

Government of Pakistan PAKISTAN ORDNANCE FACTORIES TENDER EQUIRY

M/s

Dear Sirs,

Reference: **TENDER ENQUIRY NO.**

2500-FP-PRESS-PUR-BM-CAPT, Dated:- 06-01-2025

You are requested to submit sealed quotations for the item (s) noted on the Schedule to the Tender. Please note the following instructions for filling the tender:-

1 SUBMISSION OF TENDER.

- 1.1 Tenders will be opened at 1200 hours on <u>10-02-2025</u> and must reach at Bid Centre adjacent to Rabita Hall at least half an hour earlier than the opening time. The tender received late will not be entertained. You may witness the opening of the tender if you so desired. If a representative is deputed, he should bring a letter of authority from you and request should receive at least 07 days earlier from tender opening date.
- 1.2 Only one tender should be included in one envelope. The outside of the envelope should be inscribed with: -

Tender Enquiry No:2500-FP-PRESS-PUR-BM-CAPTTender to be opened on:10-02-2025Address as follows:-Bid Centre Adjacent To Rabita Hall

Bid Centre Adjacent To Rabita Hall GM-PPC-SAA & BM POFs WAH CANTT (PAKISTAN).

1.3 If envelope do not indicate reference of T.E or received late, the same may be returned unopened.

1.4 **EVALUTION CRITERIA.**

All the technical proposals will be evaluated/scrutinized initially and commercial proposals of only those bidders will be opened who will be technically prequalified/ accepted. Accordingly, Order/contract will be placed on the lowest evaluated/technically qualified bidder.

2 <u>GENERAL INSTRUCTIONS REGARDING PREPARATION OF</u> <u>QUOTATIONS.</u>

2.1 For Plant and Machinery, you are required to quote in two parts: -

Part I "Technical Offer": It should exclusively give technical details and literature/ brochures of the offered plant/machinery and equipment; validity date; delivery schedule; and signed undertaking given on the schedule to this Tender Enquiry. It must not indicate price, costs etc.

Part II "Commercial Offer": It should indicate the commercial terms e.g. price, terms of payment, mode of payment, mode of supply. Each part should be placed in a separate sealed cover. The envelope should be inscribed with: Part I "Technical Quotation without Price" and Part II "Commercial Quotation with Price".

- 2.2 Tendering procedure as laid down in PPRA Rule No. 36(b) i.e. Single Stage two envelopes will be applicable.
- 2.3 The quotation must remain valid for, at least **120 days** from the date of opening of tenders (Commercial Offers).
- 2.3 The quotation should hold good for any reduced or enhanced quantities without notice.
- 2.4 In the event of non-acceptance of offer, intimation may be given to the tenderers bidders on their request.
- 2.5 Conditional offers or alternative offers are likely to be ignored.
- 2.6 Submission of the offer through an agent in Pakistan should be avoided. In case it is considered inevitable, the original proforma invoice must invariably accompany the agent's quotation from the principals/manufacturers.
- 2.7 Country of origin and port of shipment to be stated.
- 2.8 Declaration form as per **Annex-'H'** is required to be submitted by the supplier.
- 2.9 The offer of the principal must clearly indicate whether the rate quoted is inclusive of agent's commission, and if inclusive rate of commission included be specified.
- 2.10 Suppliers will render necessary information regarding hazardous effects on environment of materials/products supplied by them, in their quotations and shipping/dispatch documents.
- 2.11 If the requisite information is not furnished on the T.E form or offer received is not in conformity with the requirement of T.E such offer shall be ignored.

3 **BID QUALIFICATION CRITERIA.**

- 3.1 The right to accept or reject any offer in full or in part, is hereby reserved.
- 3.2 Detail of infrastructure available with the firm. Mention test equipment, standard and qualification criteria.
- 3.3 Detail of engineering expertise with qualification and experience.
- 3.4 Standard follow for manufacturing of extrusion plant e.g. ISO, DIN, BS, ASTM, or other.

4. 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 Director Admin POFs Wah Cantt. The tender fee instrument in original must be provided on day/date of tender opening in the bid Centre.

5. BID SECURITY

5.1 A copy of bid security should accompany the tender in shape of deposit at call receipt/Pay order/Banker Cheque from schedule bank drawn in favour of **GM-PPC-SAA&BM (POF WAH CANTT).**

5.2. Bid security instrument in original must accompany with the commercial offer as under: -

а	Registered/indexed firms incl foreign firms – 2% of quoted value subject to max ceiling of
	Rs. 0.50 M.
b	Registered/un-indexed firms incl foreign firms - 3% of quoted value subject to max
	ceiling of Rs. 0.75M.
с	Unregistered firms incl foreign firms – 5% of quoted value subject to max ceiling of Rs.
	1.00 M.
d	Govt. organization/production units/state owned enterprises/welfare projects of Svcs HQ
	– Rs. 0.50 M. Can be waived off on request by DG (C).
e	Bid money will be returned to un successful (less first three lowest quote firms) bidders
	on opening of commercial offers.
f	Bid money will be returned to successful bidder on submission of performance
	bond/unconditional BG.
g	Quotations accompanied with less bid money will be accepted on provisional basis for 10
-	x days after opening of bids. However, the firms are bound to provide/furnish the balance
	bid money within 10 x days after opening of bid otherwise such quotations will be
	ignored or rejected.
h	Offers received without bid security will not be entertained.
i.	Bid money will be forfeited in case the quotation is withdraw before the expiry of its
	validity date.

6. PERFORMANCE BOND.

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

7. FAILURE TO SUPPLY THE STORES

All deliveries must be completed by the specified date. If the failure to deliver the stores within the scheduled time should have arisen from "Force Majeure", which the Purchaser may admit as reasonable ground for further time, he will allow such additional time as he may consider to have been required by the circumstances of the case. Otherwise, he will be entitled, at his discretion, to cancel the contract; and/or, claim liquidated damages up to 2% but not less than 1% of the contract price of the items and their quantities for each and every month or part of a month, beyond the specified delivery date, during which these may not be delivered, subject to a maximum of 10% of the total contract value; or, to purchase from elsewhere, the unsupplied stores at the risk and cost of the Supplier.

8. PAYMENT.

Payment to the supplier will be made through irrevocable letter of credit in the following terms and condition.

- a. 60 % payment will be made to the Supplier against the equal amount of bank guarantee on shipment of the same without PSI or 60 % payment will be made to the Supplier after successful PSI by the consignee at firm's premises.
- b. Balance payment (i.e 40% of Contract amount) will be released after successful installation, commissioning, final acceptance test and training of consignee's personnel at buyers' premises.
- c. All Bank charges incurred in Pakistan in connection with the establishment of LC will be borne by the Purchaser whereas all Bank charges incurred in connection with drawing of payment including charges for confirmation of L.C. by the advising Bank/Foreign Bank will be borne by the Supplier.

9. ARBITRATION.

All matters of dispute or difference, except regarding rejection of stores by the inspector and/or cancellation of contract by the purchaser arising out of this agreement between the parties hereto, the settlement of which is not otherwise specially provided for in this agreement, shall be referred for adjudication to two arbitrators, one to be named by each party, who before entering upon the reference shall appoint an umpire by mutual agreements, and if they do not agree a judge of superior court shall appoint the umpire, the arbitration proceedings shall be held in Pakistan under the Pakistani law. The arbitration awards shall be un-spoken.

10. SECURITY OF INFORMATION.

The tenderers 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 WIL to receive it. Please return the Schedule to the Tender duly signed by the specified date, along with the specifications, drawings etc, if any, enclosed herewith – even if you are unable to quote.

11. WARNING:

In case the firm abstain from making offers or fail to return/acknowledge the tender form by the specified date or three consecutive occasions, no further tender enquiry may be issued to them and their names should be liable to be removed from the approved list.

NOTE:

Offers/bids through **<u>Email & Fax</u>** are not acceptable. The offers/bids must be submitted on firm's original letter head pad through **<u>Mail/Courier</u>**.

MD-SAA & BM POF WAH CANTT.

Phone No.	Exchange: i. 051-9055000 ii. 051-4514000	Direct:	051-905521071
Fax:	i. 051-9271400 ii. 051-9314100	Email:	mdsaa@pof.gov.pk

Address: MD-SAA& Brass Mills, Pakistan Ordnance Factories, Wah Cantt. Pakistan.

PAKISTAN ORDNANCE FACTORIES WAH CANTT

SCHEDULE TO TENDER NO.2500-FP-PRESS-PUR-BM-CAPT, Dated: 06-01-2025

Due on 10-02-2025

1. For Plant & Machinery:

Extrusion plant 2500 MT fully automatic equipped with induction heating furnace and all other accessories like run out section, wire coiler and air-cooling system.

(Qty. 01 No.)."

- 2. Specifications:-
- As per attached 'Annex-A'

3. Special Conditions:

Reputable OEMs/Manufacturer can only participate and required to provide the following information: -

- i. Proof of being an OEM/OEM's representative with profile/brochure and financial status by showing the annual turnover must be provided.
- ii. The bids must be based on firm prices and not on any price adjustable formula.
- iii. Name & address of local agent in Pakistan alongwith authorization letter duly signed/stamped.
- iv. It is not allowed to submit more than one offer through different local agents.
- v. Export license and related matters is the sole responsibility of supplier & it would not be cause of delay in execution of the contract. Confirmation to this effect has to be made
- vi. Proforma Invoice of the principal in original signed and stamped by the principal alongwith authorization certificate in case of any local agent in Pakistan.
- vii. The Bidder shall submit two (2) copies of the technical bid, one of which shall be marked the "Original "and the other "Copy". Financial Bid is required in original only.
- viii. The bidder will also provide detail of cases, which are under process with Govt. & Non-Govt. organization of Pakistan.
- ix. Also intimate the worldwide business detail, experience, and detail of similar Plant/Machinery supplied worldwide with their financial value and references.

4. Undertaking:

Should our offer be accepted, we hereby undertake to supply the stores/render the services contracted on the basis of Conditions of Contract embodied in Form POF 1282, and to deposit the 10% performance bond within the prescribed time, failing which it will constitute a breach of contract, and POF will have the right to purchase the stores/services elsewhere at our risk and cost.

Place	Signature of the Tenderer
Date	Name
Position	Address
	Income Tax G.I.R. No.

TECHNICAL SPECIFICATIONS OF EXTRUSION PLANT 2500 M.T

1. Nomenclature:

Extrusion Plant 2500 MT fully automatic equipped with induction heating furnace and all other accessories like run out section, wire coiler and air-cooling system

2. **Quantity:** - 01 x Nos.

3. <u>Technical Requirements:</u>

- a. Cost effective latest type of Furnace for pre-heating of ingots is required. Temperature required for pre heating of input material ranges from 250 °C to 1000 °C. Detail of materials and ingot sizes are attached as Annex B. Furnace must be capable of pre-heating 45-50 ingots per hour.
- b. All the functions/movements of Ext Press from input material to final size should be fully automatic as well as manual.
- c. Centralized lubrication.
- d. All Electrical / Electronic controls should be PLC based interfaced with HMI. & Controller should be of Siemens or Allen Bradley or equivalent (programming should be in English language).
- e. Operational control should be simple & fully automatic.

4. Input material:

Following are the dimensions used for the input material and specifications.

Nomenclature	Sizes	Specifications
Copper, Copper based alloys (Round Ingots)	 a) 150mm dia x 500mm length b) 185mm dia x 500mm length c) 230mm dia x 500mm length Details of ingot sizes are attached as Annex C. Note: Other Sizes as suggested by OEM to achieve the required output sizes with optimum Force required will be considered. 	Detail specifications with chemical composition attached as Annex D.

5. Output product:

Extrusion Press should be capable of extruding 40 to 50 Nos of ingots per hour.

Ranges of output products.

- a. Wire dia 05mm to 20mm.
- b. Tube dia Outer 20 mm to 180mm & Wall thick 4 mm Min.
- c. Rod dia 18 to 120mm.
- d. Various type of Cross sections, Cross section area equal to 120 mm Max.

Note: Details of Output products list are attached as Annex E.

6. <u>Accessories</u>

- a. The supplier will provide complete tool kit for electrical, electronic, hydraulic Instrument & mechanical maintenance of machines. List of tools to be provided by supplier for selection/amendment.
- b. A series of automated devices must be equipped for reducing the tool changing time and improving the work efficiency such as stem fast changing device, container changing system, container support device and built-in tool changing system.
- c. Handling system for output extruded products such as Run-out system, cooling bed and handling of straight extruded rods/tubes.
- d. Coilers/winding system for wire manufacturing.

7. Hydraulic & Pneumatic System

Detail of following system by addressing under mentioned parameters would be required.

- a. Hydraulic pumps (Type, Technical parameters, Capacity other features)
- b. Coolant pump (Type, Capacity & other features)
- c. Lubrication unit (Type, Capacity & other features)
- d. Hydraulic & Pneumatic valves (Type & its Features)
- e. Containers Sizes (Type & other features)
- f. Pre heating furnace (Type, Capacity & other features)
- g. Electrical & Electronic equipment (All Technical parameters)
- h. Detail list of lubricants coolant used will be shared with alternatives (Type and specifications)
- i. Extrusion speed, Pressing force, Approach force, Return force, Piercer force, Piercer back force, Container towards die, Container from die, Reduction ratio, Eccentricity (All Technical parameters, Capacity other features)

8. Essential Requirements:

- a. Extrusion press should be operational in fully automatic mode and manual mode as well.
- b. Ingot loading system should be automatic and efficient.
- c. Tool changing system must comply to advance technology.
- d. Real time data acquisition and troubleshooting system should be installed.
- e. Preventive maintenance system should be installed which can guide the maintenance team before the minor and major breakdown or failure of the part/equipment.

9. <u>Tooling:</u>

- a. The plant should be supplied duly tooled up for production of copper, copper base alloys, Tube, Rods, Wires and Sections. List of tools to be provided by firm for selection.
- b. Tooling sufficient for two years (4000 working Hrs) production of copper, copper base alloys, Tube, Rods, Wires and Sections shall be supplied by the supplier.
- c. Quick change over of tooling is to be ensured by automatic working cycle.

10. **Spares:**

- a. Two years essential maintenance and operation spares would be supplied along with press, which should be quoted separately.
- b. Spare part list of Electrical, Mechanical, Electronics, pneumatic and Hydraulics should be provided along with specification of each.
- c. List of spares should be shared along with technical offer and spare list will be finalized during PSI.
- d. It shall be guaranteed that spares shall be available for at least 15 years after successful installation / commissioning.

11. Safety:

- a. Plant should be equipped / provided with all safety gadgets/accessories according to following ISO Standards
 - i. ISO 12100 Safety of machinery General principles for design Risk assessment and risk reduction
 - ii. ISO 13849-2 Safety of machinery Safety-related parts of control systems
- b. Noise level: less than 75 db or as per international standards, for all plants/machinery.
- c. The Press should have environmental friendly operational control systems.
- d. Output oil, hydraulic liquid and hot/cold water should be treated and disposed off properly.
- e. The electronic equipment/control panels should be according to IP64 standard.

12. <u>Misc:</u>

- a. System should be safe to handle spike and surge (Transient).
- b. Foundation drawing will be provided by supplier.
- c. All information will be provided by Supplier for various power sources including total power consumption.
- d. The Press should have environmental friendly operational control systems.
- e. Latest production monitoring system and troubleshooting system.

13. Site Conditions and Available Services:

a. Temperature:

	• Winter	=	0°C to + 25 °C	
	• Summer		= + 25 to 50 °C	
b.	Relative Humidity	=	25 to 90%	
C.	Earthquake Value	=	7.0 on Richter scale	
d.	Electricity 400 Volts, conditions.	50 Hz	, Three Phases.	<u>+</u> 5 % in normal
e.	Electricity 230 Volts, contingency conditio		, Single Phase	<u>+</u> 10 % in
f.	Compressed air pres at site	sure		5 bar (Max) available

14. Backup Service Support:

The supplier shall confirm that after Installation of Extrusion Press, there shall be backup support at least 15 years 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 production and operation of press.

15. **Documentations / Literatures**:

Literature must be in English Language inclusive in both soft and hard form.

- a. 04 x sets of complete operating manuals.
- b. 04 x sets of maintenance manuals.
- c. 04 x set of Manual for Troubleshoots of hydraulic system, electronics /electrical control system and pneumatic system.
- d. Complete access and backup of programming software (Life time license) along with program and programmer (Laptop i9/latest generation)
- e. 04 x sets of Dimensional drawings of mechanical parts, assembly, subassemblies
- f. 04 x sets of Tooling and supportive parts dimensional drawings
- g. Details of electric and electronics drawings/schematics.
- h. Brochures of the offered model.

16. Pre-Shipment Inspection and Training

- a. Supply of Extrusion Press shall be subject to Pre-Shipment Inspection (PSI) and acceptance by the team designated by purchaser comprising of 04 x officials for 02 x week on purchaser expenses.
- b. The inspection facilities such as tools, test equipment, instruments etc. would be provided by the suppliers in accordance with the relevant specifications.
- c. The supplier shall provide assembly protocol during PSI, including assembly of Control panel, Pneumatic system, Hydraulic system and electrical components, electronic items and spare parts list.
- d. During PSI the idle working of all parts/assembly of extrusion press will be monitored and inspected.
- e. Verification and inspections of equipment, parts, assembly and subassembly
- f. The supplier will intimate schedule of training and number of men required for training at premises of OEMs or its sub-contractors. Supplier has to ensure complete transfer of knowledge of operation, hydraulic system, pneumatic system, electrical/electronic system & PLC training and troubleshooting. Training will be free of cost.
- g. The M/c will be dispatched only after the supplier's receives the pre-delivery acceptance certificate issued by the purchaser certifying that the equipment has qualified the satisfactory working performance trial by PSI team.
- h. The Extrusion Press would be dispatched only after the supplier's receives the pre-shipment trials acceptance certificate issued by the purchaser.
- i. Rejected equipment's will be removed and replaced with the acceptable one by the Supplier at his own expense, within a specified time. The supplier will render warranty / guarantee certificate.

17. Installation, Commissioning and Onsite Training

- a. The Extrusion Press shall be commissioned, and trial production of the machines shall be carried out by supplier's engineers. However, Purchaser shall provide required number of operators and technicians for the commissioning and trial production of the machines.
- b. The supplier is to indicate the total man-weeks of his engineers / technicians required for installation, commissioning and trial production of the machines. Terms and conditions are to be stated clearly. All expenses, including boarding & lodging, air travel and daily allowances of the engineers / technicians are to be borne by the supplier. Local transportation shall be arranged by the Purchaser.
- c. The oil and process lubricants required 1st time to run the machines shall be provided by the supplier free of cost.
- d. The oil and process lubricants required for 1st replacement shall be provided by the supplier.

- e. During stay on site at purchaser's premises, supplier's engineers shall train the concerned production, maintenance, programming and instruments personnel for satisfactory & safe use of plants/equipment. Experts of suppler will train the operators and maintenance staff after installation /commissioning and final trial run.
- f. Supplier has to ensure complete transfer of knowledge of operation, hydraulic system, pneumatic system, electrical/electronic system & PLC training and troubleshooting.
- g. List of oil grades and process lubricant utilized by buyer is attached.
- h. Preference to be given once already being used by buyer.
- i. The supplier is to indicate the time schedule with activity charts for the completion of whole project.

18. Final Acceptance Test (FAT)

- a. Final acceptance test will be performed at purchaser premises. This test will be carried out with the technical assistance of the supplier and will comprise successful production of acceptable quality of wire, tubes and rods as per Specified **Annex F.**
- b. The machine shall be commissioned and trial production shall be carried out by supplier's engineers. Purchaser shall provide required number of operators and technicians for the commissioning and trial production of the machine. Trial production run carried out on following terms and conditions.
 - i. Production of wire/coils for 05 working days (08 hour/days. Sizes ranges from 05mm to 20mm.
 - ii. Production of Rods for 05 working days (08 hour/days), Sizes ranges from 18mm to 120mm
 - iii. Production of Tubes for 05 working days (08 hour/days)
 Sizes ranges from Tube dia Outer 20 mm to 170mm & Wall thick 4mm Min.

Note: Detail of functional trial run including ingot sizes, day wise production is attached as Annex F.

Note: Rejection percentage should be less than 5%.

c. The output product produced from the input material provided by the purchaser must clear all the requirements and specifications mentioned in Annex.

- d. The components produced from the input material provided by the supplier must clear the following parameters:
 - i. <u>Visual Inspection</u>: Wire, Rod and Tubes produced would have no Lumpy surface, Surging, Orange Peel Surface, Pimples on surface, Excessive shrinkage and bubbles on surface.
 - ii. <u>Dimensional Inspection</u>: Wire, Rod and Tubes produced would have to qualify all dimensions as per relevant Annex attached.
 - iii. <u>Critical inspection</u>: Any 2 x Wire, Rod and Tubes at random would be selected for critical inspection to ensure the dimensions as per relevant attached Annex.
- e. Time cycle of each operation on press would be checked to ensure the production output as mentioned by Supplier.
- f. The supplier experts will stay, at supplier cost till the production has been achieved provided such delays are attributable to supplier. Supplier men should stay for 02 week after successful trial run to look after / handle the machines problems at supplier's expense.
- g. The Spares, die, punch, mandrel tools, and Process lubricants consumed during trial production run will be borne by the supplier.
- h. Delay penalty will also be imposed @ 2 % per month of contracted value for the delayed period of achievement of production run of the machines beyond the schedule date of final acceptance and will be deducted from balance 20% payment connected with production run.

19. Acceptance of Offers:

The right to accept or reject any offer in full or in part is hereby reserved.

20. Delivery Schedule:

The Extrusion press will be delivered as per following terms:

- a. The delivery will be on FOB basis. Freight may be indicated.
- b. Seaworthy packing.
- c. Marking and stenciling as per contractual terms and conditions.
- d. Press parts, assembly and subassemblies would be lettered in English and / or internationally recognized symbols.
- e. Machines are required to be made ready for PSI within 08 to 10 months after establishment of L.C.
- f. Dispatch of Extrusion Press must be ensured within 02 x month after successful completion of PSI and Training.

21. Warranty Guarantee:

- a. The Extrusion Press and accessories shall be accepted on Supplier's Warranty / Guarantee with regard to quality and quantity subject to these being technically checked/tested and accounted for on arrival at Consignee's warehouse 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 Preformed attached as **Annex-I** as soon as stores have been dispatched/delivered. This Warranty / Guarantee shall be binding on the Supplier for a period of 24 months reckoning from the date of commissioning of the machines.
- b. In case the stores on checking / test after receipt at Consignee's warehouse are found not conforming strictly to the relevant specification and other particulars are found damaged during transit, the Supplier shall immediately replace the rejected/damaged stores by acceptable stores, free of cost, and without any obligation to the Purchaser. Rejected / damaged stores shall be disposed of by the Supplier under his own arrangements.
- c. The supplier shall warranty the good quality of all equipment supplied against all defects or failures due to faulty design, material, or workmanship.
- d. The supplier shall also provide Guarantee for meeting the requisite quality and quantity of products. In case of any deficiency in term of quality or quantity of products, all related expenditure to fulfill commitment shall be borne by the supplier.

POF 1262 Annex-B

PRE-HEATING TEMPERATURES FOR EXTRUDED MATERIALS

Sr. #	Specification of Ingots	Size	Temperature	
51.#	Specification of ingots	Dia (mm)	Length (mm)	(C°)
1.	DS 2074 CZ 121	150	300,500	
1.	BS-2874, CZ-121	185	500	
2.	DC 2074 C7 122	150	300,500	700-800
∠ .	BS-2874, CZ-122	185	500	/00-800
3.	DC 2974 C7 124	150	300,500	
З.	BS-2874, CZ-124	185	500	
4.	MIL-T-13322	150	200	820-880
3.	Def-stan 95-9/II	150	200	860-900
	Def-stan 13-95/I	150	200,300	
4.		185	200,500	860-900
		230	330,500	
5.	WJ-89 / 73	230	330,500	880-920
6.	MIL-B-20292	230	230,330,500	880-940
7.	BS-1036	150	500	860-900
8.	YB-451-64 (T3)	150	300,500	860-900
9.	YB 457- 64(H-68)	150	300,500	700-800
10.	BS – 2874, CZ-121 (Pb-4)	150	300,500	700-800
11.	BS-2874, C-106	150	300,500	860-900

Note: Preheating temp of Furnace must range from 250 °C to 1000 °C

POF 1262

Annex-C

INPUT MATERIAL INGOT SIZES

6.	Ing	ot sizes	Shoop
<u>Sr</u>	Dia (mm) Length (mm)		Specs
1.	150	200	Def –Stan 13-95/I, MIL-T-13322, Def –Stan 95- 9/II
2.	150	300	Def –Stan 13-95/I, BS-2874, C-106, BS-1036, YB-451-64 (T3), BS – 2874, CZ-122, BS – 2874, CZ-124, YB 457- 64(H-68), BS – 2874, CZ-121 (Pb-4)
3.	150	500	BS-2874, C-106, BS-1036, BS – 2874, CZ-122, BS – 2874, CZ-121, BS – 2874, CZ-124, YB 457- 64(H-68) , BS – 2874, CZ-121 (Pb-4)
4.	185	200	Def –Stan 13-95/I
5.	185	500	Def –Stan 13-95/I, BS – 2874, CZ-122, BS – 2874, CZ-121, BS – 2874, CZ-124
6.	230	230	MIL-B-20292
7.	230	330,500	Def –Stan 13/95-1,MIL-B-20292, WJ 89/73
8.	200	330	Lead (BS-STA-7/L-13A based on BS 223 type A)

Available worksite space Layout

Length 163 ft Width 29 ft Height from crane rail 30 ft

POF 1262 <u>Annex-D</u>

CHEMICAL COMPOSITION OF DIFFERENT SPECIFICATIONS

Sr.	Specification							Chemic	al Com	positior	า					
No.	& Nomenclature	Cu %	Sn %	Pb %	Fe %	AI %	Mn %	As %	Ni %	Si %	Zn %	Sb %	Bi %	P %	S %	Total Impurities
1	BS-1036	99.90	-	0.005	-	-	-	-	-	-	Rem	-	0.001	-		0.03
2	YB-451-64 (T 2)	99.90	0.002	0.005	0.005	-	-	0.002	-	-	0.005	0.002	0.002	-	0.005	0.10
3	Def-Stan 13-95/1	99.85	0.01	0.010	0.03	-	-	0.05	0.10	-	-	0.005	0.0015	0.05		0.060
4	WJ-89/73 (H-96)	95/97	-	0.03	0.10	-	-	-	-	-	Rem	0.005	0.002	0.01		0.2
5	MILB-20292	89/91	-	0.05	0.05	-	-	-	-	-	Rem	-	-	-		0.125
6	Def-Stan 95-9/II (Def-Stan 95-9 / Issue-4)	68.5/72.0	0.03	0.02	0.05	0.005	0.005	0.01	0.10	0.005	Rem	0.005	0.002	0.001		0.05
7	YB-457-64 (H-68)	67/70	-	0.03	0.10	-	-	-	-	-	Rem	0.005	0.002	0.010	-	0.3
8	MILT-13322	64/68	-	0.2/2.0	0.15	-	-	-	-	-	Rem	-	-	-		-
9	IU-921211	57.5/60.5	-	1.0/2.0	0.3	-	-	-	-	-	Rem	-	-	-		1.07
10	YB-457-64	57/60	-	0.8/1.9	0.5	-	-	-	-	-	Rem	0.01	0.003	0.02		0.75
11	BS-2874 CZ-121 (Pb3)	56.5/58.5	-	2.5/3.5	0.3	-	-	-	-	-	Rem	-	-	-		0.7
12	BS-2874 CZ-121 (Pb4)	56.5/58.5	-	3.5/4.5	0.3	-	-	-	-	-	Rem	-	-	-		0.7
13	BS-2874 CZ-122	56.5/58.5	-	1.5/2.5	0.3	-	-	-	-	-	Rem	-	-	-		0.7
14	BS-2874 CZ-124	60.0/63.0	-	2.5/3.7	0.3	-	-	-	-	-	Rem	-	-	-		0.5
15	Lead	-	-	98/99.9												0.2

<u>Annex-E</u>

OUTPUT PRODUCTS ON NEW 2500 MT EXTRUSION PRESS

Sr	.	Specification of
#	Size	Ingots
	Coils	
1	5mm <u>+</u> 0.5mm	•
2	5.50mm + 0.5mm	
3	$6.2 \text{ mm} \pm 0.5 \text{mm}$	
4	$7 \text{ mm} \pm 0.5 \text{mm}$	BS-2874, CZ-122
5	8mm <u>+</u> 0.5mm	BS-2874, CZ-124
6	9mm + 0.5mm	Def-stan 95-9/II
7	10.20mm + 0.5mm	Def-stan 13-95/I
8	10.50mm <u>+</u> 0.5mm	
9	11mm <u>+</u> 0.5mm	
10	12.10mm <u>+</u> 0.5mm	
11	13.7mm <u>+</u> 0.5mm	BS-2874, CZ-122
12	14mm <u>+</u> 0.5mm	BS-1036
13	15mm <u>+</u> 0.5mm	YB-457-64 (H-68)
14	<u>15.2mm + 0.5mm</u>	BS-2874, CZ-122
15	16mm <u>+</u> 0.5mm	IU-921211
16	$17mm \pm 0.5mm$	Def-stan 95-9/II
17	18mm - 0.5mm	YB-457-64 (H-68)
18	18.5 mm ± 0.5 mm	BS-2874, CZ-121
19	18.30mm <u>+</u> 0.5mm	BS-2874, CZ-122
20 21	<u>19.25mm + 0.5mm</u>	YB-457-64 (H-68)
21	<u>19.80mm + 0.5mm</u>	BS-2874, CZ-122
22	Special Section/I Rotor SK/T-297	BS-2874, CZ-121
22	Rotor SK/T-526	D5-20/4, CZ-121
23	Shutter SK/T-525	BS-2874, CZ-122
25	Shutter 26/T-17342	HI 021211
26	Square 25x25mm	IU-921211 BS-2874, CZ-124
	Rods	-
27	20.64mm + 0.5mm	
28	21.6mm + 0.5mm	
29	23.8 mm ± 0.5 mm	BS-2874, CZ-121
30	24mm - 0.5mm	BS-2874, CZ-122
31	25.4mm <u>+</u> 0.5mm	BS-2874, CZ-124
32	$27mm \pm 0.5mm$	IU-921211
33	28.2mm + 0.5mm	Def-stan 13-95/I
34	32mm + 0.5mm	
35	33.3mm <u>+</u> 0.5mm	
36	36.5mm <u>+</u> 0.5mm	
37	38mm <u>+</u> 0.5mm	BS-2874, CZ-121
38	38.0.5mm <u>+</u> 0.5mm	BS-2874, CZ-124
39	39.6mm <u>+</u> 0.5mm	BS-2874, CZ-122
40	40mm <u>+</u> 0.5mm	IU-921211
41	45mm <u>+</u> 0.5mm	
42	50mm <u>+</u> 0.5mm	
43	50.8mm <u>+</u> 0.5mm	BS-2874, CZ-121 (4Pb)
44	63.5mm + 0.5mm	BS-2874, CZ-121
45	76.2mm + 0.5mm	BS-2874, CZ-122
46	90 mm <u>+</u> 0.5mm	BS-2874, CZ-124
47	101.6mm <u>+</u> 0.5mm	IU-921211
48	120 mm <u>+</u> 0.5mm	

Sr #	Size	Specification of Ingots
	Hexagonal Size	
49	8mm(A/F) <u>+</u> 0.5mm	
50	11.10.5mm(A/F) <u>+</u>	
	0.5mm	BS-2874, CZ-124
51	16mm(A/F) + 0.5mm	BS-2874, CZ-124
52	18.05mm(A/F) <u>+</u>	BS-2874, CZ-121
52	0.5mm	D5-2074, CZ-122
53	25mm(A/F) <u>+</u> 0.5mm	

	Tubes	
Sr	Size	Specification of Ingots
1	Outer Dia = 25 mm Inner Dia = 18 mm <u>+</u> 1mm	Def-stan 95-9/II
2	Outer Dia = 38 mm Inner Dia = 34 mm <u>+</u> 1mm	MIL-T-13322
3	Outer Dia = 31 mm Inner Dia = 21.5 mm <u>+</u> 1mm	Def-stan 95-9/II
4	Outer Dia = 34 mm Inner Dia = 21.5 mm <u>+</u> 1mm	Def-stan 95-9/II
5	Outer Dia = 43 mm Inner Dia = 36 mm <u>+</u> 1mm	MIL-T-13322
6	Outer Dia = 48 mm Inner Dia = 40 mm <u>+</u> 1mm	Def-stan 13-95/I
7	Outer Dia = 58 mm Inner Dia = 50 mm <u>+</u> 1mm	Def-stan 95-9/II
8	Outer Dia = 61 mm Inner Dia = 50 mm <u>+</u> 1mm	Def-stan 13-95/I
9	Outer Dia = 118.5 mm Inner Dia = 104 mm <u>+</u> 1mm	MIL-B-20292
10	Outer Dia = 143 mm +1mm Inner Dia = 119 mm <u>+</u> 0.5mm	Def-stan 13-95/I
11	Outer Dia = 153 mm Inner Dia = 125.2 mm <u>+</u> 1mm	Def-stan 13-95/I
12	Outer Dia = 154 mm <u>+</u> 0.5mm Inner Dia = 122 <u>+</u> 0.5mm	Def-stan 13-95/I
13	Outer Dia = 157.7 mm Inner Dia = 129 mm <u>+</u> 1mm	WJ-89 / 73
14	Outer Dia = 175 mm +1mm Inner Dia = 152 <u>+</u> 0.5mm	MIL-B-20292
15	Outer Dia = 50.8 mm Inner Dia = 38.10 mm <u>+</u> 1mm	Lead
16	Outer Dia = 63.50 mm Inner Dia = 44.45 mm <u>+</u> 1mm	Lead
17	Outer Dia = 50.8 mm Inner Dia = 25.4 mm + 1mm	Lead
18	Outer Dia = 88.9 mm Inner Dia = 76.2 mm <u>+</u> 1mm	Lead

<u>Annex-F</u>

FAT SCHEDULE FOR 2500 MT EXTRUSION PRESS

Sr #	Size	Specification of Ingots	Days	Output Product Qty to be Extruded	Container & Size of ingot
	5 5	Coil	8	20.1	
1	5mm <u>+</u> 0.5mm	-	D 1	30 Ingots	
$\frac{2}{2}$	$5.50 \text{mm} \pm 0.5 \text{mm}$		<u>Day 1</u>	40 Ingots	
3 4	6.2 mm <u>+</u> 0.5mm 7 mm <u>+</u> 0.5mm	BS-2874, CZ-		10 Ingots 20 Ingots	
4 5	$\frac{7 \text{ mm} \pm 0.5 \text{ mm}}{8 \text{ mm} \pm 0.5 \text{ mm}}$	122 BS-2874, CZ-		15 Ingots	
5 6	9 mm ± 0.5 mm	124	Day 2	20 Ingots	
7	10.20 mm ± 0.5 mm	Def-stan 95-9/II	Day 2	15 Ingots	
8	10.50 mm ± 0.5 mm	Def-stan 13-95/I		14 Ingots	
9	11 mm + 0.5 mm			43 Ingots	
10	12.10mm + 0.5mm		<u>Day 3</u>	20 Ingots	
11	13.7mm + 0.5mm	BS-2874, CZ-122		46 Ingots	
12	14mm + 0.5mm	BS-1036		08 Ingots	
13	15mm <u>+</u> 0.5mm	YB-457-64 (H-68)		09 Ingots	
14	15.2mm <u>+</u> 0.5mm	BS-2874, CZ-	Day 4	10 Ingots	1. 1
15	16mm <u>+</u> 0.5mm	122	Dayn	14 Ingots	
16	17mm <u>+</u> 0.5mm	IU-921211 Def-stan 95-9/II		13 Ingots	Fo be specified by the su
17	18mm - 0.5mm	YB-457-64 (H-68)		20 Ingots	ם
18	18.5mm <u>+</u> 0.5mm	BS-2874, CZ-121	<u>Day 5</u>	30 Ingots	Φ
19	18.30mm <u>+</u> 0.5mm	BS-2874, CZ-122		14 Ingots	\mathbf{v}
20	19.25mm <u>+</u> 0.5mm	YB-457-64 (H-68)		09 Ingots	D
21	19.80mm <u>+</u> 0.5mm	BS-2874, CZ-122	<u>Day 6</u>	50 Ingots	ē
		Special Section/	Profile Rods		if
22	Rotor SK/T-297	BS-2874, CZ-121	<u>Day 6</u>	20 Ingots	
23	Rotor SK/T-526	BS-2874, CZ-122	<u>, .</u>	50 Ingots	E C
24	Shutter SK/T-525		D 7	30 Ingots	
25 26	Shutter 26/T-17342 Square 25x25mm	IU-921211 BS-2874, CZ-124	<u>Day 7</u>	30 Ingots 20 Ingots	D
20	Square 25x25mm	Rods	s	Zo nigots	
27	20.64mm + 0.5mm		Day 7	50 Ingots	—
28	21.6mm <u>+</u> 0.5mm			25 Ingots	D
29	23.8mm <u>+</u> 0.5mm	BS-2874, CZ-121		10 Ingots	Φ
30	24mm - 0.5mm	BS-2874, CZ-122	<u>Day 8</u>	15 Ingots	$\mathbf{v}_{\mathbf{i}}$
31	25.4mm <u>+</u> 0.5mm	BS-2874, CZ-124		18 Ingots	
32	27mm + 0.5mm	IU-921211		32 Ingots	D
33	28.2 mm ± 0.5 mm	Def-stan 13-95/I	D 0	30 Ingots	D
34 35	32mm <u>+</u> 0.5mm 33.3mm <u>+</u> 0.5mm	-	<u>Day 9</u>	15 Ingots 15 Ingots	pplier
35 36	36.5 mm ± 0.5 mm 36.5 mm ± 0.5 mm			50 Ingots	P
37 37	$38mm \pm 0.5mm$	DS 2074 CZ 121		20 Ingots	
38	38.0.5mm <u>+</u> 0.5mm	BS-2874, CZ-121 BS-2874, CZ-124	<u>Day 10</u>	20 Ingots 20 Ingots	
39	39.6mm <u>+</u> 0.5mm	BS-2874, CZ-124 BS-2874, CZ-122	<u>~~~, 10</u>	30 Ingots	
40	40mm + 0.5mm	IU-921211		20 Ingots	
41	45mm ± 0.5mm			30 Ingots	
42	50 mm \pm 0.5 mm	4	D 44	20 Ingots	
13	50.8 mm ± 0.5 mm	BS-2874, CZ-121	<u>Day 11</u>	50 Ingots	
	63.5mm <u>+</u> 0.5mm	(4Pb) BS-2874, CZ-121		50 Ingots	
		L DC 2074 C7 122		20 Ingots	
45	76.2mm <u>+</u> 0.5mm	BS-2874, CZ-122			
44 45 46	76.2mm <u>+</u> 0.5mm 90 mm <u>+</u> 0.5mm	BS-2874, CZ-124	D. 14	20 Ingots	
45	76.2mm <u>+</u> 0.5mm		<u>Day 12</u>	20 Ingots 30 Ingots 30 Ingots	

<u>Annex-F</u>

FAT SCHEDULE FOR 2500 MT EXTRUSION PRESS

Sr #	Size	Specification of Ingots	Days	Output Product Qty to be Extruded	To be
		0	nal Size		7.0
Specification of Ingots					sui
49	8mm(A/F) + 0.5mm			46 Ingots	p
50	11.10.5 mm(A/F) +			35 Ingots	specified supplier
	0.5mm			_	<u>ed</u>
51	16 mm(A/F) +	BS-2874, CZ-124	Day 13	21 Ingots	<u>р</u>
	0.5mm	BS-2874, CZ-121		_	
52	$18.05 \text{mm}(A/F) \pm$	BS-2874, CZ-122		30 Ingots	the
	0.5mm				(P
53	$25mm(A/F) \pm 0.5mm$	1		20 Ingots	

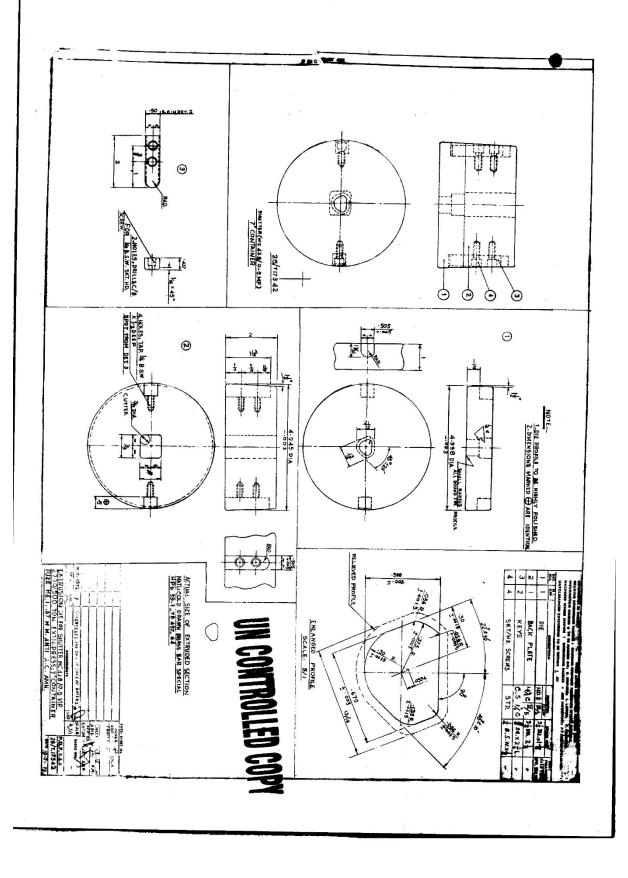
		<u>Tub</u>	es		
Sr	Size	Specification of Ingots	Days/Number of Ingots to be Extruded	Output Product Qty to be Extruded	Container
1	Outer Dia = 25 mm Inner Dia = 18 mm <u>+</u> 1mm	Def-stan 95-9/II	<u>Day 14</u>	40 Ingots	
2	Outer Dia = 38 mm Inner Dia = 34 mm <u>+</u> 1mm	MIL-T-13322	Day 15	41 Ingots	
3	Outer Dia = 31 mm Inner Dia = 21.5 mm <u>+</u> 1mm	Def-stan 95-9/II	- <u>Day 15</u>	39 Ingots	
4	Outer Dia = 34 mm Inner Dia = 21.5 mm <u>+</u> 1mm	Def-stan 95-9/II		40 Ingots	be
5	Outer Dia = 43 mm Inner Dia = 36 mm + 1mm	MIL-T-13322	<u>Day 16</u>	42 Ingots	S
6	Outer Dia = 48 mm Inner Dia = 40 mm + 1mm	Def-stan 13-95/I		40 Ingots	pe
7	Outer Dia = 58 mm Inner Dia = 50 mm + 1mm	Def-stan 95-9/II		38 Ingots	
8	Outer Dia = 61 mm Inner Dia = 50 mm + 1mm	Def-stan 13-95/I		42 Ingots	le
9	Outer Dia = 118.5 mm Inner Dia = 104 mm + 1mm	MIL-B-20292	<u>Day 17</u>	40 Ingots	
10	Outer Dia = 143 mm +1mm Inner Dia = 119 mm <u>+</u> 0.5mm	Def-stan 13-95/I		41 Ingots	
11	Outer Dia = 153 mm Inner Dia = 125.2 mm <u>+</u> 1mm	Def-stan 13-95/I		20 Ingots	th
12	Outer Dia = 154 mm <u>+</u> 0.5mm Inner Dia = 122 <u>+</u> 0.5mm	Def-stan 13-95/I		20 Ingots	e
13	Outer Dia = 157.7 mm Inner Dia = 129 mm <u>+</u> 1mm	WJ-89 / 73	<u>Day 19</u>	40 Ingots	Su
14	Outer Dia = 175 mm +1mm Inner Dia = 152 +0.5mm	MIL-B-20292		40 Ingots	d dd
15	Outer Dia = 50.8 mm Inner Dia = 38.10 mm + 1mm	Lead		20 Ingots	be specified by the supplier
16	Outer Dia = 63.50 mm Inner Dia = 44.45 mm <u>+</u> 1mm	Lead	Day 20	20 Ingots	
17	Outer Dia = 50.8 mm Inner Dia = 25.4 mm + 1mm	Lead	<u>~~~~</u>	20 Ingots]
18	Outer Dia = 88.9 mm Inner Dia = 76.2 mm <u>+</u> 1mm	Lead]	20 Ingots	

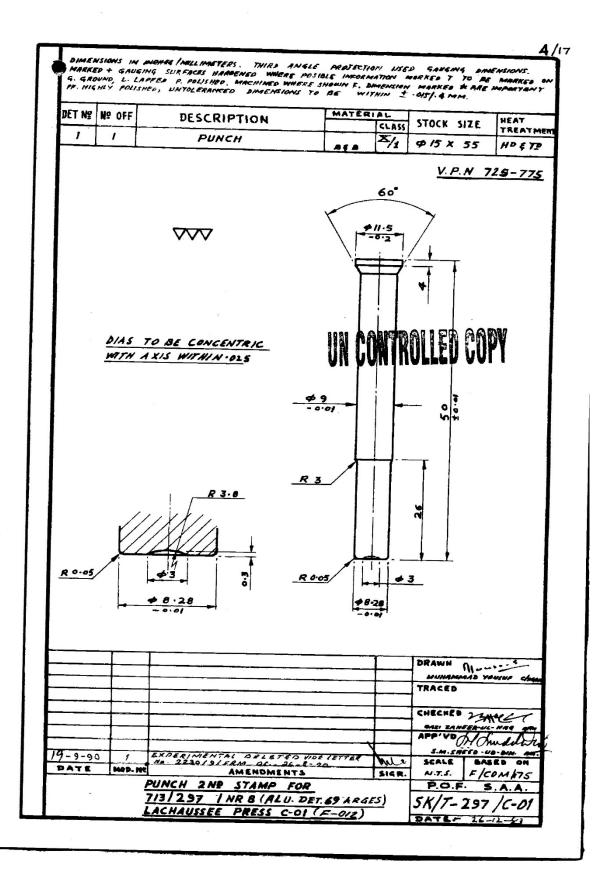
OILS & LUBRICANTS

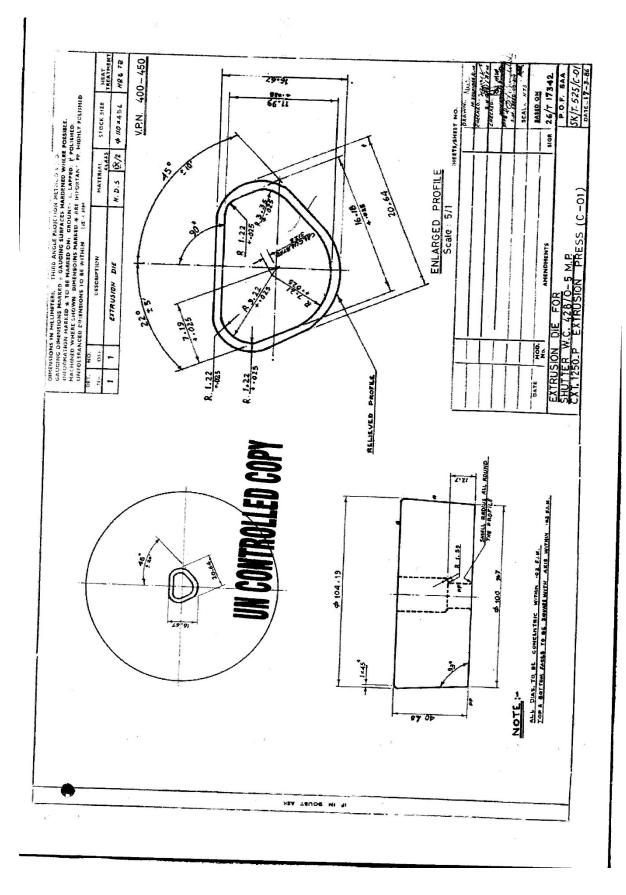
S.No.	Stock Code No.	Description of store	Specification	A/U
1	14-0020-001-11- 5	SHELL ALVANIA GREASE E.P-2 OR EQUIVALENT	SHELL OR EQUIVALENT	KG
2	14-0020-003-11- 1	SHELL ALVANIA GREASE NO-3	SHELL	KG
3	14-0020-004-11- 9	SHELL ALVANIA GREASE NO-2 OR EQUIVALENT	SHELL OR EQUIVALENT	KG
4	14-0041-001-11- 0	TELLOW	IM-1484 'B'	KG
5	14-0073-001-11- 1	SHELL BRAKE OIL (FLUID) OR EQUIVALENT	SHELL OR EQUIVALENT	LTR
6	14-0076-002-11- 6	SHELL SUPER MOTOR OIL NO.30/40 OR EQUIVALENT	SHELL OR EQUIVALENT	LTR
7	14-0080-002-11- 0	SHELL CLAVUS OIL NO.68	W/G	LTR
8	14-0081-001-11- 1	TRANSFORMER OIL	BS-148/1984 INHABITED CLASS-I-A	LTR
9	14-0082-001-11- 0	TROKUT OIL-B	W/G	LTR
10	14-0084-001-11- 8	SHELL GARIA OIL - C OR EQUALENT	SHELL OR EQUIVALENT	LTR
11	14-0084-002-11- 6	SHELL GARIA OIL - B OR EQUIVALEN	SHELL OR EQUIVALENT	LTR
12	14-0085-001-11- 7	SHELL GEAR OIL EP-90 OR EQUIVALENT	SHELL OR EQUIVALENT	LTR
13	14-0087-001-11- 5	SHELL OMALA OIL R-220 OR PSO OIL CASTROL ALPHA SP- 220	SHELL OR EQUIVALENT	LTR
14	14-0087-002-11- 3	SHELL OMALA OIL R-460 OR PSO OIL CASTROL ALPHA SP- 460	SHELL OR EQUIVALENT	LTR
15	14-0088-002-11- 2	SHELL RIMULA OIL NO.C-30	SHELL OR EQUIVALENT	LTR
16	14-0088-003-11- 0	SHELL RIMULA OIL NO.C-40	SHELL OR	LTR
17	14-0088-006-11- 3	40 OR EQUIVALENT SHELL RIMULA R2 EXTRA (20W50)	EQUIVALENT API CF-4 OR EQUIVALENT	LTR
18	14-0088-007-11- 1	SHELL HELIX HX-5 (10W40)	API SN OR EQUIVALENT	LTR
19	14-0089-001-11- 3	SHELL TELLUS OIL NO.C-10 OR PSO OIL PSO SPINCOT -10	SHELL OR EQUIVALENT	LTR

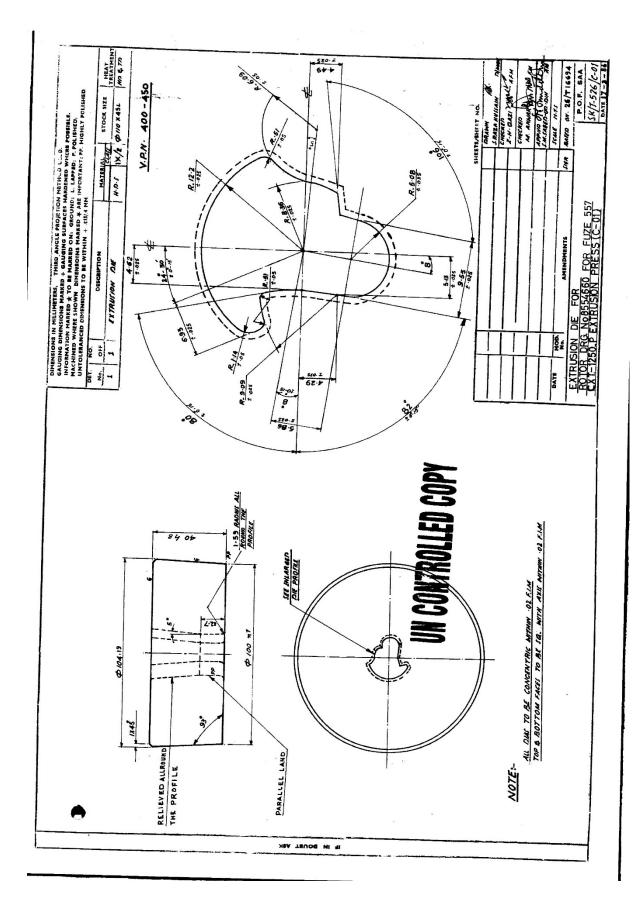
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20	14-0089-002-11- 1	SHELL TELLUS OIL NO.37 OR PSO OIL CASTROL HYSPIN AWS-37	SHELL OR EQUIVALENT	LTR
21	14-0089-003-11- 9	SHELL TELLUS OIL NO.46 OR PSO OIL CASTROL HYSPIN AWS-46	DIN-51502-ISVVG 46 (W/G)	LTR
22	14-0089-004-11- 7	SHELL TELLUS OIL NO.68 OR PSO OIL CASTROL HYSPIN AWS-68	SHELL OR EQUIVALENT	LTR
23	14-0089-005-II-4	SHELL TELLUS OIL NO.100 OR PSO OIL CASTROL HYSPIN AWS-100	SHELL OR EQUIVALENT	LTR
24	14-0089-013-11- 8	SHELL TELUS OIL NO.C-32	W/G	LTR
25	14-0090-001-11- 0	SHELL TONNA OIL NO.68	W/G	LTR
26	14-0091-003-11- 5	SHELL TURBINE OIL T-68	W/G	LTR
27	14-0091-004-11- 3	SHELL MINERAL TURPENTINE OIL OR EQUIVALENT (MINERAL SOLVENTS WHITE SPRITE AND RELATED HYDRCABON SOLVENTS) FOR PAINTS AND OTHER PURPOSES.	C-S-3021 BS/245/1976 TYPE (A)	LTR
28	14-0092-001-11- 8	SHELL TURBINE OIL NO.T-46	W/G	LTR
29	14-0093-001-11- 7	SHELL VITREA OIL NO.32	SHELL OR	LTR
30	14-0093-002-11- 5	OR EQUIVALENT SHELL VITREA OIL NO.68 OR EQUIVALENT	EQUIVALENT SHELL OR EQUIVALENT	LTR
31	14-0093-003-11- 3	SHELL VITREA OIL NO.100 OR EQUIVALENT	SHELL OR EQUIVALENT	LTR
32	14-0093-004-11- 1	SHELL VITREA OIL NO.69/150	SHELL OR EQUIVALENT	LTR
33	14-0093-005-11- 8	SHELL VITREA OIL NO.460 OR EQUIVALENT	SHELL OR EQUIVALENT	LTR
34	14-0094-001-11- 6	SHELL VALUTA OIL C OR PSO OIL PSO QUENCHING OIL	SHELL OR EQUIVALENT	LTR
35	14-0101-001-11- 7	LINSED OIL RAW	IM-966 (B) OR BSS-632	KG
36	14-0144-003-11-	OIL CASTROL SYNTILO-25	W/G	LTR
37	14-0200-001-11- 7	ANTICORIT OIL MKR EMUL SIONIDENT NO.982052	W/G	LTR
		•	•	









DECLARATION

[the Seller/Supplier] hereby declares its intention not to obtain or induce the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice.

Without limiting the generality of the foregoing, [the Seller/Supplier] represents and warrants that it has fully declared the brokerage, commission, fees etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultation fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

[The Seller/Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[The Seller/Supplier] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right, interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other rights and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, [the Seller/Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in any amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by [the Seller/Supplier] as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.

POF 1262 Annexure- I.

WARRANTY / GUARANTEE CERTIFICATE

Firm'sName	
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 after the receipt of machinery/equipment & spare parts by the consignee and successful installation/commissioning/Trial Run of the up-graded /Re-furbished Extrusion Press.

Signature	
Name	
Status in the Firm	
Dated	

ANNEXURE - "J"

BANK GUARANTEE FOR PERFORMANCE ON JUDICIAL STAMP PAPER OF RS. 100/- OR AS SUITABLE TO THE AMOUNT OF B.G.

	i)	Contract No date				
	ii)	Name of Firm/Contractor				
	iií)	Address of Firm/Contractor				
	iv)	Name of Guarantor				
	v)́	Address of Guarantor				
	ví)	Amount of Guarantee Rs. /F.E				
	()				
	\	(in words)				
	vii)	Date of Expiry of Guarantee				
To:		e President of the Islamic Republic of Pakistan through the Controller of itary Accounts (CMA), POF Wah Cantt.				
Sir,						
1.	Wh date	ereas your goodself have entered into Contract No ed: with Messrs (Full Name and Address)				
	(Full Name and Address)					
	here sub	einafter referred to as our customer and that one of the conditions of the Contract is the mission of unconditional Bank Guarantee by our customer to your good self for a sum of Rupees/FE (as applicable)				
2.	In c und	compliance with this stipulation of the contract, we hereby agree and undertake as ler:-				
	a.	To pay to you unconditionally on demand and/or without any reference to our Customer an amount not exceeding the sum of Rs.				
		(Rupees or F. E (as applicable)) as would 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 a head 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 of banking hours on the last date of the validity of this Bank Guarantee. Claim received thereafter shall not be	2			

lability under this Bank Guarantee shall cease on the closing of 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 documents 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 enchased on sight on presentation without any reference to our Customer/Seller or Vendor.

GUARANTOR

Dated:_____

Bank Seal and Signatures

ANNEXURE - "K"

DOMESTIC AND FOREIGN SCHEDULED COMMERCIAL BANKS

Being regulated by State Bank of Pakistan.

I. NATIONALISED SCHEDULED BANKS

- 1. First Women Bank Limited.
- 2. Habib Bank Limited.
- 3. National Bank Limited.

II. DE-NATIONALISED SCHEDULED BANKS

- 4. Allied Bank of Pakistan Limited.
- 5. Muslim Commercial Bank Limited.
- 6. United Bank Limited.

III. SPECIALIZED SCHEDULED BANKS

- 7. Zari Taraqiati Bank Limited.
- 8. Industrial Development Bank of Pakistan
- 9. Punjab Provincial Co-Operative Bank Limited.

IV. PRIVATE SCHEDULED BANKS

- 10. Askari Commercial Bank Limited.
- 11. Bank Al-Falah Limited.
- 12. Bolan Bank Limited.
- 13. Bank Al-Habib Limited.
- 14. Mashreq Bank Pakistan Limited.
- 15. Meezan Bank Limited
- 16. Faysal Bank Limited
- 17. KASB Bank Limited
- 18. Metropolitan Bank Limited
- 19. NDLC-IFIC Bank Limited
- 20. Prime Commercial Bank Limited
- 21. PICIC Commercial Bank Limited
- 22. Saudi-Pak Commercial Bank Limited
- 23. Soneri Bank Limited
- 24. Union Bank Limited

V. PROVINCIAL BANKS (NOW SCHEDULED BANKS)

- 25. The Bank of Khyber
- 26. The Bank of Punjab

VI. FOREIGN BANKS

27. ABN Amro Bank N. V.

- 28. Al-Baraka Islamic Bank B.S.C. (E.C).
- 29. American Express Bank Limited
- 30. Bank of Tokyo Mitsubishi Limited.
- 31. Bank of Ceyion
- 32. Credit Agricole Indosuez (The Globe French Bank)
- 33. Citibank N.A.
- 34. Deutsche Bank AG.
- 35. Doha Bank
- 36. Habib Bank AG Zurich.I
- 37. Hong Kong & Shanghai Bank Corporation Limited.
- 38. Oman International Bank S.O.A.G.
- 39. Rupali Bank Limited.
- Standard Chartered Bank.