



Government of Pakistan
PAKISTAN ORDNANCE FACTORIES
CORRIGENDUM TO TENDER ENQUIRY

T.E. NO: 007-LP-Capt-Pur-Fill, Dt: 29.02.2024

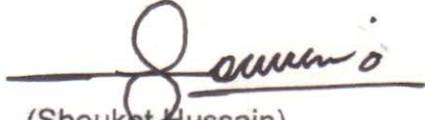
A. "TENDER TO BE OPENED ON "

FOR: 03.04.2024.

READ: 08.05.2024

2. All other terms and conditions will remain unchanged.

Date: 30.03.2024


(Shoukat Hussain)
Managing Director Filling Wah
Pakistan Ordnance Factories
Wah Cantt.

Fax #. 0092-51-9271400
TELE#. 0092-051-9314101-20
EXTEN: 21044
E-mail:- mdfill@pof.gov.pk



(INDIGENOUS SUPPLIERS)

**GOVERNMENT OF PAKISTAN
PAKISTAN ORDNANCE FACTORIES
TENDER ENQUIRY**

To,

Dear Sir,

Reference: T.E # 007 /LP/CAPT/PUR-FILL Dt. 29-02-2024

You are requested to submit quotations for the item (s) noted in the Schedule to the Tender. Offers should be sent duly sealed in an envelope. Please note the following instructions for filling the tender:-

1. SUBMISSION OF TENDER

1.1 Tenders will be opened at **1200** hours on 03-04-2024 and must reach as per address given below on or before **1130** Hours upto due date. The tender received late will not be entertained. You may witness the opening of the tender if you so desire. If a representative is deputed, he should bring a letter of authority from you.

1.2 Only one tender should be included in one envelope. The outside of the envelope should be inscribed with:-

Tender Enquiry No: 007/LP/CAPT/PUR-FILL

Tender to be opened on: 03-04-2024

Address: - **Bid Center, CR Section, C-04 Building,
POF Wah Cantt**

Fax #. 0092-51-9271400

TELE #. 0092-051-9314101-20

1.3 The bids received in factories will not be entertained.

1.4 If envelope does not indicate reference of T.E or received late the same may be returned un-opened.

2. GENERAL INSTRUCTIONS REGARDING PREPARATION OF QUOTATIONS

2.1 Case will be processed exactly as per **PPRA Rules 36(b)** in favor of most advantageous bid and **Single stage two envelope bidding procedure** will be utilized for open competitive bidding. The prices should be filled in column 4 and delivery date in column 5 of the schedule to this Tender Enquiry. The undertaking should be signed at the bottom of the Schedule which shall form the Quotation. You may use a separate sheet if necessary

2.2 For Plant and Machinery, you are required to quote in two parts:-

Part I **"TECHNICAL OFFER"** It should exclusively give technical details and literatures/brochures of the offered machine and related accessories, validity date, delivery schedule and signed undertaking given of the schedule to this Tender Enquiry. It must not indicate price, costs etc. Only confirmation regarding submission of Bid Money may be notified with technical proposal (In case of F.O.R basis).

Part II **"COMMERCIAL OFFER"** It should indicate the commercial terms e.g. price, terms of payment, mode of payment, mode of supply.

The commercial offer shall include separate price of;

i.	Chilled water AC Plants	:	09 Nos.
	Spares		
ii.	Magnetic contactor for compressor	:	02 Nos.
iii.	EOCR for compressor	:	02 Nos.
iv.	High- and low-pressure cut-out switches	:	02 Nos.
v.	Main circuit breaker for compressor	:	02 Nos.
vi.	Condenser fan contactor with EOCR	:	05 Nos.
vii.	Water flow switch	:	01 No
viii.	Temperature controller	:	01 No
ix.	Condenser Fan Motor	:	03 Nos.
x.	Refrigerant & Compressor Lubricant	:	Sufficient for 1x time charge for each unit
xi.	Filter dryer	:	03 Nos.
xii.	Expansion valve	:	01 No
xiii.	Solenoid Coil for liquid line solenoid valve	:	02 Nos.
xiv.	Compressor	:	01 No as per design requirement

Each part should be placed in a separate sealed cover. The envelopes should be inscribed with: Part I "Technical Quotation without price" and Part II "Commercial Quotation with Price."

2.3 The quotation must remain valid for, at least **180 days** from the date of opening of tenders.

2.4 **The quotation should hold good for any reduced or enhanced quantities without notice.**

2.5 In the event of non-acceptance of offer, intimation may be given to the Tenderers on their request.

2.6 Conditional offers or alternative offers are likely to be ignored.

2.7 Quotations should be based on F.O.R

a) **In case of F.O.R Basis Supply:**

i. Free delivery at POF's **Main Store (CMC), Factory, POF WAH CANTT.**

In this case Octori duty will be payable by the supplier.

ii. Taxes and Duties etc. where applicable, must be shown separately,

quoting reference to Registration No. in cases of Sales Tax and relevant authority in the case of others. Offer without these clarifications and inclusive of Taxes and Duties may be ignored.

- iii. Taxes and duties levied on or after Tender opening date or on or after the date offer was signed and dispatched will be allowed to include in the offered rates.
- iv. Suppliers will furnish a certificate, issued by Excise & Taxation Deptt, that he has cleared all Professional Tax payable by him" Offers received without this certificate will be rejected.
- v. Suppliers will render necessary information regarding hazardous effects on environment, of the materials/products supplied by them, in their quotations and shipping/dispatch documents.
- vi. If the requisite information is not furnished on the T.E forms or offer received is not conformity with the requirement of the T.E such offer shall be ignored.
- vii. Payment of duties/Taxes including professional tax (where applicable) must be supported by proof of having paid these to concern Govt. Taxation Deptt:
- viii. Date and Stamp of the Postal Order must be visible.
- ix. The payment to the registered supplier will be linked with the active taxpayer status of the supplier as per FBR database. If any registered supplier is not in ATL his payment would be stopped till he files his mandatory returns and appears on ATL of FBR.
- x. Status of your firm with POF (Registered/Un-Registered) should be mentioned in your offer.
- xi. Registered firms are required to provide copy of valid registration letter with POF.
- xii.
 - a. Only registered suppliers (with Sales Tax & Income Tax deptt) who are on Active Taxpayers List (**ATL**) of FBR are eligible to supply goods/services to Govt. Deptts.
 - b. The payment to registered persons may be linked with the active taxpayer status of the suppliers as per **FBR** database. If any registered supplier is not in ATL his payment should be stopped till his mandatory returns and appears on **ATL of FBR**.
- xiii. **TENDER FEE**
The tender must be accompanied by a non-refundable fee by means of a crossed postal order/pay order of **Rs 500/-** in favor of **Managing Director Filling Factory POF Wah Cantt.**

b) **BID MONEY**

- i. Bid Money at the rate of 2% (for registered firms) and 5% (for unregistered firms) of the quoted value, should accompany the tender in the shape of Deposit At Call Receipt., from a scheduled Bank drawn in favor of "General Manager, Filling Factory, POFs Wah Cantt"
- ii. Tenders received without Bid Money will be rejected.
- iii. Bid Money of the unsuccessful tenderers will be returned as soon as the scrutiny of the tenders is completed. Bid Money of the successful tenderers will be retained until the contract is finalized. Bid Money will be forfeited in case the quotation is withdrawn before the expiry of its validity date.
- iv. State owned organizations are not required to provide Bid Money

3. **ACCEPTANCE OF OFFERS**

The purchaser may reject all bids or proposals at any time prior to the acceptance of a bid or proposals, but is not required to justify grounds for its rejection. The purchaser shall incur no liability towards suppliers or contractors who have submitted bids or proposals.

4. **FAILURE TO SUPPLY STORES**

The specified delivery period (time and date of delivery / dispatch of stores) is the essence of the contract. All deliveries must be completed by the specified date(s). In failure to deliver stores within the scheduled time shall have arisen from "Force Majeure" which the Purchaser may admit as reasonable ground for further time, he will allow such additional time (without imposing liquidated demurrage) as he may consider to have been required by the circumstances of the case, of which he will be the sole judge and his decision will be final, otherwise he will be entitled at his option:

- a. "In case of unsupplied portion of the contract and unsatisfactory performance, the contract shall be rescinded by forfeiture of security and guarantee by the authority which approved award of the contract".
- b. "To recover liquidated damages when the government competent purchase officers on behalf of the government is satisfied that the failure to supply the stores within the scheduled delivery period has been for reason within the control of the suppliers and or if the government has suffered loss for reasons of belated delivery these liquidated damages if imposed will be recovered up to the rate of 02% but not less than 01% of the value of unsupplied quantity of the items per month or a part of a month for the period exceeding the original delivery period subject to the provision that the total liquidated damages thus leviable will be not exceed 10% of the total contract value of the particular stores which remained unsupplied either in part or in full."

OR

- c. To withhold any payment due to the supplier until the whole of the stores have been supplied and/ or to direct deduction or recover, where considered necessary.

OR

- d. To repurchase from elsewhere, at the risk and expense of the supplier, other articles of the same or similar description as he thinks fit to make good this default to the extent necessary, by canceling the contract, either wholly or for the unsupplied balance and with/ or without intimation to the supplier who shall be liable for any loss which the purchaser may sustain due to repurchase but shall not be entitled to any gain on repurchase.

5. **"FORCE MAJEURE"**

- 5.1 "Force Majeure" shall mean any event, Act / or other circumstances, not being an event, act or circumstances, under the control of the purchaser or of the supplier. The Supplier shall notify the Purchaser in writing of any such event within 15 days by Fax / Telex / Telegram of its commencement, which is relied upon by the supplier for its failure to comply with its obligation. The Purchaser shall have the right to conduct

investigations to satisfy itself about the genuineness of the “Force Majeure” event. Non-availability of raw materials for the manufacture of stores, or of export permit for the export of the contracted stores from the country of its origin, shall not constitute “Force Majeure”.

5.2 **FRUSTRATION**

If by reason of “Force Majeure” any consignment shall not be delivered by the due date, then the delivery period may be extended appropriately for the purpose provided the said consignment shall be ready within four calendar months of the stipulated delivery date. If the said consignment shall not be ready after the lapse of four calendar months as aforementioned, then the Purchaser shall have the right to cancel the contract informing the Supplier of the cancellation in writing. This, however, will not apply to consignments already accepted and delivered according to the terms of this contract. The Supplier will not be entitled to any compensation whatsoever as a result of this cancellation.

6. **SECURITY OF INFORMATION**

The tenderer and his employees must not communicate any information relating to the sale/purchase of stores under this enquiry to any person other than the manufacturer or to any press or agent not authorized in writing by POFs to receive it. Please return the Schedule to the Tender duly signed by the specified date, alongwith the specifications drawings etc. if any, enclosed herewith - even if you are unable to quote.

WARNING

In case the firm abstain from making offers or fail to return/acknowledge the tender form by the specified date on three consecutive occasions, no further tender enquiry may be issued to them and their names would liable to be removed from the approved list.

Yours faithfully,

(Shoukat Hussain)
Managing Director Filling Wah,
PAKISTAN ORDNANCE FACTORIES,
WAH CANTT.
Tel # 051-9055-21044
Fax # 051-93144100.
E-mail mdfill.@pof.gov.pk

PAKISTAN ORDNANCE FACTORIES.

SCHEDULE TO TENDER NO. **007/LP/CAPT/PUR-FILL, DATED: 29.02.2024.**

(1) **FOR STORE.**

ITEM NO.	Description	UNIT	QTY	PRICE PER UNIT FREE DELIVERY		DELIVERY DATE
				IN WORD	IN FIGURE	
01	<u>Chilled Water A.C Plant</u> i) Cap: 40 Tons	NO	08			03 Months after placement of contract
	ii) Cap: 75 Tons		01			

2. Specifications: - As per attached Annexure-“A”

SPECIAL CONDITIONS/ BID EVALUATION CRITERIA:

(A) Eligibility Criteria

Only firms registered with sales and income tax department who are on Active Tax payer list (ATL) of FBR are eligible to participate in bid. Documentary proof of the same must be attached with bids.

(B) For bid evaluation:

Firms having experience, capability and resources may participate along with the following information and documents.

- i) Rates and sales Tax must be shown separately otherwise rate will be considered inclusive of G.S.T.
- ii) Price escalation clause is not allowed. No fax or email offer will be accepted.
- iii) **Offer without bid money (CDR) and tender fee will be rejected. Tender fee must be attached with Technical offer.**
- iv) Name of the firm along with Postal Address, Phone, Fax # & email address.
- v) Photo copy of NTN and PTC Certificates duly attested by Gazetted Class -1 Officer must be attached with the bid.
- vi) Complete company profile, business detail and annual turnover with documentary proof.
- vii) Any quantity of store, if found defective functionally will essentially be replaced by the supplier free of cost under his own arrangements.
- viii) The store must be protected adequately and appropriately against damages from environmental effects, water or other substances during journey/transportation to withstand the rough handling involved in the transit and provide preservation of store while held in the storage by the supplier.
- ix) Participating firms should have not defaulted in any contract with POF or any other govt. organization.
- x) Please clearly confirm our specs. Conditional or alternative offers with multiple rates are likely to be ignored.
- xi) Supplier must accept all the terms and conditions embodied in POF 1282 (General conditions of contract) and T.E general instructions Performa form POF 1262A (indigenous supplies)

- xii) Firms should not be blacklisted in any Govt Organization within or outside Pakistan. In this regard provide no blacklisting certificate.
- xiii) **Bids will be opened as per PPRA Rule 36 (b) "Single stage- Two Envelope Procedure" in which the bid shall comprise of two separate envelopes: Technical proposal and commercial proposal. Initially only Technical offer will be opened.**
- xiv) **Photocopy of Bid money hiding the must be accompanied with technical bid to prove submission along with commercial offer.**
- xv) Clearly mentioned your firm is direct importer of requisite store or the material will be arranged from local market. (Import document/ proof of import will be provided with
- xvi) Validity period will be considered after opening of commercial offer.
- xvii) Offer must remain valid for 180 days for any reduced or enhanced quantity.

UNDERTAKING.

Should our offer be accepted, we hereby undertake to supply the stores/render the services contracted on the basis of conditions of contract embodied in From POF 1280, and to deposit the performance bond within the prescribed time, failing which it will constitute a breach of contract, and POF will have the right to purchase the stores/services elsewhere at our risk and cost.

Place_____.

Signature of the Tenderer_____

Date_____.

Name _____

Position _____.

Address _____

Income Tax G.I.R.NO. _____

Annexure – A

DETAIL SPECIFICATIONS OF CHILLED WATER A.C PLANT (QTY: 09 Nos)

Sr.#	Description	Detail
1.	Nomenclature	i) Chilled Water A.C. Plant: Cap:75 TR(Qty: 01 No). ii) Chilled Water A.C Plant: Cap: 40 TR(Qty:08 Nos)
2.	Main Features	
2.1	Type	Package Type Chiller
2.2	Chilled Water inlet Temp	20°C
2.3.	Chilled Water outlet Temp.	05°C
2.4	Chilled Water Flow rate	200 GPM (US)
2.5	In/Out Water Temp. display	Digital
2.6	Amps & Volts display	Digital
2.7	Max. Average ambient Temp	45°C
2.8	Available Electric Supply	<ul style="list-style-type: none"> • 220 / 240 V, Single Phase, 50 HZ ±5% • 400 / 440 V, 3 Phase, 50 HZ ±5%
2.9	Refrigerant	Environment Friendly (Green gas) and easily available in local market
2.10	Quality / Type of water to be chilled	Raw Water
3	Compressor Detail	
3.1	Compressor Type	Semi Hermetic / Scroll
3.2	Capacity Control	Electrical Capacity control (Automatic) With VFD Compatible motor
3.3	Compressor protection	<ul style="list-style-type: none"> a. Thermal protection for compressor winding b. Phase failure relay c. Compressor over load relay (EOCR) d. Time delay relay (Adjustable) e. High- and low-pressure switches f. Oil pressure switch g. Compressor crank case heater
3.4	Country of Origin	Main component i.e. compressor motor, Control system and safeties should be manufacturer in USA / EU / JAPAN / THAILAND or any other country under license by OEM of above- mentioned origin only
4	Condenser Detail	
4.1	Type	Air cooled
4.2	Construction	Copper Tube with aluminum plate fins.
4.3	Condenser fan	Propeller type direct driven with temp Actuated switch for condenser.
4.4	Condenser Fan protection	IP- 65
5	Evaporator detail	
5.1	Type	Shell and tube
5.2	Evaporator Shell end plate	Removeable
5.3	Shell insulation	Thick close cell
5.4	Evaporator Tubes Material	90 % Copper
6	REFRIGERATION COMPONENTS / SAFETY DEVICES	
6.1	No of refrigeration circuit	<ul style="list-style-type: none"> • 02 Nos for 40 TR unit • 03 Nos for 75 TR unit
6.2	Refrigeration control	Thermostatic Expansion valve
6.3	High- and low-pressure cut-out switches	

6.4	Oil pressure cut-out	
6.5	Refrigerant sight glass (Liquid Indicator)	
6.6	Replaceable core filter drier	
6.7	Freeze up protection	
6.8	Liquid line solenoid valve	
6.9	Water Temperature control device	
6.10	Water Flow switch	
7	ELECTRICAL COMPONENTS / SAFETY DEVICES Following electrical safety devices of Siemens, Schneider or ABB should be an integral part of the plants:	
7.1	Phase failure relay	
7.2	Magnetic contactor for each compressor	
7.3	EOCR (3-phase) separate for each compressor and condenser fan motor	
7.4	Time delay relay separate for each compressor.	
7.5	Separate MCCB for each compressor	
8	SPARES	
8.1	Magnetic contactor for compressor	02 Nos.
8.2	EOCR for compressor	02 Nos.
8.3	High- and low-pressure cut-out switches	02 Nos.
8.4	Main circuit breaker for compressor	02 Nos.
8.5	Condenser fan contactor with EOCR	05 Nos.
8.6	Water flow switch	01 No.
8.7	Temperature controller	01 No.
8.8	Condenser Fan Motor	03 Nos.
8.9	Refrigerant & Compressor Lubricant	Sufficient for 1x time charge for each unit
8.10	Filter drier	03 Nos.
8.11	Expansion valve	01 No
8.12	Solenoid Coil for liquid line solenoid valve	02 Nos
8.13	Compressor	01 No as per design requirement
9	SCOPE OF SUPPLY The following hardware should be included in the supply: -	
9.1	The Chilled Water A.C Plant (Condensing Unit) complete in all respect including essential accessories and safety devices according to latest safety standards.	
9.2	All pipes, gaskets, ejectors, fittings, valves, flanges and cables etc. (of compatible material) required for the installation & commissioning of the plant.	
9.3	All types of erection and installation materials including steel structure for support, electrical / electronic system & piping etc.	
9.4	Start / Stop control station for all motors and pumps etc. (with volt & ampere meters, phase failure & phase reverse protection).	
9.5	Consumable/s required during installation of the plant.	
9.6	Necessary civil construction work required for erection/installation will be executed by the purchaser as per requirement of the installation according to drawing of civil construction given by the supplier.	
9.7	The manufacturer should have back facilities i.e. after sales services, availability of spares and proper workshop in Pakistan.	
10	ERECTION / INSTALLATION, COMMISSIONING & TRIAL RUN OF PLANT:	
10.1	Installation, commissioning and trial run will be carried out by Supplier's Engineers in the	

	presence of buyer expertise. After successful commissioning certificate will be issued by buyer.	
10.2	The trial run of the plant will be carried out by the supplier. It will be considered successful after round the clock operation for 07 days.	
10.3	All expenses, including boarding, lodging, traveling and daily allowances of the supplier's engineers / technicians will be borne by the supplier. Local transport shall be arranged by the purchaser.	
10.4	The supplier will provide the complete time schedule to complete the commissioning and trial run.	
11	DOCUMENTATION The supplier will be required to furnish relevant technical data (4 printed & soft copies each in English language) including the following: -	
11.1	Detailed Drawings & Specifications of the Plant.	
11.2	Detailed Erection / installation drawings.	
11.3	Maintenance and services manuals.	
11.4	Safety Instructions for protection of labor and equipment.	
11.5	Comprehensive operating manual of the plant & related equipment.	
11.6	Detailed Electrical & Instruments Connection diagrams.	
11.7	Lubrication & service manual.	
11.8	Detailed civil engineering design / drawing indicating foundation holes, static & dynamics load etc.	
11.9	Instruction for start-up and shut down of the plant.	
12	CLIMATIC CONDITIONS	
12.1	Temperature range	1 to 45°C
12.2	Atmospheric relative humidity	25 – 90%
12.3	Earthquake Value	7 on Richter scale
12.4	Average Annual Rainfall	1050 mm
12.5	Wind speed max	100 mph
12.6	Altitude Ground Level at site	460 Meter above sea level
13	TRAINING & PRELIMINARY INSPECTION / PDI	
13.1	The supplier shall train 04 x persons (maintenance & instrumentation) on similar plant at the firm's premises for a period of 05 days.	
13.2	The supplier shall arrange pre-delivery inspection at their site or at the site of their sub-contractors or vendors.	
13.3	During PDI, firm will demonstrate operation of the plant. This demonstration should be identical to those actions defined for Factory Acceptance Testing (FAT). PDI team will certify the process. All expenditure of PDI team will be borne by buyer.	
13.4	PDI team will also inspect /check all the standard accessories / equipment's according to contract schedule and get certificates from the firm in this regard.	
13.5	Cost of training including boarding, lodging and internal traveling will be supplier responsibility.	
14	TECHNICAL SUPPORT	
14.1	The supplier shall confirm that after successful commissioning and trial run of the Chilled Water A.C Plant (Condensing Unit), there shall be technical support as and when required by the purchaser. In addition, the purchaser shall be kept informed regarding latest advancement in the related technology for further improvement in the process for a period of 15 years, commencing from the date of completion of the project.	
14.2	The manufacturer should have backup facilities i.e. after sales services, availability of spares, technicians and proper workshops in Pakistan.	
15	SPARE	
15.1	Two years essential spares i.e. mechanical, electronics & instruments etc must be included in the scope of supply. Item wise detail must be included in technical offer indicating price of each item separately in commercial offer.	

15.2	It shall be guaranteed that spares & refrigerant shall be available on demand for at least 15 years after successful installation of Chilled Water A.C plant and related equipment.
16	WARRANTY GUARANTEE
16.1	The plant and accessories shall be accepted on Supplier's Warranty / Guarantee with regard to quality and quantity subject to these being technically checked/tested where necessary and accounted for on arrival at Consignee's ware-house in presence of supplier's rep (if desired by supplier) at their cost. The supplier shall render Warranty/Guarantee certificate in duplicate to the Purchaser on the Proforma (will be attached with tender documents) as soon as stores have been dispatched/delivered. This Warranty / Guarantee shall be binding on the Supplier for a period of 24 months reckoning from the date of acceptance after successful trial run.
16.2	In case the stores on checking / test after receipt at Consignee's warehouse are found not conforming strictly to the relevant specification and all components not found as per PDI team markings / identifications, or found broken during transit, the Supplier shall Immediately replace the rejected/broken stores by acceptable stores, free of cost, and without any obligation to the Purchaser. Rejected/broken stores shall be disposed off by the Supplier under his own arrangements.
16.3	The supplier shall warrant the good quality of all equipment supplied against all defects or failures due to faulty design, material, or workmanship.
16.4	The supplier shall also provide guarantee for meeting the requisite capacity of the machines. Guarantee regarding plant capacity shall be based on one week continuous round the clock operation. In case of any deficiency in terms of quality and performance, all related expenditures to fulfill commitment shall be borne by the supplier.
16.5	Delivery Period: 03 x Month
17	PAYMENT TERMS
17.1	20% payment of total value of contract in advance within 30 days will be made through cross cheque by CMA POF Wah against equal amount of Bank Guarantee to be provided by the firm immediately after placement of contract. Bank Guarantee will be remained valid upto receipt of store.
17.2	80% payment will be made after successful Final acceptance Test after installation and commissioning. The firm will assure the performance of all machines by running round the clock at full load, for 07 days during FAT.
18	PERFORMANCE BANK GUARANTEE The firm will be provided PBG in the shape of Deposit at Call Receipt or un-conditional Bank Guarantee within 45 days after placement of contract as per following:
18.1	Contract valuing upto Rs: 1,000,000.00, Performance Bond equal to 10% value of the contract
18.2	Contract valuing beyond Rs: 1,000,000.00 & upto Rs: 2,500,000.00, Performance Bond equal to 05% value of the contract but not less than Rs: 100,000.00
18.3	Contract valuing beyond Rs: 2,500,000.00, Performance Bond equal to 02% value of the contract but not less than Rs: 125,000.00
19	FINAL ACCEPTANCE TEST Final acceptance (trial run) of all the plants will be carried out by the supplier engineers at purchaser premises. This test will be carried out with the technical assistance of the supplier and will comprise of round the clock running of all machines at full load for 07 days. Acceptance parameters are as under:
19.1	Outlet temperature / difference
19.2	Discharges of Chilled Water (GPM)
19.3	Capacity control
19.4	Pressure Switches (Refrigerant / Oil)