

Tel. # 0092-51-905529201
Fax # 0092-51-9271400 & 9314100
Email: mdexp@pof.gov.pk

(Foreign Supplies)



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

To,

Dear Sir,

Reference: T.E # **Wah-1800-12-TRPM-D.O(JBHC)** Dated **27th February 2025**

You are requested to submit quotations for the **Twin Roll Plasticizing Machine alongwith all essential 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 **08th April 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-TRPM-D.O(JBHC)**

Tender to be opened on: **08th April 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 **Twin Roll Plasticizing Machine alongwith all essential 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. Twin Roll Plasticizing Machine alongwith all essential accessories
 - ii. Fire Detection & Suppression System
 - iii. HVAC System
 - iv. Spares
 - v. Installation, Commissioning & Trial Production Run
 - vi. Documentation
 - vii. 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	02% of quoted value subject to max ceiling of Rs. 0.50 M
ii.	Registered / Un-indexed firms including Foreign firms	03% of quoted value subject to max ceiling of Rs. 0.75 M
iii.	Unregistered firms including Foreign firms	05% of quoted value subject to max ceiling of Rs. 1.00 M
iv.	Govt. Organization / production units / State Owned Enterprises / Welfare Projects of Svcs HQ	Rs. 0.50 M
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 – JBH Complex Wah
for **PAKISTAN ORDNANCE FACTORIES**
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-TRPM-D.O(JBHC)**

Dated **27th February 2025** to be opened on **08th April 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.	Twin Roll Plasticizing Machine alongwith all essential accessories (Technical Details are attached as Annexure-A)				
	Fire Detection & Suppression System				
	HVAC System				
	Spares				
	Installation, Commissioning & Trial Production Run				
	Documentation				
Total Price					

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 TWIN ROLL PLASTICIZING MACHINE FOR RDX
ALONGWITH ALL ESSENTIAL ACCESSORIES**

- **NOMENCLATURE** Twin Roll Plasticizing Machine
- **QUANTITY** 01 No.
- **MAIN FEATURES OF EQUIPMENT**

The RDX Plasticizing Machine along with suitable driving system, drenching system, humidification system, room temperature controlling system and all other essential accessories and safety devices.

1. RDX PLASTICIZING MACHINE:

One complete set of RDX plasticizing Machine to plasticize. Approx 08 to 10 Kg of oiled material (RDX: Oil: 90:10) ± 1 to be rolled in 80 - 90 seconds with an effect that when the material (after mixing) is subjected to plasticity test. It must show an extension expressed in one tenth of an inch of at least 10 and not greater than 24 before fracture of the test piece occurs.

2. CAPACITY:

RDX plasticizing machine must be capable to plasticize 1.5 MT of oiled RDX per day (24 hrs).

3. RDX Plasticizing Machine Must Have Following Features:

3.1. FEATURES:

- 3.1.1. RDX plasticizing machine consist of a pair of phosphor bronze, water cooled, knurled rollers. The clearance between the rollers should be adjustable.
- 3.1.2. Rollers must have suitable RPMs compatible with requirement.
- 3.1.3. Scraper knife is fitted at the underside of each roller to remove any oiled material which adheres to the rollers. The clearance between the scraper and the rollers is adjustable. Minimum clearance which could be achieved is 0.1mm
- 3.1.4. A finned drum of non ferrous material, which revolves around the rollers at suitable RPM to catch the material leaving the rollers and feeds it again at the top of the rollers.
- 3.1.5. Machine must have a suitable and safe loading and offloading mechanism.
- 3.1.6. All the motors and electrically driven accessories should be intrinsically safe, Explosion Proof, Flame proof and or with IP 65 rating as and where required.
- 3.1.7. The RDX plasticizing machine should be capable to function promptly in the environment having relative humidity more than 65%.
- 3.1.8. A suitable emergency shutdown system should be provided to switch off the machine in case of emergency.
- 3.1.9. The machine should be equipped with the suitable sprinkler and Flooding system **as per Clause 4.2** capable of controlling any accidental ignition during process.
- 3.1.10 Flame proof light & fitting to provide for sufficient illumination in and outside building.

3.2. DRIVERS:

3.2.1. Hydraulic Motors

- For RDX plasticizing machine, following hydraulic motors having suitable capacity must be provided to meet process requirements.
 - i. Hydraulic motor for each twin roller.
 - ii. Hydraulic motor to drive fined non ferrous drum.

- A suitable Hydraulic Pack complete in all respect, including all required safeties, accessories, isolating valves and oil reservoir with the provision of required pressure adjustment to operate roller mill. It should also include all oil filtering, heating and cooling facilities as required for the said environment.
- Hydraulic motor driven gear boxes to drive roller and non ferrous fined drum to required power and RPMs.
- Inter connection pipes, hoses to drive all hydraulic motors and equipment installed at rolling mill.

3.2.2. Electric Motor Starter in Machine Room

It shall include IP65 rated starter panels, MCC, Over Load protection, High/Low voltage for electrical motor 400 V \pm 5% and Phase Reverse protection, Ampere and Volt indication and Start/Stop buttons, VFD/Soft Starter/Star Delta Starter.

4. SCOPE OF SUPPLY:

4.1. Hardware (Mechanical & Electrical)

The following hardware should be included in the supply;

- 4.1.1. RDX plasticizing machine complete in all aspects including safety equipment and essential accessories.
- 4.1.2. Erection materials such as steel structure for supporting of machinery, hydraulic system & piping etc.
- 4.1.3. Fire retardant cables required for Electrical Power, control and fire system installations.
- 4.1.4. Start / Stop control station for all motors (with ampere meters) etc. along with perforated cable trays with mounting accessories for power control & instrumentation cables.
- 4.1.5. All valves, interconnecting hydraulic piping, fittings, gaskets, couplings, bolts & nuts.
- 4.1.6. Consumables required during installation and commissioning of machinery.
- 4.1.7. Civil construction work will be executed by the purchaser as per design and materials specifications provided by the supplier.
- 4.1.8. The supplier is required to supply soft copy and hard copy of all software in case the machine includes programmed PLC or any other Programmable controllers or programmable fire panel.
- 4.1.9. Sketch of the room where the machine along with the related accessories will be installed is attached as Annex-D.
- 4.1.10. HVAC System and its all accessories.

4.2 FIRE DETECTION & SUPPRESSION SYSTEM:

4.2.1. Fire Detection & Suppression System

- Supply of fire detection and suppression system (where required) with all components at least SIL2 rated. Including all essential hardware for installation including pipes, cables & trays, sensors and accessories. The system shall be capable to detect Fire within 30 milliseconds and consequently actuate water sprinkling. Detail is as under; Supply of fire system should include all required hardware for installation including pipes, accessories cables, cable trays, supports and clamps etc.
- All equipment to be installed in hazardous area shall be Ex, Exi and IP 65 as and where required.

4.2.3. Fire Control Panel:

Capable to handle all fire sensors, manual pull station inputs and outputs included with logging and reporting facilities printable as and when required on real time basis. Output of panel shall be capable to drive all sprinkler and flooding solenoids and acoustic alarm.

It shall also include stand by batteries to be charged in normal through mains and batteries shall be capable to maintain back up for minimum of 4 Hours in case of mains failure for complete system operation including all inputs and out puts. Preferred manufactures for fire panel are

- a. Det-Tronics.
- b. Honeywell Notifier.

4.2.4. Fire Sensors:

Suitable numbers of Fire Sensors to cover the 100% risk area.

Sensors shall be IR3 and UV.

Preferred manufactures for sensors will be, Det-Tronics, Sharp eye or Talentum.

4.2.5. Pressurized Water system:

It shall be designed with wet pipe having solenoids at end of pipe before sprinkler and flooding nozzles. Water system shall include;

- Suitable capacity water tank at rated pressure minimum 8 bar equipped with visual water level indicator.
- Electric driven fire water pump.
- Diesel Engine driven fire water pump.
- Jockey pump to keep up water level.
- Air compressor to maintain system pressure including water tank.
- Supply of fire system shall include all required Hardware and accessories.

4.2.6. HVAC System.

HVAC system having suitable capacity is required to maintain the temperature from 25 to 30 °C alongwith humidification system to maintain humidity at 65 % min.

4.2.7 Complete Instrument Air System including air compressor, oil & moisture separator and dryer to supply quality air to instruments as per ISA standards and minimum dew point of - 30°C (if required).

5. SPARES:

5.1. Two years essential spares must be included in the scope of supply after warranty / guaranty period. Item wise detail must be included in technical offer, indicating price of each item separately.

5.2. Following spare parts must also be included in the scope of supply, giving price of each item;

5.2.1. Spares of Electrical & Instrumentation including Fire Alarm System:

- i. All field sensors and transmitters, one against each type installed.
- ii. Control Panel: Complete components installed in control panel.
- iii. Final Control Elements, one against each installed.
- iv. Hydraulic Pack: All solenoid valves, sensors, limit sensors for pressure temperature etc. One against each installed
- v. Fire Panel 01 No.
- vi. UV / IR3 Sensor 02 Nos.
- viii. Manual Release 02 Nos.
- ix. Solenoid Valve 04 Nos.
- x. Flooding solenoid valve. 02 Nos
- xi. Spare Electric motor with starter and other essential accessories one against each type installed.

5.2.2. Spares of Mechanical:

- i. Spare set of Phosphor Bronze, water cooled and Knurled rollers.
- ii. Hydraulic oil driven motors for twin rollers one for each installed.
- iii. Hydraulic oil driven motor for non ferrous drum 01 in qty.
- iv. Gear boxes for both the rollers compatible in accordance to their RPMs, one for each installed.
- v. Gear box for non ferrous 01 in qty.
- vi. Bearings for pumps one set each.
- vii. Gland packing or Mechanical seal for pumps 2 sets each.
- viii. Bearings and Gas kits for twin Rollers 04 sets each.
- ix. Bearing and Gasket for Drive wheels 02 sets each.
- x. Hydraulic oil Pressure regulation system one complete set.
- xi. Pipes and fittings for complete hydraulic system.
- xii. Recommended spare for HVAC system along with;
 - a. Refrigerant Gas for HVAC, Qty 100 kg along with specification.
 - b. Bearings / belts of HVAC, Blower 01 set.
 - c. Compressor for HVAC, Qty. 01 No.

5.2.3. It shall be guaranteed that spares shall be available for at least 15 years after successful Final Acceptance Test of the machine on as and when required basis.

5.3 RECOMMENDED OEMS:

The recommended OEMs for all instrumentation, control system, electrical equipment, hydraulics, pneumatics, Valves, Air Compressors, fire detection sensors and sprinkler system are as under:

S #	Category	Recommended OEM
i.	Control System	a. ABB b. Allen Bradley c. Siemens d. Honeywell e. Schneider electric f. or Equivalent manufactured under the license of above OEMs
ii.	Electrical & Instrumentation	a. VEGA, Germany b. Endress+Hauser c. Flowline, USA d. Krohne, Germany e. Schneider f. Siemens g. ABB h. Emerson i. Honeywell j. Tokyo Keiki Inc., Japan k. WIKA, USA l. or Equivalent manufactured under the license of above OEMs
iii.	Control Valve and Pneumatics	a. Emerson b. Samson c. FESTO, Germany d. COAP, Netherland

		<ul style="list-style-type: none"> e. Fisher Controls f. Arca Regler, Germany g. Conval h. Flowserve, USA i. Metso flow control, Finland j. Swagelok, USA k. Comp Air l. SMC m. or Equivalent manufactured under the license of above OEMs
iv.	Hydraulics	<ul style="list-style-type: none"> a. Rexroth b. Hydac c. Parker d. or Equivalent manufactured under the license of above OEMs
v.	Fire Detection and sprinkler system	<ul style="list-style-type: none"> a. Notifier, Honeywell b. Sharp eye c. Det-Tronics d. Bosch g. Simplex h. or Equivalent manufactured under the license of above OEMs
vi.	ROVs (Valves)	<ul style="list-style-type: none"> a. Galassi Ortolanni, Italy b. Richter, Germany c. Saunders, UK d. Spirax Sarco UK e. Flowserve, USA f. or Equivalent manufactured under the license of above OEMs
vii.	Air Compressors	<ul style="list-style-type: none"> a. Atlas Copco b. Kaeser c. Ingersoll Rand d. CompAir e. Hoer burger f. Cope land g. Sauer h. Boge i. Air pro j. or Equivalent manufactured under the license of above OEMs

6. 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.

7. DOCUMAENTATION:

The SELLER will provide technical documents (4 sets in English language) as per following;

- 7.1 Complete final civil construction drawings (workshop drawings).
- 7.2 Equipment assembly and sub-assembly drawings.
- 7.3 Installation drawings.
- 7.4 Operational, Maintenance and Services manuals.
- 7.5 Detailed Drawings & Specifications of the Machinery.
- 7.6 Specifications of materials not include in the supplies but necessary for integration of the offered machinery.
- 7.7 Safety instructions for smooth and operation of the machinery.
- 7.8 Layout of Plant & accessories
- 7.9 P & I drawings.
- 7.10 Detailed Electrical, Instruments Connection diagrams.

8. CIVIL WORK:

- 8.1. The machine along with accessories will be installed in the BUYER's existing building.
- 8.2. Complete civil drawings (workshop drawings) for modification of existing building for installation of the complete Twin Roll Plasticizing Mill and its related equipment will be provided by the SELLER. These drawings will be provided within two months after contract.
- 8.3. Anchoring bolts & chemicals etc will be provided by the SELLER.
- 8.4. Civil modification work of the existing building will be executed by the BUYER as per design and materials specifications provided by the SELLER.

9. DELIVERY PERIOD

Delivery period of the Machine & accessories will be 06 x months after establishment of L.C

10. PRE-SHIPMENT INSPECTION

The store shall be new and shall conform to the requisite specifications. The BUYER's Pre-shipment inspection team will consist of **04 x members** and will carry out inspection at the SELLER premises. The duration of Pre-Shipment Inspection will be **01 x week**. All expenditures of the PSI team i.e. boarding, lodging, internal traveling return air tickets for the visiting team will be borne by the BUYER.

11. INSTALLATION, COMMISSIONING & TRIAL RUN:

- 11.1. The purchaser personnel under the working supervision of the supplier's engineers and technicians shall install the machinery.
- 11.2. The machinery will be commissioned and trial production will be carried out by seller's Engineers. Purchaser shall provide the required number of operators and technicians for the installation, commissioning and trial run.
- 11.3. The supplier to indicate the total man-weeks of his engineers/technicians required for the installation, commissioning and trial run of the machinery. Terms and conditions are to be stated clearly. All expenses, including boarding, lodging, traveling and daily allowances of the supplier's engineers / technicians are to be borne by the suppliers. Local transport shall be arranged by the purchaser.
- 11.4. The supplier shall provide the time schedule for completion of the installation, commissioning and trial run.

12. FINAL ACCEPTANCE TEST (FAT)

Trial run (Qualitative & Quantitative) of the complete RDX Plasticizing Machine along with the related accessories will be based on successful operation of continuous 120 working hours. In case of any deficiency & discrepancy in terms of quality and quantity of products, all related expenditures to fulfill the commitment shall be borne by the seller.

13. PAYMENT TERM AND CONDITION

The mode of payment will be as under;

- i. **70% payment** will be released against presentation of shipping documents and acceptance certificate issued by PSI team.
- ii. **Balance 30% payment** will be released against the Final Acceptance Certificate, duly signed by the BUYER after the successful installation, commissioning & trial run of the store.
 - All Bank charges incurred in Pakistan in connection with the 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.

14. CLIMATIC CONDITIONS AT SITE:

- Temperature range = -3 to 50 °C
- Atmospheric relative humidity = 25 to 90%
- Average annual rain fall = 450 mm
- Altitude above sea level = 471 Mtr.
- Earthquake Value = 7.5 on Richter scale

15. AVAILABLE UTILITIES AT SITE:

Following utilities are available at site: -

- i. Electricity 400 \pm 5% volts 50Hz three phase
- ii. Electricity 220 \pm 5% volts 50Hz single phase
- iii. Raw Water at 1.5-2 bar_g
- iv. Steam at 2-3 bar_g
- v. Compressed air at 4 to 5 Bar (H.P) at generation point.
- vi. Compressed air at 2 to 2.5 Bar (L.P) at generation point.

16. WARRANTY GUARANTEE:

16.1 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 Purchaser on the enclosed Performa (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 installation, commissioning & successful trial run which will be extended in case of breakdown within warranty period.

16.2 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. Rejected / broken stores shall be disposed by the SELLER under his own arrangements. The SELLER will warrant the good quality of all equipment supplied against all defects or failures due to faulty design, material or workmanship.

17. PERFORMANCE BOND

17.1 The SELLER will provide a Bank Guarantee to the tune of 10% of FOB value of the contract on the prescribed Performa attached as **Annexure 'C'** for satisfactory execution of the order. It shall be covered by any Scheduled Bank in Pakistan. The Bank Guarantee shall be endorsed in favour 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 12 months after the successful final acceptance test of the machine. If** 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.

17.2 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.

17.3 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-Explosives, POFs Wah Cantt on request after its expiry or after satisfactory performance of the contract whichever is earlier.

17. 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.

18. 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

19. EXPORT PERMIT

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

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 **12 Months** reckoning from the date of successful **Final Acceptance Test of the Twin Roll Plasticizing Machine alongwith all essential accessories.**

Signature _____

Name _____

Status in the Firm _____

Dated _____

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 **one clear year** 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