



PAKISTAN AERONAUTICAL COMPLEX, KAMRA AIRCRAFT MANUFACTURING FACTORY

TENDER NOTICE : OPEN TENDER
AMF/751-A/4607/LOG DATED 12 December, 2024

TO BE OPENED ON : 26 December, 2024

TENDER INQUIRY : 08

1. Sealed tenders for purchase / repair of items as per enclosed list are invited from sales tax registered Suppliers who are on Active Taxpayers List (ATL) of FBR.

Pattern of Quotations

2. The quotation shall comprise a single package containing 02 separate envelopes. Tender reference along with due date of opening and Category Number must be clearly marked. Each envelope shall contain separately, the Financial proposal and the Technical proposal. Each bid (financial / technical) will be on separate leaf against single line item, envelope cover must be marked with "Item name". **Quotations with multiple line items on single page will be dropped. Quotations should be on original letter head (colour printed).** The quotations shall be addressed to Managing Director AMF, PAC Kamra as per terms given below:-

(a) **Technical Offer:** It should be without prices and contain all relevant essential specifications along with literature / brochures. Tender number, date of opening and word (**Technical offer**) should be clearly marked. The tendered Part No should be mentioned against quoted item / offer. Any details of equivalent / variables being quoted should be clearly mentioned against Part No being tendered. **NSN / OEM Part No** should be mentioned on both technical and commercial quotations. All quoted products must have traceable local / foreign OEM. **Country / Place of Manufacture / OEM** of stores is to be provided along with Technical / Commercial offer. **Certificate of Conformance (CoC), Technical Data Sheet (TDS) and Material Safety Data Sheet (MSDS)** along with any other relevant literature by OEM are must for all Aviation Items, Chemicals, Material and Equipment. All precision measuring equipment must be quoted with provisioning of fresh **Calibration Certificate**. Spectrometric analysis report against raw material / hardware items may be required to establish conformity of delivered product. All Chemicals, lubricants and any item of shelf life range must be quoted with provisioning of **MSDS** along with fresh **Laboratory Test Reports** against corresponding LOT No, Batch No, Date of Production, Date of Expiry of delivered stores. **Part Catalogues, IPBs (Illustrated Part Breakdown), User Guides, Operating / Maintenance Manuals, Brochures, Prices** which ever available / applicable would be provided free of cost along with delivered stores. In case of **Unit of issue** being Quoted other than which has been tendered, conversion formula is to be mentioned, AMF will conclude all transaction formalities (vetting, approval, placement of order, receipt of stores and subsequent payment) as per tendered / published Unit of Issue. All cyber range products must be of **branded origin and without Pro technology, ivy / sandy bridge processors**. Confirmation to this effect is to be furnished by written certificate along with quotation. License keys, activation / access passwords and source codes are to be provided along with all software whether purchased individually or as a part of any system/equipment or machinery.

(b) **Financial Offer:** It should indicate price of quoted item (**to be delivered at AMF, Kamra premises with all liabilities on Suppliers**) and confirmation to the terms and condition of AMF tender inquiry. The words "**Financial offer**" should be clearly marked. The Quoted prices are to be exclusive of GST levied by the Government and these should be in accordance with the current Local market prices. GST must be mentioned separately. All other charges must be incorporated in offered price. Rates must be mentioned in both "words" and "figures". Following documents must accompany financial offer:-

- (i) Proof of being on **active taxpayers list**
- (ii) Sales tax registration certificate

- (iii) NTN certificate
- (iv) Professional Tax certificate of the province where the contract is being concluded as per MAG letter No 54/AT/S/1687-Vol-XXVII/P-29 dated 22 April, 2013 and Taxation department Punjab letter No SO (TAX) 1-33/77 (P-IV) date 28 August, 2003.
- (v) Any specific SRO / Tax exemptions if applicable must be notified along with commercial offer.

(c) **Bid Money / Earnest Money:** The **unregistered firms with PACB** (Pakistan Aeronautical Complex Board, Kamra) will have to furnish **earnest money @ 5%** of the quoted value through **Bank Draft / CDR** in favour of **Public Fund Account AMF PAC, Kamra**. The earnest money instrument should indicate Tender reference and firm/company name. In case where the exact Quantity has not been mentioned the earnest money should be calculated against MOQ / market available standard OEM packaging. The exact bid money in this scenario will have to be furnished within 01 week of intimation of being technically accepted, lowest financial bidder. The confirm purchase order will be furnished upon receipt of earnest money. Earnest money of bidders backing out of submitted quote or failing to provide in time delivery will be forfeited along with initiation of disciplinary actions.

Quantity

3. Quantity can be increased / decreased at the time of order as per AMF requirement without change of financial quotations. Bids once submitted will not be allowed to be changed and will be binding on suppliers for delivery of stores if purchase order is furnished, however, clarifications may be sought.

Offer requirement / validity

- 4. The quotation should be valid if it contain under mentioned information.
 - (a) Quote Validity should be minimum **90 days** and extendable on request.
 - (b) **EDD must be available on Commercial Quote. Quotation will not be accepted without delivery period.**
 - (c) Picture and TDS must be available with technical quote.
 - (d) Separate quote for every single line item.
 - (e) Mentioning of date on commercial / technical quotes is mandatory.
 - (f) Terms & Conditions should be mentioned on commercial / technical quotes.

Delivery Period

5. **Items are to be delivered at AMF, PAC KAMRA premises with all liabilities on Suppliers.** Stores are required within minimum possible delivery period. Offer with minimum delivery period are likely to be preferred. However, the delivery period should be factual as no subsequent extension will be granted except under extreme / un-avoidable circumstances. **Delivery period will invariably start from furnishing of written (provisional / firm) purchase order whichever is earlier.** Delivered stores must be in **standard packing** (free of any separate cost). Delivery of items shall be strictly made as per timeline mentioned in purchase order. In case of failure, AMF reserves the right to cancel any PO.

6. Acceptance of Stores / General Terms & Conditions

- (a) **Certificate of Conformance, TDS and MSDS** by OEM is must for all aviation items, Materials and Equipment.
- (b) All precision measuring equipment must accompany fresh **Calibration Certificate either from OEM or any certified credible facility.**

- (c) All Chemicals, lubricants and any item of shelf life range must accompany **MSDS** along with fresh **laboratory test reports against corresponding LOT number, Batch number, date of production, date of expiry of delivered stores.**
- (d) In case of life items, the remaining shelf life must be at least 75 % at the time of delivery.
- (e) Stores will be accepted after inspection by concerned user / Quality Control Directorate as per QMS of AMF.
- (f) Supplier will be made responsible for **warranty / guarantee** of newly purchased items **at least one year or maximum possible.** In case of rejection of item on receipt or any defect / anomaly found within warranty period whether before use or while in use, the supplier will provide free of cost repair / replacement (which applicable) at AMF Kamra premises bearing all liabilities.
- (g) All repair works / services will **INVARIABLY** be under at least **06 months warranty**, unless contracted otherwise and depends upon case to case basis.
- (h) **Part Catalogues, IPBs (Illustrated Part Breakdown), User Guides, Operating / Maintenance Manuals, Brochures, Prices** which ever available / applicable would invariably be provided **free of cost** along with delivered stores.
- (j) Items should be current year's production.
- (k) Supplier will retain record of all products delivered to AMF karma, for at least 03 years.
- (l) AMF reserves the right to visit / inspect any premises of supply chain against required / offered products.
- (m) The supplier will be responsible for in time payment of all applicable taxes and duties to relevant agencies as per in vogue GOP regulations. The supplier must be able to furnish / produce such record as and when demanded by AMF.
- (n) Any item being tendered if obsolete / discontinued by OEM may please be communicated along with said certification by OEM. Suitable replacements / substitutes / interchangeable may also be communicated along with complete technical / operational details.
- (p) All quotations/ bids, correspondence and clarifications / queries must be on company letter head duly signed by authorized signatory authority. Active contact / correspondence details (phone no. mobile no. email & postal address must be mentioned).
- (q) All quotations, bids, clarifications, queries, correspondence and product will be kept strictly confidential.

Release of Payment

7. Payment will be released by Dte of Budget and Accounts, AMF PAC, Kamra on submission of Sales Tax invoice along with copies of GST registration, NTN certificate and Professional Tax certificate. Sales Tax Return against previous transactions (if any) during current financial year and copy of relevant SRO (if applicable) will also be required. All payments are to be received after successful acceptance of delivered stores by user and upon furnishing of requisite documentation. After receipt of payment, supplier is to furnish monthly sales tax return declaration along with Annexure "C" (DOMESTIC SALES INVOICE DETAIL) duly depicting invoice number against which payment has been received from AMF, Kamra. Specified amount of GST and Income tax will be withheld/ deducted at source as per GOP instructions in vogue. Any exemption in this regard will only be entertained upon furnishing of FBR issued EXEMPTION certificate in name of Firm / Company against specified item.

Terms and Conditions

8. The terms and conditions mentioned in this document will be integral part of any purchase order furnished against this tender, whether or not mentioned again.

Clarifications of Queries

9. Queries if any may be cleared by contacting **051-90995372**.

Rejection

10. Offers are liable to be rejected if:

- (a) There is a deviation from any instruction.
- (b) Offers are found conditional or incomplete in any respect.
- (c) Overwriting / erasing in prices.
- (d) Firm being **BLACKLISTED / UNDER EMBARGO / DE LISTED** by any **Government Organization**.
- (e) Any terms and conditions not in conformity with tendered terms and conditions.

Delivery of Tender

11. **Each quotation (financial / technical) shall be on separate leaf against single line item.** Both the envelopes of **Technical and Commercial** offers should be enclosed in one cover properly sealed, **envelope cover must be marked with "Item name"** and bear the following address of Local Purchase office, AMF with **tender Inquiry number and opening date**.

Assistant Director Local Purchase (JF-17)

Aircraft Manufacturing Factory,
Pakistan Aeronautical Complex, Kamra
District Attock

Opening of Tender

12. The quotations must be in original and are to reach at this factory by **1100 Hrs on 26 December, 2024**. All quotations are to be dropped in the tender box placed at the Local Purchase Section, AMF. No quotation will be accepted in photocopy, through Fax and after due date and time. Tender will be opened on **same day at 1130 Hrs** in the presence of witnessing officers and available representatives of the firms in vendor's conference room / DD Log JF-17. AMF reserve the right to cancel or reject any or all bids / proposals against complete tender or any part thereof, at any time without any liability. In case of official holiday the Tender will be opened on next working day.

Yours Faithfully,



(QAZI M AHMAD JAN)

for Flying Officer
Managing Director
AMF, PAC Kamra

AMF QUALITY SYSTEM REQUIREMENTS

Following are the requirements to be satisfied by the Supplier (External Provider) / Sub-Contractor (Local Vendor) of AMF:-

1. The processes, products, and services to be provided including the identification of relevant technical data (e.g., specifications, drawings, process requirements, work instructions).
2. The approval of products and services, methods, processes, equipment, and the release of products and services.
3. Provide inspection and testing criteria for acceptance by AMF.
4. Notify AMF about non-conformance product or material supplied.
5. Obtain approval from AMF of changes in product / process.
6. Access by AMF, its customers and regulatory authorities be ensured to applicable areas of all facilities involved in the order and to all applicable records at any level of the supply chain.
7. Provide Objective evidence of the quality of product.
8. To ensure product conformance to specified requirements.
9. To provide manufacturing date and Lot number.
10. To provide shelf life and expiry date as applicable
11. Competence, including any required qualification of persons.
12. The external providers' interactions with the organization.
13. Control and monitoring of the external providers' performance to be applied by the organization.
14. Verification or validation activities that the organization, or its customer, intends to perform at the external providers' premises.
15. Supplier (External providers) apply appropriate controls to their direct and sub-tier Suppliers (external providers), to ensure that requirements are met.
16. Design and development control.
17. Special requirements, critical items, or key characteristics.
18. Test, inspection, and verification (including production process verification).
19. The use of statistical techniques for product acceptance and related instructions for acceptance by the organization.
20. To provide Material / Metallurgical test reports along with raw material for traceability through Lot / Batch No. External Provider will also provide date of manufacture of provided Lot / Batch No of raw material.
21. The need to:
 - (a) Implement a Quality Management System.
 - (b) Use customer-designated or approved external providers, including process sources (e.g., special processes).
 - (c) Notify the organization of nonconforming processes, products, or services and obtain approval for their disposition.
 - (d) Prevent the use of counterfeit parts.
 - (e) Notify the organization of changes to processes, products, or services, including changes of their external providers or location of manufacture, and obtain the organization's approval.
 - (f) Flow down to external providers applicable requirements including customer requirements.
 - (g) Provide test specimens for design approval, inspection/verification, investigation, or auditing.
 - (h) Retain records (documented information), including retention periods and disposition requirements.
22. Ensuring that persons are aware of:
 - a. Their contribution to product or service conformity.
 - b. Their contribution to product safety.
 - c. The importance of ethical behavior.
23. Any item marked with company name, origin and brand is for reference purpose only.

PLEASE SUBMIT RELEVANT DOCUMENTS, ALONG WITH TECHNICAL QUOTATION AS PER UNDERMENTIONED DETAILS OTHERWISE TECHNICAL QUOTATION WILL NOT BE ACCEPTED (PMI ITEMS)

1. The Stores must be factory new and free from damage, corrosion and other forms of deterioration.
2. Technical publication / brochure sufficing the genuineness of offered items should be enclosed with technical quotations.
3. Make / Models are mentioned only for identification of specifications and required standards.
4. Calibration Certificate (if applicable) will be provided with stores by seller.
5. The spares should be delivered in standard OEM packing on FOR Kamra basis.
6. The spare should clearly indicate name / code of product, name of manufacturer, date of manufacturing, and Production Lot No. / batch No.
7. The spares should be delivered with proper traceability record.
8. Source of purchase should be authorized by OEM. In this regard, proof in tangible form to be provided with technical quotation.
9. The supplier will provide OEM's / authorized dealer's Certificate of Conformance (CoC).
10. Item will be accepted on complete form, fitment and functionality checks.
11. Standard warranty of one year is required.

AMF/751-A/4607/LOG (PC-08) DATED 12 Dec, 2024

S NO	PART NO	NOUN	QTY	UI	SECTION	SPECIFICATIONS
1	RTD-PT100	RTD TEMPERATURE SENSOR	As Req	EA	Building 111 (ST Shop)	PT-100 (Stainless Steel) 0-250 degree Length 4 Ft, 15 Ft, 08 Mtr (Grade A Pressure)
2	SR253-11-N-10600100	DIGITAL TEMPERATURE CONTROLER	As Req	EA	Building 111 (ST Shop)	Auto Controller (Digital)
3	HS75670	PRESSURE GUAGE	As Req	EA	Building 111 (ST Shop)	PSI 160, 1.6 BAR, 2.5 MPA
4	15303825-12-041-2	TEMPERATURE RECORDER	As Req	EA	Building 111 (ST Shop)	SR 93 Shimden Or Equivalent
5	JT2X0.22MFA-MFAD.2.7DIN	J-TYPE THERMOCOUPLE CABLE	As Req	MTR	Central Lab JF-17	<ul style="list-style-type: none"> ● Diameter (Positive & Negative wires with insulation) = 1.05MM ● Overall Diameter with insulation = 2.7MM ±0.2MM ● Temperature range = (-200 ~ +250)°C ● Accuracy = ±1.1°C or ±0.4% ● Number of Conductors = 2 ● Formation = 7x0.20 ● Layup = twisted conductors ● Applicable Standards = ASTM E230 & DIN 43714 ● Insulation = Fluoropolymer type Hyflon MFA ● Insulation could not burn at 250°C ● Colour of thermocouple wire must comply with International standards (Positive-red Negative-blue Overall- blue) ● Documents required= OEM calibration certificate & Conformance Certificate ● Acceptance criteria = Cable will be accepted after calibration at PAC
6	M-97008	DISC ELECTRODE	As Req	EA	Central Lab JF-17	<ul style="list-style-type: none"> ● Required for Spectroil M equipment
7	CS-75-500	SPECTROIL STANDARD BASE OIL (400 GRAM)	As Req	BTL	Central Lab JF-17	<ul style="list-style-type: none"> ● Made by SPECTRO INC USA OR CONOSTAN Or Equivalent ● 0PPM ● 400 Gram ● MSDS & CoC required ● Remaining shelf life should not be less then 75% of original life
8	9219980	UNIVERSAL ROTORY BOLT HOLE FISCHER PROBE (ET)	As Req	EA	Central Lab JF-17	Universal Rotary Bolt Hole 4 pin Fischer

						Probe <ul style="list-style-type: none"> ● Diameter : (0.218~0.250) inch / (5.5~6.3) mm ● Frequency range : 200 KHz~3 MHz ● Working length : 2 inch (50mm) ● Manufacturer : Olympus / Aerofab, USA Or Equivalent ● Probe must be compatible with Minimite Scanner Part No 9020266.04 & Eddy Current Tester Nortec 2000S+ made by Olympus USA Or Equivalent
9	2024-T3-1MM	SHEET ALUMINIUM 2024 1MM THICK	As Req	SHT	Central Lab JF-17	<ul style="list-style-type: none"> ● Sheet aluminum 2024 Bare ● Temper Condition : T3 ● Dimensions :- 48 x 144 x 0.040 inches. Comply with AMS-QQ-A-250/4 Note:- <ul style="list-style-type: none"> ● Conformance certificate of sheet is required. ● Sheets should be scratch less and corrosion less. ● Sheets should be wrapped with polythene sheet.
10	6665-00-235-3820-GTP-25	DETECTOR PAD (25MM) FOR AQUA GLOW TESTER	As Req	EA	Central Lab JF-17	<ul style="list-style-type: none"> ● Required for Aqua Glow Tester
11	ZBITANK51	BOOSTER PUMP	As Req	EA	Central Lab JF-17	<ul style="list-style-type: none"> ● Rating : 36 Volt DC (32 Amp) ● Open flow ● Nomial bypass pressure: 145 Psi ● S No 2050315 ● Booster pump must be Compatible with Millipore Elix 10 pure water production unit ● Sample may be checked
12	EMCEE/152	DIGITAL CONDUCTIVITY METER	As Req	EA	Central Lab JF-17	<ul style="list-style-type: none"> ● Part No 6630-01-155-2398 ● Model No EMCEE/152 ● Made in USA Or Equivalent
13	GTP-323	AQUA GLOW TESTER	As Req	EA	Central Lab JF-17	<ul style="list-style-type: none"> ● AQUA GLOW water detector KIT along with complete accessories and consumables ● Model GTP-323 ● Made by Gammon Technical Products Inc USA Or Equivalent ● Operating manual
14	DDS011-6	SAFETY SHOES	As Req	PR	Central Lab JF-17	<ul style="list-style-type: none"> ● Ranger
15	6644-00-445-3662-GTP-1985	SINGLE FILTER MONITOR FOR AQUA GLOW TESTER	As Req	EA	Central Lab JF-17	<ul style="list-style-type: none"> ● Required for Aqua Glow Tester

16	0.0120.SH2024T3CLAD	SHEET ALUMINIUM 0.3MM(48X144X0.012)INCH	As Req	SHT	Central Lab JF-17	Sheet aluminum 2024 Claded ● Temper Condition : T3 ● Dimensions : 48 x 144 x 0.012 inches. Comply with AMS-QQ-A-250/5 Note:- ● Conformance certificate of each material is required. ● All materials should be scratch less and corrosion less. ● All materials should be wrapped with polythene sheet.
17	M32408	SHAFT DISC ELECTRODE L 82 MM	As Req	EA	Central Lab JF-17	● Compatible with Spectroil M Mode-6 Length = 82MM
18	C263310	BUBBLE TOWER TUBE FOR SSTC CCX-2000	As Req	EA	Central Lab JF-17	● Material : Acrylic transparent ● Diameter: 6 inch ● Compatible with Salt Spray Test Chamber Model CCX-2000 ● Sample may be checked from user
19	M33005	FAN FILTER MEDIA 92 MM	As Req	EA	Central Lab JF-17	● Compatible with Spectroil M Mode-6 92MM
20	32/1072	MASKING TAPE 50MM	As Req	RL	Chemical Store	Nichibon Or Equivalent
21	NT-08-001-060-13	AUTO VOLTAGE REGULATOR (AVR)	As Req	EA	DTS JF-17 (Chinese Office)	Part No: M0501 OEM: Chinese Origen Or Equivalent
22	DJXS-30	DYNAMIC/STATIC PRESSURE TESTER	As Req	EA	Final Assembly (103)	Flexible Hose 25 Ft req to be replaced Internal valve Qty 12 are req to be repair
23	34D/FT-193	FOD SHAKER	As Req	EA	FTS (112)	As per attached Specs
24	61A/FT/001	RUBB MAT FOR STEEL RACKS	As Req	MTR	FTS (112)	Thickness : 4mm Width : 48x50
25	32B/AMF-100	WRAPING POLYTHENE 12 INCH	As Req	RL	Log Sqn JF-17	Size Large
26	10A/AMF-21	UNDER GROUND CABLE(10 PAIR)	As Req	MTR	PAC Comm Centre	Armoured 0.6 MM
27	11-00081-C	24 CORE OFC CABLE	As Req	MTR	PAC Comm Centre	direct burried OFC SM
28	MEGAFLO100HDPE	HDPE PIPE 38/50MM	As Req	MTR	PAC Comm Centre	1.5" 38/50 MM
29	24PORTSCRM	ODF 24F WITH PIGTAIL AND ADAPTERS	As Req	EA	PAC Comm Centre	OUT DOOR wall mount
30	GI-2-2MM	GI PIPE	As Req	EA	PAC Comm Centre	1.5" 2mm
31	7430-68-900-0647	(SERVICES) PAKA SOIL	As Req	MTR	PAC Comm Centre	digging laying and back filling of area 5 feet depth
32	6020PKL0001823	(SERVICES) OPTICAL SPLICING WITH ODF	As Req	EA	PAC Comm Centre	at standard losses only
33	7430-68-900-0646	KACHA SOIL (DIGGING LYING & BACKFILLING)	As Req	MTR	PAC Comm Centre	digging laying and back filling of area 5 feet depth

34	7430-68-900-0648	(SERVICES) ROAD BORE WITH G.I PIPE	As Req	MTR	PAC Comm Centre	digging laying and back filling of area 5 feet depth
35	21IBM/AMF-279	HP LASER JET PRINTER COLOURED	As Req	EA	PACIT	Model 404DN
36	8661114H07	MOTOR BRAKE ASSY	As Req	EA	PMI (JF-17)	Make: Binder 24VDC, 1.29AMP, 80Nm, A. Nr.P80284/W2
37	531014730	BLADDER TYPE ACCUMULATOR	As Req	EA	PMI (JF-17)	Make:- Bosch Rexroth Or Equivalent OEM Part No. 531014730
38	BBF-HDA-2525	HDA SERIES AC SERVO DRIVE	As Req	EA	PMI (JF-17)	Input: 3PH AC 380V +10%~-15% Output: Axis AC380V 0-200Hz 5.3A Axis AC380V 0-200Hz 5.3A Make: BBF, China Or Equivalent
39	SMC-GRP-3000	SMC WATER TANK 3000 LTR	As Req	EA	PMI (JF-17)	Water Storage Capacity 3000 ltr Material GRP
40	FT1000H/L	BRINE TANK 1000L FOR SOFTENER	As Req	EA	PMI (JF-17)	Water Storage Capacity 1000 ltr Material GRP
41	HUBA511	HUBA CONTROL 5436	As Req	EA	PMI (JF-17)	Type: A-10 Pressure: 0~16 Bar Rating 4-20 mA In Put Power 8-33VDC Make Switzerland Or Equivalent
42	LDB4-81B(6140)	TURRET TOOL POST	As Req	EA	PMI (JF-17)	A is : 192mm B is : 192mm C is : 152mm D is : 168mm H is : 81mm H1 is : 26mm Max Height of Turret : 203mm Motor: 120 watts, 380Volts RPM : 1400 Same as LDB4-81(6140)
43	PGL-G	CENTRIFUGAL PUMP (SUMP TANK)	As Req	EA	PMI (JF-17)	Working Pressure Required 05 bar Ambient Temperature 40°C Ph value 0 ~ 9 Temperature 0 ~ 100°C Pump material SS for Chemical Circulation Input 3 Phase (440 V)
44	30A/AMF-67	M/S PIPE 1-1/2XOD DIA 50MM	As Req	FT	PMI (JF-17)	Standardized
45	WTH118W	POTENTIOMETER 330K 0 HM	As Req	EA	PMI (JF-17)	Resistence: 330K Ohm, Power:2KW
46	55TYB	SYNCHRONOUS MOTOR	As Req	EA	PMI (JF-17)	I/P Volt : 220V, I/P Power: 3W, 50Hz,375rpm, 18mA
47	820061752	BI-DIRECTIONAL VALVE 5/2	As Req	EA	PMI (JF-17)	Coil Voltage: 110VAC Make: Bosch Rexroth

48	PLM4112B5/340	CENTRIFUGAL STAINLESS STEEL END SUCTION PUMP	As Req	EA	PMI (JF-17)	Flow 21.8 m3 per/h Head 38m Efficiency 60.2% Motor 5.5 Kw 3 Phase
49	10KL	VERTICAL COMPRESSED AIR RECEIVER TANK	As Req	EA	PMI (JF-17)	As Per Scope of Work attached
50	SENC-150-572282-A2	LINEAR SCALE WITH READER HEAD (SENC-150)	As Req	EA	PMI (JF-17)	Make: SENC
51	LS187C-ML2640MM	INCREMENTAL LINEAR ENCODER	As Req	EA	PMI (JF-17)	Measuring Length: 2640mm Accuracy Grade: +/- 3µm, 5µm Interface: 1Vpp Signal Period: 20µm Make: Heidenhain Or Equivalent ID No: 526 974-22
52	R901437544	ACCUMULATOR BLADDER/SEAL KIT 10 LITER	As Req	EA	PMI (JF-17)	Make: Bosch Rexroth Or Equivalent
53	LD4B-C6132	LATHE TURRET	As Req	EA	PMI (JF-17)	A is : 166mm B is : 180mm C is : 156mm D is : 130mm H is : 70mm H1 is : 26mm Max Height of Turret : 192mm Motor: 120 watts, 380Volts RPM : 1400 Same as LDB4-70(6132)
54	ESSICO0000	CAREL PCB CARD	As Req	EA	PMI (JF-17)	AS PER SULLAIR OEM ESSICO0000.CAREL PCB CARD
55	6SL3000-0BE25-5AA0	ACTIVE LINE FILTER MODULE (I/R)	As Req	EA	PMI (JF-17)	Voltage: 380~480V 3AC 50~60Hz, 55KW Make: SIEMENS Or Equivalent
56	NA2AL2SI2O8	SODIUM ZEOLITE	As Req	KG	PMI (JF-17)	Standardized MSDS, COC & COA Docs Required
57	750X750X300MM	PVC ROUND FILLS (HONEY COMB FILTER)	As Req	EA	PMI (JF-17)	Standardized
58	682604773537	PLASTIC HEXAGON GRILL MESH SHEET	As Req	FT2	PMI (JF-17)	Standardized
59	HH-001	BLACK SANDWICH AIR MESH FABRIC	As Req	FT2	PMI (JF-17)	Standardized
60	YRTM325	AXIAL/RADIAL BEARING (WITH MEASUREMENT SYSTEM)	As Req	EA	PMI (JF-17)	YRTM series Dimension Bore Dia ; 325mm OD : 450mm width Dia : 60mm Weight : 24.6Kg Double direction

						Screw mounting with integrated angular measuring system Make: INA, Italy Or Equivalent
61	02250135-149	AIR FILTER	As Req	EA	PMI (JF-17)	AS PER SULLAIR OEM 5~10 MICRON Filtration Efficiency 98%
62	MC202-D00	AIR LUBRICATURE WITH MOISTURE TRAPE 0.5 ~10 BAR	As Req	EA	PMI (JF-17)	Min Working Pressure 10 Bar Environment Temp 60°C
63	MTZ80HP4AVE	COMPRESSOR	As Req	EA	PMI (JF-17)	Refrigrant: R407C, R134, R404A, R507 18Amp Max, 50Hz, 400v, LRA80,
64	6SL3000-0BE31-2AA0	SIEMENS ACTIVE LINE FILTER MODULE 120KW	As Req	EA	PMI (JF-17)	Voltage: 380~480V 3AC 50~60Hz, 120KW Make: SIEMENS Or Equivalent
65	HEAD-60426921425	SPRINKLING FAN 6 INCH ALUMINUM 4 BLADES	As Req	EA	PMI (JF-17)	Material Aluminum Head inner Dia 06 inch Blade Dia 03 inch
66	WRS3000VX	SELF CONTAINED SOLDER/DESOLDER STATION 220V	As Req	EA	PMI (JF-17)	OEM.Weller, 300Watt, 220V As per Part No
67	PWM303	DC SPEED REGULATOR	As Req	EA	PMI (JF-17)	Model ; PWM-303, OEM: GLME Drives Guilin machine tool Co.Ltd Electronic control factory Or Equivalent
68	250038-672	SOLENOID VALVE PLUG	As Req	EA	PMI (JF-17)	AS PER SULLAIR OEM Or Equivalent
69	FLECK2850	CONTROL VALVE (FLECK)	As Req	EA	PMI (JF-17)	valve material Brass Inlet / Outlet Pipe 1-1/2 inch Cycle 05 Flow rate 51 GPM Neck diameter as per sample Electrical rating 24V, 220 V 50Hz
70	DT-60330	CHIESAL AND POINT BIT SET	As Req	SET	PMI (JF-17)	Manual Chisel Bit Set (set of 22Pcs)
71	0820061762	Aventic Pneumatic valve	As Req	EA	PMI (JF-17)	Make Rexroth (Aventics) Input Power 110 Volt
72	A03B-0819-C110	Digital Input Module (FANUC)	As Req	EA	PMI (JF-17)	Make FANUC Or Equivalent Series:- AID32E2 Input 24 VDC
73	310126-03	Heidien Hein Encoder Cable	As Req	EA	PMI (JF-17)	Make Heidien Hein Pin 12
74	COREI7-6THGEN-INTEL	COMPUTER CORE I7 6TH GEN	As Req	EA	PP&C JF-17	CORE I7 6TH GEN
75	C13913.0	END MILL SHORT 2F HSCO XP 13MM	As Req	EA	Prod Prep Workshop No 51-1	Dia 13mm Flute Length 60mm Total Length 60mm
76	S251122.0	CARBIDE END MILL LONG 22MM	As Req	EA	Prod Prep Workshop No 51-1	Dia 22mm Flute Length 80mm Total Length 120mm

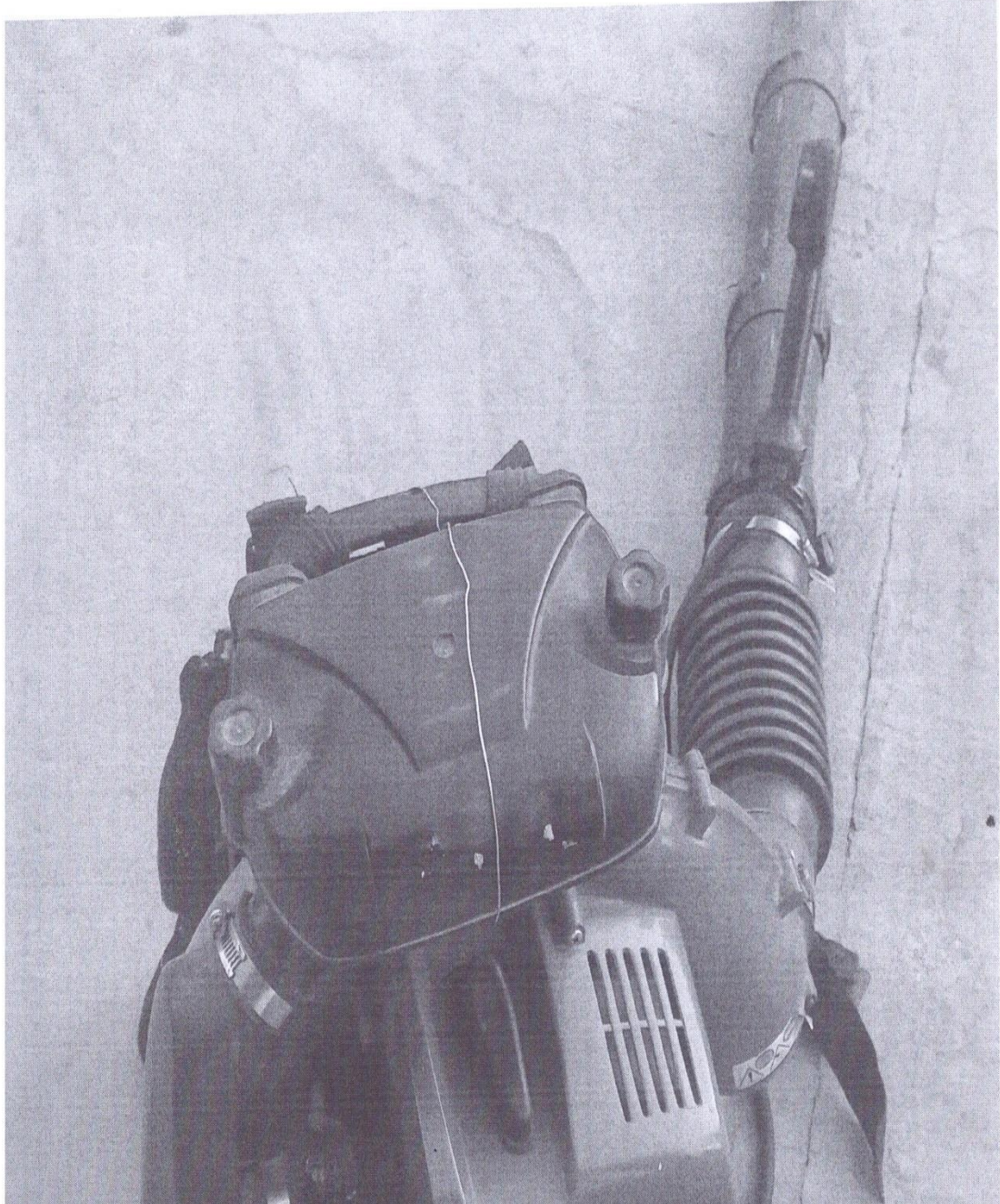
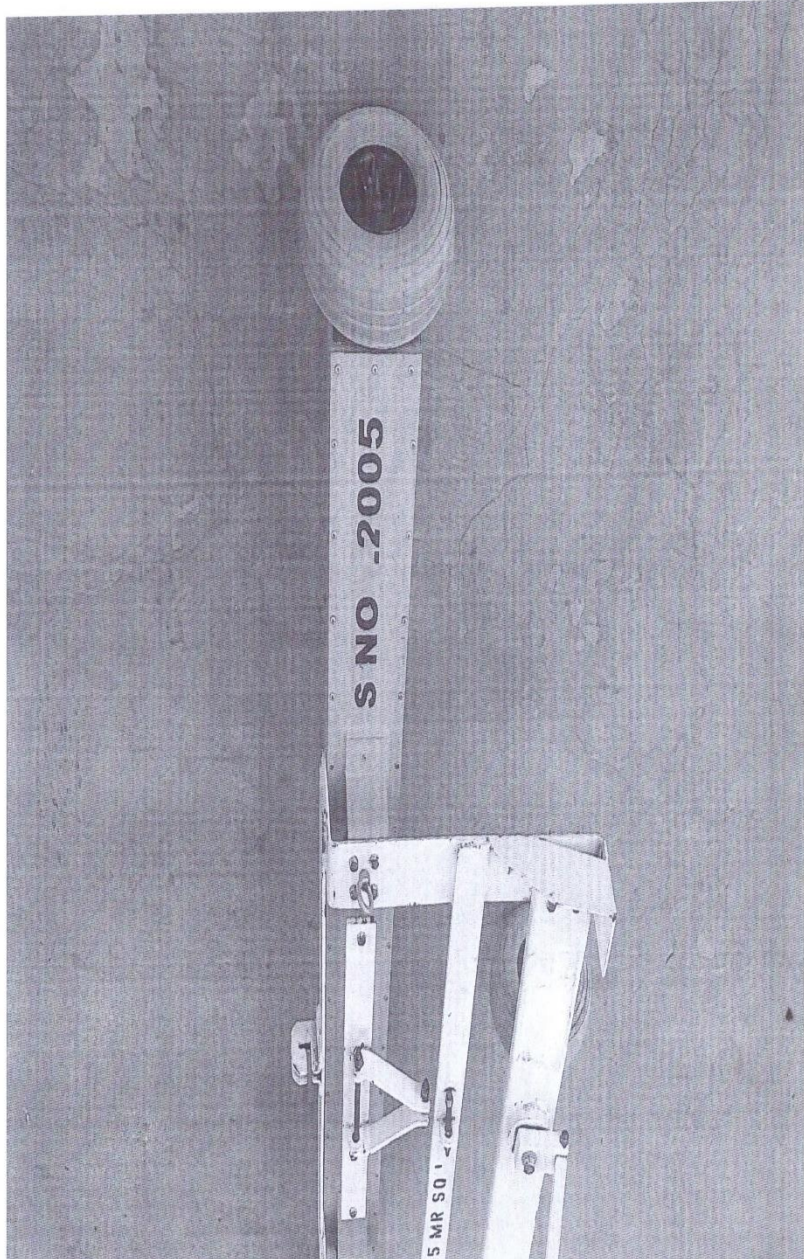
77	2354.000	EXTRA LONG TWIST DRILL HSS DIA 4.0MM	As Req	EA	Prod Prep Workshop No 51-1	Dia 4mm Flute Length 150mm Total Length 200mm
78	23511.000	EXTRA LONG TWIST DRILL HSS DIA 11.0MM	As Req	EA	Prod Prep Workshop No 51-1	Dia 11mm Flute Length 150mm Total Length 200mm
79	1125518	CONVEX CUTTER R6	As Req	EA	Prod Prep Workshop No 51-1	Corner Radius Cutter R-6
80	2355.700	EXTRA LONG TWIST DRILL HSS DIA 5.7MM	As Req	EA	Prod Prep Workshop No 51-1	Dia 5.7mm Flute Length 150mm Total Length 200mm
81	2355.900	EXTRA LONG TWIST DRILL HSS DIA 5.9MM	As Req	EA	Prod Prep Workshop No 51-1	Dia 5.9mm Flute Length 150mm Total Length 200mm
82	20H7	PLANE GO NO GO GUAGE 20H7	As Req	EA	Prod Prep Workshop No 51-1	Plain Plug Gauge Standard 20H7
83	2358.000	EXTRA LONG TWIST DRILL HSS DIA 8.0MM	As Req	EA	Prod Prep Workshop No 51-1	Dia 8mm Flute Length 150mm Total Length 200mm
84	22H7	PLANE GO NO GO GUAGE 22H7	As Req	EA	Prod Prep Workshop No 51-1	Plain Plug Gauge Standard 22H7
85	61812.500	EXTRA LONG TWIST DRILL HSCO DIA 12.5MM	As Req	EA	Prod Prep Workshop No 51-1	Dia 12.5mm Flute Length 150mm Total Length 200mm
86	4.2H7	EXTRA LONG REAMER 4.2H7	As Req	EA	Prod Prep Workshop No 51-1	Dia 4.2mm Flute Length 100mm Total Length 150mm Standard H7
87	4.6H7	EXTRA LONG REAMER 4.6H7	As Req	EA	Prod Prep Workshop No 51-1	Dia 4.6mm Flute Length 100mm Total Length 150mm Standard H7
88	724-0569	REVERSIBLE AIR DRILL	As Req	EA	Prod Prep Workshop No 51-1	Drill chuck capacity 1-13mm
89	629-583	REVERSIBLE AIR DRILL	As Req	EA	Prod Prep Workshop No 51-1	Drill chuck capacity 1-13mm
90	ZME280137	OIL FILTER (DENSE OF 10 MICRON SET)	As Req	EA	Prod Prep Workshop No 51-1	(DENSE OF 10 MICRON SET)
91	GL1-50	PAPER FILTER	As Req	EA	Prod Prep Workshop No 51-1	Standard
92	MF-1546	OIL FILTER	As Req	EA	Prod Prep Workshop No 51-1	Dia 150mm Internal bore 42mm Total length 450mm
93	34D/AMF-L-11	TELLUS OIL 37	As Req	LTR	Prod Prep Workshop No 51-1	Part No is from OEM
94	1.20275.028	HARDENER (DIETHYLENE TRIAMINE)	As Req	KG	Prod Prep Workshop No 51-1	01 Kg per bottle
95	EPE- 44(STD/SH1085007- 2011)	EPOXY	As Req	KG	Prod Prep Workshop No 51-1	01 Kg per bottle
96	I5-4670-NVIDIA-7	LED MONITOR 20	As Req	EA	Prod Prep Workshop No 51-1	LED 21 inch
97	S32220.0	CARBIDE E/MILL 20MM	As Req	EA	Prod Prep Workshop No 51-1	Dia 20mm Flute Length 80mm Total Length 140mm
98	10AG/AMF-400	WORKSTATION PC BASED DIGITAL VIDEO RECORDER	As Req	EA	Provost Sqn JF-17	
99	AG12V100F	MAINTENANCE FREE BATTERY	As Req	EA	Provost Sqn JF-17	
100	M0301	PNEUMATIC RIVETING HAMMER SMALL	As Req	EA	Structure Built Up	Part No: M0301 OEM: Chinese Origin Or Equivalent

101	J11PM0067	POLISH NO 6	As Req	LTR	Structure Built Up	OEM: ABAX, France Or Equivalent Packing: 1 Litter, Bottle Ref No: 02211
102	33C/AMF-29	ACCETONE (ITALY)	As Req	LTR	Structure Built Up	CAS#: 67-64-1 Formula: C3H6O Origin: Italy Or Equivalent
103	150ARB	GRINDER DISK 2 INCH	As Req	EA	Structure Built Up	Dia: 2 Inch Grit Size: 120 Material: Aluminum Oxide
104	34D/149	CORROSION CLEANER WD-40 (400ML)	As Req	EA	Structure Built Up	WD-40 Packing: 330 ml Origin: UK
105	RICOHD129-2110	PHOTO CONDUCTOR UNIT FOR RICOH PPC MODEL MP- 5002	As Req	EA	Structure Built Up	Replace of Photo Conductor Unit of Ricoh PPC Model-MP-5002
106	M0501	PNEUMATIC RIVETING HAMMER MEDIUM	As Req	EA	Structure Built Up	Part No: M0501 OEM: Chinese Origin Or Equivalent
107	RICOHDAF032085	HEATER UNIT FOR RICOH PPC MODEL MP-5002	As Req	EA	Structure Built Up	Schedule replace of Heater Unit of Ricoh PPC Model-MP-5002
108	P38259	Adhesive RTV 3145 Grey Cat	As Req	EA	Structure Built Up	Origin : Germany / USA Or Equivalent Packing 310 ml 3145 Dowsel
109	71A/6830PK0000069	GAS ARGON	As Req	CM	TECH STORE (JF-17)	2000-2200 PSI
110	71A/6830PK0000074	GAS OXY BREATHING HP(99.9%)	As Req	CM	TECH STORE (JF-17)	3000-3000 PSI
111	71A/6830PK0000073	GAS NITROGEN HP (99.9%)	As Req	CM	TECH STORE (JF-17)	3000-3000 PSI
112	MDF-WP-25	LASANI WATER PROOF 8X4X 25 MM	As Req	EA	TECH STORE (JF-17)	Dimension Length 8 Ft Width 4 Ft Thickness 01 Inch
113	TK42100/2-PG-0.4MPA	PRESSURE GAUGE 0.4MPA	As Req	EA	W/Shop (105)	Range 0.4 MPA
114	QPT-C4-P	PRESSURE MEASURING & CONTROLLER	As Req	EA	W/Shop (105)	Voltage 220V Signal 420mA
115	6FX50025DA01-1AF0	6 CORE POWER CABLE	As Req	MTR	W/Shop 104(a)	
116	31363-LUB-200	LUBRICANT LUB 200	As Req	LTR	W/Shop 106(PPG)	BOgraded, synthetic lubricant for metal cutting
117	FE2508	FILTER CARTRIDGE	As Req	EA	W/Shop 106(PPG)	Brand DONOLDSON Or Equivalent Length and dimeter for reference drawing is attached
118	2860BF6B010000	TEMPRETURE RECORDER	As Req	EA	W/Shop 106(PPG)	Part No is from OEM
119	437106(UR20000)	TEMPRETURE RECORDER	As Req	EA	W/Shop 106(PPG)	Part No is from OEM
120	24300156	TIMING BELT	As Req	EA	W/Shop 106(PPG)	LXW 3970X15MM
121	ESG/B-FRTB1	TEMPRETURE ALARM CONTROLLER	As Req	EA	W/Shop 106(PPG)	Part No is from OEM
122	65414594	PROXY SWITCH	As Req	EA	W/Shop 106(PPG)	Part No is from OEM

123	60518464	PUSH BUTTON	As Req	EA	W/Shop 106(PPG)	Part No is from OEM
124	46252019	SERVO VALVE	As Req	EA	W/Shop 106(PPG)	Part No is from OEM
125	42160060	SEAL SET	As Req	EA	W/Shop 106(PPG)	Material Rubber Size as per Servo Valve Cylinder
126	20011581EL	SHELL CORENA OIL V 100	As Req	LTR	W/Shop 106(PPG)	Physical & chemical properties sheet attached
127	745144	SIEVE	As Req	EA	W/Shop 106(PPG)	Part No is from OEM
128	820055102	2X3/2 NORMALLY CLOSED VALVE	As Req	EA	W/Shop 106(PPG)	Part No is from OEM
129	820055502	5/2 IMPULSE VALVE	As Req	EA	W/Shop 106(PPG)	Part No is from OEM
130	CRE/001	CRESCENT BOARD 2500X2000X9 MM	As Req	SHT	W/Shop 106(PPG)	LASANI SHEET
131	10G/3227	TEMP RECORDER RIBBON CASSETTE	As Req	EA	W/Shop 106(PPG)	BJ9906JA YOKOGAWA
132	10AG/AMF-1380	ABBRASIVE DISK	As Req	EA	W/Shop 106(PPG)	SIZE 50MM grain size p80,p100,p120
133	JDZBAYGW/40*80*80* DEG180	CORO DRILL B3212.F.040.Z01.080R	As Req	EA	W/Shop 107	40*80*80*DEG180
134	AL7075T6-50MM	ALUMINIUM SHEET 7075	As Req	M2	W/Shop 107	GRADE 7075
135	AL2024T3-80MM	ALUMINIUM SHEET 2024	As Req	M2	W/Shop 107	GRADE 2024
136	AL6061T6-100MM	ALUMINIUM SHEET 6061	As Req	M2	W/Shop 107	GRADE 6061
137	61A/4BR-00031	TRINTEP PAPER	As Req	FT2	W/Shop 107	No sight Paper Sheet
138	61A/4BR-00032	FROSTED PAPER	As Req	FT2	W/Shop 107	No sight Paper Sheet
139	SMC-TU0425	POLYURETHANE PIPE OUTER DIA 4MM X INNER DIA 2.5MM	As Req	MTR	W/Shop 107	OUTER DIA 4MM X INNER DIA 2.5MM
140	SMC-TU0604	POLYURETHANE PIPE OUTER DIA 6MM X INNER DIA 4MM	As Req	MTR	W/Shop 107	OUTER DIA 6MM X INNER DIA 4MM
141	SMC-T51209	SOFT NYLON PIPE OUTER DIA 12MM X INNER DIA 9MM	As Req	MTR	W/Shop 107	OUTER DIA 12MM X INNER DIA 9MM
142	1625-4261-00-MAX15- BAR	OIL FILTER(ATLUS COPCO)	As Req	EA	W/Shop 107	Compressor Filter
143	2202-9294-00-MAX20- BAR	OIL SEPARATOR(ATLUS COPCO)	As Req	EA	W/Shop 107	Compressor Oil Separator
144	KBE-270- 2020H/GDA2206L	ANGLE DIE GRINDER	As Req	EA	W/Shop 107	Die Grinder
145	YXLPY2GWT/30*24*65 R3	END MILLING CUTTER	As Req	EA	W/Shop 107	2/30*24*65R3
146	18.16003	DIAL TEST INDICATOR(LT)0.02MM	As Req	EA	W/Shop 107	Part No is from OEM
147	ISOVC406	HYDRAULIC OIL46	As Req	LTR	W/Shop 109	Part No is from OEM
148	446537A	BEND DIE DIA 27 CLR 81 WITH INSERT GRIP LENGTH 54	As Req	EA	W/Shop 109	CLR 81 WITH INSERT GRIP LENGTH 54

149	446541	CLAMP DIE DIA 27 GRIP LENGTH 54	As Req	EA	W/Shop 109	DIE DIA 27 GRIP LENGTH 54
150	446538AC	WIPER DIE DIA 27 CLR 81 STEEL	As Req	EA	W/Shop 109	Dimension : 27 CLR 81 STEEL
151	1B/AMF-146	MAGNETIC WELDING CLAMP 6MMx80MM	As Req	EA	W/Shop 109	Dimension : 6MMx80MM
152	MED-50	ELECTRICAL AXIL BLOWER 48 INCH	As Req	EA	W/Shop 110	48 Inch Length of fan wings.
153	23-2806	SURFACE PLATE 914/610 MM	As Req	EA	W/Shop 110	Dimention is 914/610 MM
154	2.0VVP-20Q-34/48HV	LARGE SIZE VERTICAL VACUUM OIL QUENCHING AIR COOLING FURNACE	As Req	EA	W/Shop 110	Calibration of under mentioned 09 Vacuum Guages: Low Vacuum Gauge/Thermovac transmitter (Qty 04) = $1 \times 10^{-3} \sim 100$ mbar High vacuum gauge / Penning transmitter (Qty 03) = $DN251 \times 10^{-9} \sim 1 \times 10^{-2}$ mbar Ceravac vacuum gauge (Qty 01) = 0 ~ 10 Torr Analogue pressure gauge / Pressure transmitter (Qty 01) = -1 to +0.6bar
155	ZYC2-65	VACCUM OIL QUENCHING AIR COOLING FURNACE	As Req	EA	W/Shop 110	Calibration of under mentioned 05 Vacuum Guages: Digital display vacuum gauge set (Qty 01) = 0.5Pa ~2500 Pa Vacuum gauge tube (Qty 03) = 0.5 Pa ~ 2500 Pa Contact pressure gauge (Qty 01) = 1mbar ~ 1bar
156	KF-09-511-HN-442	KINEMATIC SOLENOID VALVE	As Req	EA	W/Shop 110	Size as per standard part no. KF-09-511-HN-442 M09-1,100% ED , 24V , 2.5W , 104mA , Germany Airtech, Or Equivalent
157	KF-10-520-HN-442	KINEMATIC SOLENOID VALVE	As Req	EA	W/Shop 110	Size as per standard part no.KF-10-520-HN-442 M09-1,100% ED , 24V , 2.5W , 104mA , Germany Airtech, Or Equivalent
158	9061010-060	PNEUMATIC DRILL MACHINE (S)	As Req	EA	W/Shop 51	Part No is from OEM
159	02-4110	T SLOT CUTTER 16 MM	As Req	EA	W/Shop 52	Material HSS Dia 16mm Thickness 2.3mm R0.2
160	A201.75	STRAIGHT SHANK CARBIDE DRILL DIA 3.2X150	As Req	EA	W/Shop 52	Material Carbide Dia 3.2mm Length 150~160mm

161	C92020.0	END MILL DIA 20MM	As Req	EA	W/Shop 52	Material Carbide HRC55 Length 100~120mm
162	EL-BUL16R0.5	EXT LONG BULL MILL DIA 16MM R0.5 FL 60 TL 120MM	As Req	EA	W/Shop 52	Material Carbide HRC55
163	EL-BUL16R3	EXT LONG BULL MILL DIA 16MM R3 FL 60 TL 120MM	As Req	EA	W/Shop 52	Material Carbide HRC55
164	11IR-1.5MJ-IC908	MJ 1.5 INTERNAL THREADING INSERT 11MM	As Req	EA	W/Shop 52	OEM Iscar Or Equivalent
165	REF9213	HAND SAWS	As Req	EA	W/Shop 52	Hacksaw Frame
166	2572-90	COUNTER SINK 90 DEGREE	As Req	EA	W/Shop 52	Material HSS Dia 12 mm
167	71A/129	EMPTY CYLINDER OXYGEN BREATHING	As Req	EA	Log Sqn JF-17	



DEFECT REPORT / SCOPE OF WORK

The detailed scope of work/Diagnosis is as under.

Part No	Noun	Make/Mode I	Diagnosis/Scope of work
10KL	Vertical Compressed Air Receiver Tank	China	<ul style="list-style-type: none">• Qty 02 Vertical Compressed Air receiver Tank Capacity (10000 Ltrs, Working Pressure 08 Bar) are installed at W/S 120 Compressor House.• Third Parties Inspection. & Hydrostatic Testing NDT tests of Air receiving Tanks are due on 08-12-2024 as per schedule of 03 years. These NDT tests were carried out on 08-12-2021.• These NDT tests are required from authorized and Competent firm under regulation according to Punjab Boilers & Pressure Vessels Regulation 2018