

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

To  
M/s \_\_\_\_\_  
\_\_\_\_\_

Dear Sirs,

Reference: TENDER ENQUIRY NO. **08-DS-FP-Capt-51-Rotary Compressors Dated 19-01-2022.**

You are requested to submit quotations for the items(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 **1230 hours** on **28-02-2022** at Bid Centre Adjacent to Rabita Hall, POF Wah Cantt and must reach at below mentioned address before 30 Minutes of opening 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 CNIC in original & 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: **08-DS-FP-Capt-51-Rotary Compressors Dated 19-01-2022.**  
Tender to be opened on: **28-02-2022**  
Address as follows:- **BID CENTRE ADJACENT TO RABITA HALL, POF WAH CANTT**  
**(DIRECTOR SERVICES),**  
Tele: +92-51-9055-21090  
Fax: +92-51-9271400, 9314100

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

1.4 Tender "By Hand" can be delivered at Bid Centre, Rabita Hall, POF Wah Cantt.

1.5 Offers received through email / fax are not acceptable.

2. **GENERAL INSTRUCTIONS REGARDING PREPARATION OF QUOTATIONS**

2.1 For materials, the prices should be filled in column 5 and delivery date in column 6 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 plant, machinery and equipment; validity date; delivery schedule; and signed undertaking given on the schedule to this Tender Enquiry. It must not indicate price, costs etc.

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" and Part II "Commercial Quotation with Price."

2.3 The quotation must remain valid for, at least **120 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.B. 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.

- 2.8 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.
- 2.9 Country of origin and port of shipment to be stated.
- 2.10 The offer of principal must clearly indicate whether the rate quoted is inclusive of agent's commission, and if inclusive rate of commission included be specified.
- 2.11 Suppliers will render necessary information regarding hazardous effects on environment, of the materials/products supplied by them, in their quotations and shipping/Dispatch documents.
- 2.12 If the requisite information is not furnished on the T.E form or offer received is not in conformity with the requirement of the T.E such offer shall be ignored.

### 3. **PRE-SHIPMENT INSPECTION**

- 3.1 Pre-shipment inspection of the compressors by a team of 03 x POF Officials for 05 x working days at each OEM premises. Supplier will bear all the expenses on account of visa processing, air tickets, boarding / lodging, inland transportation of visiting team. Charges of PSI to be indicated separately in commercial offer.
- 3.2 Inspection facilities such as test bed, tools, test equipment / testing material etc. will be provided by the supplier in accordance with the relevant specification.
- 3.3 Firm will arrange run test of compressors at OEM premises in which minimum 02 hrs run test will be witnessed jointly by POF & OEM rep. Necessary flow, pressure, quality of air (as per ISO-8573 or equivalent standards) and over tripping etc. will be witnessed & ensured during run test and recorded data sheets would be obtained.
- 3.4 Final acceptance test (FAT) will be at POF site after continuous operation of compressor for 72 hours.

#### 3.5 **TENDER SAMPLE**

Where required offer must accompany tender sample strictly according to the description given in tender enquiry. Offer not accompanied by tender sample will NOT be entertained excepting the established and reputable firms who have either previously satisfactorily supplied the same or similar stores or have submitted an acceptable sample thereof against previous T.E

### 4. **ACCEPTANCE OF OFFERS**

- 3.5.1 The procuring agency may reject all bids or proposals at any time prior to the acceptance of a bid or proposal. The procuring agency shall upon request communicate to any supplier or contractor who submitted a bid or proposal, the grounds for its rejection of all bids or proposals, but is not required to justify those grounds.
- 3.5.2 Procuring agency shall incur no liability, solely by virtue of its invoking sub-rule (1.1) towards suppliers or contractors who have submitted bids or proposals.
- 3.5.3 Notice of the rejection of all bids or proposals shall be given promptly to all suppliers or contractors that submitted bids or proposals.

### 4.2 **PERFORMANCE BOND**

- (a) The successful bidders will provide Performance Bond at the rate upto 10% of 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 performa 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 30 months after the date of expiry of letter of credit. If the Performance Bond is not furnished within the prescribed time of 45 days, the Purchaser reserves the right to cancel the contract and make other arrangements for purchase of the stores at the risk and expense of the Supplier.
  - i. Cancel the contract and make other arrangements for purchase of the stores at the risk and expense of the Supplier.
- (b) No Performance Bond will be required if the total FOB value of the contract is less than US\$ 50,000 and contract is placed directly on the foreign Supplier.

#### 4.3 **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 contract price of the items and their quantities for each and every month or part of a month, beyond the specified delivery date, during which these may not be delivered, subject to a maximum of 10% of the total contract value of particular store which remained unsupplied either in part or in full or, to purchase, from elsewhere, the unsupplied stores at the risk and cost of the Supplier.

#### 4.4 **PAYMENT**

4.4.1 Payment will normally be made by means of irrevocable letter of credit. Scheduled of payment is as under:

- i) Firm will submit offer on FOB basis.
- ii) LC will be opened against OEM only
- iii) Pre-Shipment Inspection at OEM premises
- iv) Payment will normally be made by means of irrevocable letter of credit. Unless otherwise stated 80% payment may be released on submission of shipping documents to bank along with pre-shipment inspection acceptance certificate from the purchaser. Remaining 20% payment will be released after successful FAT at POF site. Final acceptance test certificate will be issued by the Purchaser.
- v) All bank charges incurred in Pakistan in connection with the establishment of LC will be borne by the Purchaser whereas all bank charges incurred in connection with drawing of payment including charges for confirmation of LC by the advisory bank / foreign bank will be borne by the supplier.

**OR**

In case PSI is not possible (due to COVID or any other unforeseen situation) at OEM premises, firm will provide third party inspection certificate furthermore, payment will be made by means of irrevocable letter of credit. Unless otherwise stated 50% payment will be released on submission of shipping documents to bank. 20% payment will be made on receipt of store at POF and remaining 30% payment will be released after successful conduct of FAT at POF site. Final acceptance test certificate will be issued by the Purchaser. However, PSI charges indicated in commercial offer will be deducted/adjusted from firm's payment.

#### 5 **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,

**DIRECTOR SERVICES**  
Pakistan Ordnance Factories  
Wah Cantt  
Tele + 92-51-905521090  
Fax + 92-51-9271400 & 9314100  
e. mail: [dirser.pof@gmail.com](mailto:dirser.pof@gmail.com)

**PAKISTAN ORDNANCE FACTORIES**

**SCHEDULED TO TENDER NO. 08-DS-FP-Capt-51-Rotary Compressors Dated 19-01-2022.**

**(1) FOR MATERIALS**

(1)	(2)	(3)	(4)	(5)		(6)
Item No.	Description with Specs etc.	Unit	Qty	Price per unit FOB / C&F basis		Delivery date
				In figures	In words	
i.	Rotary screw type air compressor <b>Capacity 50 m<sup>3</sup>/min</b> (HAT version) along with refrigeration air drier, plate type heat exchanger, cooling tower and water circulation pumps. System should be energy efficient with VFD/VSD control system. The specification are attached as Annexure-A.	Nos	05			
ii.	Rotary Screw Type Air Compressor <b>Capacity 34.0 m<sup>3</sup>/min</b> (HAT version) along with Refrigeration Air Drier, Plate Type Heat Exchanger, Cooling tower and Water Circulation Pumps. System should be energy efficient with VFD/VSD control system. The specification are attached as Annexure-B.	No	01			
iii.	Rotary Screw Type Air Compressor <b>Capacity 11.0 m<sup>3</sup>/min</b> (HAT version) along with Refrigeration Air Drier, Plate Type Heat Exchanger, Cooling tower and Water Circulation Pumps. System should be energy efficient with VFD/VSD control system. The specification are attached as Annexure-C.	Nos	02			
iv.	Rotary Screw Type Air Compressor <b>Capacity 05.0 m<sup>3</sup>/min</b> (HAT version) along with Refrigeration Air Drier, Plate Type Heat Exchanger, Cooling tower and Water Circulation Pumps. System should be energy efficient with VFD/VSD control system. The specification are attached as annexure-D.	Nos	02			

**(2) For Plant & Machinery:**

Specification:- attached

**(3) Special Conditions:**

- a. **LC will be established against OEM only.**
- b. **Offer should be on FOB basis. However, for considering C&F or CIF Karachi basis, sea freight & insurance charges should be indicated separately.**
- c. **Authorized dealer of OEM having backup services (OEM authorized maintenance workshop and spare parts godown) in Pakistan is eligible to quote.**
- d. Manufacturers must have valid international certification regarding equipment & spares i.e CE marked or any equivalent standard.
- e. **The model should be out of latest production. Detailed specifications of quoted model should be available on manufacturer official website.**
- f. No reconditioned / used part / component will be acceptable. In such case, firm will be responsible to replace it with new one.
- g. **All Chinese & Hong Kong based firms must quote rates in RMB (Chinese Yuan) and rate in other currency will not be entertained.**
- h. Repair / maintenance period (in case of breakdown during warranty / guarantee) will not be counted in Warranty / Guarantee period.
- i. Population list of same make & model in Pakistan is essentially required with complete addresses of users including postal address, email address, telephone number & fax number etc.

**j. Compliance sheet (point-to-point comparison) to T.E is also essentially required as per following format:**

S #	POF SPECIFICATION	FIRMS REMARKS / OFFERS.
1.		

**NOTE:** **LOCAL BIDDERS WHO ARE INTERESTED TO QUOTE ON F.O.R WAH BASIS SHOULD FOLLOW THE INSTRUCTIONS AS PER ANNEXURE-E. IN THIS CASE, PSI & FOREIGN TRAINING IS NOT REQUIRED / INVOLVED. HOWEVER, SUPPLIER WILL ARRANGE TRAINING OF POF OFFICIALS AT SITE.**

(4) **Undertaking**

Should our offer be accepted, we hereby undertake to supply the stores/render the services contracted on the basis of General Conditions of Contract embodied in Form POF 1282 (for foreign bidders) and form POF-1281 (for local bidders), 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 \_\_\_\_\_  
Date \_\_\_\_\_

Signature of the Tenderer \_\_\_\_\_  
Name \_\_\_\_\_  
Position \_\_\_\_\_  
Address \_\_\_\_\_  
Income Tax G.I.R No. \_\_\_\_\_  
Official stamp.

**SPECIFICATION OF ROTARY SCREW TYPE AIR COMPRESSOR CAPACITY 50 M<sup>3</sup>/MIN**

<b>TECHNICAL SPECIFICATION:</b>		
Type of Compressor	Rotary Screw Type Air Compressor (HAT version) along with Refrigeration Air Drier, Plate Type Heat Exchanger, Cooling tower and Water Circulation Pumps. System should be energy efficient with VFD/VSD control system.	
<b>Quantity</b>	<b>05 Nos</b>	
Working Pressure	10 bar (Maximum)	
Capacity	50 M <sup>3</sup> /min	
Country of Origin	Manufacturer / supplier from USA/UK/EU/Japan.	
Cooling system	Water cooled	
Lubrication	Oil lubrication	
Ambient Temperature	-3°C to 51°C	
Power	3 phase, 400 ± 5% volt, 50 Hz	
Energy efficient system	System to be equipped with VFD/VSD control system	
Main Compressor Motor Power	As recommended by OEM as per country of origin mentioned above (compressor motor should meet IE3 standards or equivalent)	
Motor Protection Clause	IP-55	
Quality of Air	Air quality (Oil, Moisture and dust free) should be as per ISO standard 8573-1-2010 or equivalent (particle size: max 50µm, water contents max. 10 g/m <sup>3</sup> Oil contents max. 25 mg/m <sup>3</sup> ).	
Discharge Air Temperature	Max 8°C above ambient	
<b>ACCESSORIES</b> (Make, model and country of origin of each item to be provided by the firm alongwith literature)		
Air Filter	Heavy duty filters at Inlet.	
Portable compressed air analyzer <b>(Optional)</b> Qty = 05 Nos	To monitor the quality of compressed air in accordance with the requirement of ISO standard 8573-1-2010 or equivalent.	
Cooling Tower (Qty = 05 Nos) Pump for Cooling Tower = 10 Nos. (02 x Pumps for each cooling tower)	Package type cooling tower of suitable capacity to work at temp max 51°C & relative humidity 96% max along with 2 x centrifugal pumps (renowned brands i.e KSB, Grundfoss or equivalent) including 02 x motors (1 x operational & 1 x standby) and control panels for water circulation system. Outlet water temperature min 5°C to 8°C below the inlet. Fan motor protection clause IP-66	
Heat exchanger (Qty = 05 Nos) Pump for Heat exchanger = 10 Nos.	Plate type heat exchanger (Corrugated S.S Plates) of suitable capacity along with 2 x centrifugal pumps (renowned brands i.e KSB, Grundfoss or equivalent) including 02 x motors (1 x operational & 1 x standby) and control panels for water circulation system.	
Air Drier (Qty=05 Nos)	Refrigerant Air Drier of suitable capacity with high efficiency filters at inlet and outlet.	
Country of origin	Cooling tower & heat exchanger	China/Korea/Thailand or any other country having manufacturing facility under license of OEM from these origin
	Cooling Tower Pumps	Europe/USA/Japan/Thailand/Korea or any other country having manufacturing facility under license of OEM from these origin
	Air Drier	USA/UK/EU/Japan or any other country having manufacturing facility under license of OEM from above origin.
	Portable compressed air analyzer	USA/UK/EU/Japan

**SPECIFICATION OF ROTARY SCREW TYPE AIR COMPRESSOR CAPACITY 34.0 M<sup>3</sup>/min**

<b><u>TECHNICAL SPECIFICATION:</u></b>		
Type of Compressor	Rotary Screw Type Air Compressor (HAT version) along with Refrigeration Air Drier, Plate Type Heat Exchanger, Cooling tower and Water Circulation Pumps. System should be energy efficient with VFD/VSD control system.	
<b>Quantity</b>	<b>01 No.</b>	
Working Pressure	10 bar (Maximum)	
Capacity	34.0 M <sup>3</sup> /min	
Country of Origin	Manufacturer / supplier from USA/UK/EU/Japan	
Cooling system	Water cooled	
Lubrication	Oil lubrication	
Ambient Temperature	-3°C to 51°C	
Power	3 phase, 400 ± 5% Volt, 50 Hz	
Energy efficient system	System to be equipped with VFD/VSD control system	
Main Compressor Motor Power	As recommended by OEM as per country of origin mentioned above (compressor motor should meet IE3 standards or equivalent)	
Motor Protection Clause	IP-55	
Quality of Air	Air quality (Oil, Moisture and dust free) should be as per ISO standard 8573-1-2010 or equivalent (particle size: max 50µm, water contents max. 10 g/m <sup>3</sup> Oil contents max. 25 mg/m <sup>3</sup> ).	
Discharge Air Temperature	Max 8°C above ambient	
<b><u>ACCESSORIES</u></b> (Make, model and country of origin of each item to be provided by the firm alongwith literature)		
Air Filter	Heavy duty filters at Inlet.	
Portable compressed air analyzer <b>(Optional)</b> Qty = 01 No	To monitor the quality of compressed air in accordance with the requirement of ISO standard 8573-1-2010 or equivalent.	
Cooling Tower (Qty=01 Nos) Pump for Cooling Tower = 02 Nos.	Package type cooling tower of suitable capacity to work at temp max 51°C & relative humidity 96% max along with 2 x centrifugal pumps (renowned brands i.e KSB, Grundfoss or equivalent) including 02 x motors (1 x operational & 1 x standby) and control panels for water circulation system. Outlet water temperature min 5°C to 8°C below the inlet. Fan motor protection clause IP-66	
Heat exchanger (Qty = 01) Pump for Heat exchanger = 02 Nos.	Plate type heat exchanger (Corrugated S.S Plates) of suitable capacity along with 2 x centrifugal pumps (renowned brands i.e. KSB, Grundfoss or equivalent) including 02 x motors (1 x operational & 1 x standby) and control panels for water circulation system.	
Air Drier	Refrigerant Air Drier of suitable capacity with high efficiency filters at inlet and outlet.	
Country of origin	Cooling tower & heat exchanger	China/Korea/Thailand or any other country having manufacturing facility under license of OEM from these origin
	Cooling Tower Pumps	Europe/USA/Japan/Thailand/Korea or any other country having manufacturing facility under license of OEM from these origin
	Air Drier	USA/UK/EU/Japan or any other country having manufacturing facility under license of OEM from above origin.
	Portable compressed air analyzer	USA/UK/EU/Japan

**SPECIFICATION OF ROTARY SCREW TYPE AIR COMPRESSOR CAPACITY 11.0 M<sup>3</sup>/min**

<b><u>TECHNICAL SPECIFICATION:</u></b>		
Type of Compressor	Rotary Screw Type Air Compressor (HAT version) along with Refrigeration Air Drier, Plate Type Heat Exchanger, Cooling tower and Water Circulation Pumps. System should be energy efficient with VFD/VSD control system.	
<b>Quantity</b>	<b>02 Nos.</b>	
Working Pressure	10 bar (Maximum)	
Capacity	11.0 M <sup>3</sup> /Min	
Country of Origin	Manufacturer / supplier from USA/UK/EU/Japan.	
Cooling system	Water cooled	
Lubrication	Oil lubrication	
Ambient Temperature	-3°C to 51°C	
Power	3 phase, 400 ± 5% volt, 50 Hz	
Energy efficient system	System to be equipped with VFD/VSD control system	
Main Compressor Motor Power	As recommended by OEM as per country of origin mentioned above (compressor motor should meet IE3 standards or equivalent)	
Motor Protection Clause	IP-55	
Quality of Air	Air quality (Oil, Moisture and dust free) should be as per ISO standard 8573-1-2010 or equivalent (particle size: max 50µm, water contents max. 10 g/m <sup>3</sup> Oil contents max. 25 mg/m <sup>3</sup> ).	
Discharge Air Temperature	Max 8°C above ambient	
<b><u>ACCESSORIES</u></b> (Make model and country of origin of each item to be provided by the firm alongwith literature)		
Air Filter	Heavy duty filter at Inlet.	
Portable compressed air analyzer <b>(Optional)</b> Qty = 01 No	To monitor the quality of compressed air in accordance with the requirement of ISO standard 8573-1-2010 or equivalent.	
Cooling Tower (Qty=02 Nos) Pump for Cooling Tower = 04 Nos. (02 x Pumps for each cooling tower)	Package type cooling tower of suitable capacity to work at temp max 51°C & relative humidity 96% max along with 2 x centrifugal pumps (renowned brands i.e KSB, Grundfoss or equivalent) including 02 x motors (1 x operational & 1 x standby) and control panels for water circulation system. Outlet water temperature min 5°C to 8°C below the inlet. Fan motor protection clause IP-66	
Heat exchanger (Qty = 02) Pump for Heat exchanger = 04 Nos.	Plate type heat exchanger (Corrugated S.S Plates) of suitable capacity along with 2 x centrifugal pumps (renowned brands i.e KSB, Grundfoss or equivalent) including 02 x motors (1 x operational & 1 x standby) and control panels for water circulation system.	
Air Drier (Qty=02 Nos)	02 x Refrigerant Air Drier of suitable capacity with high efficiency filters at inlet and outlet.	
Country of origin	Cooling tower & heat exchanger	China/Korea/Thailand or any other country having manufacturing facility under license of OEM from these origin
	Cooling Tower Pumps	Europe/USA/Japan/Thailand/Korea or any other country having manufacturing facility under license of OEM from these origin
	Air Drier	USA/UK/EU/Japan or any other country having manufacturing facility under license of OEM from above origin.
	Portable compressed air analyzer	USA/UK/EU/Japan



**SPECIFICATION OF ROTARY SCREW TYPE AIR COMPRESSOR CAPACITY 5.0 M<sup>3</sup>/min**

<b>TECHNICAL SPECIFICATION:</b>		
Type of Compressor	Rotary Screw Type Air Compressor (HAT version) along with Refrigeration Air Drier, Plate Type Heat Exchanger, Cooling tower and Water Circulation Pumps. System should be energy efficient with VFD/VSD control system.	
<b>Quantity</b>	<b>02 Nos.</b>	
Working Pressure	10 bar (Maximum)	
Capacity	5.0 M <sup>3</sup> /Min	
Country of Origin	Manufacturer / supplier from USA/UK/EU/Japan.	
Cooling system	Water cooled	
Lubrication	Oil lubrication	
Ambient Temperature	-3°C to 51°C	
Power	3 phase, 400 ± 5% volt, 50 Hz	
Energy efficient system	System to be equipped with VFD/VSD control system	
Main compressor motor power	As recommended by OEM as per country of origin mentioned above (compressor motor should meet IE3 standards or equivalent)	
Motor Protection Clause	IP-55	
Quality of Air	Air quality (Oil, Moisture and dust free) should be as per ISO standard 8573-1-2010 or equivalent (particle size: max 50µm, water contents max. 10 g/m <sup>3</sup> Oil contents max. 25 mg/m <sup>3</sup> ).	
Discharge Air Temperature	Max 8°C above ambient	
<b>ACCESSORIES</b> (Make model and country of origin of each item to be provided by the firm alongwith literature)		
Air Filter	Heavy duty filter at Inlet.	
Portable compressed air analyzer <b>(Optional)</b> Qty = 02 No	To monitor the quality of compressed air in accordance with the requirement of ISO standard 8573-1-2010 or equivalent.	
Cooling Tower (Qty=02 Nos) Pump for Cooling Tower = 04 Nos. (02 x Pumps for each cooling tower)	Package type cooling tower of suitable capacity to work at temp max 51°C & relative humidity 96% max along with 2 x centrifugal pumps (renowned brands i.e KSB, Grundfoss or equivalent) including 02 x motors (1 x operational & 1 x standby) and control panels for water circulation system. Outlet water temperature min 5°C to 8°C below the inlet. Fan motor protection clause IP-66	
Heat exchanger (Qty = 02) Pump for Heat exchanger = 04 Nos.	Plate type heat exchanger (Corrugated S.S Plates) of suitable capacity along with 2 x centrifugal pumps (renowned brands i.e KSB, Grundfoss or equivalent) including 02 x motors (1 x operational & 1 x standby) and control panels for water circulation system.	
Air Drier	Refrigerant Air Drier of suitable capacity with high efficiency filters at inlet and outlet.	
Air Vessel (Qty = 02 Nos.) (with safety valve, pressure gauge & manual drain valve)	Capacity	1000 Liters
	Working Pressure	10 bar
	Test Pressure	15 bar
	ASME standard section 8 division 01/CE standard EN13445 or equivalent	
	Configuration	Vertical
	Connections	Threaded
	Surface preparation	Externally sand blasted and galvanized
Country of origin	Cooling tower & heat exchanger	China/Korea/Thailand or any other country having manufacturing facility under license of OEM from these origin
	Cooling Tower Pumps	Europe/USA/Japan/Thailand/Korea or any other country having manufacturing facility under license of OEM from these origin
	Air Drier	USA/UK/EU/Japan or any other country having manufacturing facility under license of OEM from above origin.
	Portable compressed air analyzer	USA/UK/EU/Japan

## **TERMS & CONDITIONS FOR COMPRESSORS**

### **1. SAFETY**

- Compressor should be equipped/ provided with all suitable safety gadgets/accessories according to latest international safety standards ISO-18623 or equivalent.
- Compressor shall be equipped with following safety systems but not limited to following.
  - i. Electrical isolation emergency switch
  - ii. Pressure indicator
  - iii. Over temperature tripping of motor winding
  - iv. Bearing vibration analysis
  - v. Tripping at high discharge air temp
  - vi. Over current tripping system
  - vii. High air pressure tripping system
  - viii. Noise level should be less than 80 dBA with canopy

### **2. SPARES:**

- Firm will provide two years essential maintenance & operational consumable spares against each Compressor (Item wise specification / model, name of manufacturer & price should be quoted separately).
- The oil and process lubricants in quantity, sufficient to cater the requirement for one year shall be supplied by the firm for each compressor. First fill of Oils / Lubes etc will be made by the firm at purchaser premises for each compressor with detailed price.
- Firm will ensure provision of all spares for 10 years after successful installation (clearance of FAT).
- Firm will provide recommended 01 x set of specialized tool kit for maintenance against each compressor (list of items in tool kit alongwith separate price should be quoted).

### **3. CLIMATIC CONDITIONS**

- Ambient Temperature: = -3°C to 51°C
- Relative Humidity = 25 to 96 %
- Earthquake Value = 7.0 on Rector scale

### **4. TRAINING**

Training of POF Officials in the field of operation & maintenance of the compressors for 05 x working days at POF site(s).

### **5. TECHNICAL SUPPORT**

- The manufacturers should have backup facilities i.e. after sales services, availability of spares and proper workshops in Pakistan.
- The supplier shall confirm that after handing over of the compressors, there shall be technical support available for at least 10 years as & when required by the purchaser. In addition, the purchaser shall be kept Informed regarding advancement in the related technology for further improvement in the production and operation of the compressors.

### **6. INSTALLATION, COMMISSIONING AND TRIAL RUN**

- Installation and commissioning of the compressors at POF shall be responsibility of the supplier. The supplier will also be responsible to provide complete installation material, accessories including pipe/pipe fittings along with the compressors. Foundation drawing will have to be provided at least 02 x months before shipment of the compressors. Firm's rep may visit the site, before bidding if desired.
- Commissioning & trial run of the compressors shall be carried out by Supplier's Engineer. Purchaser shall provide required number of operators for the commissioning / trial run of the compressors.

## 7. FINAL ACCEPTANCE TEST (FAT)

- Firm will execute the full performance test of compressors i.e. round the clock operation for 03 days (72 Hrs) after commissioning at site. During FAT, pressure & capacity of the compressors, air quality (as per ISO-8573 or equivalent standards), inlet & outlet temperature of the water entering & leaving the compressors, cooling tower water and inlet & outlet temperature of air from the air dryer etc. will be observed, recorded and ensured as per required specifications.

## 8. DOCUMENTATION

03 x Sets (for each compressor) of relevant literature / documents in English language, but not limited to the following will be provided by the supplier:

- Logic Diagram of circuit.
- Operation and maintenance manual.
- Electric Sequence control circuit diagram of compressor.
- Detail of motors and their control.
- List of spares for 10 x years.
- Programming / configuration software (if required) along with soft copy of the program.

## 9. WARRANTY GUARANTEE

- The compressors and accessories shall be accepted on supplier's warranty/guarantee with regard to quality subject to these being technically checked/tested 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 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 successful FAT at POF site.
- In case the stores on checking / test after receipt at consignee's ware house are found not conforming strictly to the relevant specification and other particulars are found damaged during transit, the supplier shall immediately replace the rejected / damaged stores by acceptable Stores, free of cost, and without any obligation to the purchaser. Rejected / damaged stores shall be disposed off by the supplier under his own arrangements.
- The supplier shall warrant the good quality of all equipment supplied against all defects or failures due to faulty design, material or workmanship.
- The supplier shall also provide warranty for meeting the requisite quality of products. In case of any deficiency in term of quality of products, all related expenditure to fulfil commitment shall be borne by the supplier.

## 10. SPECIAL TERMS AND CONDITIONS:

- i. Firm should provide company profile clearly mentioning details of workforce (engineers / technicians) especially for backup services.
- ii. Accessories can also be quoted in local currency if compressor is quoted on FOB basis.

**NOTE: LOCAL BIDDERS WHO ARE INTERESTED TO QUOTE ON F.O.R WAH BASIS SHOULD FOLLOW THE INSTRUCTIONS AS PER ANNEXURE-E. IN THIS CASE, PSI & FOREIGN TRAINING IS NOT REQUIRED / INVOLVED. HOWEVER, SUPPLIER WILL ARRANGE TRAINING OF POF OFFICIALS AT SITE.**

**INSTRUCTIONS FOR LOCAL BIDDER TO QUOTE ON F.O.R WAH BASIS**

1. **SUBMISSION OF TENDER**

1.1 Tenders will be opened at **1230** hours on **28-02-2022** at Bidding Centre adjacent to Rabita Hall, POF Wah cantt and must reach at below mentioned address before 30 Minutes of opening 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 CNIC in original and 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: **08-DS-FP-Capt-51-Rotary Compressors Dated 19-01-2022.**  
Tender to be opened on: **28-02-2022.**  
Address as follows:- **DIRECTOR SERVICES, BID CENTER, ADJACENT TO RABITA HALL, POF WAH CANTT**  
Tele: +92-51-9055-21090  
Fax: +92-51-9271400, 9314100

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

1.4 Tender " By Hand" can be delivered at Bid Centre, Rabita Hall, POF Wah Cantt.

1.5 offers received through email / fax are not acceptable.

2. **GENERAL INSTRUCTIONS REGARDING PREPARATION OF QUOTATIONS**

2.1 For materials, the prices should be filled in column 5 and delivery date in column 6 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 plant, machinery and equipment; validity date; delivery schedule; and signed undertaking given on the schedule to this Tender Enquiry. It must not indicate price, costs etc.

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" and Part II "Commercial Quotation with Price."

2.3 The quotation must remain valid for, at least **120 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. station of Dispatch basis, i.e. delivered free on rail, inclusive of packing and forwarding charges. The stores will be booked under Military Credit Note, to be provided by the purchaser.

and/or

Free delivery at POF's stores at **POF Wah basis**. In this case Octori duty will be payable by the supplier.

2.8 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.

- 2.9 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.
- 2.10 "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.
- 2.11 Suppliers will render necessary information regarding hazardous effects on environment, of the materials/products supplied by them, in their quotations and shipping/dispatch documents.
- 2.12 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.

3. **INSPECTION**

- 3.1 Preliminary inspection will be carried out by POF team at supplier premises before dispatch / delivery.
- 3.2 Inspection facilities such as tools, test equipment / testing material etc. will be provided by the supplier in accordance with the relevant specification.
- 3.3 Firm will arrange run test of compressor at OEM premises in which minimum 02 hrs run test will be witnessed jointly by POF & OEM rep. Necessary flow, pressure, quality of air (as per ISO-8573 or equivalent standards) and over tripping will be witnessed during run test and recorded data sheets would be obtained.
- 3.4 Where considered necessary by the Purchaser, stores may be obtained on Warranty/Guarantee, subject to inspection on receipt. Rejected stores will be removed and replaced with the acceptable stores by the Supplier at his own expense, within a specified time.

4. **TENDER FEE**

The tender must be accompanied by a non-refundable fee by means of a **crossed postal order/pay order for Rs 500/- in favour of Director Services POFs Wah Cantt.**

5. **BID MONEY**

- 5.1 **Bid Money at the rate of 2% (for registered firms with POFs) and 5% (for unregistered firms with POFs) of the quoted value should accompany the tender in the shape of Deposit At Call Receipt/Pay Order/Banker's cheque, from a scheduled Bank drawn in favour of Director Services. Moreover, a certificate to this effect must be accompanied in technical offer i.e bid money as per desired shape & percentage is available in the commercial offer. Tenders received without Bid Money will be rejected.**
- 5.2 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.
- 5.3 State owned organizations are not required to provide Bid Money.

6. **ACCEPTANCE OF OFFERS**

6.1.1 The procuring agency may reject all bids or proposals at any time prior to the acceptance of a bid or proposal. The procuring agency shall upon request communicate to any supplier or contractor who submitted a bid or proposal, the grounds for its rejection of all bids or proposals, but is not required to justify those grounds.

6.1.2 Procuring agency shall incur no liability, solely by virtue of its invoking sub-rule (1.1) towards suppliers or contractors who have submitted bids or proposals.

6.1.3 Notice of the rejection of all bids or proposals shall be given promptly to all suppliers or contractors that submitted bids or proposals.

6.2 **PERFORMANCE BOND**

(a) The successful bidders shall provide Performance bond at the rate, prescribed by POF Board according to the value of contract which shall not exceed 10% of contract value, in the form of a Deposit At Call Receipt from a scheduled Bank. The Performance Bond will be in favour of C.M.A. POF Wah Cantt. It will be returned on satisfactory completion of the contract.

(b) If the Supplier fails to furnish the Performance Bond within the specified time, such failure will constitute a breach of the contract and the Purchaser shall be entitled to make other arrangements for purchase of the stores at the risk and expense of the Supplier.

6.3 Performance Bond from State owned organizations may be waived off at the discretion of the Purchaser.

6.4 **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 contract price of the items and their quantities for each and every month or part of a month, beyond the specified delivery date, during which these may not be delivered, subject to a maximum of 10% of the total contract value of the particular stores which remained unsupplied either in part or in full: or, to purchase, from elsewhere, the unsupplied stores at the risk and cost of the Supplier.

6.5 **PAYMENT**

- a. Firm will submit offer on FOR basis.
- b. 100% Payment will be made after installation / commissioning and successful FAT of stores on our prescribed bill form supported by receipt voucher on part/full supply basis
  
- b. Payment of duties /Taxes including professional tax(where applicable) must be supported by proof of having paid these to concerned Govt. Taxation Deptt:

7. **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 be liable to remove from the approved list.

**PAKISTAN ORDNANCE FACTORIES**

**SCHEDULE TO TENDER NO. 08-DS-FP-Capt-51-Rotary Compressors Dated 19-01-2022.**

(1) FOR MATERIALS

(1)	(2)	(3)	(4)	(5)		(6)
Item No	Description with spec etc	Unit	Qty	Price per unit F.O.R free delivery		Delivery date
				In figure	In words	
i.	Rotary screw type air compressor <b>Capacity 50 m<sup>3</sup>/min</b> (HAT version) along with refrigeration air drier, plate type heat exchanger, cooling tower and water circulation pumps. System should be energy efficient with VFD/VSD control system. The specification are attached as Annexure-A.	Nos	05			
ii.	Rotary Screw Type Air Compressor <b>Capacity 34.0 m<sup>3</sup>/min</b> (HAT version) along with Refrigeration Air Drier, Plate Type Heat Exchanger, Cooling tower and Water Circulation Pumps. System should be energy efficient with VFD/VSD control system. The specification are attached as Annexure-B.	No	01			
iii.	Rotary Screw Type Air Compressor <b>Capacity 11.0 m<sup>3</sup>/min</b> (HAT version) along with Refrigeration Air Drier, Plate Type Heat Exchanger, Cooling tower and Water Circulation Pumps. System should be energy efficient with VFD/VSD control system. The specification are attached as Annexure-C.	Nos	02			
iv.	Rotary Screw Type Air Compressor <b>Capacity 05.0 m<sup>3</sup>/min</b> (HAT version) along with Refrigeration Air Drier, Plate Type Heat Exchanger, Cooling tower and Water Circulation Pumps. System should be energy efficient with VFD/VSD control system. The specification are attached as annexure-D.	Nos	02			

(2) For Plant & Machinery:

Specification:- **Attached**

(3) **SPECIAL CONDITIONS:**

- i) Authorized dealer of OEM having backup services (OEM authorized maintenance workshop and spare parts godown) in Pakistan is eligible to quote.
- ii) Manufacturers must have valid international certification regarding equipment & spares i.e CE marked or any equivalent standard.
- iii) The model should be out of latest production. Detailed specifications of quoted model should be available on manufacturer official website.
- iv) No reconditioned / used part / component will be acceptable. In such case, firm will be responsible to replace it with new one.
- v) Repair / maintenance period (in case of breakdown during warranty / guarantee) will not be counted in Warranty / Guarantee period.
- vi) Population list of same make & model of quoted all Rotary Screw Air Compressor in Pakistan is essentially required with complete addresses of users including postal address, email address, telephone number & fax number etc.

**vii) Compliance sheet (point-to-point comparison) to T.E is also essentially required as per following format:**

S #	POF SPECIFICATION	FIRMS REMARKS / OFFERS.
1.		

- viii) POF reserves the right to reject any firm's offer on the basis of quality/ services issues
- ix) Breakdown of rates be given showing price and sales tax separately. If nothing is mentioned then offer shall be considered inclusive of GST.**
- x) In case of arbitration or court case, it can only be filed in Rawalpindi / Islamabad.
- xi) 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 government department.
- xii) 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.

(4) Undertaking

Should our offer be accepted, we hereby undertake to supply the stores/render the services contracted on the basis of General Conditions of Contract embodied in Form POF-1281, 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 \_\_\_\_\_  
Date \_\_\_\_\_

Signature of the Tenderer \_\_\_\_\_  
Name \_\_\_\_\_  
Position \_\_\_\_\_  
Address \_\_\_\_\_  
Income Tax G.I.R No. \_\_\_\_\_  
Official stamp.



## QUESTIONNAIRE FORM

S #	Description	Yes / No	Remarks
1.	Whether the quotation / offer is on F.O.B or F.O.R Wah basis.		
2.	Whether undertaking of T.E has been signed and stamp by the bidder.		
3.	Whether POF 1262 (Foreign Supply) has been, fill and signed by the Bidder in case of offer on F.O.B basis.		
4.	Whether Original Performa invoice from OEM (in case of offer on F.O.B basis) has been enclosed with quotation.		
5.	Whether complete details are available in Performa Invoice i.e Country of origin, Port of Shipment, beneficiary details (complete address along with contact no & email address, complete bank address and account details for payment / Letter of Credit.)		
6.	Whether complete details of firm (local agent in case of offer on F.O.B basis) are available in offer i.e complete address along with contact no, email & postal address.		
7.	Whether letter of authorization to sign tender documents on behalf of OEM is attached (in case of offer on F.O.B basis).		
8.	Whether tender fee in shape of postal order / pay order amounting to Rs.500/- has been enclosed herewith <b>(in case of offer on F.O.R Wah basis)</b> .		
9.	Whether Bid Money at the rate of 2% (for registered firms with POFs) and 5% (for unregistered firms with POFs) of the quoted value in the shape of Deposit At Call Receipt/Pay Order/Banker's cheque, from a scheduled Bank drawn in favour of Director Services has been enclosed in commercial offer <b>(in case of offer on F.O.R Wah basis)</b> .		
10.	Whether undertaking as per Annexure-E has been signed & stamped by the bidder.		
11.	Whether copy of NTN, sales tax, professional tax certificate etc have been attached <b>(in case of offer on F.O.R Wah basis)</b> .		
12.	Whether all terms and conditions mentioned in T.E are acceptable.		
13.	Registration status of firm with POF Board (registered or not in case indigenous supply).		
14.	<b>Whether compliance sheet (point-to-point comparison) to T.E has been attached necessary as per above mentioned format.</b>		

Dated: \_\_\_\_\_

**(Signature of Bidder & Stamp)**