 3-pole 4000 A ABB, SIEMENS, SCHNEIDIER (SACE Tax) | No's | | |
| 334 | VFD Trane (TR-200) 30KW | No's | | |
| 335 | Timer 1-6 Minutes, 250V | No's | | |
| 336 | Emery paper | No's | | |
| 337 | Aluminum tape/insulation tape/cotton tape | No's | | |
| 338 | Thermo-pole | Sq-ft | | |

| | | | | |
|-----|--|------|--|--|
| 339 | Exhaust duct grill | No's | | |
| 340 | Magic epoxy/diepoxy | | | |
| 341 | Thermostat screen | No's | | |
| 342 | Cone Barings UC206 to UC212 | No's | | |
| 343 | Baring block UC206 to UC212 | No's | | |
| 344 | AHU MOTOR | No's | As per Specs Installed | |
| 345 | 5 KW | No's | | |
| 346 | 7.5KW | No's | | |
| 347 | 11 KW | No's | | |
| 348 | 15 KW | No's | | |
| 349 | 18.5 KW | No's | | |
| 350 | MAHU BLOWER MOTOR | No's | | |
| 351 | 0.37Kw | No's | | |
| 352 | 0.75KW | No's | | |
| 353 | 1.10KW | No's | | |
| 354 | 1.1KW | No's | | |
| 355 | Motor rewinding Per kW | No's | | |
| 356 | AHU Blower (As per sample) | No's | | |
| 357 | MAHU Blower (As per sample) | No's | | |
| 358 | FAN COIL UNITS | | | |
| 359 | FCU Thermostat | No's | Compatible, Best Quality / As per sample | |
| 360 | FCU Electronic Card | No's | | |
| 361 | FCU Filters | No's | | |
| 362 | Motorized Valve actuator for FCU Units | No's | | |
| 363 | FCU Motor for Single Blower 220v, 1.6 KW | No's | | |
| 364 | FCU Motor for Single Blower 220v, 1.8 KW | No's | | |
| 365 | FCU Motor for Double Blower 1.6 kW | No's | | |
| 366 | FCU Motor for Double Blower 1.8 kW | No's | | |
| 367 | Double Blower | No's | | |
| 368 | Single Blower | No's | | |
| 369 | 2-way motorized valve 3/4" | No's | | |
| 370 | 2-way motorized valve 1" | No's | | |
| 371 | MOTOR COUPLING | No's | | |
| 372 | 3" | No's | | |
| 373 | 4" | No's | | |
| 374 | 5" | No's | | |
| 375 | 6" | No's | | |

| | | | |
|-----|--|------|--|
| 376 | 8" | No's | |
| 377 | 10" | No's | |
| 378 | 12" | No's | |
| 379 | 14" | No's | |
| 380 | COUPLING RUBBER DISC | No's | |
| 381 | 3" | No's | |
| 382 | 4" | No's | |
| 383 | 5" | No's | |
| 384 | 6" | No's | |
| 385 | 8" | No's | |
| 386 | 10" | No's | |
| 387 | 12" | No's | |
| 388 | 14" | No's | |
| 389 | Thermostat 5-30C, 3 speed, hot, cold mode | No's | |
| 390 | | No's | |
| 391 | Flow switch 1" | No's | |
| 392 | Volt meter 0 A-500v | No's | |
| 393 | Ampere meter 0 A-1000 A | No's | |
| 394 | Ampere meter 0 A-30 A | No's | |
| 395 | Indicator bulbs 220v, red, green, yellow, blow | No's | |
| 396 | Selector switch auto, manual | No's | |
| 397 | ON/OFF push button | No's | |
| 398 | Single pole breaker 10 A | No's | |
| 399 | Pressure transmitter/sensor | No's | |
| 400 | Humidity sensor | No's | |

Cooling Towers

| | Item | Unit | Remarks | Rate |
|-----|--|-------|--|------|
| 401 | Cooling Tower fins 9' x 9' width 5" (imported) | Sheet | Compatible, Best Quality / As per sample Best Quality | |
| 402 | Cooling Tower fan blades GFAR-240 | Set | | |
| 403 | V belt SPB-4500 | Set | | |
| 404 | Cooling Tower Motor 37 kW | | | |
| 405 | Combine Belt Size 120 | No's | | |
| 406 | Brass Float valve 1-1/2" | No's | | |
| 407 | Raisin Chemical for fiber leaks | Kg | | |
| 408 | Chemical for fiber leaks | Kg | | |

BMS System

Company Name: Trane

| | Item | Unit | Remarks | Rate |
|-----|--|------|--|------|
| 409 | Web Controller with installation | No's | Compatible, Best Quality / As per sample | |
| 410 | HMI Software with installation | No's | | |
| 411 | Reliable Controller with installation | No's | | |
| 412 | Low pressure switches man. Reset 0,5-7 bar PS1-R3A | No's | | |
| 413 | High Pressure switch man. Reset 6-31 bar PS1-R5A | No's | | |
| 414 | Relay 48-65A | No's | | |
| 415 | Relay 30-40A | No's | | |
| 416 | Pressure Probe 0/10 bar SPKT0011CO CAREL | No's | | |
| 417 | Pressure Probe 0/30 bar SPKT0031CO CAREL | No's | | |
| 418 | Control cable flexible 23/76" | No's | | |

General items

| | Item | Unit | Remarks | Rate |
|-----|--|-------|---------|------|
| 419 | Nitrogen Gas | Kg | | |
| 420 | UPVC Pipe ½", ¾", 1" | RFT | | |
| 421 | Flexible joint 200mm, 250mm, 300mm | No's | | |
| 422 | 4 WAY DIFFUSER, with installation | | | |
| 423 | 12"x12", | No's | | |
| 424 | 16"x16 | No's | | |
| 425 | 18"x18" | No's | | |
| 426 | 24"x24" | No's | | |
| 427 | 2 WAY DIFFUSER, with installation | | | |
| 428 | 12"x12" | No's | | |
| 429 | 16"x16 | No's | | |
| 430 | 18"x18" | No's | | |
| 431 | 24"x24" | No's | | |
| 432 | FRESH AIR GRILLE | Sq-ft | | |
| 433 | 12"x12" | Sq-ft | | |
| 434 | 12"x 24" | Sq-ft | | |
| 435 | 24"x24" | Sq-ft | | |
| 436 | Installation of GI Duct | Sq-ft | | |
| 437 | 18 G | Sq-ft | | |
| 438 | 20 G | Sq-ft | | |
| 439 | 24 G | Sq-ft | | |
| 440 | Canvas Cloth | Sq-ft | | |
| 441 | Cladding | Sq-ft | | |
| 442 | Aluminum cladding on pipes with install | Sq-ft | | |
| 443 | GLASS WOOL Insulation for Piping | Sq-ft | | |
| 444 | Canvas Cloth | Sq-ft | | |
| 445 | Flexible Duct with Installation | | | |

| | | | | |
|------------------------------------|--|-------|---|--|
| 446 | 6" | Sq-ft | | |
| 447 | 8" | Sq-ft | | |
| 448 | 10" | Sq-ft | | |
| 449 | 12" | Sq-ft | | |
| 450 | Flexible Connector | Sq-ft | | |
| 451 | VCD (Volume Control Damper) | Sq-ft | | |
| 452 | Nylon Brush 1" | No's | | |
| 453 | WD-40 | Kg | | |
| 454 | Wire brush | No's | | |
| 455 | Grinder disk 6" | No's | | |
| 456 | Cutting disk 6" | No's | | |
| 457 | Compound gauge Range-0.1~0.2mpa | No's | | |
| 458 | Condenser/Primary/Secondary Pumps/Motor | No's | | |
| 459 | Primary Motor 75 kw | No's | | |
| 460 | Secondary Motor 30 kw | No's | | |
| 461 | Condenser Motor 110 kw | No's | | |
| 462 | PUMP | | | |
| 463 | 960 GPM | No's | | |
| 464 | 1200 GPM | No's | | |
| 465 | 1937 GPM | No's | | |
| 466 | MOTOR COUPLING | | | |
| 467 | Primary | No's | As per sample | |
| 468 | Secondary | No's | | |
| 469 | Condenser | No's | | |
| 470 | Pump Impeller (as per sample) | No's | | |
| 471 | Pump mechanical seal (as per sample) | No's | | |
| 472 | Pump shaft (as per sample) | No's | | |
| 473 | Pump pulley (as per sample) | No's | | |
| 474 | Back fan all motors (as per sample) | No's | | |
| 475 | Cotton Thread | No's | | |
| 475 | Cotton Thread | No's | | |
| COMPRESSION CHILLER details | | | | |
| 476 | Trane Compressor Model K4129-72A, serial num K1609214001 | No's | For Chiller Parts, Only Authorized firm by the Principal Manufacturer | |
| | | No's | | |
| 477 | | | | |
| 478 | Display battery cell 3volt plus CR 2450Hr Japan | No's | | |
| 479 | Oil Pump Motor | No's | | |
| 480 | Pressure switch | No's | | |
| 481 | Control circuit Trane (As per sample) | No's | | |
| 482 | Panel door locks (As per sample) | No's | | |

| | | | | |
|-----|-----------------------------------|------|------------------------------------|--|
| 483 | R-123 refrigerant | KG | Honeywell or Equivalent (IMPORTED) | |
| 484 | Impeller (As per sample) | No's | | |
| 485 | Impeller bearing (As per sample) | No's | | |
| 486 | Solenoid valve | No's | | |
| 487 | Solenoid valve ¾" | No's | | |
| 488 | Solenoid valve 1" | No's | | |
| 489 | Solenoid valve 1- ½ " | No's | | |
| 490 | Solenoid valve 2", | No's | | |
| 491 | Level switch Omron float less | No's | | |
| 495 | Rapture disk | No's | | |
| 496 | Panel exhaust fan (As per sample) | No's | | |
| | | | | |

SYSTEM DETAILS REQUIRED

Raw Water Details:

pH: 7.8, TDS :325ppm,

System Details:

1. COOLING WATER:

Total 4 CTs, Average Operational → 3 of 4, Total System Volume → 31,500

Total Flow → 10,560 us-GPM, Operational hours → 24/7 Operation/year → 36-38 Weeks

2. CHILLED WATER

03 No's of 800 RT, DFA Chillers, Flow of 1920 USGPM/each

All the 3 Operational only in peak July August, mostly 2 are operational (So detail be adjusted as per these).

Volume per Chiller → 5830-gal,

0Total

System Volume = 17,500 gal, Avg daily makeup → 55 gal

Chemical supply → 40-42 Weeks

Additionally, the Costing may also include: (keeping in view any changes in Operation)

1. Costing per Day and per Month per Unit Equipment (i.e. per each Chiller and per each CT)
2. Costing per Day and per Month per System (Open & Closed separate)
3. Also include the details of each item Cost and consumption

| HVAC PLANT CARDIOLOGY BLOCK | | | | |
|------------------------------------|--------------------|-------------|------------------------|--------------|
| | DESCRIPTION | UNIT | Remarks / Brand | Rates |
| 497 | V-Belts: | No's | | |

| | | | | |
|-----|---|--------|---------------|--|
| 498 | A-55 | No's | | |
| 499 | B-54 | No's | | |
| 500 | B-64 | No's | | |
| 501 | b-72 | No's | | |
| 502 | B-78 | No's | | |
| 503 | Bearing Block for AHU: | No's | | |
| 504 | F206J | No's | | |
| 505 | F207J | No's | | |
| 506 | F 208J | No's | | |
| 507 | Rubber Disc - Part No. 3502 for Cooling Tower Motor Gear Box Coupling | No's | | |
| 508 | Aero flex for Chiller Pipe Insulation (2.5" Dia) Length-6' | No's | | |
| 509 | Aero Flex 5/8" and 3/4" Dia, 6 ft length | No's | | |
| 510 | Soft Rubber Gas kit for Chiller Cover Plates (1/4" x 3/8") – | Rft | | |
| 511 | | | | |
| 512 | Rubber Disc 6" Dia, 8 Nos. Holes for KSB Pumps Coupling | No's | | |
| 513 | Rubber Diaphragm 6" Dia for Chiller Actuator Valve – | No's | as per sample | |
| 514 | Rubber Foam Sheet 1" x 4' x 4' for insulation of chiller for coolant tank | Sheets | | |
| 515 | Samad Bond | Kg | | |
| 516 | Glue for HVAC Pipe insulation purpose | Kgs | | |
| 517 | Vacuum Oil (Robin Air USA) for Chiller Vacuuming | Liters | | |
| 518 | Insulation tape (Nitto) for electrical connection purpose | No's | | |
| 519 | Teflon Tape 1/2" 1 | No's | | |
| 520 | Steel Wire Brush Flat (4" x 9") | No's | | |
| 521 | Clinker Joint Sheet (1/8" x 4' x 5') for Pumps | No's | | |
| 522 | Clinker Joint Sheet (1/16" x 4' x 5') for Pumps | No's | | |
| 523 | Joint Sheet (1/8" x 4' x 5') for Boilers (high temperature) | No's | | |
| 524 | Motor for FCU double shaft (1/6 HP) | No's | | |
| 525 | Motor for FCU single shaft (1/12 HP) | No's | | |
| 526 | Blower required for FCU - as per sample | No's | | |
| 527 | Capacitor for FCU (3.5(uf) | No's | | |
| 528 | Filter for FCU: as per sample | Sq-ft | | |
| 529 | Plastic Pipe (1" Dia) for high pressure | Mtr. | | |
| 530 | Brass Nut for Boiler's door fitting (1" Dia) as per sample | No's | | |
| 531 | Nozzle with Adapter complete for Cooling Towers (Marley USA) Local made | No's | | |
| 532 | Ball Bearings | No's | | |
| 533 | UC204, | No's | | |

| | | | | |
|-----|--|-------|--|--|
| 534 | UC206, | No's | | |
| 535 | UC207, | No's | | |
| 536 | UC208 | No's | | |
| 537 | Circuit Breaker 3-Phase 80 A | No's | | |
| 538 | Circuit Breaker 20amp | No's | | |
| 539 | Boiler Water Feed Pumps complete with 5 -1P Meter multi-stage, high pressure | No's | | |
| 540 | KSB Pump for Chiller with 3-Phase 25HP Motor | No's | | |
| 541 | (Head 1000ft) | | | |
| 542 | Fins/Fills) for Marley Cooling Tower, | No's | | |
| 543 | Imported (4' x 11') 16 Macro | | | |
| 544 | Fins (Fills) for Marley Cooling Tower, As per sample | No's | | |
| 545 | Air Compressor complete with Air Tank 10 Bar Pressure with Air Drier | No's | | |
| 546 | Complete Starter (Star Delta) for 25HP Motor 3-Phase, as per sample | No's | | |
| 547 | Gate Valve for FCU connection supply/return for water control (1/2") Kitz | No's | | |
| 548 | Gate Valve for FCU Connection (3/4") Kitz | No's | | |
| 549 | 30HP (48 slots) 3-Phase Electric Motor RPM 1450, waterproof for CT | No's | | |
| 550 | Starter Star Delta for 30HP Motor 3-Phase | No's | | |
| 551 | Thermostat with fitting for FCU as per sample | No's | | |
| 552 | Ball Bearings 6205ZZ | No's | | |
| 553 | 6207ZZ | No's | | |
| 554 | 6309ZZ | No's | | |
| 555 | 6310ZZ | No's | | |
| 556 | High Temperature Grease | Kg | | |
| 557 | Teflon Gland Packing for Pumps 1/4" and 3/8" | Kg | | |
| 558 | Asbestos Dori 1" for Boilers' Doors | Kg | | |
| 559 | Asbestos Patti 2" wide and 1/8" thick | Kg | | |
| 560 | Gland Cup (for Pumps and Valves) - as per sample | Each | | |
| 561 | MS Coupling for Pumps | Sets | | |
| 562 | Flexible wire | Rolls | | |
| 563 | Alcohol Thermometer 1ft long | No's | | |
| 564 | Digital Temperature Gauge | No's | | |
| 565 | Pressure Gauge | No's | | |
| 566 | Fire Cement for Boilers | Kg | | |
| 567 | Silica Liquid for Boilers | Kg | | |
| 568 | Welding Rods 10 No. and 12 No. | Kg | | |

| | | | | |
|-----|--|-------|--|--|
| 569 | Pump for De-scalar circulation, plastic body, 3-Phase, 3HP | No's | | |
| 570 | Motor 7.5HP 3-Phase 1400 RPM required for AHU | No's | | |
| 571 | Aluminum Filter for AHU - as per sample | No's | | |
| 572 | Sound Liner for AHU internal body | Mtr | | |
| 573 | Canvas Cloth, best quality | Mtr | | |
| 574 | Magnetic Contactor for 5HP 3-Phase Motors | No's | | |
| 575 | Magnetic Contactor for 7.5HP 3-Phase Motors | No's | | |
| 576 | Data Cable 12-Cöre | Rolls | | |
| 577 | Diaphragm Valve 1/2" for Chillers - as per sample | No's | | |
| 578 | Diaphragm Valve 3/4" for Chillers - as per sample | No's | | |
| 579 | Solenoid Valve 3/4" for Chillers' | No's | | |
| 580 | Solenoid Valve 1/2" for Chillers | No's | | |
| 581 | Honeywell Thermostat required for FCU temperature Controller | No's | | |
| 582 | Gear Oil for Gear Box | Liter | | |
| 583 | Air Compressor Oil | Liter | | |

Miscellaneous

| | DESCRIPTION | UNIT | Remarks/ Brand | Rates |
|-----|--|------|--|-------|
| 584 | High Flow Evaporative Air Coolers | No's | (Best Quality, With Warranty-Min 12 Months) | |
| 585 | 10,000-12000, CFM | No's | | |
| 586 | 17,000-20000 Cfm | No's | | |
| 587 | High-Capacity Drinking Water Coolers with Filters | | | |
| A | 250 liter per Hour | No's | | |
| B | 500 liter per Hour | No's | | |
| C | 1000 liter per Hour | No's | | |
| 588 | High Flow Axial Fans (Direct or Belt Driven) | | | |
| A | 4000 m3/hr. or higher | No's | | |
| B | 10500 m3/hr or higher | No's | | |
| C | 15000 m3/hr or higher | No's | | |
| 589 | Compressor 12.5 RT | No's | | |

NOTE:

1. For Major Equipment in Built-System Parts: only Authorized Firms will be eligible.
2. For Others and/or Major Equipment Spares, Associated parts/consumables: Relavant Field Expert/Experienced firms will be preferred.
3. To be Compatible with the system, Best Quality, As per sample.

Details Required.

- Brand name,
- Specification of product,
- Pack size, if required
- Unit/Pack/job Price.
- Bids having items not fulfilling/in compliance with the required specifications shall be treated as non-responsive bids.

Do's and Don'ts

Do attach authorization letter for items where mentioned.

Do attach only authentic documents.

Do attach only legible/readable documents.

Do attach table of contents on top of the bid documents.

Don't attach fake and forged documents.

Don't attach unreadable, misprint and dim/ dull documents.

10. Award of Contract:

After opening of the bids of the firm / contractor quoting the lowest rates in each item are accepted.

11. Payment:

- a. No advance payment will be permissible.
- b. The payment will be made after successful supply, installation/inspection and test run of all requisite items.

12. Sub-Letting Contract:

The supplier shall not sub-let or assign this Contract or any part thereof without the written permission of the procuring entity. In the event of the Services provider subletting or assigning this Contract or any part thereof without such permission, the procuring entity shall be entitled cancel the Contract and to purchase the goods elsewhere on the supplier account and risk and the supplier shall be liable for any loss or damage which the procuring entity may sustain in consequence of arising out of such purchase.