

Tel. # 0092-51-905529201  
Fax # 0092-51-9271400 & 9314100  
Email: [mdexp@pof.gov.pk](mailto:mdexp@pof.gov.pk)

(Foreign Supplies)



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

Dear Sir,

Reference: T.E # **Wah-1800-12-BP-D.O (JBHC)** Dated **09<sup>th</sup> December 2024**

You are requested to submit quotations for the **Complete Ball Powder Propellant Manufacturing Plant alongwith related accessories** noted in the Schedule to the Tender. Offers should be sent duly sealed envelopes. Please note the following instructions for filling the tender: -

**1. SUBMISSION OF TENDER**

1.1 Tenders will be opened at **1100** hours on **14<sup>th</sup> January 2025** 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: **Wah-1800-12-BP-D.O(JBHC)**

Tender to be opened on: **14<sup>th</sup> January 2025**

Address: - **Bid Center, CR Section, C-04 Building,  
POF Wah Cantt**

**Tele: - 0092-51-9055-29201**

**Fax : -0092-51-9271400**

1.3 The bids received in factories will not be entertained.

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

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

2.1 Case will be processed exactly as per **PPRA Rules 36(d)** in favor of most advantageous bid and **two stage two envelope bidding procedure** will be utilized for open competitive bidding. The prices 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 of the offered **Complete Ball Powder Propellant Manufacturing Plant alongwith related accessories**, 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.

The commercial offer shall include separate price of;

- i. Complete Ball Powder Propellant Manufacturing Plant alongwith complete TOT on turnkey basis and related accessories
- ii. Humidity and temperature control system
- iii. Automatic control panel
- iv. Automatic sprinkler & drenching system
- v. Solvent suction & recovery system
- vi. Wastewater treatment plant
- vii. Safety devices and all other essential accessories
- viii. Ethyl acetate manufacturing (optional with the plant)
- ix. Complete electronic pressure velocity action time (EPVAT) system along with proofing barrels against each type of propellant & other essential hardware for evaluation of propellants performance
- x. Complete Physio-Chemical Testing Lab facility
- xi. Spares
- xii. Erection, Commissioning & Trial Production Run
- xiii. Documentation
- xiv. Training (Abroad & Onsite)
- xv. Total Price

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** or **F.O.B**:

a) **In case of F.O.R Basis Supply:**

- 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's stores at **Gate # 6, JBH COMPLEX, POF WAH 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 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.
- 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 concern Govt. Taxation Deptt:
- viii. Date and Stamp of the Postal Order must be visible.
- ix. 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. Depts.  
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 **MANAGING DIRECTOR JBH COMPLEX POF Wah Cantt.**

**b) In case of F.O.B Basis Supply:**

- i. 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.
- ii. 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.
- iii. Country of origin and port of shipment to be stated.
- iv. 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.
- 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 form or offer received is not in conformity with the requirement of the T.E such offer shall be ignored.

**c) BID MONEY**

Bid Money at the rate mentioned bellow should accompany the tender (with commercial offer) in the shape of Deposit At Call Receipt, from a scheduled Bank drawn in favour of "**Managing Director - JBH Complex Wah**"

i.	Registered / indexed firm including Foreign firms	<b>02%</b> of quoted value subject to max ceiling of Rs. <b>0.50 M</b>
ii.	Registered / Un-indexed firms including Foreign firms	<b>03%</b> of quoted value subject to max ceiling of Rs. <b>0.75 M</b>
iii.	Unregistered firms including Foreign firms	<b>05%</b> of quoted value subject to max ceiling of Rs. <b>1.00 M</b>
iv.	Govt. Organization / production units / State Owned Enterprises / Welfare Projects of Svcs HQ	Rs. <b>0.50 M</b>
v.	Earnest Money will be returned to un successful (less first three lowest quote firms) bidders on opening of commercial offer	
vi.	Earnest / bid Money will be returned to successful bidder on submission of unconditional BG	
vii.	Provisional acceptance of bids if bid money deposited by the firms is lesser than the given amount, with the intimation to the bidding firms to deposit additional amount within 10 days of opening of bids. However, procurement process will continue.	
viii.	Tenders received without / less Bid security will be rejected.	
ix.	Intimation regarding submission of bid money must be endorsed in technical offer.	

**3. ACCEPTANCE OF OFFERS**

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.

4. **FAILURE TO SUPPLY STORES**

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 02% but not less than 01% 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.

5. **“FORCE MAJEURE”**

- 5.1 “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”.

## 5.2 **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.

## 6. **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,



Raheel Anjum  
**Managing Director (JBHC)**  
Office Tel. # 0092-51-905529201,  
FAX # 0092-51-9271400  
E-mail: mdexp@pof.gov.pk

**PAKISTAN ORDNANCE FACTORIES**

Schedule To Tender Enquiry No. **Wah-1800-12-BP-D.O(JBHC)**  
Dated **09<sup>th</sup> December 2024** to be opened on **14<sup>th</sup> January 2025**  
**For Plant and Machinery**

1 Item No	2 Description with Spec etc.	3 Capacity	4 Price		5 Delivery Date
			In Figures	In Words	
i.	<b>Complete Ball Powder Propellant Manufacturing Plant alongwith complete TOT on turnkey basis and related accessories (Technical Details are attached as Annexure-A)</b>				
ii.	Humidity and temperature control system				
iii.	Automatic control panel				
iv.	Automatic sprinkler & drenching system				
v.	Solvent suction & recovery system				
vi.	Wastewater treatment plant				
vii.	Safety devices and all other essential accessories				
viii.	Ethyl acetate manufacturing (optional with the plant)				
ix.	Complete electronic pressure velocity action time (EPVAT) system along with proofing barrels against each type of propellant & other essential hardware for evaluation of propellants performance				
x.	Complete Physio-Chemical Testing Lab facility				
xi.	Spares				
xii.	Erection, Commissioning & Trial Production Run				
xiii.	Documentation				
xiv.	Training (Abroad & Onsite)				
<b>Total Price</b>					

2. **SPECIAL CONDITIONS AND EVALUATION CRITERIA**

- i) Chinese firms can quote in Chinese currency i.e. Yuan.
- ii) For comparison of bids quoted in different currencies, the price will be converted into single currency i.e. Pak Rupees
- iii) The rate of exchange shall be the selling rate prevailing on the opening of bids (notified by State Bank of Pakistan on that day).
- iv) Undertaking must be signed.
- v) Based upon the information being provided by the firms, only those firms will be awarded contract(s) who fulfill all the T.E. requirements.
- vi) Case will be processed and contract will be awarded to the firm(s) who will fulfill the evaluation criteria as **per PPRA** Rules.
- vii) Grand Total of offer must be mentioned in your quotation
- viii) LOI (Letter of Intent) is the part of purchase procedure & will be considered as legal document.

3. **Undertaking**

Should our offer be accepted, we hereby undertake to supply the store/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 store/services elsewhere at our risk and cost.

Place \_\_\_\_\_  
Date \_\_\_\_\_

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

**DETAILED SPECIFICATION OF  
BALL POWDER PROPELLANT MANUFACTURING PLANT**

1. **NOMENCLATURE** Ball Powder Propellant Manufacturing Plant
2. **QUANTITY** 01 No.
3. **MAIN FEATURES OF EQUIPMENT**
- 3.1 **GENERAL REQUIREMENT**
  - 3.1.1 JBHC requires ball powder manufacturing facilities with complete TOT on turnkey basis, humidity and temperature control system, automatic control panel, automatic sprinkler & drenching system, solvent suction & recovery system, wastewater treatment plant, safety devices and all other essential accessories.
  - 3.1.2 Ethyl acetate manufacturing be made optional with the plant.
  - 3.1.3 Complete electronic pressure velocity action time (EPVAT) system along with proofing barrels against each type of propellant & other essential hardware for evaluation of propellants performance is also required.
  - 3.1.4. Complete Physio-Chemical Testing Lab facility.
  - 3.1.5 Technical details regarding hardware, weapon and specified acceptance criteria will be shared with the firms after pre-qualification of their initial technical offers.
4. **PLANT CAPACITY**
  - 4.1 Total Production Capacity (03x shifts):  
800 M.Ton / Annum @ 250 Working Days / Annum
  - 4.2 Plant should be capable to produce the Ball Powder Propellants for following calibers having various ammo types;
    - 5.56 MM (Ball & Pen)
    - 7.62 x 39 MM
    - 7.62 x 54 MM (Ball & Tracer)
    - 12 Bore Hunting Gun
    - 30 MM
    - 40 MM AGL
    - 9 x 19 MM
    - 7.62 x 51 MM (Ball & Tracer)
    - 12.7 MM
    - 20 x 102 MM Phalanx
    - 35 MM
    - 23 MM
5. **AVAILABLE FACILITIES AT SITE**
  - 5.1 Nitroglycerine Production.
  - 5.2 Nitrocellulose Production.
  - 5.3 CVT & Ballistic Proof Range.
6. **RAW MATERIAL, UTILITY REQUIREMENTS AND CONSUMPTION**
  - 6.1 The supplier should provide detailed technical specifications of raw materials required for production of propellants as mentioned in para 4.2.
  - 6.2 Supply of raw materials other than NG & NC for approximately 300 M.Ton of finished products excluding consumption in trial production run which will also be supplied by the seller.
  - 6.3 The supplier should indicate clearly, the consumption of raw materials and utilities per M.Ton of finished products.
  - 6.4 The supplier should also indicate chemicals used for wastewater treatment & their consumption for per M.Ton of finished products. Provisioning of these chemicals required for six months production i.e 300 M.Ton of finished products will be responsibility of the seller.



## 7. **SCOPE OF SUPPLY - HARDWARE**

### 7.1 **Mechanical & Electrical**

The following hardware should be included in the supply;

- 7.1.1 Ball Powder Manufacturing Plant complete in all aspects including all process equipment, accessories to produce propellants as mentioned in Para 4.2 above.
- 7.1.2 Complete electronic pressure velocity action time (EPVAT) system along with proofing barrels against each type of propellant & other essential hardware for evaluation of propellants performance is also required.
- 7.1.3 Complete Physio-Chemica Lab facility for raw materials & final ball powder propellant testing.
- 7.1.4 Flameproof light fittings to provide sufficient illumination in and out-side buildings, lightening & static charge protection equipment.
- 7.1.5 Transfer pumps (including one standby against each installed) complete with motor, latest control system along-with all necessary protections suitable in acidic environment.
- 7.1.6 Start / stop stations with volt & ampere meters for all motors, perforated cable trays for power & instrumentation and mounting accessories.
- 7.1.7 Erection materials e.g. all pre-fabricated supporting steel structure for plant equipment, pipelines and services such as steam, air, water, electrical equipment, within the battery limits.
- 7.1.8 All valves including reducing and relief valves, interconnecting piping, fittings, gaskets, couplings, bolts & Nuts and flanges etc. for all inputs and outputs required for installation of complete plant.
- 7.1.9 All civil works of the building will be carried out by the buyer according to design provided by the supplier. However, plant support structure will be provided by the supplier.
- 7.1.10 Air compressor unit along with filters, driers, oils and moisture separators of suitable capacity to supply quality air for instruments & plant requirement.
- 7.1.11 Complete chilled & cooling water units along with essential accessories.
- 7.1.12 Consumables required during installation and commissioning of plant.

## 8 **SAFETY EQUIPMENTS, FIRE CONTROL & ALARM SYSTEMS**

- 8.1 All safety related equipments as deemed fit by the the OEM should be the part of the plant along with quick response and effective Fire control & alarm system for the manufacturing of ball powder propellant should be the part of supply along with:
  - i) Sensors; IR3 and UV/IR combined sensors.
  - ii) Electric Water Pump for required water flow and pressure.
  - iii) Diesel engine driven water pump having capacities equal to electric water pump with auto start / replacement of electric pump in case of electric mains failure.
  - iv) Pump for system pressure coupe up (capacity negotiable).
  - v) Air compressor of suitable capacity for system pressurization (tank and water lines).
  - vi) Pressure vessel of adequate capacity to cover all risk area at least 10/15mm water on floor level.
  - vii) Deluge / flooding nozzles with auto control at maximum risk points in the press rooms of the building.
  - viii) Sprinkler nozzles integral with solenoid valves to cover whole press rooms of the building.
  - ix) Manual break glass for manual actuation of fire suppression system.

- x) Pre-Wired & Pre-Programmed Control panel suitable for the fire suppression system having maximum possible processing speed for inputs and outputs and capability of 8 zones user selectable and programmable.
  - xi) System shall operate on mains power supply 230V 50Hz and must include stand by batteries / UPS to operator complete fire suppression system (control panels, fire sensors, solenoid and deluge valves etc) at least for one hour in case of mains failure.
  - xii) Ethernet communication COM port for remote alarm and status etc with complete support.
  - xiii) The system shall be capable to detect Fire within 30 milliseconds and start water showering in less than 01 second.
  - xiv) Complete documents and software with system drawings for installation, interconnection of all system equipment, programming and configuration details
- 8.2 Safety items e.g. gas mask, face shield, apron, breathing apparatus etc along with necessary accessories.
- 8.3 Temperature & Humidification Control systems for maintaining required level of temperature and relative humidity in all process buildings with paperless recorders.
- 8.4 Emergency Electricity-supply system for illumination in case of mains failure at least for 03 hrs backup time.
- 8.5 Cables with flameproof insulation to be supplied for electrical and instrumentation.

## **9. ELECTRICAL, INSTRUMENTATION EQUIPMENT & CONTROL SYSTEM**

- 9.1 Plant shall be equipped comprehensively with measuring and control system to allow remote process control with record of all essential process parameters. The measuring and control instruments must be accompanied with master calibration equipment.
- 9.2 Portable industrial Laptop / notebook for programming and configuration. All field instruments and electrical equipment shall be explosion proof, intrinsically safe with IP ratings of minimum IP 67 as and where required.
- 9.3 Auto & manual control system to be adopted for main processes in the production line with complete control & command in both auto & manual modes.
- 9.4 Self-diagnostic DCS / PLC & instruments must have a good industrial grade computer/workstation for both server & client.
- 9.5 Complete support in software and hardware interfaces required at all level of application for field development, programming and calibration of all instruments, VFD / soft starter, PLC / DCS to be included in the supply along with CD Keys, licenses and up-gradation facility in CD / DVD formats with no online or over web activation.
- 9.6 The key equipment and processes must be equipped with intrinsically safe industrial C.C. T.V monitoring system with programmable time laps recording 03 x months.

## **10. TOOLS, TACKLES AND EQUIPMENT**

- 10.1 02 Tool Kits comprising of all essential tools required for installation and maintenance of mechanical equipment.
- 10.2 02 Tool Kits comprising of all essential tools, master calibration and test equipment required for erection, maintenance, calibration and programming of electrical and instruments equipment.

**11. SPARES**

- 11.1 02 year's spares i.e. Mechanical; Electrical & Instruments, services plant including pressurized water system of sprinkler system should be included with quantity and prices against each item separately.
- 11.2 It shall be guaranteed that all spares i.e. Mechanical, Electrical & Instruments, Plant equipment would be made available by the supplier against payment for a period of at least 15 years after successful trial run of the plant on as and when required by the purchaser.

**12. ERECTION AND COMMISSIONING**

- 12.1 The purchaser under the working supervision of the supplier's engineers and technicians shall erect the plant and all other equipment.
- 12.2 The plant will be commissioned by supplier's engineers. Purchaser shall provide the required number of operators and technicians for the commissioning.
- 12.3 The supplier has to indicate the total man-weeks of his engineers / technicians required for the erection, commissioning and trial run of the plant. Terms and conditions are to be stated clearly. All expenses including boarding, lodging, traveling and daily allowance of the supplier's engineers / technicians shall be borne by the supplier. However local transport will be arranged by the purchaser.
- 12.4 The supplier shall provide the time schedule for completion of the project.
- 12.5 Consumables required during installation and commissioning of plant shall be provided by the supplier.

**13. TRIAL PRODUCTION RUN**

- 13.1 After successful installation and commissioning, supplier will be responsible to produce 02 Lots of 7.62 x 51mm and 01 lot each of remaining ammo's mentioned in Para 4.2 above.
- 13.2 Quantity of each lot will be 02 M.Ton (max). The supplier shall also provide guarantee for meeting the quantity & quality mutually agreed according to specifications provided by the buyer. In case of any deficiency in terms of quality and quantity of products, all related expenditures to fulfill commitment shall be borne by the supplier.
- 13.3 Purchaser shall provide the required number of operators and technicians for undertaking trial production run.

**14. DOCUMENTATION**

The supplier will be required to furnish all relevant technical data and drawings for design and complete technology transfer (4 copies each in English language) including the following:

- 14.1 Detailed Drawings & Specifications of Plant & Equipment.
- 14.2 P & I Drawings, circuit & wiring diagram and troubleshooting manuals, Equipment Layout and Schematic Diagrams.
- 14.3 Detailed Civil Engineering Design and Drawings of the buildings including Foundation Plans with Load Values for the equipment to be installed.
- 14.4 Detailed Erection drawings.
- 14.5 Specifications of materials not included in the supplies but necessary for integration of the offered plant/ equipment.
- 14.6 Specifications of direct raw materials, indirect raw materials, intermediate and finished products.

- 14.7 Production process instruction manuals for sequence wise start up and shut down of the equipment and processes.
- 14.8 Maintenance and services manuals of plant & machinery.
- 14.9 Complete safety manuals for all operations and production processes.
- 14.10 Operation manuals for plant and equipment.
- 14.11 Configuration, programming and calibration manuals.
- 14.12 All programs and configurations fed to any instrument, VFD / soft starter and PLC / DCS will be supplied in soft and hard copy in CD / DVD formats with no online or over web activation.
- 14.13 All engineering details, data and tables involved in calibration and process calculations should be provided.
- 14.14 Manufacture and testing methods for the products.
- 14.15 OEM documents and calibration certificates should be provided for all instruments.
- 14.16 Material Safety Data Sheet (MSDS) for all the raw materials & products be provided.
- 14.17 Ballistic parameters of ammo as mentioned at para 4.2, including projectile weight, type of weapon and charge weight etc available with the supplier / international standard.

## 15. **CLIMATIC CONDITIONS**

- i. Temperature range in WINTER = 0 – 20 °C
- ii. Temperature range in SUMMER = 35 – 52 °C
- iii. Atmospheric relative humidity = 25 – 90%
- iv. Average annual rain fall = 450 mm
- v. Altitude above sea level = 1504.50 Ft.
- vi. Earthquake Value = 8 on Richter scale

## 16. **AVAILABLE UTILITIES**

- 16.1 Following utilities are available at site: -
- Electricity 400±10% volts 50Hz three phase.
  - Electricity 220±10% volts 50Hz single phase.
  - Raw Water at 2 bar pressure
  - Steam at 3-4 bar up to the battery limit.
  - The supplier will provide data of consumption of utilities related to electricity, water, steam and compressed air.

### 16.2 **BATTERY LIMIT**

Battery limit means one meter outside the wall of the building up to which the purchaser will provide the required utilities / services. The purchaser will ensure to terminate all pipes with flanges at Zero level of each building.

### 16.3 **LABORATORY FACILITIES**

A well-furnished physio-chemical laboratory for testing of single, double and triple base propellants, raw materials and intermediate products is available. If any special testing for raw materials, semi finished and finished products are required, equipment and testing procedure for the same may be included in the scope of supply.

### 16.4 **ENGINEERING FACILITIES**

The plant is to be added to already existing manufacturing setup, therefore infrastructure such as fabrication, machine & electrical workshop, and other relevant facilities are available at site . Supplier may include special erection equipment like tools & lifting tackles of suitable capacities in the bid.

**17. TRAINING**

**17.1 ABROAD**

Supplier shall train 20 persons on plant of similar production at the supplier's works site for a period of one-month, expenses / expenditure including boarding, lodging and local traveling will be borne by supplier. However, Air Tickets will be arranged by purchaser. This training is to be imparted on process, instrumentation, electrical & mechanical maintenance and quality control.

**17.2 ON SITE**

During the stay of supplier engineers at work site, they will be required to train the concerned maintenance, instrument, production and quality control personnel of the purchaser.

**18. TECHNICAL SUPPORT**

The supplier shall confirm that after handing over of the plant, there shall be continuing technical support as and 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 process and operation of plant, for a period of 20 years, commencing from the date of commissioning.

**19. PRE DELIVERY INSPECTION:**

The supplier will arrange Pre-Delivery Inspection at their site and at the site of their sub contractors and vendors. The Pre-Delivery Inspection will take place in following manner;

- a) Pre-delivery Inspection of Mechanical Equipment.
- b) Pre-delivery Inspection of Electrical & Electronics Equipment.

Each Pre-delivery Inspection team will be comprised of 10 members from the buyer side. Cost of Pre-delivery Inspection including boarding, lodging and air tickets responsibility of the buyer. Internal traveling of Pre-Delivery Inspection team will be seller's responsibility.

**20. SEALED QUOTATION ON FOB BASIS**

The supplier shall forward quotations / proposals complete in all respect in two parts, in separate envelopes. Each envelope must be clearly marked in bold letters as; **TECHNICAL PROPOSAL** and **COMMERCIAL PROPOSAL**.

**TECHNICAL PROPOSAL**

Comprehensive Technical Proposal must contain all the requirements mentioned in the Technical Specification of the plant.

**COMMERCIAL PROPOSAL**

Comprehensive Commercial Proposal shall contain total price of the project including:

- Price of Plant and Machinery with all accessories.
- Price of two-year spares against each item.

**21. PAYMENT TERMS AND CONDITION:**

Payment will be made as per following;

- i. **50% payment** will be released against presentation of shipping documents and acceptance certificate issued by PSI team.
- ii. **20% payment** will be released on receipt of complete store at JBHC ware house
- iii. **Balance 30% payment** will be released against the Final Acceptance Certificate, duly signed by the BUYER after the successful Final Acceptance Test of the complete plant along with the related auxiliary units.

22. **WARRANTY GUARANTEE**

22.1 The plant and accessories shall be accepted on Supplier's Warranty / Guarantee with regard to quality and quantity subject to these being technically checked/tested where necessary 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 Buyer 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 successful **Final Acceptance Test of the Plant & related accessories**.

22.2 In case the stores on checking / test after receipt at the BUYER's factory are found not conforming strictly to the relevant specification and other particulars, or found broken during transit, the seller shall immediately replace the rejected/ broken store by acceptable stores free of cost and without any obligation to the buyer and without effecting the project timeline otherwise L.D charges will be imposed as per POF Purchase Procedure. Rejected / broken stores shall be disposed by the seller under his own arrangements. The seller will warrant the acceptable quality of all equipment supplied against all defects or failures due to faulty design, material or workmanship

23. **PERFORMANCE BOND**

23.1 The SELLER will provide a Bank Guarantee to the tune of 10% of FOB value of the contract on the prescribed Performa for satisfactory execution of the order. It shall be covered by any Scheduled Bank in Pakistan. The Bank Guarantee shall be endorsed in favor of CMA POFs Wah Cantt. The Bank Guarantee shall be furnished by the SELLER within 45 days from the date of opening of letter of credit. The Bank Guarantee will be **valid for a period of 24 months after the successful final acceptance test of the plant**. If the successful trial run is delayed, the SELLER shall arrange the extension of **Bank Guarantee within 30 days from the date** of amendment of L.C. If the Guarantee is not revalidated, the same is liable to be encashed by the CMA (POFs) Wah Cantt.

23.2 If the SELLER fails to furnish the Bank Guarantee within specified period, the BUYER reserves the right to cancel the contract and has the right to purchase the stores at the risk and expenses of the SELLER.

23.3 In the event of unsatisfactory performance or any breach of the Contract, Bank Guarantee shall be forfeited by the BUYER. The Bank Guarantee will be returned to the SELLER by M.D-JBH Complex, POFs Wah Cantt on request after its expiry or after satisfactory performance of the contract whichever is earlier.

24. **ORIGIN**

The plant / machinery will be accepted from USA / UK / EU / Japan / South Korea OR any other country having manufacturing facility under license of OEM from above origins

25. **EXPORT PERMIT**

Offers of only those firms will be entertained who will confirm the availability of export permit from their respective government.

**Annexure – “B”**

**WARRANTY / GUARANTEE CERTIFICATE**

**Firm's Name** \_\_\_\_\_

**Contract No.** \_\_\_\_\_ **DATE** \_\_\_\_\_

1. We hereby guarantee that the goods supplied against the above 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 **24 Months** reckoning from the date of successful **Final Acceptance Test of the Ball Powder Manufacturing Plant and related accessories**.

Signature \_\_\_\_\_

Name \_\_\_\_\_

Status in the Firm \_\_\_\_\_

Dated \_\_\_\_\_

**Annexure-C**

**BANK GUARANTEE FOR PERFORMANCE**  
**ON JUDICIAL STAMP PAPER OF Rs.100/- OR**  
**AS SUITABLE TO THE ACCOUNT OF BG.**

- i) Contract No. \_\_\_\_\_ Date \_\_\_\_\_
- ii) Name of Firm/Contractor \_\_\_\_\_
- iii) Address of Firm/Contractor \_\_\_\_\_
- iv) Name of Guarantor \_\_\_\_\_
- v) Address of Guarantor \_\_\_\_\_
- vi) Amount of Guarantee Rs. \_\_\_\_\_  
( \_\_\_\_\_ )  
(in Words)
- vii) Date of Expiry of Guarantee \_\_\_\_\_

To: The **President of the Islamic Republic of Pakistan**  
Through the **CMA POF WAH CANTT.**

Sir,

1. Whereas your good self have entered into Contract No. \_\_\_\_\_  
\_\_\_\_\_ dated \_\_\_\_\_  
with Messrs \_\_\_\_\_  
(Full Name and Address)  
hereinafter referred to as our customer and that one of the conditions of the contract is the submission of unconditional Bank Guarantee by our customer to your good self for a sum of Rs. \_\_\_\_\_ Rupees/FE(as applicable) \_\_\_\_\_
2. In compliance with this stipulation of the contract, we hereby agree and undertake as under:
- a) To pay you unconditionally on demand and / or without any reference to our customer and amount not exceeding the sum of Rs. \_\_\_\_\_ Rupees or FE (as applicable) \_\_\_\_\_ as which be mentioned in your written Demand Notice.
- b) To keep this Guarantee in force till \_\_\_\_\_
- c) That the validity of this Bank Guarantee shall be kept **two years** ahead of the original/extended delivery period or the warrantee of the stores which so ever is later in duration on receipt of information from our customer i.e. M/s \_\_\_\_\_  
or from your office. Claim, if any must be duly received by us on or before this day. Our liability under this Bank Guarantee shall cease on the closing or banking hours on the last date of the validity of this bank Guarantee. Claim received thereafter shall not be entertained by us whether you suffer a loss or not. On receipt of payment under this guarantee, this document i.e. Bank Guarantee must be clearly cancelled, discharged and returned to us.



- d) That we shall inform your office regarding termination of the validity of this Bank Guarantee one clear month before the actual expiry date of this Guarantee.
- e) That with the consent of our customer you may amend/alter any term/clause of the contract or add/delete any term/clause to/from this contract without making any reference to us. We do not reserve any right to receive any such amendment/alternation or addition/deletion provided such like actions do not increase our monetary liability under this Bank Guarantee, which shall be limited only to Rs. \_\_\_\_\_  
(Rupees \_\_\_\_\_)
- f) That the Bank Guarantee herein before given shall not be affected by any change in the constitution of the Bank or Customer/Seller or Vendor.
- g) That this is an unconditional Bank Guarantee, which shall be encashed on sight on presentation without any reference to our Customer/Seller or vendor.

**Guarantor**

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

\_\_\_\_\_  
Bank Seal and Signatures