



POF 1262
(FOREIGN SUPPLIES)

GOVERNMENT OF PAKISTAN
PAKISTAN ORDNANCE FACTORIES
TENDER ENQUIRY

To

Dear Sirs,

Reference: Tender Enquiry NO. **POF-5226-FP-Capt (1)-Gdl DATED 29.08.2017**. Offers should be sent duly sealed in an envelope. Faxed offers received before opening of tender are acceptable. Please note the following instructions for filling the tender:-

1. SUBMISSION OF TENDER

- 1.1 Tenders will be opened at 1230 hours on **03.10.2017** and must reach this office on or before that time. 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: **POF-5226-FP-Capt (1)-Gdl, DATED 29.08.2017**
Tender to be opened on: **03.10.2017**
Address as follows:-

MANAGING DIRECTOR POF GADWAL
SUB.P.O.26 AREA, WAH CANTT
DISST. RAWALPINDI (PAKISTAN).

- 1.3 If envelop do not indicate reference of TEs or received late, the same will be returned un opened.

2. GENERAL INSTRUCTIONS REGARDING PREPARATION OF QUOTATIONS

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

Part-I: "Technical Offer" It should exclusively give technical details and literature / brochures of the offered plant, machinery & equipment, validity date, delivery schedule and signed undertaking given on the schedule to this tender enquiry. It must not indicate price, costs etc. Country of origin should be clearly mentioned.

Part-II: "Commercial Offer" It should indicate the commercial terms e.g. price, terms of payment, mode of payment, mode of supply.

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

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- 2.2 The quotation must remain valid for, at least 90 days from the date of opening of tenders
- 2.3 The quotation should hold good for any reduced or enhanced quantities without notice.
- 2.4 In the event of non-acceptance of offer, no intimation will be given to the Tenders.
- 2.5 Conditional offers or alternative offers are likely to be ignored.
- 2.6 Quotations should be based on FOB. The consignment will be shipped through Pakistan National Shipping Corporation (PNSC). In case there is no PNSC service in the country of shipping, please quote on C & F basis. The freight should be indicated separately. Insurance premium should not be included in the quoted price. However, where insurance is considered necessary, advice to that effect should be given in the quotation.
- 2.7 Submission of the offer through an agent in Pakistan should be avoided. In case it is considered inevitable, the agent's quotation must invariably be accompanied by the original Proforma Invoice from the principals/ manufacturers.
- 2.8 Country of origin and port of shipment to be stated.
- 2.9 Supplier will render necessary information regarding hazardous effects on environment, of the materials/products supplied by them along with shipping/ dispatch documents.
- 2.10 The supplier will furnish a declaration regarding Fees, Commission & Brokerage etc payable by the firm along with shipping documents.
- 2.11 If the requisite information is not furnished on the TE form or offer received is not in conformity with the requirement of the TE each offer should be ignored.

3. **INSPECTION**

- 3.1 **Pre-Shipment Inspection (PSI).**
Pre-Shipment Inspection of chiller at OEM's premises will be conducted by 03 x POF Engineers for 01 x week. Boarding, lodging, travelling and 30% DA per person per day will be borne by the supplier.
- 3.2 **Training**
Supplier has to provide free of cost training to 04 x POF Engineers / Technicians for 02 weeks on operation and maintenance of chiller at POF Gadwal site after commissioning.

4. **INSTALLATION & COMMISSIONING**

- 4.1 Installation, commissioning and connectivity of new chiller with the existing networks in POF Gadwal shall be responsibility of the supplier. The chiller will be tried out for capacity run and at least 15 days continuous running and maintaining the required temp as per specs at site in POF Gadwal

5. **WARRANTY / GUARANTEE CERTIFICATE**

Supplier has to provide 02 years satisfactory performance warrantee / guarantee certificate including replacement of parts after satisfactory full load performance test. , which will be valid for a period of 12 months after successful installation and commissioning of the machine.

6. **COUNTRY OF ORIGIN**

USA, Japan & Europe

7. **ACCEPTANCE OF OFFERS**

7.1 The right to accept or reject any offer in full or in part is hereby reserved. However, rejection grounds shall be intimated to the bidder.

7.2 **PERFORMANCE BOND**

a) The successful bidder will provide Performance Bond at the rate up to 10% F.O.B value of contract in favour of the Controller Military Accounts (CMA) POF, Wah Cantt. The Performance Bond will be furnished in the form of Deposit at Call Receipt (CDR) from any scheduled bank in Pakistan or an unconditional bank guarantee on prescribed proforma covered by any scheduled bank in Pakistan. The Performance Bond shall be furnished within 45 days from the date of opening of Letter of Credit. It shall be valid for a period of 12 months after the date of expiry of letter of credit.

(b) No Performance Bond will be required if the total value of the contract is less than US\$ 50,000 and contract is placed directly on the foreign Supplier.

7.3 **FAILURE TO SUPPLY THE STORES**

All deliveries must be completed by the specified date. If the failure to deliver the stores within the scheduled time should have arisen from "Force Majeure", which the Purchaser may admit as reasonable ground for further time, he will allow such additional time as he may consider to have been required by the circumstances of the case. Otherwise, he will be entitled, at his discretion, to cancel the contract; and/or, claim liquidated damages upto 2% but not less than 1% of the contact price of the items and their quantities for each and every month, beyond the specified delivery date, during which these may not be delivered, subject to a maximum of 10% of the total contract value; or, to purchase from elsewhere, the unsupplied stores at the risk and cost of the Supplier.

7.4 **PAYMENT**

(a) 80-20% payment will be made by means of irrevocable letter of credit. 80% payment will be made against shipping documents & acceptance report of PSI Team countersigned by the consignee. Balance 20% payment will be released on acceptance of store by the consignee after receipt, satisfactory performance and successful trial run of the chiller.

(b) All Bank charges incurred in Pakistan in connection with the establishment of L.C. will be borne by the Purchaser, where as all Bank charges incurred in connection with drawing of payment including charges for confirmation of L.C. by the advising Bank/Foreign Bank will be borne by the Supplier.

8. **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 offer or fail to return / acknowledge the tender form by the specified date on three occasions no further tender enquiry be issued to them and their name would be liable to be removed from the approved list

Yours faithfully,

(Muhammad Massood)
G.M-PP&C POF Gdl
For Pakistan Ordnance Factories

Tele No. 3597-8, 535021/254
Telex 5840 POFAC PK

Fax No. 0519271400, 1596-2995

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PAKISTAN ORDNANCE FACTORIES
SCHEDULE TO TENDER ENQUIRY NO. **POF-5226-FP-Capt (1)-Gdl DATED 29.07.2017**

- (1) FOR MATERIALS
- (2) FOR PLANT & MACHINERY:

(1)	(2)	(3)	(4)	(5)		(6)
Item no.	Description with specs. etc.	Unit	Qty	Price per Unit FOB or Free delivery		Delivery Date
				In Figures	In Words	
1	Absorption Liquid Chiller (Steam operated) complete with all Standard accessories and control systems, capacity 295R Ton	Nos	01			

Specifications:- Enclosed as Annexure "A"

- (3) Special Conditions. -
 - i. POF will hold no responsibility for any damage occurred during shipment of the chiller.
 - ii. List of (02) years spares with itemized price must be furnished by the supplier.
 - iii. Reputable European / Japanese / USA OEMs can participate and are required to provide following information's:
 - a. Proof of being OEM with the profile / brochure.
 - b. Financial status by showing the annual turnover.
 - c. List of similar supplies in past, their financial values and references.
 - d. Well established supplier can take part by indicating their OEMs.
 - iv. FOB and C&F Prices of the machine should be indicated separately.
 - v. Firm will also be responsible for:
 - a. Installation & commissioning of new chiller and pumps at the existing foundations as shown in attached drawing.
 - b. Provisioning and modification / rectification in existing chilled and cooling water pipes work, flanges and control valves due to deviation in size and design of new chiller and pump.
 - c. Provisioning and installation of essential accessories with chilled and cooling water pump i.e, electric control panel, star / delta starters with over load relays and electric cable (M.D.B to pumps).

(4) 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 Form 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.....

SPECIFICATIONS

NOMENCLATURE

Absorption liquid chillier (steam operated) with all standard accessories and control system consisting of followings main features: -

- i. Generator condenser assembly & Absorber evaporator assembly ,
- ii. Leak proof hermetic pumps with Isolation valves (Solution and refrigerant pumps),
- iii. Auto purge system ,Safety cut-outs, overrides, capacity control and all indications,
- iv. Initial charge of lithium bromide, Low sound & Vibration level,
- v. Chilled water pumps with motors & Condenser water pumps with motors with all accessories,
- vi. Simple , reliable operation and latest Micro processor control system,
- vii. Equipped with safety valve and steam pressure regulator (100 PSI to 10 PSI) and steam control valve.

2. **MANUFACTURERS & COUNTRY OF ORIGIN**

- i. Manufacturers = Carrier/ Trane/ York/ Mitsubishi / LG *or Eg/ - client*
- ii Country of Origin = USA, Japan, Europe

3. **COOLING CAPACITY**

= 295 R Ton

4. **EVAPORATOR DATA**

- i. Chilled water inlet temp = 54⁰F
- ii. Chilled water outlet temp = 44⁰F
- iii. Chilled water flow rate = 507 US GPM or standard
- iiii. Evaporator fouling factor = Standard
- iv. Evaporator pressure max = 10 bar G
- v. Copper tube = Copper Nickel (90:10)

5. **CONDENSER / ABSORBER DATA**

- i. Cooling water inlet temp = 85⁰F
- ii. Cooling water outlet temp = 104⁰F
- ii. Cooling water flow rate = 1140 US GPM or standard
- iii. Condenser fouling factor = standard
- iv. Condenser pressure Max = 10 bar G
- v. Copper tube = Copper Nickel (90:10)

6. **GENERATOR DATA**

- i. Saturated steam pressure Inlet = 14 PSI or standard
- ii. Steam flow at full load = 5260 lbs/hrs or standard

7 **CHILLED WATER & COOLING WATER PUMPS WITH MOTORS**

7.a **CHILLED WATER PUMPS WITH MOTORS**

<u>Pump Data</u>	<u>Motor Data</u>
i) Flow = 507 US GPM or standard ii) Discharge head = 95 feet, iii) RPM = 1465 iv) Suction size = 5" v) Discharge size = 4" <div style="text-align: right;">(Qty 2 Nos)</div>	i) 3 phase Ind. Motor= 400V± 5%,50 Hz+2% 33 Amp, 25 HP,PF 0.86, RPM-1465 <div style="text-align: right;">(Qty 2 Nos)</div>

7.b **COOLING WATER PUMPS WITH MOTORS**

<u>Pump Data</u>	<u>Motor Data</u>
i) Flow = 1140US GPM or standard ii) Discharge head = 60 feet, iii) RPM=1465 iv) Suction size = 6" v) Discharge size = 5" <div style="text-align: right;">(Qty 2 Nos)</div>	i) 3 phase Ind. Motor= 400V± 5%,50 Hz+2% 33 Amp, 25 HP,PF 0.86, RPM-1465 <div style="text-align: right;">(Qty 2 Nos)</div>

8. **ELECTRICAL CHARACTERISTICS:** 03 Phase, 380-440 Volts $\pm 10\%$, 50Hz
9. **AMBIENT TEMPERATURE::** $-2^{\circ} \text{C} \sim 55^{\circ} \text{C}$, Humidity 10~ 95%.
10. **MICROPROCESS CONTROLS**
Latest control system with complete redundant, safety, interlock, capacity control, and all indications necessary to operate the chiller in safe and efficient manner. Complete with Factory mounted, factory wired and factory tested to ensure Chiller protection & efficient capacity controls to be provided with chiller.
11. **INDICATIONS-INSTRUMENTS & GAUGES**
Digital temperature indicator and pressure gauges at chilled and cooling water inlet and outlet lines, steam pressure and vacuum gauge to be provided with chiller.
12. **SAFETY & PRESSURE REDUCING VALVE**
Safety Valve, Steam Pressure regulator (100 PSI to 10 PSI) and steam control valve.
13. **PSI & TRAINING**
i. Pre-shipment inspection of chiller at OEM's premises will be conducted by 03 x POF Engineers for 01 x week. Boarding, lodging and travelling will be born by supplier.
ii. Supplier has to provide free of cost training to 04x POF Engineers/Technicians for 02 weeks on operation and maintenance of chiller at POF Gadwal site after commissioning.
14. **INSTALLATION & COMMISSIONING**
Installation, commissioning and connectivity of new chiller with the existing networks in POF Gadwal shall be responsibility of the supplier. The chiller will be tried out for capacity run and at least 15 days continuous running and maintaining the required temp as per specs at site in POF Gadwal.
15. **DOCUMENTATION**
Supplier has to provide 04 set of operational and maintenance manuals in English version, schematic drawings of electrical / electronic circuits from OEMS
16. **CONFIRMATION OF SPARES**
Supplier has to provide certificate for availability of spares from OME's of chiller for next 10 years after commissioning.



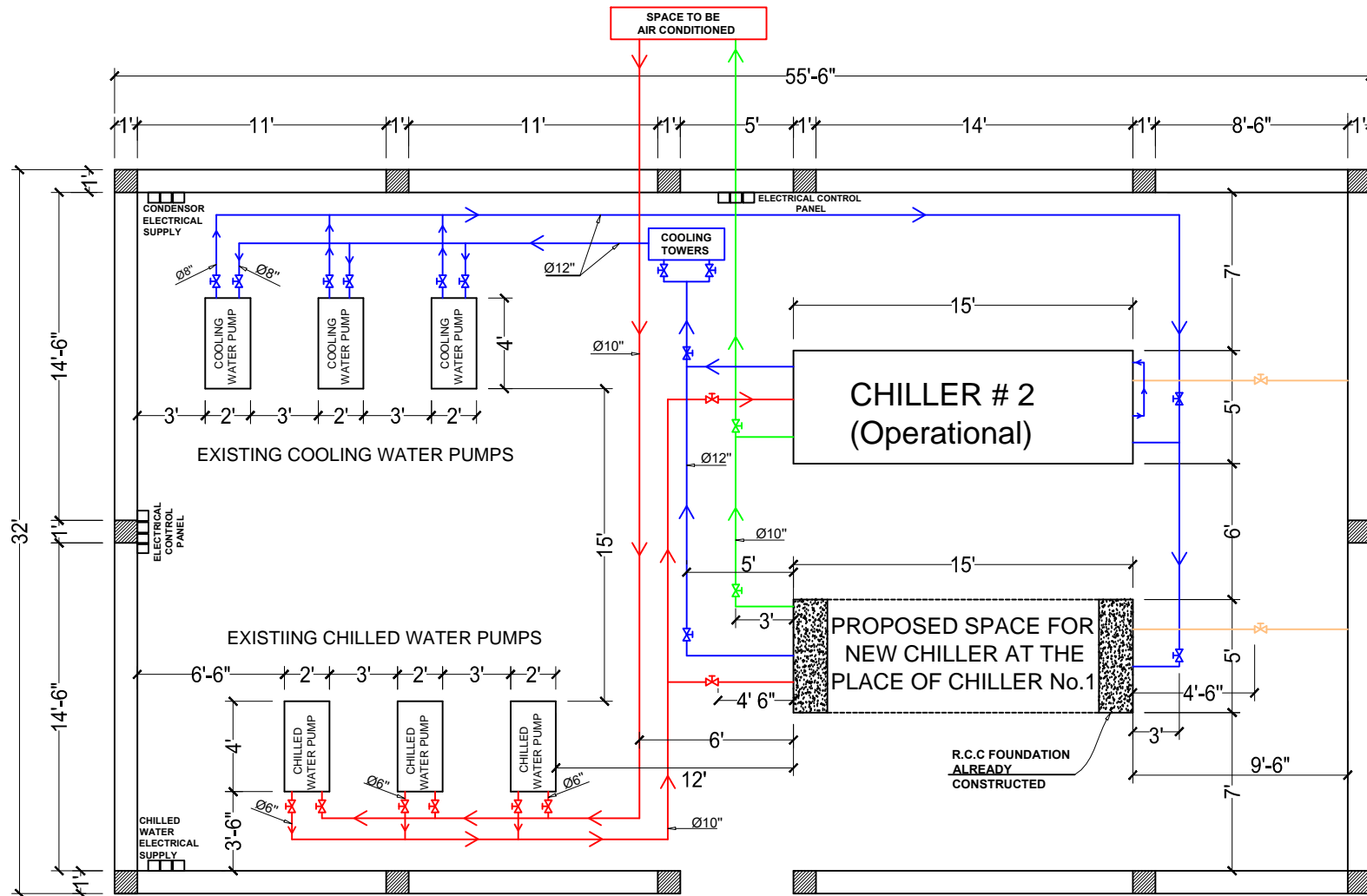
16. **PROVISION OF SPARES**

Supplier has to provide spare parts with chillier for 02 years' running maintenance.

17. **WARRANTY / GUARANTY**

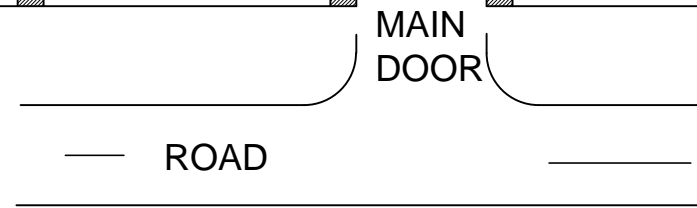
Supplier has to provide 02 years satisfactory performance warranty / guaranty including replacement of parts after satisfactory full load performances test.

PROPOSED LAYOUT FOR INSTALLATION OF NEW CHILLER IN CHILLER HOUSE POF GADWAL



EXISTING KEY

- CHILLED WATER SUPPLY LINE: —
- COOLING WATER LINE: —
- CHILLED WATER RETURN LINE: —
- STEAM SUPPLY LINE: —
- CONTROL VALVES:



DATE:- -05-2016	WEIGHT	SCALE:- NTS
POF GADWAL		
Prepared By	Checked By	Approved By
TITLE LAYOUT OF CHILLER HOUSE (AF16)		
DRG.No.	GDL/SPR/MISC-666	