



**GOVERNMENT OF PAKISTAN**  
**PAKISTAN ORDNANCE FACTORIES**  
**HAVELIAN CANTT**

**CORRIGENDUM**

1. The following amendment regarding tender opening date is hereby made in Tender Notice which has already been uploaded on PPRA website/published in Print media

<b>T.E No. &amp; Date</b>	<b>Description of Store</b>	<b>Opening Date (Technical Offer)</b>
No.0029-HVN-LP-CAPT Dated: 28 09-2024	Complete Refurbishment of Boiler	10-12-2024

2. All other Terms & Conditions will remain unchanged. Amended tender documents can also be downloaded from POF website ([www.pof.gov.pk](http://www.pof.gov.pk)).

  
Managing Director  
POF HVN Cantt

Office Tel: 0992 810001 Ext. 28257 / 28614, Fax: 0992-810318, E-mail: [mdhvn@pof.gov.pk](mailto:mdhvn@pof.gov.pk)



# GOVERNMENT OF PAKISTAN PAKISTAN ORDNANCE FACTORIES TENDER ENQUIRY

To,

M/s. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Dear Sirs,

Reference: **TENDER ENQUIRY NO. 0029-HVN-LP-CAPT** **DATED: 28-09-2024**

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 **1100** hours on **19-11-2024** and must reach as per address given below on or before **1030** 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: **0029-HVN-LP-CAPT** **DATED: 28-09-2024**  
Tender to be opened on: **19-11-2024**

Address as follows: - **INCHARGE BID CENTER (Adjacent to Rabta Hall)  
PAKISTAN ORDNANCE FACTORIES  
WAH CANTT (PAKISTAN)**

1.3 The bids received in factories may not be entertained.

1.4 If envelope does not indicate reference of T.E or received late the same may be returned un-opened by I/C Bid Center.

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

2.1 Case will be processed exactly as per **PPRA Rules 36(b)** in favour of most advantageous bid and single stage two envelope procedure will be utilized for open competitive bidding. The price 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/OEM (Name, Make, Model, etc.) of the offered store, 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.

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 **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.**:

- i. 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 HAVELIAN 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 case 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 concerned Govt. Taxation Deptt:
- viii. Date and Stamp of the Postal Order must be visible.
- xi. 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 favour of **MD-POF Havelian Cantt.**

3. **BID MONEY**

- 3.1 Registered / indexed firms including foreign firms – 2% of quoted value subject to max ceiling of Rs. 0.50 Million.
- 3.2 Registered / un-indexed firms including foreign firms – 3% of quoted value subject to max ceiling of Rs.0.75 Million.
- 3.3 Unregistered firms including foreign firms – 5% of quoted value subject to max ceiling of Rs1.00 million.
- 3.4 Bid Money should accompany the tender in the shape of Call at Deposit Receipt, from a scheduled Bank drawn in favour of:-  
**M.D. POF HAVELIAN CANTT**
- 3.5 Govt. organizations / production units / state owned enterprises / welfare projects of services head quarter – Rs.0.5 Mn can be waived off on request by DG (C)
- 3.6 Tenders received without Bid Money will be rejected.
- 3.7 Bid money will be returned to un-successful (less first three lowest) bidders after opening of commercial offers and approval of competent authority.
- 3.8 Bid money will be returned to successful bidders on submission of performance bond / unconditional B.G.
- 3.9 Bids will be conditionally accepted if Bid Money deposited by firms is less than the given amount. However, the firms will be required to deposit additional amount within 10 x days of opening of Bids.
- 3.10 Offers received without Bid Security shall be ignored.
- 3.11 Bid Money will be forfeited in case the quotation is withdrawn before the expiry of validity.
- 3.12 Bid Money should be attached with Part-II Commercial Quotation, however, **as a proof only CDR No. & date (without indicating value) may be mentioned in Part-I Technical quotation.**

#### **4. INSPECTION**

- 4.1 Supplies shall be subject to the inspection and acceptance by the competent inspection authority nominated by the Purchaser. Inspection facilities such as tools, test equipment, instruments etc. will be provided by the Suppliers in accordance with the relevant specifications.
- 4.2. 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.

#### **5. PRE-DISPATCH INSPECTION (PSI):**

- 5.1 Supplies shall be subjected to the inspection and acceptance by the competent inspection authority nominated by the Purchaser, who will arrange it at his own cost
- 5.2 Inspection facilities such as tools, test equipment, instruments etc. will, however, be provided by the Suppliers in accordance with the relevant specifications.

#### **6. WARRANTY / GUARANTEE**

- 6.1 02 x years' warranty / guarantee will be provided by the supplier subject to inspection / FAT on receipt. Rejected store will be removed and replaced with new acceptable store by the supplier at his own expense within specified time.
- 6.2 Any damage or loss to the equipment procured under this contract due to willful faulty design, material workmanship including loss / damage to life and property shall be the responsibility of supplier who shall have to compensate the purchaser according to the consultation and decision of the two parties

#### **7. ACCEPTANCE OF OFFERS**

- 7.1 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.

#### **8. PERFORMANCE BOND**

- a) The successful bidders shall provide Performance bond within 15 days after issuance of letter of intent (LOI) at the rate of 10% of the total contract value, in the form of a Deposit At Call Receipt from a scheduled Bank; or, an un-conditional Bank Guarantee **valid for a period of 24 months after the successful final acceptance test of the store** in POFs. 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.
- c) In the event of unsatisfactory performance or any breach of the Contract, Bank Guarantee / Deposit at Call Receipt shall be forfeited by the BUYER. The Bank Guarantee / Deposit at Call Receipt will be returned to the SELLER by M.D-POF Havelian on request after its expiry or after satisfactory performance of the contract whichever is earlier.

#### **9. FAILURE TO SUPPLY STORES**

- 9.1 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 2% but not less than 1% 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.

10. **FORCE MAJEURE**

- 10.1 “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”.

10.2 **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.

11. **PAYMENT**

100% payment will be made by the C.M.A (POF) through crossed cheque on Successful Final Acceptance Test of the store on our prescribed bill form supported by receipt voucher on full supply basis.

12. **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

**MANAGING – DIRECTOR**  
PAKISTAN ORDNANCE FACTORIES

Tel: +92-992-810001,3 Ext. 28257, 28614

Fax: +92-992-810318, E.mail: [mdhvn@pof.gov.pk](mailto:mdhvn@pof.gov.pk)

**PAKISTAN ORDNANCE FACTORIES****Schedule to T.E No.0029-HVN-LP-CAPT, Dated: 28-09-2024****(1) For Plant and Machinery.**

Sr.#	Description with Spec etc.	A/U	Qty	Price Rs.		Delivery Date
				In Figures	In Words	
1.	Price of Refurbishment of Boiler	--	--			
2.	Price of Installation & Commissioning + FAT	--	--			
3.	Price of Spares	--	--			
4.	Price of documentation	--	--			
5.	Total Price					

**Technical Evaluation Criteria**

- The offered product will be technically evaluated on the basis of attached Annex-A.
- Technical quotation may be supported with literature/brochure.
- Attached Annex-B may be filled and signed/stamped.

**2) For Plant & Machinery Specification****Annex-A (Attached)****3) Special Conditions:**

- Only Registered suppliers with Sales Tax & Income Tax Deptt.) who are on Active Taxpayers List (ATL) of FBR are eligible to supply goods/services (Sales Tax Registration & NTN must be enclosed with the quotations).
- Quotation Strictly according to our requirement, specification and TE term and conditions. Quote all parameter of specification and the bid being technically deviated from any parameter of the specification shall be out-rightly rejected.
- Store will be supplied in standard packing.
- Basic Price and Sales Tax should be quoted separately.
- Offer should only be forwarded if the supplier has authorization / Export permit for export of store.
- Fax/E-Mail offer will not be entertained.
- Offer without complete Bid Money (CDR only) & Tender Fee (Postal Orders/Pay order) will not be entertained.
- Quotation submitted on Schedule to TE must be signed / Stamped.
- In case, the order is placed on your firm, Professional Tax Certificate issued by the Govt. of KPK will have to be submitted along with the bill against supplies as per prevailing rates of E&T deptt. KPK.
- Suppliers are required to sign **Annexure-C** attached to this TE document regarding Declaration of Fees, Commissions, and Brokerage etc, paid or intended to be paid by them of Goods, Services and Works in case of exceeding more than US\$ 50,000 (or its equivalent in other foreign currency) in value.
- Compliance sheet (point-to-point comparison) to T.E is also essentially required as per following format:**

Sr. No.	POF Specification (Annex-A)	Firm's Remarks/Offer
1.		

**(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 Tenderer \_\_\_\_\_

Name \_\_\_\_\_

Position \_\_\_\_\_

Address \_\_\_\_\_

Income Tax G.I.R. No \_\_\_\_\_

Official Stamp \_\_\_\_\_

**REFURBISHMENT / UPGRADATION OF BOILER No. 1 (M-7072)****1. PURPOSE:**

Two boilers of capacity 25 ton are installed at power house POF Havelian. Refurbishment / repair of boiler No. 1 (working capacity: 25 ton/hr) is required to be carried out along with installation of complete Boiler Burner Management System (BMS) including gas burners and boiler Control System (PLC Based HMI with Alarm & Control System) (as per European manufacturer standard). The boiler must fulfill the below mentioned parameters / conditions after execution of defined scope of work:

- 1.1 Live Steam temperature from Boiler Super Heater must be  $470 \pm 5^{\circ} \text{C}$  after installation of BMS & PLC equipped with HMI Control System
- 1.2 Boiler must operate at 52 bar and generate 25 ton/hr steam.
- 1.3 Boiler must provide 100 % steam generation as per requirement of turbine, process steam and space heating.

**2 DETAIL OF BOILER:**

i.	Boiler Type	AZC (AALBORG Boiler) i) Natural Circulation	O-Type Furnace ii) Dual Firing
ii.	Boiler Evaporation Capacity	25 T/hr	
iii.	Boiler Heating Surface Total	1141	Sq-Meter
	i. Boiler heating surface radiant	60	do
	ii. Boiler heating surface convection bank	407	do
	iii. Super heater heating surface	102	do
	iv. Economizer heating surface	572	do
iv.	Steam Pressure	Working: 52 Bar(g) Design: 65 Bar (g)	
v.	Steam Temperature	$470 + 5^{\circ} \text{C}$	
vi.	Burner Capacity (Gas)	1200 Cu-Meter/hr	
vii.	Burner Capacity (Furnace oil)	940 kg/hr	
viii.	Feed Water Temperature	105/135 $^{\circ} \text{C}$	
ix.	Saturated Steam Temperature	267 $^{\circ} \text{C}$	
x.	Flue Gas Temperature in Furnace Gas/Oil	1300/1248 $^{\circ} \text{C}$	
xi.	Flue Gas Temperature after Super Heater	836 $^{\circ} \text{C}$	
xii.	Flue Gas Temperature after boiler	380 $^{\circ} \text{C}$	
xiii.	Flue Gas Temperature after economizer	143 $^{\circ} \text{C}$	
xiv.	Combustion Air Temperature	46 $^{\circ} \text{C}$	
xv.	Furnace Oil Pressure	10 Bar (g)	
xvi.	Atomizing Steam pressure	09 Bar(g)	
xvii.	Natural Gas Pressure for Burner	0.5 Bar (g)	

**3 SCOPE OF WORK:**

- 3.1 Dismantling, provisioning, fabrication & installation of complete Boiler tubes (665 Nos, approx. length of one tube 6 to 7 meter) Front, Rear, Left & Right-side wall tubes, Super heater & Economizer along with headers according to flow & material drawing Nos. AZ:107913 B AZ:104456 D, AZ:106551 & AZ:106552 B (as per OEM).
- 3.2 Provisioning & installation of refractory and insulation material including cladding & G.I sheets for complete boiler, Super heater & Economizer as per requirement.
- 3.3 Provisioning, installation & commissioning of complete Boiler Burner Management System (BMS) including gas burners having efficiency greater than or equal to existing burners along with control system. Boiler Control System (PLC Based HMI with Alarm & Control System as per European manufacturer standard). The system should be compatible with existing setup. (Both boilers installed at POF Havelian have same technical specs/ capacity).
  - 3.3.1 Feed Water auto control valve along with Non return valve (NRV) (01 No)
  - 3.3.2 Boiler Steam temperature auto control valve (01 No)
  - 3.3.3 Steam Pressure (12 Bar) Reducing Control Valve with controller (01 No)
  - 3.3.4 Deaerator (1.5 Bar) auto control valve with controller (01 No.) common section
  - 3.3.5 Replacement of all manual control valves
    - i- Main steam stop valve (04 Nos)

- ii- Control valve for gauge glass water / steam connection (02 Nos)
  - iii- Boiler bottom blow down valve (03 Nos)
  - iv- Control valve for feed water pump (04 Nos)
  - v- Control valve for steam supply to deaerator (01 Nos)
  - vi- Control valve for 12 Bar steam supply system (01 Nos)
  - vii- NRV for chemical dosing line (02 Nos)
  - viii- Control valves for sampling of super-heated steam and water (04 Nos)
  - ix- Boiler Safety valve (02 Nos)
- 3.3.6 Boiler Drum Level Transmitter (Monitoring & Control)
  - 3.3.7 Low & High-Level Water indication, alarm & tripping
  - 3.3.8 Ignition system indications
  - 3.3.9 Steam and Water Flow control parameters
  - 3.3.10 High Pressure and High Temperature of Steam indication, alarm & tripping
  - 3.3.11 Air and Fuel Ratio Display and control
  - 3.3.12 Natural Gas (m<sup>3</sup>)/Furnace Oil (Kg), Feed Water (m<sup>3</sup>) & Steam Consumption (m<sup>3</sup>) indicators and totalizer.
- 3.4 Designing, provisioning and installation of explosion door at appropriate place.
  - 3.5 Inspection and rectification of expansion joints of Economizer & FD fan.
  - 3.6 Installation of new Pressure and Temperature Gauges at Boiler drums, super heater & Economizer headers, Feed Water Lines, Process Steam lines & Fuel Gas Lines.
  - 3.7 Provisioning, installation & commissioning of Temperature monitoring and tripping system for super heater coils.
  - 3.8 Provisioning of all welding works test report after completion of work i-e x-ray, penetration and ultrasonic tests.
  - 3.9 Commissioning & capacity testing of required boiler at OEM Parameters in the presence of boiler inspector/ POF inspection team
  - 3.10 All safeties of Boiler will be provided/ checked by firm for safe and sound operation of boiler.
  - 3.11 Firm will provide third party inspection certificate for mechanical design, stage fabrication and hydro testing.
  - 3.12 Inspection facilities such as tools, test equipment, instruments etc will be arranged by the firm in accordance with relevant specification / requirement.
  - 3.13 Inspection of boiler at different stages from Govt. Boiler inspector during installation & commissioning.
  - 3.14 Pressure test of boiler, super heater and economizer will be carried out at 1.5 times working pressure, at POF's site in the presence of boiler inspector under firm's & third-party inspector supervision.
  - 3.15 Any miscellaneous material, deficiency, amendment or additional work required during execution of job, pointed out by boiler inspector/ POF team will be the responsibility of the firm without any impact of additional cost.
  - 3.16 All components/ parts of the boiler should confirm safe and reliable operation in intense corrosive environment and extreme weather conditions.
  - 3.17 Installation/ Commissioning of equipment will be carried out by supplier engineers. Purchaser shall provide the required number of operators & technicians for the installation, commissioning & trial run.
  - 3.18 Supplier will be responsible to send their technical rep for site survey / feasibility study material assessment before submission of quotation. Otherwise offer will be subjected to clear rejection.
  - 3.19 The firm will ensure the completion of project within 24 to 26 weeks.

**4 SPECIFICATION FOR BOILER TUBES, SUPER HEATER AND ECONOMIZER TUBES MATERIAL AND BOILER BURNER MANAGEMENT SYSTEM (BMS) INCLUDING GAS BURNERS ALONG WITH CONTROL SYSTEM (PLC BASED HMI):**

- 4.1 The material should be according to ASME standards, firm will ensure provision of mill trade certificate of boiler tubes, super heater & economizer tubes material. Firm will provide reputable third-party quality inspection certificate before delivery of material.
- 4.2 Origin of material : European, USA, Japan or equivalent
- 4.3 Origin of BMS & Control System : European, USA, Japan or equivalent
- 4.4 Origin of Valves : European, USA, Japan or equivalent



Sr.#	Description of Store	Specification
01.	Tubes of boiler furnace and outer walls	Outer Dia of Tube: 50.80 MM, Wall Thickness of Tube: 4.50 MM Material: C-Steel Electric Resistance Welded Boiler Tube St 37.8 I (as per DIN 17177 standard equivalent ASTM A 178 Grade A) or equivalent
02.	Tubes of boiler convection bank	Outer Dia of Tube: 50.80 MM, Wall Thickness of Tube: 3.60 MM Material C-Steel Electric Resistance Welded Boiler Tube St 37.8 I (as per DIN 17177 standard equivalent ASTM A 178 Grade A) or equivalent
03.	Super heater	Outer Dia of Tube :38 MM, Wall Thickness of Tube: 4.5 MM 1 <sup>st</sup> set of 17 coils Material: Seamless Alloy Steel Tubes DIN 17175/13 CrMo44 or equivalent 2 <sup>nd</sup> set of 17 coils Material: Seamless Alloy Steel Tubes DIN 17175 / 10CrMo910 or equivalent
04.	Economizer	Outer Dia of tube:38 MM, Wall Thickness of Tube :3.2 MM Double ribbed tubes, Material: Seamless Alloy Steel Tubes DIN ST 37.8 I / 17177. or equivalent

## **5 SPECIFICATION FOR INSTALLATION & FABRICATION WORK**

- 5.1 All fabrication work (welding, bending and expansion), installation of equipment should be according to requisite ASME standards. Firm will produce the reference (Quality Inspection Certificate) of requisite standard against the fabrication work. Firm should have capability to fulfill ASME standard for execution of boiler refurbishment job. Firm should qualify the following ASME stamps / codes:
- 5.1.1. Assembly of Power Boilers
  - 5.1.2. Fabrication & Assembly of Pressure Piping
  - 5.1.3. Manufacturing and assembly of Power Boilers
  - 5.1.4. Manufacturing of Pressure Vessels
  - 5.1.5 Provision of above certification in favor of firm by ASME authorities with tender submission documents is mandatory
  - 5.1.6 Firm will provide detailed P&ID for entire scope of work.
  - 5.1.7 Firm should have relevant experience / capability for doing the similar refurbishment on boilers of similar or higher capacity.
  - 5.1.8 Firm must have good market reputation and will share the list of similar projects successfully executed in Pakistan

## **6 UTILITIES AVAILABLE AT SITE**

Following utilities are available at site:

- 6.1 Electricity 400 Volts, 50 Hz Three Phases.
  - 6.2 Electricity 220 Volts, 50 Hz Single Phases.
  - 6.3 Natural Gas, pressure 2.2 bar
  - 6.4 Air pressure, 5.5 to 8 bar
- } ± 5 %

## **7 CLIMATIC CONDITIONS**

- 7.1 Ambient Temperature = 1° C to 46° C
- 7.2 Relative Humidity = 25 to 85%

## **8 PRELIMINARY INSPECTION**

Material inspection and work carried out at firm's site/ workshop shall be checked by POF official team at firm premises before delivery at POF's site. Inspection equipment, tools & machinery will be provided by the firm.

**9 SOFTWARE**

- 9.1 Complete software back up of PLC and any other electronic item will be provided in soft and hard form by the firm free of cost.
- 9.2 The firm will provide full access to boiler's Control System software & its accessories.
- 9.3 Lifetime license for purchaser and all future upgradation of software should be free of cost.

**10 SPARE PARTS**

- 10.1 Two years essential spares must be included in the scope of supply.
- 10.2 List of spares along with specification, model, name of manufacturer to be quoted in technical offer along with service life of each spare. Price of spare will be quoted separately in commercial offer.
- 10.3 Firm will ensure provision of all spares for 15 years after successful installation.
- 10.4 Provisioning of 01 x PC & large display with redundancy for control system in control room along with UPS, backup operating system.

**11 TRAINING POF PERSONNEL**

Firm will provide free of cost training to POFs personals for operation, troubleshooting and maintenance of the boiler and its auxiliaries i.e. PLC system, control system and its software backup, upload and download at POF premises for the period of 02 x weeks

**12 TECHNICAL BACK UP SUPPORT**

- 12.1 The supplier / manufacturers should have backup facilities i.e. after sales services, availability of spares, technical staff and proper workshops in Pakistan. Detail of workshop to be provided in technical offer.
- 12.2 The supplier shall confirm that technical support would be available for at least 15 years on as & when required basis by the purchaser.

**13 FINAL ACCEPTANCES TEST (FAT)**

Firm will execute the full performance test of boiler for 02 x weeks after commissioning at site. During FAT all parameters including capacity/ quality of performance, output and time cycle will be observed, recorded & ensured as per specifications

**14 DOCUMENTATION**

- 14.1 03x sets of relevant literature / documents / calibration certificates in English language, but not limited to the following will be provided by the supplier.
- 14.2 Logic Diagram / electric control / circuit diagram of equipment.
- 14.3 Operation and maintenance manual.
- 14.4 List of all spares with complete specifications.

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**SUPPLIER'S CAPABILITY**

1. NAME OF THE FIRM: \_\_\_\_\_  
ADDRESS: \_\_\_\_\_  
\_\_\_\_\_

1.1 - TELE:NO: \_\_\_\_\_  
1.2- FAX NO: \_\_\_\_\_  
1.3- E.MAIL ADDRESS: \_\_\_\_\_

2. WHETHER PUBLIC LTD, PRIVATE LTD, PARTNERSHIP  
OR SOLE PROPRIETORSHIP: \_\_\_\_\_

3. ESTABLISHED SINCE: \_\_\_\_\_

4. CAPACITY: (Manufacturer / Stockist/Agent to foreign Firm): \_\_\_\_\_

5. IF MANUFACTURER, PROVIDE FOLLOWING DETAILS:

5.1- RANGE OF PRODUCTS MANUFACTURED: \_\_\_\_\_  
\_\_\_\_\_

5.2- DETAIL OF PLANTS, MACHINERY AND MAJOR EQUIPMENTS:  
(Attach separate sheet if required):  
\_\_\_\_\_

6. INSPECTION/QUALITY ASSURANCE FACILITIES: \_\_\_\_\_

7. ISO-9000 CERTIFIED IF SO ATTACH NECESSARY DOCUMENTS

8. IF STOCKIST, PROVIDE FOLLOWING:-

8.1- DETAILS OF STOCKS HELD: - \_\_\_\_\_

8.2- APPROX. STOCK VALUE \_\_\_\_\_

8.3- LOCATION OF STOCKS: \_\_\_\_\_

ORGANISATIONAL DETAILS.

9. WHETHER THE FIRM IS REGISTERED WITH THE FOLLOWING DEPTTS.  
(Give registration No., Date and attach copies of the necessary documents).  
\_\_\_\_\_

9.1 DP/ARMY OR ANY GOVT./SEMI GOVT. DEPTT: \_\_\_\_\_

9.2- IMPORT TRADE CONTROL DEPTT: \_\_\_\_\_

9.3- SALES TAX DEPTT: \_\_\_\_\_

9.4- INCOME TAX DEPTT: \_\_\_\_\_

FINANCIAL STATUS: \_\_\_\_\_

(Bank certificate to be attached)

Signature \_\_\_\_\_

Name: \_\_\_\_\_

Position: \_\_\_\_\_

Stamp



**DECLARATION OF FEES, COMMISSIONS AND BROKERAGE ETC;  
PAYABLE BY THE SUPPLIERS OF GOODS, SERVICE AND WORKS**

1. M/s. ----- [The Seller /Supplier] I hereby declares its intention not to obtain or induce the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice.
  
2. Without limiting the generality of the foregoing,[ the Seller/Supplier ] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever from GoP, except that which has been expressly declared pursuant hereto.
  
3. [The Seller/Supplier] certified that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.
  
4. [The Seller/Supplier] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.
  
5. Not with standing any rights and remedies exercised by GoP in this regard, [the Seller/Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [the Seller/Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever from GOP.

SIGN \_\_\_\_\_

SEAL \_\_\_\_\_