



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

To,

M/s _____

Dear Sirs,

Reference: **TENDER ENQUIRY NO. 5167-92-FP-CAPT-SJL, Dt.22-04 -2021**

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 **1200Hours** on **27-05-2021** at Room No. 01, Bid Center near Rabta Hall POF Wah Cantt and must reach this office on or before **1130Hours** 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: **5167-92-FP-CAPT-SJL**

Tender to be opened on: **27-05-2021**

Address as follows: - **ROOM NO. 01, BID CENTER NEAR RABTA
HALL POF WAH CANTT**

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

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 90 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 bidders 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 TE form or offer received is not in conformity with the requirement of the TE, such offer shall be ignored.

3. **INSPECTION**

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

3.2 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.

3.3 **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 TE.

4. **ACCEPTANCE OF OFFERS**

4.1.1 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.

4.1.2 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.

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

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 favor 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. If the Performance Bond is not furnished within the prescribed time of 45 days, the Purchaser reserves the right to:

i. Impose penalty @ 1 % per month of the value of CDR/BG.
(Clause-4.2 (a i) is not applicable in case of procurement of Plant / Equipment / Machinery items)

OR

ii. 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**

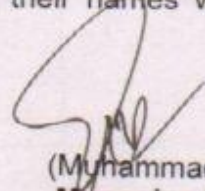
All Bank charges incurred in Pakistan in connection with the establishment of LC will be borne by the Purchaser, whereas all Bank charges incurred in connection with drawing of payment including charges for confirmation of LC by the advising Bank/Foreign Bank will be borne by the Supplier.

5. **SECURITY OF INFORMATION**

The tenderer and his employees must not communicate any information relating to the Sales/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/stamped by the specified date, alongwith the specifications drawings etc. if any, enclosed herewith - even if you are unable to quote.

6. **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.



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TO BE OPENED ON 27-05-2021

Sr. No.	Description Of Store	A/U	Qty	Price Per Unit	Delivery Date/Period
1.	Heat Treatment Furnace (Vertical), Type: Muffle, For Heat treatment of Tool Steel Material(Technical Specification attached as Annex-A)	Off	01		

SPECIAL TERMS & CONDITIONS:

For Foreign Suppliers Only

- a. Payment would be released as per following:
 - i. **90% payment** will be released on submission of shipping documents.
 - ii. **10% payment** will be released after successful installation and commissioning and trial run at POF Sanjwal.

In case PSI not carried out:

- i. **50% payment** will be released on submission of shipping documents
 - ii. **30% payment** will be released on receipt and inspection of furnace at POF Sanjwal.
 - iii. **20% payment** after installation, commissioning and satisfactory completion of trial run at POF Sanjwal.
- b. All Chinese and Hong Kong firms are required to quote prices in Chinese Yuan.

For Indigenous Suppliers Only:

- a. Any eligible indigenous bidder can offer on FOR basis.
- b. Tender Fee: tender must be accompanied by a non-refundable fee by means of cross Pay order of Rs. 500/- in favor of MD POF Sanjwal.
- c. Bid Money: Bid Money @ of 2% for registered firms and 5% for unregistered firms of the quoted value in the form of CDR in favor of GM PPC POF Sanjwal.
- d. Tender received without tender fee and bid money shall be rejected.
- e. Only registered supplier with sales tax and income tax departments who are on active tax payers list (ATL) of FBR are eligible to participate in the bid.
- f. Photocopy of NTN & PTC certificates duly attested by Gazetted class-1 Officer must be attached with the bid.
- g. Rates & Taxes must be shown separately otherwise rate will be considered inclusive of taxes.
- h. Indigenous suppliers are required to quote their prices in PKR. **100% Payment will be made after acceptance of store at POF Sanjwal.**
- i. In case pre-shipment Inspection is required to be carried out, Supplier will be bound to bear the charges incurred in Air Traveling to and fro, Boarding/Lodging, Inland Transport charges, General Medical of visiting team.

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 _____
Stamp _____
Address _____

Signature of the Tenderer _____
Name _____
Position _____

**TECHNICAL SPECIFICATIONS OF HEAT TREATMENT FURNACE
(VERTICAL)TYPE MUFFLE**

1. **Nomenclature:**
Heat Treatment Furnace (Vertical), Type Muffle, for Heat treatment of Tool Steel Material
2. **Quantity:** 01 off
3. **Technical Requirements:**
The furnace is required for the following heat treatment processes of Tool Steel Materials Dies / Tools etc.
 - a. Hardening
 - b. Tempering
 - c. Annealing / Normalizing
 - d. Carburizing

4. **Furnace Technical Feature:**

Sr. #	Features:	Unit	Parameters
a.	Chamber Size:		
	• Working Diameter (Minimum)	mm	950
	• Working Depth (Minimum)	mm	1600
	The actual chamber dimension should be approximately 100 mm greater than working dimensions.		
b.	Temperature Range:		
	• Maximum temperature in hardening furnace	°C	1350 ± 5
	• Time to heatup the furnace (Minimum)	°C/min	20
c.	Heating Elements		
	• Nichrome Alloy Strips		
d.	Feeding/ Loading & Unloading system		
	• Overhead Electric Hoist Capacity (Minimum)	Tons	3
e.	Design of Furnace body:		
	Modern solution for furnace insulation with joint less ceramic fiber insulation. <ul style="list-style-type: none"> • <u>Door:</u> lightweight joint less ceramic fiber insulation. • <u>Internal Circumferential wall:</u> Combination of lightweight ceramic fiber insulation. 		
f.	Automatic temperature control system:		
	• Temperature must be controlled at a set temperature value represented by a curve graph.		
	• Furnace must have process monitoring and recording system with paperless recorder.		

g.	International Standards:
	<ul style="list-style-type: none"> Furnace should have provision for temperature uniformity measurement at a reference temperature in compliance with ISO/IEC17025:2005/EN/DIN standards.
	<ul style="list-style-type: none"> Furnace should conform to Safety in electro heat installations EN DIN 60519-2 standards.
	<ul style="list-style-type: none"> Diagnostic of Input & Output elements.
h.	Frame
	<ul style="list-style-type: none"> Vertical

5. Applicable Standard:

- a. For furnace accuracies, latest issued standards are enforced at the time of placing order, shall govern various aspects of the work, as mentioned at Para 4(g).
- b. Facilities for inspection such as tools, test equipment, instruments etc would be provided by the suppliers in accordance with the relevant specifications.

6. Hydraulic & Pneumatic System:

Details of hydraulic / Pneumatic system, by addressing under mentioned parameters, are required for chamber door opening closing;

- a. Hydraulic pump: Type & Capacity
features
- b. Hydraulic & Pneumatic valves: Type & its Features
- c. Cylinder for furnace door opening / closing: Type & its Features
- d. Pressure switches: Type & its Features
- e. Hydraulic pipes: Type

7. Accessories:

- a. Voltage stabilizer / controller suitable for furnace.
- b. The furnace should have environmentally friendly system.
- c. The supplier will provide complete tool kit for electrical, Instrument & mechanical maintenance of furnace.
- d. A/Cs should be installed in panel/system (where necessary).
- e. Foundation drawing will be provided by supplier.
- f. The equipment should be earthed.

8. Spares:

- a. 02years' essential maintenance and operational spares shall be required including heating elements. Detailed item wise list would be provided.
- b. Backup support for provisioning of spares for 15 x years.

9. Documentations:

Literature must be in English language inclusive but not limited to:

- a. 04 x sets of operating manuals.
- b. 04 x sets maintenance manuals.
- c. Details of electric schematics.
- d. Brochures of the offered model.
- e. All installation drawings having information are required for various power sources including total power consumption.

- f. Spare part list would be provided along with specification.
 - g. Final and complete CNC program print out (if any).
 - h. PLC listing with comments should be provided (if any).
 - i. Complete description of CNC codes (if any).
 - j. Compatible programmer for uploading and downloading of all kinds of software data backup in/from furnace Control (if any).
- 10. Site Conditions & available Services:**
- a. Temperature:
 - Winter = -5 to + 25 °C
 - Summer = + 25 to 55 °C
 - b. Relative Humidity = 25 to 90%
 - c. Earthquake Value = 6.0 on Richter scale
 - d. Electricity 400 Volts, 50 Hz, Three Phases. } ± 5 % in normal conditions.
 - e. Electricity 220 Volts, 50 Hz, Single Phase. } ± 10 % in contingency conditions
 - f. Compressed air pressure 6 bar (Max).
- 11. Safety**
- a. The furnace should be equipped / provided with all safety gadgets / accessories.
 - b. Noise level must be less than 85 DB for furnace.
 - c. The equipment should be earthed.
- 12. Training**
- a. The supplier will provide training to POF personnel at no additional cost to the extent of 02 men for 02 weeks for Heat Treatment Furnace in the field of furnace setting, checking & maintenance of all parameters related to software, operating of furnace, maintenance of mechanical, electrical and electronics parts related to furnace at supplier's premises.
 - b. Training expenses of POF personnel, at supplier's premises including boarding, lodging & return Air Tickets etc. will be borne by the Supplier.
 - c. During stay at supplier's site, supplier's engineers shall train the concerned Production, Maintenance and Instruments personnel for satisfactory & safe use of Heat Treatment Furnace.
- 13. Pre-Shipment Inspection**
- a. Supply shall be subject to Pre-Shipment Inspection (PSI) and acceptance by the designated team comprising of 02 x officers for 01 weeks.
 - b. For PSI the following input tool steel material samples will be arranged by the supplier for heat treatment trial at no additional cost. The materials after heat treatment will be inspected for desired hardness & crack detection. The supplier will also provide the inspection certificate of the material to be used.

S. No.	Nomenclature / Size (mm)	Din No.	Required Hardness
a.	18% W High Speed Steel O/H (200 x 150x 25)	1.3255	820-920VPN
b.	5% Cr V MO Steel O/H (Ø100 x 200)	1.2344	450-500VPN
c.	1% C 1% Cr Ball Bearing Steel (200 x 150x 25)	1.2060	800-825VPN

- c. PSI team will run the furnace for 24 hrs for 3 x consecutive days to conform the following technical parameters of the furnace:
 - i. Temperature variation from 0 °C to 1350 °C.
 - ii. Rate of heating & cooling temperature.
 - iii. Condition of heating Elements.
 - iv. Verification of Assembly protocol.
- d. If PSI is not carried out due to Covid-19 pandemic or any other reason, the furnace will be functionally trialed out by training team at no load condition for 24 hrs. for 3 x consecutive days to conform the technical parameters of the furnace mentioned at Para-13(c).
- e. The furnace will be inspected as per standard mentioned at Para 4(g). However, the inspection facilities such as tools, test equipment, instruments etc would be provided by the suppliers in accordance with the relevant standard / specification.
- f. The supplier shall provide assembly protocol during PSI for verification of assembly of Control Panel, Pneumatic System, Hydraulic System, electrical components and spare parts list.
- g. All expenditure including boarding, lodging & return air tickets for PSI & training officials would be borne by the supplier.
- h. The furnace & equipment will be dispatched only after the suppliers receives the pre-shipment acceptance certificate issued by the purchaser certifying that the furnace & equipment have qualified the requirements.
- i. Rejected furnace / equipment will be removed and replaced with the acceptable stores by the Supplier at his own expense, within a specified time. The supplier will render warranty / guarantee certificate as per “Annex B”.

14. Installation, Commissioning and Trial Production Run:

- a. The Heat Treatment Furnace shall be commissioned, and trial production of the furnace shall be carried out by supplier’s engineers. However, Purchaser shall provide required number of operators and technicians for the commissioning and trial production of the furnace.
- b. The supplier is to indicate the total man-weeks of his total engineers / technicians required for installation, commissioning and trial production of the furnace. Terms and conditions are to be stated clearly. All expenses, including boarding & lodging, air travel and daily allowances of the Engineers / Technicians are to be borne by the Supplier. Local transportation shall be arranged by the purchaser. The supplier is to indicate the time schedule for the completion of whole project.

15. Final Acceptance Test (FAT):

- a. Final acceptance test will be performed at purchaser premises. This test will be carried out with the technical assistance of the supplier and will comprise successful production of acceptable quality of 03 x set of tools / dies mentioned below with the confirmation of the following technical parameters of the furnace:
 - i. Temperature variation from 0 °C to 1350 °C.
 - ii. Rate of heating & cooling temperature.
 - iii. Condition of heating Elements.
 - iv. Verification of Assembly protocol.

S. No.	Nomenclature / Drawing No.	Required Hardness
a.	Ogive Tool (PDO-H/COM-1012)	820-920VPN
b.	Draw Mandrel (PDO-H/COM-988)	450-500VPN
c.	Piercing Die (PDO-H/COM-1010)	450-500VPN

- b. The dies / tools so produced should conform to the standards / criteria of hardness and grain structure / size analysis. For grain structure analysis, a test sample of same material will be heat treated with original tooling and be tested as per standard criteria.
- c. If the specified parameters of the furnace are not achieved after the effective date of contract, the supplier experts will stay, at supplier cost till the production has been achieved provided such delays are attributable to supplier. Supplier men should stay for 02 x week after successful trial run to look after / handle the furnace problems at supplier's expense.
- d. Delay penalty will also be imposed @ 2% per month of contracted value for the delayed dispatch to Purchaser and installation & commissioning of furnace; achievement of production run of the furnace beyond the schedule date of final acceptance and will be deducted from balance 10% payment connected with production run.

16. Payment Term & Condition:

- a. Payment will normally be made by means of irrevocable letter of credit. Unless otherwise stated 90% (negotiable) payment may be released on submission of dispatch documents to Bank along with pre-shipment inspection acceptance certificate from the purchaser.
- b. Remaining 10% payment will be released after installation, commissioning and satisfactory completion of trial run of the furnace at purchaser premises against the final acceptance test certificate issued by the purchaser.
- c. If PSI not carried out due to Covid-19 pandemic or any other reason, the payment terms would be 50% on submission of dispatch documents to Bank from the purchaser and 30% payment will be released on receipt & inspection of furnace at purchaser's site.
- d. Remaining 20% payment will be released after installation, commissioning and satisfactory completion of trial run of the furnace at purchaser premises against the final acceptance test certificate issued by the purchaser.
- e. 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 L.C. by the advising Bank/Foreign Bank will be borne by the Supplier.
- f. The right to accept or reject any offer in full or in part is hereby reserved.

17. Delivery Schedule:

The Heat Treatment Furnace will be delivered as per following terms:

- a. The delivery will be on FOB Karachi basis. Freight may be indicated.
- b. Sea Worthy packing.
- c. Marking and stenciling as per contractual terms and conditions.

- d. Furnace parts would be lettered in English or internationally recognized symbols.
- e. Furnace is required to be made ready for PSI within 03 to 05 months after confirmation of contract order.
- f. Dispatch of furnace must be ensured within 01 x month after successful completion of PSI and Training.

18. Warranty Guarantee:

- a. The Heat Treatment Furnace and accessories shall be accepted on Supplier's Warranty / Guarantee with regard to quality and quantity subject to these being technically checked / tested and accounted for on arrival at Consignee's ware-house in the presence of supplier's rep (if desired by supplier) at their cost.
- b. The supplier shall render Warranty / Guarantee certificate in duplicate to the Purchaser on the enclosed Proforma attached as "Annex-B" as soon as stores have been dispatched/delivered. This Warranty / Guarantee shall be binding on the Supplier for a period of 12 months reckoning from the date of commissioning of the furnace.
- c. In case the stores on checking / test after receipt at Consignee's warehouse 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.
- d. The supplier shall warranty the good quality of all equipment supplied against all defects or failures due to faulty design, material, or workmanship.
- e. The supplier shall also provide Guarantee for meeting the requisite quality and quantity of products. In case of any deficiency in term of quality or quantity of products, all related expenditure to fulfill commitment shall be borne by the supplier.

19. Performance Bond:

- a. The successful bidder will provide Performance Bond at the rate of 10% of FOB value of the contract in favor of CMA (Store) POF Wah Cantt. The Performance Bond will be furnished in the form of Deposit at Call Receipt from any scheduled bank in Pakistan or an unconditional bank guarantee on prescribed Proformae covered by any scheduled bank in Pakistan.
- b. The Performance Bond shall be furnished within 45 days from the date of opening of letter of Credit. It shall be valid for period of 24 months after the date of expiry of letter of Credit.
- c. If the Performance Bond is not furnished within the above mentioned prescribed time; the Purchaser reserves the right to cancel the contract and has the right to take risk purchase action.

WARRANTY/GUARANTEE CERTIFICATE

Firm's Name: -----

1. We hereby guarantee that the store/goods supplied against the Contract are in all respect in accordance with the relevant specifications and terms of the contract and that the materials used, whether or not of our manufacture, are in accordance with the latest approved standard specifications complete, are of good workmanship/quality throughout, and that we shall replace free of cost, every article or part thereof which before use or in use, shall be found defective, or not within the limits and tolerance of specification requirements, or in any way not in accordance with the terms of the contract.

2. In case of our failure to replace the defective stores free of cost within the period specified by the purchaser, we will refund the relevant cost.

3. The Warranty/Guarantee will remain valid for 12 months reckoning from the date of commissioning of the furnace.

Signature: _____

Name: _____

Status in firm: _____

Dated: _____

Capital Purchase
Special Points To be Considered While Preparing Commercial Bid

Commercial offers in the line with the following clarification would be considered acceptable otherwise the same will stand rejected.

- a. FOR/FOB & C&F Cost of Machine alongwith accessories etc.
- b. List & Cost of Tooling.
- c. List & Cost of Spare Parts for two years.
- d. Cost of Training & installation / Commissioning charges.
- e. Acceptance of travelling expenditure of PSI team including boarding / lodging, air ticket, inland traveling charges.
- f. Confirmation regarding obtaining of export permit.
- g. Confirmation regarding submission of 10% Performance Bond.