


GOVERNMENT OF PAKISTAN
PAKISTAN ORDNANCE FACTORIES
WAH CANTT

CORRIGENDUM

NOMENCLATURE			Tender Opening Date	
			FOR	READ
Kneading Machines	No. Wah-1800-12-KM(TBP)-D.O(JBHC)	20 th Dec 2024	23 rd January 2025	13 th February 2025
Hydraulic Extrusion Presses	No. Wah-1800-12-EXT(TBP)-D.O(JBHC)			
Rotary Cutting Machine	No. Wah-1800-12-CM(TBP)-D.O(JBHC)			
Propellant Sifting Machines	No. Wah-1800-12-SM(TBP)-D.O(JBHC)			
Drum Type Rotary Blending Unit	No. Wah-1800-12-BLU(TBP)-D.O(JBHC)			

Note: All other terms and conditions will remain unchanged.


(Raheel Anjum)
Managing Director
POF JBH COMPLEX
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(Foreign Supplies)



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

To,

Dear Sir,

Reference: T.E # **Wah-1800-12-EXT(TBP)-D.O (JBHC)** Dated **20th December 2024**

You are requested to submit quotations for the item(s) noted in the Schedule to the Tender. Offers should be sent duly sealed in an envelope. Please note the following instructions for filling the tender: -

1. SUBMISSION OF TENDER

1.1 Tenders will be opened at **1100** hours on **23rd 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-EXT-D.O(JBHC)**

Tender to be opened on: **23rd 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 **Hydraulic Extrusion Presses along with 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. Hydraulic Extrusion Presses along with related accessories
- ii. Spares
- iii. Erection, Commissioning & Trial Production Run
- iv. Documentation
- v. Training (Abroad & Onsite)
- vi. 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 Octroi 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.
 - vii. 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
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PAKISTAN ORDNANCE FACTORIES

Schedule To Tender Enquiry No. **Wah-1800-12-EXT(TBP)-D.O(JBHC)**

Dated **20th December 2024** to be opened on **23rd 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.	Hydraulic Extrusion Presses along with related accessories (Technical Details are attached as Annex-A)				
ii.	Spares				
iii.	Erection, Commissioning & Trial Production Run				
iv.	Documentation				
v.	Training (Abroad & Onsite)				
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 HYDRAULIC EXTRUSION PRESSES
FOR TBP ALONG WITH RELATED ACCESSORIES, QTY. 02 Nos.**

1. **NOMENCLATURE** Hydraulic Extrusion Presses along with related accessories
2. **QUANTITY** 02 Nos.
3. **MAIN FEATURES OF EQUIPMENT**
 - 3.1 **GENERAL REQUIREMENTS**

Hydraulic Extrusion Press for production of Triple Base Propellants along with all essential accessories and safety devices.
 - 3.2 **MACHINE CAPACITY**

Capacity of each Extrusion Press: 1.0 M.Ton per shift (8 hrs) on three shift basis.
 - 3.3 **MACHINERY REQUIREMENTS**
 - 3.3.1 Both the Presses must be capable to function independently and simultaneously as per production requirement.
 - 3.3.2 The presses must have independent oil based hydraulic drive system. Each press shall have adjustable following parameters keeping in view safety & production capacity;
 - a) Idle Traveling
 - b) Idle Speed
 - c) Extrusion Speed
 - d) Return Speed
 - 3.3.3 Each Hydraulic Extrusion Press should have 02 cylinders rotate-able around the shaft, one for pre-pressing & other for final extrusion. Propellant Dough loading capacity in each cylinder should be in the range of 10 ~ 25 Kg.
 - 3.3.4 Required working pressure for Pre-pressing shall be in the range of 120-140 Kg/cm². The pressure should be displayed on the panel/screen.
 - 3.3.5 The normal extrusion pressure for final pressing shall be in the range of 150~350 Kg/cm². The system must have safety valve to release the excessive pressure of hydraulic pump. The pressure should be displayed on the panel/screen.
 - 3.3.6 Both the presses should have separate and independent control panels, operate-able through manual and semi automatic mode.
 - 3.3.7 Speed of extrusion plunger should be adjustable as per convenience of operator.
 - 3.3.8 It must be ensured that all electrical equipment conform to, Ex, Exi ratings as & where required.
 - 3.3.9 Hydraulic / Pneumatic system for lifting and off loading of dough barrels into the pre pressing cylinder should be provided with each press.
 - 3.3.10 Propellant compatible / suitable cords collection system being extruded from the press.
 - 3.3.11 Each Extrusion press should be equipped with all necessary safety devices to ensure safety of equipment and operator.
 - 3.3.12 All necessary equipment including piping, fittings, valves, flanges, flam proof cables etc. required for the installation, commissioning of extrusion presses should be part of the scope of supply.
 - 3.3.13 Both the extrusion presses are to be housed in an existing building shown in the attached drawing. This existing building shall be modified so that each press could be installed in a separate room whereas a common motor room shall be provided adjacent to the two press rooms.
 - 3.3.14 In case available building cannot be amended to serve the intended purpose, supplier will provide the complete drawings for the construction of new building for the installation of the extrusion presses.

Following systems for the two press rooms shall also be part of the scope of supply;

 - i) Suitable fire detection and suppression system.
 - ii) Temperature control and Humidification system.
 - iii) Over head Mechanical crane having suitable capacity in each press room
 - iv) Electric operated lift capacity 500kg for lifting of Propellant Dough for extrusion (if reqd)
 - 3.3.15 All motors, electrical devices & controls including hydraulic units should be installed in separate common motor room between both the extrusion press rooms. However, the main equipment of fire suppression system like pressure vessels, water pumps, air compressors, temperature controlling and humidification system will be installed in a separate room adjacent to the building.

4. **SCOPE OF SUPPLY**

4.1 **Hardware (Mechanical and Electrical)**

The following hardware should be included in the supply;

- 4.1.1 Hydraulic Extrusion Presses complete in all respects including essential accessories such as oil based hydraulic drive systems, hyd valves, safety valves, pressure relief valves, hyd actuators, hyd pipes & fittings, oil tanks, vessels, pressure gauges and necessary safety devices to ensure safety of equipment and operator. Suitable fire detection & suppression system, temperature controlling and humidification system, and all other necessary safety devices to ensure safety of equipment and operator.
- 4.1.2 The fire detection & suppression system comprise of following;
- 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) Jockey 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 standby 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) Complete documents and software with system drawings for installation, interconnection of all system equipment, programming and configuration details.
 - xiv) The system shall be capable to detect Fire within 30 milliseconds and start water showering in less than 01 second.
 - xv) 2x Air compressors unit along with air vessels, filters, driers, oils and moisture separators of suitable capacity to supply quality air for instruments & plant requirement.
 - xvi) If required PLC and HMI shall be Allen Bradley or equivalent and programmed in FBD or Ladder Logic and language shall be English at all levels. Software and interface/cables for PLC and HMI to communicate with PC.
 - xvii) Software for all equipment shall be capable for work and re-work at all levels of application and shall also include all types of communication cables and interfaces required in duplicate alongwith Foxboro HHT50 configurator release2 Tablet PC and un-restricted software licenses with software backup in form of CD / DVD.
 - xviii) Fire simulator for testing of system on actual simulation of fire with 10 Nos UV & IR bulbs / lamps.
 - xix) Fluke 754 documenting process calibrator.
 - xx) There shall be no password in any equipment at any level of application. All parameters and programs shall be free to access for read, write and edit.
- 4.1.3 The Temperature Controlling (30°C max.) & Humidification (relative humidity 50% min.) System should comprise of following:
- i) Common Condensing Unit having dual compressor (one standby) and Air Handling Unit including refrigerant cooling coil & steam heating coil to maintain the require temperature and humidity throughout the year and independent Humidification and Temperature control on each room's particular duct having digital display, set point & digital / electronic sensing of temperature & humidity independent inside each room in intrinsically safe version.
 - ii) Ducting System in Galvanized Iron(G.I). Due to safety reasons, Air handling Unit (AHU) shall intake fresh outside air and no air shall be returned to AHU from the rooms (price of ducting system alongwith design to be quoted separately).
 - iii) Temperature & humidity paperless recorder with intrinsically safe inputs common for all rooms and shall be installed in the Motor Room in at least IP55 enclosure.

- 4.1.4 All types of erection, installation materials including steel structure for supporting of machinery, hydraulic system & piping etc.
- 4.1.5 Necessary fire-retardant cables, cable trays and accessories required for electrical and instrument installations.
- 4.1.6 Start / Stop control station for all motors and pumps etc. with volt and ampere meters, phase failure & reverse protection and overload protections.
- 4.1.7 All valves, interconnecting piping, fitting, gaskets, couplings, bolts & Nuts etc.
- 4.1.8 Consumables required during installation of machinery.
- 4.1.9 The following accessories are also required in non ferrous and non sparking material:

i	Complete Dies for Extrusion of Tube & rosette shape Triple Base Propellant grain for carrying out trial production (Drawing of existing dies are attached for reference)	10 Nos each
ii	Complete Dies for Extrusion of 7.62x39 mm single Base Propellant production (Drawing of existing dies is attached for reference and guidance)	06
iii	Complete Dies for Extrusion of 12 Bore shot gun ammo single Base Propellant production (Drawing of existing dies is attached for reference and guidance)	06
iv	Blank Extrusion Dies	100 Nos
v	Mould for die holder	10 Nos
vi	Sealing rings	100 Nos
vii	Propellant Dough Barrels having capacity commensurating with pre pressing cylinder of extrusion press	50 Nos

4.1.10 01xNarrow Gauge Engine suitable for inter process-buildings transportation of propellant.

4.1.11 **CIVIL WORKS.**

Civil construction work for modification of the existing building, as required by the supplier, according to the offered machinery, will be executed by the purchaser as per design and materials specifications provided by the supplier.

4.2 **SPARE PARTS**

4.2.1 Two years essential spares must be included in the scope of supply. Item wise detail must be included in technical offer, indicating price of each item separately.

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

MECHANICAL SPARES

i.	Rotate-able Cylinders	=	01 set
ii.	Hydraulic Piston Shaft for pre-pressing	=	02 No
iii.	Hydraulic Cylinder for die-ejector	=	02 No
iv.	Main ram for final pressing	=	02 No
v.	Hydraulic pump with motor & starter	=	01 No
vi.	Set of Seals & joint Pressure rings alongwith complete specification	=	04 sets
vii.	Installation & Maintenance Non-Ferrous / Non-Sparking Tool kit	=	02 sets
viii.	Flexible high pressure hydraulic pipe	=	01 against each installed
ix.	Hyd valves all types	=	01 against each installed
x.	Bearings for Hyd pumps	=	02 sets
xi.	Spares for chillers,	=	01 x compressor, and 1x valves against 03 installed
xii.	Air compressor	=	Suction and delivery valves, & Filters one against each
xiii.	Spares for temperature control & Humidification system		
xiv.	Spares for pressurised water system of sprinkler system	=	01 against 2

ELECTRICAL SPARES

i.	IR3 sensors	=	05 No.
ii.	UV/ IR3 combined sensors	=	05 No.
iii.	Manual release	=	06 No.
iv.	Break glasses	=	25 Nos
v.	Hydraulic Solenoid Valves	=	one against each installed
vi.	Sprinkler system solenoid valves	=	20 Nos.
vii.	Deluge water solenoid valves	=	01 against each installed
viii.	PCB Card	=	01 against each installed

- ix. Complete PLC & HMI with all I/O cards = 01 set against each installed
- x. Humidity sensor = 01 against each installed.
- xi. All devices including gauges, controllers, sensors, push buttons, limit switches, proxy sensors, intrinsic barriers, contactors and overloads = 01 against each installed
- xii. Bearings for all electric motors = 01 against each.

5. **ERECTION / INSTALLATION & TRIAL RUN OF MACHINERY**

- 5.1 Machinery will be installed by the purchaser's personnel under the working supervision of seller's engineers / experts.
- 5.2 Commissioning of machinery and trial production will be carried out by seller's Engineers. Purchaser shall provide the required number of Operators and Technicians for the commissioning and trial run.
- 5.3 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 supplier. Local transport shall be arranged by the purchaser.
- 5.4 The supplier shall provide the complete time schedule to complete the installation, commissioning and trial run.
- 5.5 It shall be guaranteed that spares shall be available on demand, for at least 15 years after successful installation of Hydraulic Extrusion Press and related equipments.

6. **TRIAL RUN OF MACHINERY**

The trial run of each Extrusion Press will be considered successful if it produces requisite quality and quantity of Propellant for a continuous, round the clock operation of 15 x days as mentioned in para 3.2 [1.0 M.Ton per shift (8 hrs) on three shift basis]

6b. **DOCUMENTATION**

- 6.1 The supplier will be required to furnish relative technical data (4 printed & soft copies each in English language) including the following: -
 - 6.1.1 Detailed civil engineering design indicating foundation holes, static and dynamic load etc. Also layout showing safety installation, electrical installation, utilities, humidification and temperature controlling system etc.
 - 6.1.2 Detailed Drawings & Specifications of the Machinery.
 - 6.1.3 Detailed Erection drawings.
 - 6.1.4 Specifications of materials not included in the supplies but necessary for integration of the offered machinery.
 - 6.1.5 Instructions for start up and shut down of the machinery.
 - 6.1.6 Maintenance and services manuals of the machinery.
 - 6.1.7 Safety and labour protection instructions.
 - 6.1.8 Operation manual of Hydraulic Extrusion Press.
 - 6.1.9 Soft and hard copy of all parameters programmed to programmable / configurable instruments, panels, equipment and PLC & HMI.
- 6.2 The supplier shall provide phase-wise time plan indicating each activity starting from signing of contract to final trial run.

7. **CLIMATIC CONDITIONS**

- 7.1 Temperature:
 - Winter = 0 to + 20 °C
 - Summer = 30 to 52°C.
- 7.2 Relative Humidity = 25 to 90%
- 7.3 Average Annual Rainfall = 1050 mm
- 7.4 Wind Speed, Max. = 100 mph
- 7.5 Altitude Ground Level at site = 460 Mtr above sea level
- 7.6 Earthquake Value = 8 on Richter scale

8. **AVAILABLE UTILITIES** Utilities as per following are available at battery limit:

- 8.1 Electricity 230/400 Volts \pm 10%, 50Hz.
- 8.2 Raw Water at 2 bar
- 8.3 Steam at 4 bar
- 8.4 Compressed air at 3-4 bar
- 8.5 The supplier will provide data of consumption of utilities related to electricity, water, steam and compressed air.

9. **TRAINING ON SUPPLIER SITE**

- 9.1 The Supplier shall train 06 persons (Production, Maintenance & Instrumentation) on similar equipment at the firm's premises or at the location of similar installation under supplier's arrangements, for a period of 02 weeks.
- 9.2 Cost of Training including boarding, lodging and internal travelling will be seller's responsibility. However, return air tickets will be arranged by the purchaser.

10. **PRE-DELIVERY INSPECTION**

- 10.1 The supplier shall arrange Pre-Delivery Inspection at their site and at the site of their sub-contractors and vendors.
- 10.2 PSI should be carried out by a team of 03 members for a period of 01xweek excluding journey period.
- 10.3 Cost of PSI including air tickets, boarding, lodging will be borne by purchaser. However local transportation will be arranged by the supplier.
- 10.4 Inspection facilities for extrusion presses and related accessories such as tools, test equipment, instrument etc will be provided by supplier in accordance with the relevant specifications.
- 10.5 The Pre-Shipment Inspection will take place in following manner;
- i. The team will inspect the unit in respect of material of construction, electrical & instrumentation specifications, spares quality and quantity.
 - ii. Verification that the equipment conforms to the ordered specifications. The team will check the test certificates of the relevant items.
 - iii. Operation of the extrusion presses with the relevant media.

11. **TECHNICAL SUPPORT**

The supplier shall confirm that after successful commissioning and trial run of the Hydraulic Extrusion Press, 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 for a period of 15 years, commencing from the date of completion of the project.

ORIGIN

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

12. **SEALED QUOTATION ON FOB BASIS**

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

13. **TECHNICAL PROPOSAL** Comprehensive Technical Proposal must contain all the requirements mentioned in the Technical Specification of the machine.

14. **COMMERCIAL PROPOSAL** Comprehensive Commercial Proposal shall contain total price of the project including: -

- i) Price of Hydraulic Extrusion Press with all accessories.
- ii) Price of documentation
- iii) Price of foreign training
- iv) Price of Pre-Shipment inspection.
- v) Price of installation, commissioning and trial run
- vii) Price of two years spares against each item.
- viii) Price of each item mentioned at article 4.2.2.

15. **WARRANTY GUARANTEE**

- 15.1 The machine and accessories shall be accepted on Supplier's Warranty / Guarantee with regard to quality and quantity subject to 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 Proforma (Annex-C) 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 trial run.
- 15.2 The supplier shall also provide guarantee for meeting the requisite quality and quantity of the products. Quantitative guarantee regarding plant capacities shall be based on one-week continuous run of each extrusion press. 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.

- 15.3 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 or found broken during transit, the Supplier shall immediately replace the rejected / broken stores by acceptable stores, free of cost, and without any obligation to the Purchaser. Rejected / broken stores shall be disposed off by the Supplier under his own arrangements.
- 15.4 The supplier shall warrant that all equipment supplied against the contract will be brand new and good quality free of all defects or failures due to faulty design, material, or workmanship.

16. **PAYMENT TERMS**

Payment will be made as follows;

- 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.

17. **SPECIAL CONDITONS**

Special Conditions to be mentioned in the T.E of Hydraulic Extrusion Press;

- i) List of similar plant & machinery installed & commissioned by the firm which are still working satisfactorily, should be provided with the offer.
- ii) Current financial status of the firm should be provided with the offer.
- iii) Before submitting the offer the firm must ensure that they will definitely get export license from the concerned Government authorities of country from where the plant & equipment is to be shipped / provided.

18. **PERFORMANCE BOND**

- 18.1 The SELLER will provide a Bank Guarantee to the tune of 10% of FOB value of the contract on the prescribed Proforma 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 Presses**. 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.
- 18.2 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.
- 18.3 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.

19. **EXPORT PERMIT**

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

20. **REFERENCE LIST**

The Seller shall provide list of similar kneading machines which have been provided to different customers.

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 **Hydraulic Extrusion Presses along with related 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 02 clear 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.

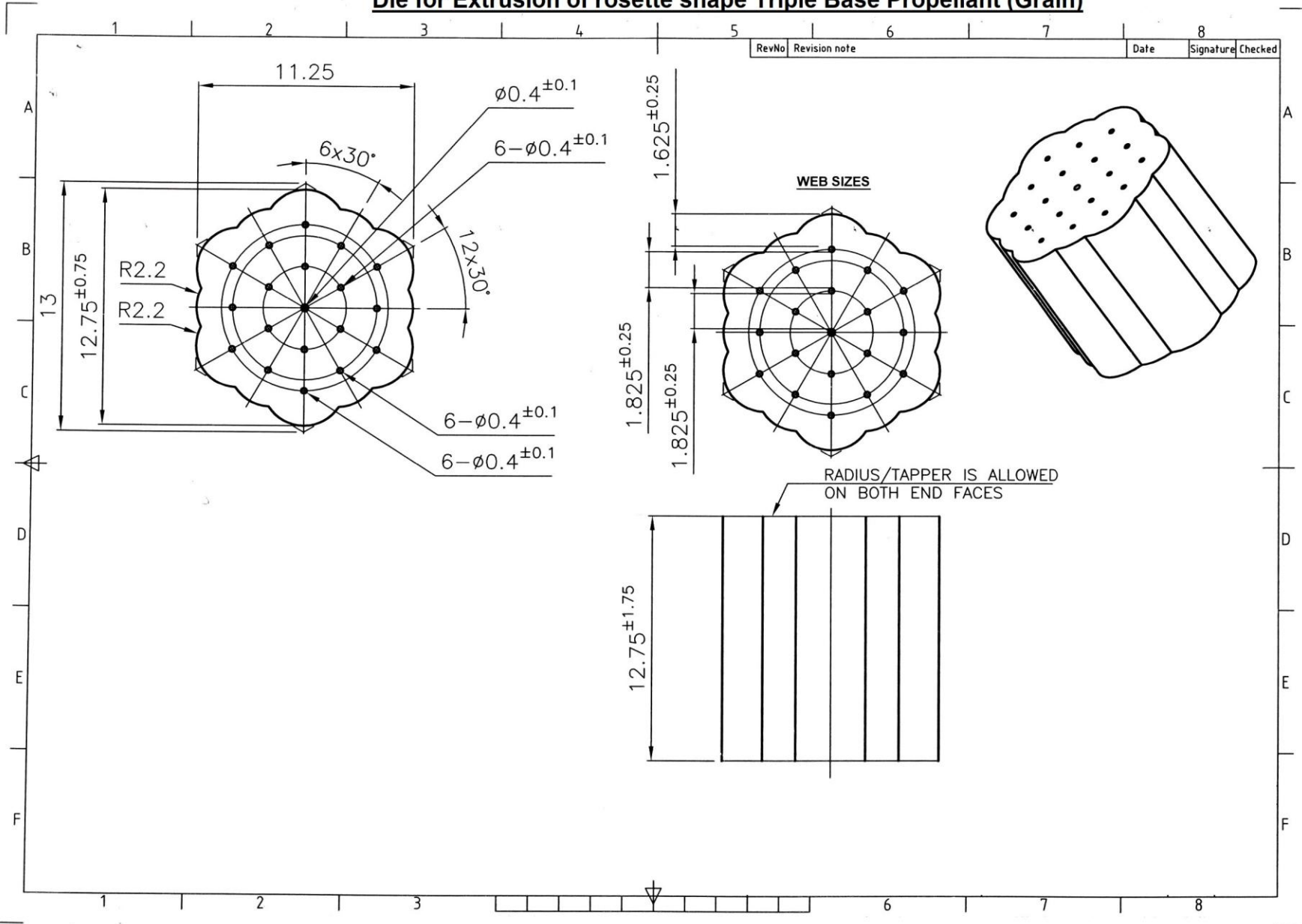
- d) That we shall inform your office regarding termination of the validity of this Bank Guarantee one clear month before the actual expiry date of this Guarantee.
- e) That with the consent of our customer you may amend/alter any term/clause of the contract or add/delete any term/clause to/from this 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: _____

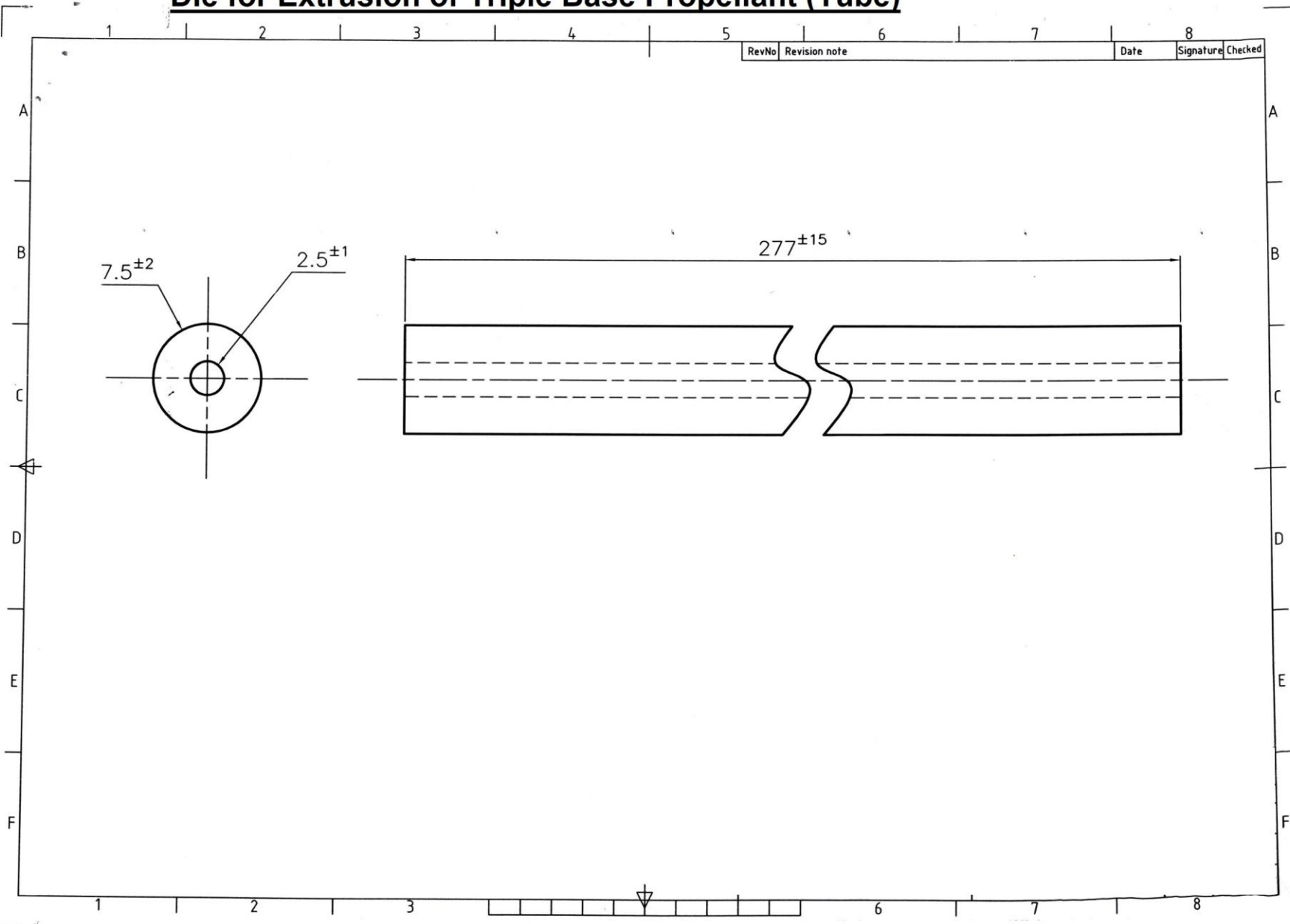
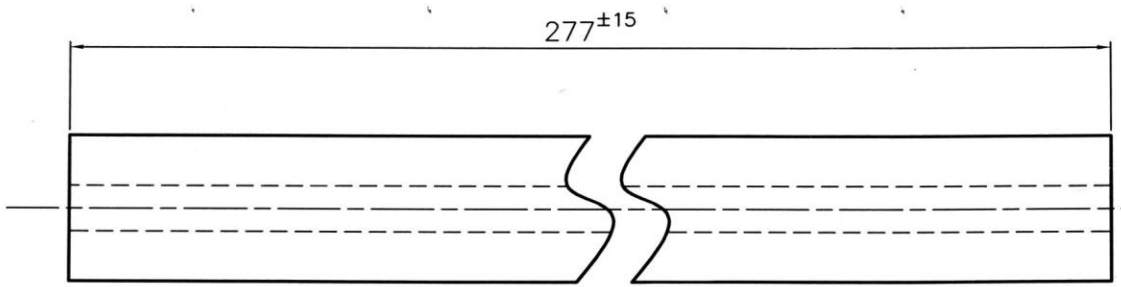
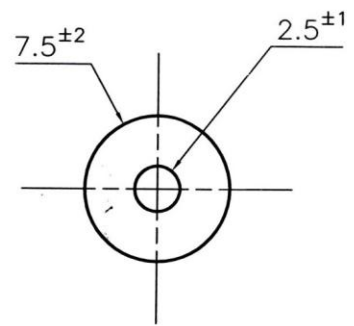
Bank Seal and Signatures

Die for Extrusion of rosette shape Triple Base Propellant (Grain)

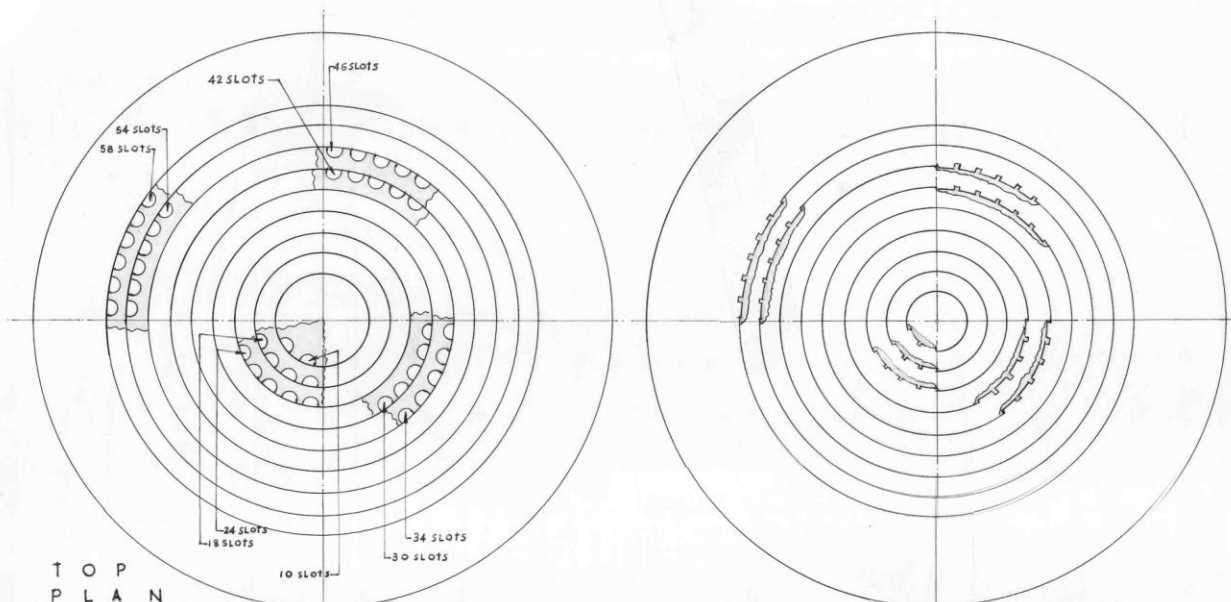


Die for Extrusion of Triple Base Propellant (Tube)

RevNo	Revision note	Date	Signature	Checked



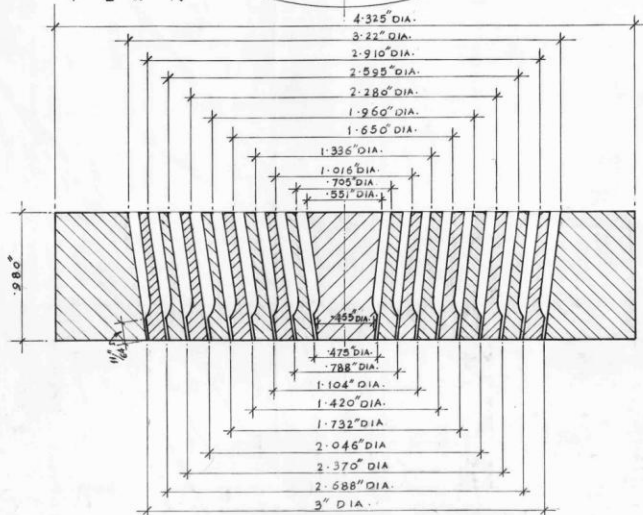
DIE FOR SHOT GUN AMMO PROP MANUFACTURING



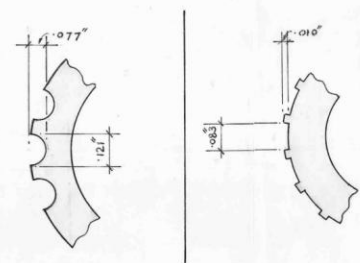
TOP PLAN

BOTTOM PLAN

- GENERAL NOTES**
- 1 - TOLERANCE ON OPEN DIMENSIONS $\pm .005"$
 - 2 - ALL SHARP EDGES TO BE REMOVED
 - 3 - WORKING SURFACE MIRROR POLISHED
 - 4 - MATERIAL - TOOL STEEL



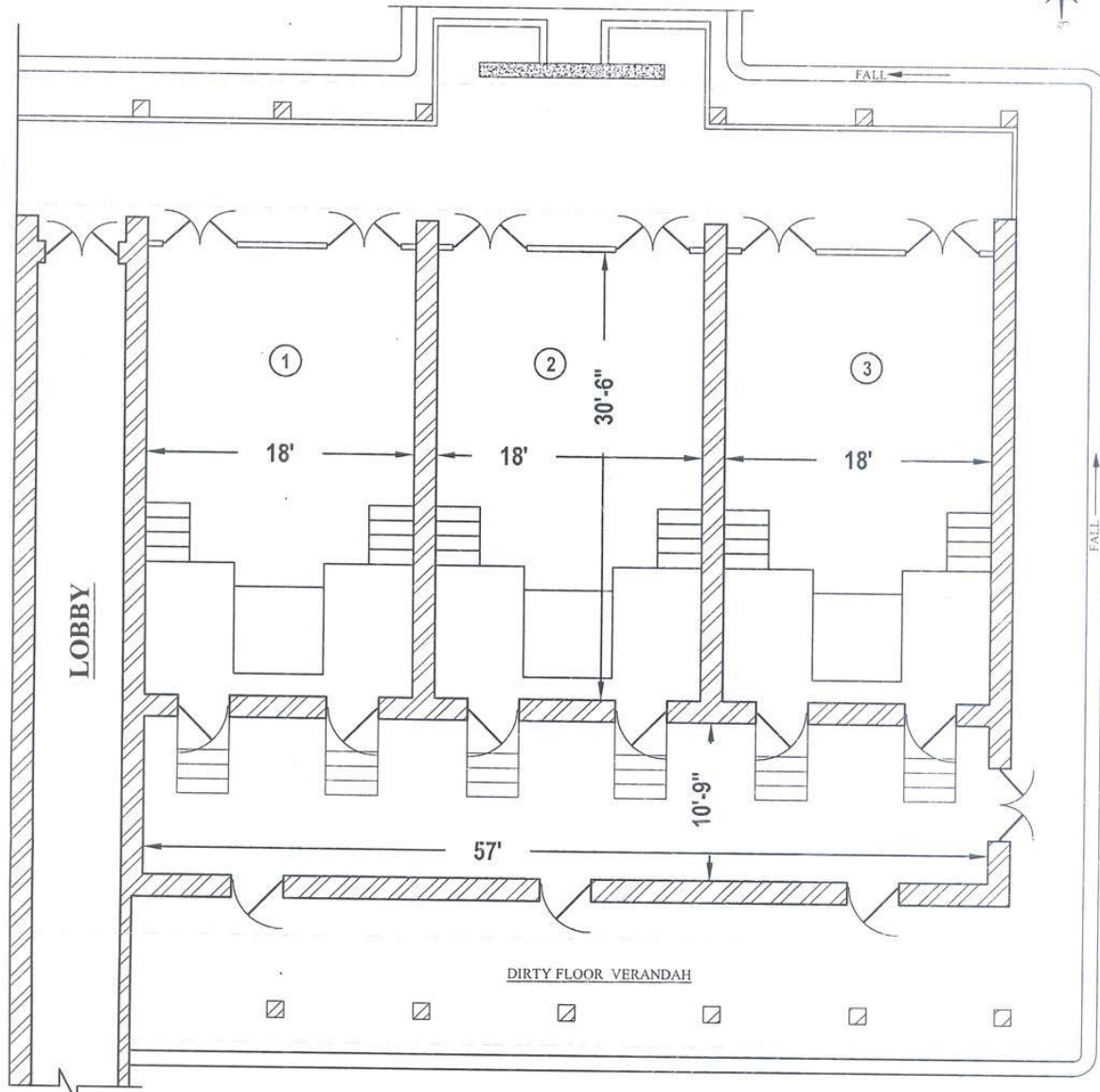
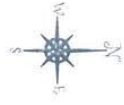
SECTIONAL ELEVATION



DETAIL OF TOP SLOT | DETAIL OF BOTTOM SLOT

SCALE - 4" = 1"

DETAIL OF EXTRUSION PRESS ,BLDG NO. 14/07-C



KEY

BLDG.# 14/07-C ROOM no. (1 to 3)
INSTALLATION FOR NEW EXTRUSION PRESS.
DATE : -09-2024

/x/635