



POF 1262  
(FOREIGN SUPPLIES)

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

To

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

Dear Sirs,

Reference: **TENDER ENQUIRY NO. 4104-MPO-W-COLD HAMMER BARREL FORGING MACHINE, dt. 27-4-2019**

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 Room No 3, Bid centre, adjacent to Rabita Hall, POF Wah Cantt at **10:00 hours** on **29-5-2019** and must reach CR Section, POF Wah Cantt on or before **09:20 hour 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: **4104-MPO-W-Cold Hammer Barrel Forging Machine, dated 27-4-2019**

Tender to be opened on: **29-5-2019**

Address as follows:-

- i) For Technical Offer: **Managing Director  
Weapons Factory  
CR Section, C-04 Building , POF Wah Cantt.  
Email : [mdwpm@pof.gov.pk](mailto:mdwpm@pof.gov.pk)**
- ii) For Commercial Offer: **Chairman, POF Board,  
POF Board Headquarter,  
Wah Cantt. Pakistan  
Fax. +92-51-9314080  
E-Mail: [chairman@pof.gov.pk](mailto:chairman@pof.gov.pk)**

iii) Both Technical & Commercial offers duly sealed in 02x separate envelopes should be Sent in third envelope, which should indicates address of MD-Weapons POF- Wah Cantt.

1.3 If envelope does not indicate reference of T.Es 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 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. INSPECTION

3.1 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, 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.

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 favour of the Controller Military Accounts (CMA) POF Wah Cantt. The Performance Bond will be furnished in the form of Deposit At Call Receipt (CDR) from any scheduled Bank in Pakistan or an unconditional bank guarantee on prescribed proforma covered by any scheduled bank in Pakistan. The Performance Bond shall be furnished within 45 days from the date of opening of Letter of Credit. It shall be valid for a period of 12 months after the date of expiry of letter of credit.
- (b) No Performance Bond will be required if the total 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

Payment will normally be made by means of irrevocable letter of credit. Unless otherwise stated 80% payment will be released on submission of dispatch documents to Bank while balance 20% payment will be released on receipt and acceptance of store by consignee.

All Bank charges in Pakistan in connection with establishment of L.C 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.

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#### 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, along-with 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 occasion, no further tender enquiry may be issued to them and their names would liable to be removed from the approved list.

Yours faithfully,



(**NAEEM AHMED**)  
MANAGING DIRECTOR-WPNs  
POFs **Wah Cantt.**  
For and on behalf of President of  
The Islamic Republic of Pakistan

**PAKISTAN ORDNANCE FACTORIES**

SCHEDULE TO TENDER NO. 4104-MPO-W-Cold Hammer Barrel Forging, dated: 27-4-2019

Due on 29-5-2019

(1) FOR MATERIAL

(1)	(2)	(3)	(4)	(5)		(6)
Item No.	Description with Specs. etc	Unit	Qty.	Price per Unit FOB or C & F		Delivery Date
				In Figures	In Words	
01	<b>COLD HAMMER BARREL FORGING MACHINE</b>	No.	01			

- (1) For Plant & Machinery:-  
Description, Specification:- Enclosed as Annexure- "A"
- (2) Technical Comparison:- Enclosed as Annexure- "B"
- (3) 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, and to deposit the performance bond within the prescribed time, failing which it will constitute a breach of contract, and POF will have the right to purchase the stores/services elsewhere at our risk and cost.

Place \_\_\_\_\_ Signature of Tenderer \_\_\_\_\_

Date \_\_\_\_\_ Name \_\_\_\_\_

\_\_\_\_\_ Position \_\_\_\_\_

\_\_\_\_\_ Address \_\_\_\_\_

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

**1. SPECIFICATIONS OF COLD FORGING MACHINE.**

<b>Sr.No.</b>	<b>Forging Box</b>	
i)	Max. Forging Force	800 KN
ii)	Number of Hammers	04 Nos
iii)	No. of Forging Strokes	1450 /min
iv)	Diameter adjustment of Rams	30 mm
v)	Forging Eccenter	3.5 mm
vi)	Feed Speed of Hammer in diameter	0.1-8 mm/sec
<b>Chuck Head (Manipulator)</b>		
i)	Feed Force –Chucking Force	150 KN
ii)	Rotational Speed of Chuck Head Spindle	25-75 /min
iii)	Axial Force, Max	70 KN
iv)	Feed Speed	5-500 mm/sec
v)	Chuck Head Stroke	1200 mm
<b>Mandrel Axis</b>		
i)	Feed Speed	5-300 mm/sec
ii)	Stroke	700 mm
iii)	Approx. Axial Force	Max. 20 KN
<b>Counter Holder</b>		
i)	Stroke	800 mm
ii)	Axial Clamping Force	10-55 KN
iii)	Feed Speed	5-500 mm/sec
iv)	Axial Force Max.	60 KN
<b>Start Dimensions of Blank</b>		
i)	Blank Diameter , Min	20 mm
ii)	Blank Diameter , Max	38 mm
iii)	Blank Length , Min	100 mm
iv)	Blank Length , Max	630 mm
v)	Work Piece Weight, Max	6 Kg
<b>Finish Dimensions</b>		
i)	Diameter , Min	16 mm
ii)	Diameter , Max	32 mm
iii)	Forged Work Piece Length, Max	750 mm

**2. ACCESSORIES:**

Accessories like Hammers, Mandrel Rod, Mandrel Guide, Driver, Center Insert, Divided Sleeve and other necessary accessories shall be provided with the machine.

**3. TOOLING:**

Tooling as mentioned below:

G3A3	=	10 x Mandrels
MP5	=	06 x Mandrels
MG3	=	06 x Mandrels

**4. SPARES:**

- (a) Essential maintenance and operation spares for 5,000 hrs shall be required.
- (b) It shall be guaranteed that spares shall be available for at least next 20 X years after successful commissioning of machine.
- (c) Essential spares must include:
  - i. Counter holder and motor bearings
  - ii. Hydraulic, Pneumatic, Servo and directional control valves
  - iii. PCBs
  - iv. Couplings
  - v. O- rings and seals
  - vi. Pressure and force sensors
  - vii. Power belts
  - viii. Emergency stop switch
  - ix. NC Board
- (d) Other spares will be identified by the OEM based on wear and tear.

**5. TOOL KIT:**

The machine must include 2 X sets of Toolkits, essential for its setting and complete maintenance work.

**6. SAFETY**

- (a) Machine should be equipped/provided with all safety gadgets/ accessories according to latest international safety standards.
- (b) Noise level should be less than 75 db or as per international standards.
- (c) The machine should be cost effective and environmental friendly as per international standards.

**7. INPUT & SUPPORT MATERIALS**

The machine should be capable for Cold Hammer Forging of Barrels having material specification: 32Cr MoV 1210 ranging size from dia 20 mm to 38 mm and length 100 mm to 630 mm

**8. CLIMATIC CONDITIONS:**

- (a) Temperature:
  - Winter = -3 to +30°C
  - Summer = 25 to 50°C
- (b) Relative Humidity = 25 to 90%
- (c) Earthquake Value = 7.5 on Richter scale

**9. UTILITIES AVAILABLE AT SITE**

- (a) Electricity 400 ± 5% Volts, 50 Hz, Three Phase.
- (b) Electricity 220 to 230 Volts, 50 Hz, Single Phase.
- (c) Compressed Air Pressure = ( 5 to 6 bar)
- (d) Environmental Temperature -5° C to 55° C

**10. PRE-SHIPMENT INSPECTION & TRAINING**

- (a) Free of cost training to 06 x Engineers/Technicians of Weapons Factory in the field of operation, maintenance (i.e electrical, electronics, hydraulics & pneumatics) of the machine for 06 x working days will be imparted at firm's premises.

- (b) Pre-shipment inspection by 03 x Officials for 06 x working days of Weapons Factory as per approved check list including the following points will be imparted at firm's premises.
  - i. Machine Assemble Protocol.
  - ii. Evidence of Bought out parts.
  - iii. Machine functions & parameters as per contractual obligations.
  - iv. Spare parts list.
  - v. Machine trial report.
- (c) Boarding/lodging and travelling of POF engineers/technicians for training and PSI will be the responsibility of the supplier.
- (d) Inspection facilities such as tools, test equipment / testing material etc. will be provided by the Supplier in accordance with the relevant specification, gauges will be provided by the purchaser.
- (e) Trial run of the machine will be carried out for 20 successful / qualified components (i.e visually & gauged) of each type (i-e Barrel of MG-3, MP5 and G3A3).
- (f) Material for trial run shall be arranged by the OEM.

#### **11. TECHNICAL SUPPORT:**

- (a) The supplier shall confirm that after handing over of the machine there shall be technical support at least for 15 years as & when required by the purchaser. In addition the purchaser shall be kept informed regarding latest advancement in the related technology for further improvement in the production and operation of the machine.
- (b) The supplier shall confirm the overhauling of machine when required.

#### **12. TERMS OF DELIVERY**

The goods will be delivered as per following terms:

- (a) The delivery will be on C & F Karachi basis. Freight charges should be mentioned separately.
- (b) Machine parts would be lettered in English and / or internationally recognized symbols.

#### **13. INSTALLATION, COMMISSIONING AND TRIAL PRODUCTION RUN**

- (a) Design parameters for foundation and armoring of machine shall be provided by the OEM.
- (b) The machine shall be installed by the purchaser under the supervision of the supplier's engineers and technicians.
- (c) The machine shall be commissioned and trial production of the machine shall be carried out by supplier's engineers. Purchaser shall provide required number of operators and technicians for the commissioning and trial production of the machine.
- (d) Trial run of the machine will be carried out for at least 1000 X acceptable components in continuous run.
- (e) The manufactured 1000 X components during trial run shall qualify the approved inspection criteria (gauge and visual inspection).
- (f) Oil and process lubricants in quantity sufficient to cater for the requirement for one year shall be supplied by the firm. First oiling / lubricating shall be made by the firm at purchaser's premises.



**14. DOCUMENTATION**

03 X Sets of following documents in English language will be provided by the supplier.

- (a) Complete administrative control of PC's (Backup, Antivirus etc.)
- (b) Schematic Diagram of each PCB.
- (c) Schematic Diagram pneumatic and hydraulic circuits.
- (d) Operation and maintenance manual.
- (e) Electric sequence control circuit diagram of machine.
- (f) Detail of motors and their control.
- (g) List of spares required for minor and major overhauling.
- (h) Programming / configuration software (if required) along with soft copy of the program.

**15. WARRANTY GUARANTEE**

- (a) The machine 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 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 the date of commissioning and successful trial run of the machine.
- (b) 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 with acceptable stores, free of cost.
- (c) Without any obligation to the Purchaser. Rejected/ damaged stores shall be disposed off by the Supplier under his own arrangements.
- (d) The supplier shall warrant 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.

**16. PAYMENT TERMS**

- (a) Payment to the supplier will be made by means of an irrevocable letter of credit.
- (b) The payment terms will be **80%** against shipping documents after clearance the PSI. Certificate to this effect will be issued by the customer. Remaining **20%** amount to be released after satisfactory commissioning and trial of the unit.
- (c) Firm is bound to provide 10% PBG as per POF Format within 45 days of opening of L.C in un-equivocal terms.

**17. COUNTRY OF ORIGIN**

Europe, UK, USA, Japan, Austria & South Korea.

**TECHNICAL COMPARISON**  
**(TO BE FILLED BY SUPPLIER)**

<b>SR. #</b>	<b>TENDER SPECIFICATIONS</b>	<b>OFFERED SPECIFICATIONS WITH REFERENCE TO PAGE NO. OF QUOTATION</b>