



# PAKISTAN AERONAUTICAL COMPLEX, KAMRA AIRCRAFT MANUFACTURING FACTORY

**TENDER NOTICE : OPEN TENDER**

**AMF/751-A/4607/LOG DATED 09 April, 2026**

**TO BE OPENED ON : 27 April, 2026**

**TENDER INQUIRY : 06**

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.**

**Unit (751-A) 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 27 April, 2026**. 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,**

**Unit No 751-A  
AMF, PAC Kamra  
Tel No. 051-90995372**

## 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.

## **ACCEPTANCE CRITERIA FOR PROCUREMENT OF LP ITEMS RELATED TO PMI**

1. The spares should be factory new and should be delivered in standard OEM packing on FOR Kamra basis.
2. The spares should clearly indicate Name, Part No and name of OEM.
3. The spares should be delivered with proper traceability record from authorized dealer to OEM of the Part number.
4. Technical publication relevant page of OEM Catalogue be provided along with technical quotation.
5. Vendor has to provide complete trail that item is from OEM of the Part number or through OEM authorized dealer with documentary proof (e-mail / letter head etc.) along with technical quotation.
6. Vendor will provide all support for the item which need special installation / software requirement for its operation.
7. The Vendor will also provide following documents with supplied stores at the time of delivery:-
  - (a) Quality Certificate.
  - (b) Certificate of Conformance (CoC) by OEM of the Part number.
  - (c) Standard Warranty Certificate of one year

**AMF/751-A/4607/LOG (PC-06) DATED 09 APRIL, 2026  
(TOTAL LINE ITEMS ON SHEET 243 WITH DETAIL SPECIFICATIONS)**

S No	Part No	Noun	Qty	U/I	Shop	Specification
1	KH-94101-20	REPLACEMENT GENERATOR	1	EA	Central Lab	<ul style="list-style-type: none"> <li>Part No 71-0104</li> <li>Compatible with Cou-Lo Aquamax KF Moisture Meter SNo 71361 Made: GR Scientific Ltd Bedford Shire UK</li> </ul>
2	71-0103	DETECTOR ELECTRODE FOR KF METER	1	EA	Central Lab	<ul style="list-style-type: none"> <li>Compatible with Cou-Lo Aquamax KF Moisture Meter SNo 71361 Made: GR Scientific Ltd Bedford Shire UK</li> </ul>
3	9219980	UNIVERSAL ROTORY BOLT HOLE FISCHER PROBE (ET)	1	EA	Central Lab	<ul style="list-style-type: none"> <li>Universal Rotary Bolt Hole 4 pin Fischer Probe</li> <li>Diameter : (0.218~0.250) inch / (5.5~6.3) mm</li> <li>Frequency range : 200 KHz~3 MHz</li> <li>Working length : 2 inch (50mm)</li> <li>Manufacturer : Olympus / Aerofab, USA</li> <li>Probe must be compatible with Minimate Scanner Part No 9020266.04 &amp; Eddy Current Tester Nortec 2000S+ made by Olympus USA</li> </ul>
4	PROG00002	PROGARD 2 MILLIPORE	1	EA	Central Lab	Progard 2 Milipore must be compatible with Milipore Elix 10 pure water production unit, Sample may be checked.
5	PMASSBSS/104B-178	PARTICAL COUNTING SYSTEM FOR LIQUID	1	EA	Central Lab	Calibration fluid oil for PAMAS
6	DFR(113-124-660)	ALPHA DFR PROBE	1	EA	Central Lab	Frequency ? Dia = 5 MHZ / 0.2", Prob must compatible with portable composite ultrasonic flaw detector model (USM Go+) made in USA.
7	CO01269	CLEAN OIL FOR PAMAS CALIBRATION	2	BTL	Central Lab	Standard clean oil for calibration of pamas particle counting system,400ml Bottle, The filtered oil contains less then 20 particlies pr mm greater then 4mm©.
8	O-00003	CALIBRATION FLUID OIL FOR PAMAS (ACFTD)	2	BTL	Central Lab	Standard fluid oil for calibration of pamas particle counting system as per ISO 4400 (ACFTD), 400ml Bottle.
9	Z-3583	ACETIC ETHER	4	LTR	Central Lab	<ul style="list-style-type: none"> <li>AR Grade</li> <li>MSDS &amp; CoC required</li> <li>Minimum remaining shelf life = 75% of original life</li> </ul>
10	0.0120.SH2024T3CLAD	SHEET ALUMINIUM 0.3MM(48X144X0.012)INCH	1	SHT	Central Lab	Sheet aluminum 2024 Claded <ul style="list-style-type: none"> <li>Temper Condition : T3</li> </ul>

						<ul style="list-style-type: none"> <li>• Dimensions : 48 x 144 x 0.012 inches.</li> <li>Comply with AMS-QQ-A-250/5</li> <li>Note:-</li> <li>• Conformance certificate is required.</li> <li>• Sheet should be scratch less and corrosion less.</li> <li>• Sheet should be wrapped with polythene sheet.</li> </ul>
11	50D5	SILICON RUBBER 2.0 MM (VULCANIZED)	20	MTR	Central Lab	Type=50D5 Silicon Rubber Sheet 500 X2mm (WidthxThick) <ul style="list-style-type: none"> <li>• Rubber sheet must be vulcanized</li> <li>• CoC required</li> </ul>
12	Cr16Ni6Ø40MM	Cylindrical Reference Block of Longitudinal Wave Inspection Ø40mm	1	EA	Central Lab	As Per Attached Drawing
13	Cr16Ni6Ø50MM	Cylindrical Reference Block of Longitudinal Wave Inspection Ø50mm	1	EA	Central Lab	As Per Attached Drawing
14	23Co14Ni12Cr3MoE (A100)Ø50MM	Cylindrical Reference Block of Longitudinal Wave Inspection Ø50mm	1	EA	Central Lab	As Per Attached Drawing
15	23Co14Ni12Cr3MoE(A100)Ø64MM	Cylindrical Reference Block of Longitudinal Wave Inspection Ø64mm	1	EA	Central Lab	As Per Attached Drawing
16	0Cr12Mn5Ni4Mo3Al(69111)Ø40MM	Cylindrical Reference Block of Longitudinal Wave Inspection Ø40mm	1	EA	Central Lab	As Per Attached Drawing
17	0Cr12Mn5Ni4Mo3Al(69111)Ø50MM	Cylindrical Reference Block of Longitudinal Wave Inspection Ø50mm	1	EA	Central Lab	As Per Attached Drawing
18	0Cr13Ni8Mo2AlPH13-8Mo)Ø40MM	Cylindrical Reference Block of Longitudinal Wave Inspection Ø40mm	1	EA	Central Lab	As Per Attached Drawing
19	LC9RØ100MM	Cylindrical Reference Block of Longitudinal Wave Inspection Ø100mm	1	EA	Central Lab	As Per Attached Drawing
20	2124-T851	Standard Block 2124 (Ø60 mm, Thickness 30 mm)	1	EA	Central Lab	For Spectrometric Analysis
21	30CrMnSiNi2A	Standard Block 30CrMnSiNi2A (Ø35 mm, Thickness 35 mm)	1	EA	Central Lab	For Spectrometric Analysis
22	2024-T0	Standard Block 2024 (Ø 60 mm, Thickness 30 mm)	1	EA	Central Lab	For Spectrometric Analysis
23	0Cr12Mn5Ni4Mo3Al(69111)	Standard Block 0Cr12Mn5Ni4Mo3Al(69111) (Ø35 mm, Thickness 35 mm)	1	EA	Central Lab	For Spectrometric Analysis
24	23Co14Ni12Cr3MoE(A100)WF	Standard Block 23Co14Ni12Cr3MoE(A100)WF (Ø35 mm, Thickness 35 mm)	1	EA	Central Lab	For Spectrometric Analysis
25	18Cr2Ni4WA	Standard Block 18Cr2Ni4WA (Ø35 mm, Thickness 35 mm)	1	EA	Central Lab	For Spectrometric Analysis
26	2Cr13Mn9Ni4-R	Standard Block 2Cr13Mn9Ni4 (Ø35 mm, Thickness 35 mm)	1	EA	Central Lab	For Spectrometric Analysis

27	ML16CrSiNi	Standard Block ML16CrSiNi (Ø35 mm, Thickness 35 mm)	1	EA	Central Lab	For Spectrometric Analysis
28	TC1M	Standard Block TC1 (Ø35 mm, Thickness 35 mm)	1	EA	Central Lab	For Spectrometric Analysis
29	TC4M	Standard Block TC4 (Ø35 mm, Thickness 35 mm)	1	EA	Central Lab	For Spectrometric Analysis
30	QT600-3	Standard Block QT600-3 (Ø35 mm, Thickness 35 mm)	1	EA	Central Lab	For Spectrometric Analysis
31	CS-17	Calibrase Abrading Wheel	10	Pair	Central Lab	Required for Taber abrasion resistance tester
32	S-11	Refacing Disc	5	Box	Central Lab	Required for Taber abrasion resistance tester
33	NaCl-AR	Sodium Chloride AR Grade	10	Kg	Central Lab	AR Grade
34	36B/BDH-16	Chromium Trioxide	1	Kg	Central Lab	AR Grade
35	27A/AMF-24	Phosphoric acid	1	Ltr	Central Lab	AR Grade
36	KNO3	Potassium nitrate	10	Kg	Central Lab	AR Grade
37	30721	Hydrochloric acid	10	Ltr	Central Lab	AR Grade
38	27A/AMF-21	Nitric acid	10	Ltr	Central Lab	AR Grade
39	30743	Sulfuric acid	10	Ltr	Central Lab	AR Grade
40	109951	Glacial acetic acid	1	Ltr	Central Lab	AR Grade
41	8331	Toluene	0.5	Ltr	Central Lab	AR Grade
42	21FAMF-152	Ammonium hydroxide	2.5	Ltr	Central Lab	AR Grade
43	33A/AMF-115	Hydrogen peroxide	2	Ltr	Central Lab	AR Grade
44	104169	Glycerin	0.5	Ltr	Central Lab	AR Grade
45	33220	Formaldehyde	0.5	Ltr	Central Lab	AR Grade
46	3609	Ethylenediaminetetraacetic acid	0.5	Kg	Central Lab	AR Grade
47	A/3440/53	Ammonium acetate	500	GM	Central Lab	AR Grade
48	30105	Sodium fluoride	0.5	Kg	Central Lab	AR Grade
49	A/6160/53	Ammonium persulfate	500	GM	Central Lab	AR Grade
50	101719	Barium chloride	0.5	Kg	Central Lab	AR Grade
51	30620	Sodium hydroxide	2	Kg	Central Lab	AR Grade
52	6810-68-600-0342	Sodium tetraphenylboron	30	GM	Central Lab	AR Grade
53	4763	Iodine	500	GM	Central Lab	AR Grade
54	30315	Potassium iodide	0.5	Kg	Central Lab	AR Grade
55	31459	Sodium thiosulfate	0.5	Kg	Central Lab	AR Grade
56	C6H15NO3	Triethanolamine	0.5	Ltr	Central Lab	AR Grade
57	S/2120/53	Anhydrous sodium acetate	500	GM	Central Lab	AR Grade
58	A/5680/48	Ammonium metavanadate	200	GM	Central Lab	AR Grade
59	H/0320/53	Hexamethylenetetramine	500	GM	Central Lab	AR Grade
60	A/4880/53	Ammonium ferrous sulfate	500	GM	Central Lab	AR Grade
61	S/5840/53	Sodium oxalate	100	GM	Central Lab	AR Grade
62	Z/1350/53	Zinc oxide	100	GM	Central Lab	AR Grade

63	31630	Silver nitrate	100	GM	Central Lab	AR Grade
64	31255	Potassium dichromate	0.1	Kg	Central Lab	AR Grade
65	31432	Anhydrous sodium carbonate	0.5	Kg	Central Lab	AR Grade
66	P/5320/53	Potassium hydrogen phthalate	500	GM	Central Lab	AR Grade
67	C/7480/44	Xylenol orange	10	GM	Central Lab	AR Grade
68	103170	Eriochrome black T	25	GM	Central Lab	AR Grade
69	32940	Methyl orange	0.025	Kg	Central Lab	AR Grade
70	107233	Phenolphthalein	25	GM	Central Lab	AR Grade
71	S/7960/53	Soluble starch	500	GM	Central Lab	AR Grade
72	B/2113/48	Benzidine hydrochloride	50	GM	Central Lab	AR Grade
73	33723	Thymolphthalein	0.025	Kg	Central Lab	AR Grade
74	31650	Zinc chloride	0.5	Kg	Central Lab	AR Grade
75	31404	Potassium permanganate	0.5	Kg	Central Lab	AR Grade
76	4109	4109 Aviation lubricating oil	50	Ltr	Central Lab	AS PER part Number
77	YH-15	YH-15 Hydraulic oil	50	Ltr	Central Lab	AS PER part Number
78	YH-10	YH-10 Hydraulic oil	50	Ltr	Central Lab	AS PER part Number
79	No-120	No.120 Solvent oil	1	Ltr	Central Lab	AS PER part Number
80	No-8	No.8 Lubricating oil	50	Ltr	Central Lab	AS PER part Number
81	RP-3	RP-3 Aviation kerosene	50	Ltr	Central Lab	AS PER part Number
82	3A/AMF-149	COMBINE WOOD WORKING M/C WITH ALL ACCY	1	EA	108	Attached
83	11232	ELECTRIC SCISSOR LIFT	1	EA	108	Attached
84	16A/AMF-153	ELECTRIC STACKER/LIFTER	1	EA	108	Attached
85	3820-520B	HYDRAULIC JACK TROLLY	3	EA	108	Attached
86	220V-10A-2	EXTENTION BOARD ELECT 100M CABLE 220VOLT AC	3	EA	108	100M CABLE 220VOLT AC
87	498J6600-01	WEIGHT & BALANCING DEVICE UPTO 5 K	1	EA	108	UPTO 5 K
88	15303825-12-041-2	TEMPERATURE RECORDER	2	EA	111	TEMP RECORDER WITH GRAPH PAPER SHEET. RECORD TEMP WITH PT100 NSOR
89	DO111	DRY OVEN GRAPH PAPER	5	RL	111	Made in CHINA, NO 291E-207, PAGE WIDTH 29mm, PAGE POIT AT WIDTH 0~20
90	3A/2110	ELECTRIC DRILL MACHINE	1	Ea	WKSP-111	MADE BY BOSCH OR DEWALT INPUT POWER 1100~1200W, OUT PUT POWER 420, LOAD SPEED 1ST GEAR 0~1100rpm LOAD SPEED 2nd GEAR 0~3000rpm, IMPACT RATE: NO LOAD SPEED 0~17500/48000rpm CHUCK CAPACITY: KEYLESS CHUCK, MAX TORQUE: 24/14nm RATED SPEED/TORQUE: :740/1930rpm/4.8/1.8mm.

91	1/HS19-2	OFC SPLITTER	5	EA	PAC Comm	Specs attached
92	UGC50ARM	UNDERGROUND CABLE 50 PAIR 0.6 MM ARMORED WITH LAYING TERMINATION	250	MTR	PAC Comm	Specs attached
93	XR40CX	ELECTRONIC THERMOSTAT 230V 50-60HZ 3VA MAX	1	EA	PMI	230V 50-60HZ 3VA MAX
94	JT160BCBY1L	SCROLL COMPRESSOR	1	EA	PMI	OEM: DAIKIN, CHAINA Model No:- JT160BC-YE, 3Phase 380~420v Gass= R-22, Suniso4GS.
95	6140-68-900-0009	CHEMICAL CIRCULATING PUMP 220V & 5HP & 2850 RPM	1	EA	PMI	Input power - 220 volt RPM - 2850
96	682604773537	PLASTIC HEXAGON GRILL MESH SHEET	100	FT2	PMI	as per sample
97	CV-DN80	DUAL PLATE CHECK VALVE 3 INCH	2	EA	PMI	OEM KITZ Flange Type Size 3 Inch
98	GG25-12046	STEAM STOP VALVE DN100	2	EA	PMI	OEM= kitz stop valve type DN100 source local market.
99	32A/AMF-2	LIFTING SLING OF NYLON	30	MTR	PMI	Nylon Sling, 30 Mtr, 25 TON
100	1B/AMF-106	ROLLER SCATERS	8	EA	PMI	Par easy scating of new ~10ton ics
101	192-9033520-010	WIRE CUTTER	2	EA	PMI	Relectres wire cutter
102	YH32-200IACV-01	TWO WAY CARTRIDGE VALVE	1	EA	PMI	Attached
103	3A/AMF-21	ELECT WELDING PLANT	1	EA	PMI	Elect welding plant is unserviceable and need to be repaired. 1. Winding is burnt out and need to be rewinded. 2. Complete serviceability of electric welding plant along with 06 months post repair warranty is required.
104	A03B-0819-C060	ANALOG OUTPUT MODULE (ADA02B)	4	EA	PMI	Type: ADA02B, OEM: Fanuc Japan, Make: Japan.
105	773103	PILZ PNOZ EMERGENCY I/O MODULE	1	EA	PMI	Voltage 24VDC, no of digital input:20, no of test pulse output: 04, no of relay output:01, no of cascading outout: 01, no of semiconductor output: 01, no of ethernet interface: 02, permitted no of module: 08.
106	6SN1145-1BB00-0EA1	SIMODRIVE 611 E/R-MODULE (80/104KW)	1	EA	PMI	OEM: Siemens, make: germany, Simodrive E/R 611 Module, 80/104w.
107	3RT1026-1B	MAGNATIC CONTACTOR WITH DIODE 24VDC COIL 3PHASE (SIEMENS)	1	EA	PMI	Magnetic contactor with diode coil voltage 24VDC phase 3 Make Siemens
108	6SN1145-1BB00-0FA1	SIMODRIVE 611 E/R-MODULE (120/156KW)	1	EA	PMI	OEM Siemens make Germany, watt 120/156 kw
109	6SN1112-1AC01-0AA1	SEIMENS SIMODRIVE UEB MODULE	1	EA	PMI	OEM Siemens make Germany, watt 120/156 kw
110	AQUACARE-AC-306	OXYGEN SCAVANGER CATALYST	50	KG	PMI	

111	SATA-TO-IDE	SATA TO IDE ADAPTER CONVERTER 2.5 SATA FEMALE TO 3.5 INCH IDE MALE	1	EA	PMI	2.5 SATA Female 3.5 Inch IDE Male
112	88290008-036	HOSE	1	EA	PMI	L=33", 4" Dia pressure: 15 Bar, Temp:- 200 c
113	043406	RUBBER ELBOW	1	EA	PMI	8mm thickness, 90c angle.
114	2819-0208	FRAME LEVEL	3	EA	PMI	for leveling of machine
115	6030082	DIGITAL MICROMETER EXTERNAL 20-50 MM	1	EA	51-1	20-50mm (INVAR STEEL)
116	LEICA-575739	RED RING REFLECTOR 0.5INCH	1	EA	51-1	Leica Dia 0.5" (Stainless steel)
117	F1000-G0150T3C	HF INVERTER AC 3PH 15KW 32A	1	EA	51-1	3 Phase 15 KW 32 Ampere
118	GB/T25751-2010	GAS STRUT SPRING	16	EA	51-1	Specs Attached
119	CDR14.5	DRILL CARBIDE DIA14.5MM	5	EA	51-1	Carbide
120	10AG/AMF-400	WORKSTATION PC BASED DIGITAL VIDEO RECORDER	2	EA	SRT	Intel core i7 (any of latest 3 generations),6 MB Cache or Better, 4 GB Nvidia Graphic Card (compatible) ,8 GB DDR4 RAM, 1 TB HDD , SSD 256 GB , Pre-installed windows 10 64 bit, 10 meter 4k HDMI , 10 meter VGA , 2x ports converter , 2x USB to RJ-45 converter, standard power cables set, Surge protected power supply , Gigabit Ethernet port , standard Keyboard & Mouse.
121	1GS-1002-OPT	8 PORT POE 12 SFP NETWORK SWITCH ALONG SWP MOULES	2	EA	SRT	Specs attached
122	NTI-50022-A35	FIXED IP CAMERA 2MP DAY AND NIGHT VIEW IR	2	EA	SRT	Minimum 2 Mega Pixel resolution adjustable frame rate, more than 100 feet IR visual distance in Pitch Dark, Automatic Varifocal lens 2.7 to 12 mmm, DC Iris F 1.4 ~ 360, IRcorrected, H.264,H.265, MJPEG Multi codec, Multi-crop streaming, Auto focus, Face / motion / Audio Detection, Defog, DC-Iris, Day & Night 0.0 Lux (IR on), Network Protocol IPv4/6 - TCP/IP, UDP, HTTP, HTTPS, RTP, RTSP, DHCP,ICMP,FTP,SMTP, iSCSI, APIPA, NTP, ARP, SNMPv1 / v2c / v3,DDNS,UPnP,CHAP, digest access authentication, Intelligent Video Analytic features, Web Viewer: Internet Explorer, Google Chrome, Firefox. Encryption: TLS 1.0, SSL, DES, 3DES, RJ- 45, Audio In / Out Alarm In / Out, Audio In / Out, Motion detection: Support Event

						Notification Relay Out, Email, FTP, Totally Weatherproof IP-66, Impact protection: IK08, POE, 24V AC, 12V DC supports. Outdoor Housing and Bracket Included power supply box and external power supply. Open protocol ONVIF Supported, SD Memory Slot. Compatible with Luxriot VMS. Firmware remotely programmable .3 axis adjustment (pan /tilt / rotation).Warranty : 03 years replaceable. Parts availability : 05 years
123	PAE-PSU-1200	UPS 1 KVA	4	EA	SRT	Output power capacity : 700 watts / 1 KVA , Nominal output voltage : 220 to 230V , output voltage distortion : Less than 5% at full load , output frequency (sync to mains) : 47-53 Hz nominal, 57 – 63 Hz for 60 Hz nominal , Online , pure sine wave , LCD display, 1.5 Hrs backup .Built in AVR.
124	7430-68-900-1041	UTP CABLE	4	RL	SRT	Material Solid bare copper content 99.95% 23 AWG, Insulation material HDPE, color Orange RAL2003, U/UTP CAT6-4P
125	21IBM/IT-358	USB CABLE 15 METER	20	EA	SRT	Material Solid bare copper content 99.95%
126	NEZ-5230-IRCW4	PT2 IP CAMERA 2MP DAY AND NIGHT VIEW IR	2	EA	SRT	Minimum 2 Mega Pixel resolution, Variable frame rate minimum 25 fps streaming, minimum 30x optical zoom lens (4.3 mm - 129 mm) (F1.6 - F5.0), 16x digital zoom or more, Min illumination 0.0 Lux, more than 180 Mtrs IR Range, Network Protocol IPv4/6 - TCP/IP, UDP, HTTP, HTTPS, RTP, RTSP, DHCP, ICMP, FTP, SMTP, iSCSI, APIPA, NTP, ARP, SNMPv1/v2c/v3, DDNS, UPnP, CHAP, digest access authentication, Web Viewer Internet Explorer, Google Chrome, Firefox. Encryption TLS 1.0, SSL, DES, 3DES, H.264 / MPEG-4 / MJPEG/H.265 Multiple Streams, Intelligent Video Analytics: Tampering, Virtual Line, Enter / Exit Appear, Face Detection. Network Disconnection, 360° Endless Pan, Tilt / Zoom, WDR, Defog, IP66, Open protocol ONVIF Supported, SD Memory Slot, Weatherproof Housing & Mounting Kit, standard power supply, 24 VAC, POE. Compatible with Luxriot VMS. Firmware remotely

						programmable. Warranty: 03 years replaceable. Parts availability: 05 years
127	5E/PAF-25	PVC PIPE	900	MTR	SRT	PVC Pipe 1" including socket, bend accessories
128	7430-68-900-1039	POWER DISTRIBUTION UNIT	10	EA	SRT	Power Unit 8 Port.
129	32B/AMF-67	MASKING TAPE 25 MM (NICHIBAN)	500	RL	SBG	Nichiban Compony OEM
130	G784KT	REPAIR TOOL KIT FOR PNEUMATIC CHERRY GUN	1	EA	SBG	Repair kit for pneumatic cherry gun
131	J11PM0067	POLISH NO 6	2	LTR	SBG	PT No: J11PM0067, OEM: ABAX, France, Packing 01 Ltr, U/I Bottle, Web Address: www.abax.eu, Usage: Used for scratch removal on canopy glass.
132	92000-601	IR SENSOR COVER	12	EA	TECH STORE	
133	32B/AMF-76	CLOTH FLANENT	503	MTR	TECH STORE	
134	22B/492	PARACHUTE CLOTH DANE DAR	321	MTR	TECH STORE	
135	8305/PK0005848	CLOTH PARACHUTE	319	MTR	TECH STORE	
136	5AP-340/L8-2003-C	ELEVATOR JIG ASSY COVER (PARACHUTE CLOTH)	319	MTR	TECH STORE	
137	5305/PK0011616	RED PARACHUTE CLOTH	319	MTR	TECH STORE	
138	22A/PAF-L-223	PARACHUTE CLOTH	587	MTR	TECH STORE	
139	16B/AMF-31	MACHINE COVER OF PARACHUTE CLOTH	587	EA	TECH STORE	
140	XU-092	HIGH TEMPERATURE SAFETY SUIT	1	EA	105	Upto 150 Degree "C", head Gear and Boots also included
141	UE319AT20Z	ROUGH FILTRATION ELEMENT	3	EA	105	Pall Company USA Part Number UE319AT20Z
142	UE319AP20Z	SECONDARY FILTRATION ELEMENT	3	EA	105	Pall Company USA Part Number UE319AP20Z
143	CASTROL-18	NIBLLER LUBRICANT LLOBROACH 18	5	KG	106	AS PER part Number
144	DR-210A	TEMPERATURE RECORDER WITH SENSOR -50°C TO 50°C 12V, 24VDC	1	EA	106	DR-210A printer temperture, sensor (3 in 1)
145	32B/9433234	BINDING TAPE RED (JAPAIN)	20	RL	106	Neeto or Equal Bands
146	3A/AMF-196	PNEUMATIC AIR PIPE CONNECTION Y QUICK FITTING (DIA 8 MM)	25	EA	106	Stainless Steel
147	4D/AMF-220	BUFFING DISC 100X5MM	300	EA	106	100x16 max RPM 12500 ( Dragon super u;tra)
148	7134-12-0.9	BAND SAW BLADE	10	MTR	106	16 TPI
149	SST-10MM	STAINLESS STEEL ROD DIA 10MM	61	MTR	106	AISI-304 DIA 2.4MMX150MM. 3rd Party Lab report required with item. COA of Mfg required.
150	AMS-5557-30	STAINLESS STEEL PIPE DIA 30X4MM	10	FT	106	AISI-304 DIA12MM THICKNESS 3MM. 3rd Party Lab report required with item. COA of Mfg required.
151	AMS-5557-12	STAINLESS STEEL PIPE DIA 12MMX3MM	45	FT	106	AISI-304 DIA12MM THICKNESS 4MM. 3rd Party Lab report required with item. COA of Mfg required.

152	10AC/AMF-198	STAINLESS STEEL SHEET 4 FEETX2 INCHX6MM	16	EA	106	AISI-304 SHEET WIDTH 4 FT THICKNESS 2MM. 3rd Party Lab report required with item. COA of Mfg required.
153	FLEX-PLPS-120-LG6	FLEXIBLE POLYRETANE SUCKING TUBE DIA120 8MM-1	70	FT	106	Dia 120 mm Wall thickness 6 mm Wire Type, Materail Flexible Polyurthene
154	AMS-5557-50	STAINLESS STEEL PIPE DIA 50X4MM	200	FT	106	AISI-304 DIA 50MM T HICKNESS 4MM. 3rd Party Lab report required with item. COA of Mfg required.
155	LP6-4.5	LEAD ACID BATTERY(6V4.5AH)	32	EA	106	Any brand Voltage12, raiting 7.5 amp 12-7 5AH, sealed battery, with clamp.
156	CASTROL-150	DRIVE CASING LUBRICANT MAGNA 150	25	KG	106	Attached
157	CASTROL-45	AIR SYSTEM LUBRICANT HYSPIIN 45	5	KG	106	Attached
158	CASTROL-AWS22	CLAMP BOOSTER LUBRIC CANT HYSPIIN AWS22	5	KG	106	Attached
159	QH25390	SPHERE DIA 25.39MM	3	EA	107	Dia 25.39mm
160	A-5734-1200-MCUW-2	JOY STICK KIT (RENISHAW)	2	EA	107	(Renishaw)
161	GXLZY3GWT/12*14*50 R1	MILLING CUTTER	15	EA	107	3/12*14*50*100R1
162	CHPC.32.R.03-19-A-80	INDEXABLE MILLING HOLDER	1	EA	107	AS PER part Number
163	CHSC.32.R.03-19-A-80	INDEXABLE MILLING HOLDER	1	EA	107	AS PER part Number
164	CHSC.32.R.02-19-A-80	INDEXABLE MILLING HOLDER	1	EA	107	AS PER part Number
165	ZLM/14*98*98	DRILL	20	EA	107	14*98*98*150
166	ER16.UP	COLLET ER16	5	SET	107	0.5-10MM
167	JJLZMGTW/16H8*20*80	SPECIAL CUTTING TOOL 16H8	20	EA	107	As per part number
168	JZLZ/3*16*21	SPECIAL DRILL	12	EA	107	As per part number
169	JJLZMGTW/16H8*20*100	END MILL	15	EA	107	As per part number
170	JDXTIZYGWF/10*22*28 R1	END MILL	12	EA	107	2/10*22*28*75R1
171	ER16	COLLET	5	EA	107	0.5-10MM
172	GXLZY2GWT/12*14*50 R3	END MILLING CUTTER 2G/12X14X50R3	20	EA	107	2/12*14*50*100R3
173	JDZTIAYGW/25*75*75 DEG170	SPECIAL DRILL 25MM (B4213.F25.25.201.075R-4)	15	EA	107	As per part number
174	JZLZ/11.7*46*54	DRILL REAMER MAE1170MB	15	EA	107	As per part number
175	JDZBAYGW/20*80*80D EG176	SPECIAL DRILL 20MM (880-D2000L25-04)	20	EA	107	As per part number
176	DXTIZY5GWT/16*32*70 R3	MILLING CUTTER	10	EA	107	5/16*32*70*130R3

177	DXTIZY5GWT/16*32*60 R3	MILLING CUTTER	10	EA	107	5/16*32*60*130R3
178	GXLZY2GWT/12*14*80 R3	MILLING CUTTER	10	EA	107	2/12*14*80*130R3
179	GXLZY3GWT/20*24*60 R3	MILLING CUTTER	15	EA	107	3/20*24*60*110R3
180	T20-W40-L200	CLAMP M12	100	EA	107	Thickness 20mm & Width 40mm & Length 200mm
181	T20-W40-L60	CLAMP M16	100	EA	107	Thickness 20mm & Width 40mm & Length 60mm
182	T25-W60-L300	NOSE CLAMP M16 (30MM)	100	EA	107	Thickness 25mm & Width 60mm & Length 300mm
183	T16-W50-L200	NOSE CLAMP M16 (20MM)	100	EA	107	Thickness 16mm & Width 50mm & Length 200mm
184	T14-W36-L100	CLAMP M12	100	EA	107	Thickness 14mm & Width 36mm & Length 100mm
185	M16-1343ML50	HEXAGONAL NUT	50	EA	107	M16 & Length 50mm
186	M12-1343ML50	HEXAGONAL NUT	50	EA	107	M12 & Length 50mm
187	M12X150MM	ALLEN KEY BOLT 12X150MM	50	EA	107	M12 & Length 150mm
188	M16X200MM	ALLEN KEY BOLT 16X200MM	70	EA	107	M16 & Length 200mm
189	JGXLZY2GWT/6*10*20 R3	SPECIAL MILLING CUTTER	15	EA	107	2/6*10*20*60R3
190	HXLZM20SWT/110*7.5*31*60R3	T SLOT CUTTER	5	EA	107	As per part number
191	486100-M4X0.76H	THREAD PLUG GAUGE M4X0.7	10	EA	107	GERMANY M4X0.7
192	486100-M3X0.56H	THREAD PLUG GAUGE M3X0.5	10	EA	107	GERMANY M3X0.5
193	GZ15-FC1-33003-1MC11	MILLING CUTTER	5	EA	107	4/32*50*60*120R3
194	GZ15-FC1-20202-31A-YMC1	CONICAL E/MILL 8*55*20DEG	5	EA	107	As per part number
195	GZ15-FC1-02071-1MC1	END MILLING CUTTER DIA 20XSR3	5	EA	107	As per part number
196	GXLZY2GWT/32*30*100R3	MILLING CUTTER	7	EA	107	2/32*30*100*160R3
197	JGXLAY2GNT/32*35*100R3	SPECIAL MILLING CUTTER	5	EA	107	2/32*35*100*160R3
198	GZ15-FC1-71621-210-1MC3	END MILLING CUTTER 12X16X40R0.5	5	EA	107	2/12*16*40*90R0.5
199	GXLZY3GWT/12*14*50 R3	CARBIDE END MILL	15	EA	107	3/12*14*50*100R3
200	JGXLAY2HNT/32*35*80 R3	MILLING CUTTER	10	EA	107	2/32*35*80*130R3
201	JGXLAY2HNT/32*35*60 R3	SPECIAL MILLING TOOL	4	EA	107	2/32*35*60*110R3
202	YXLZY2G/20X40X60R0	SPECIAL CUTTING TOOL	5	EA	107	2/20*24*60*110R0
203	GZ15-FC1-33003-2MC2	MILLING CUTTER 12X14X55R3	5	EA	107	2/12*14*55*110R3

204	GZ15-FC1-02081-12-ZMC5	MILLING CUTTER 32R3	5	EA	107	2/32*30*100*160R3
205	GZ15-FC1-02101-1-ZMC1	END MILLING CUTTER DIA 12R4	5	EA	107	2/12*14*60*110R4
206	DXLPY2GWT/20*30*70R3	END MILL	5	EA	107	2/20*30*70*120R3
207	GGXLPY4/32X50X60R3	SPECIAL MILLING CUTTER	5	EA	107	4/32*35*60*110R3
208	GXLZY3GWT/20*24*60R1	END MILL	10	EA	107	3/20*24*60*110R3
209	GXLZY2GWT/6*10*30R0	END MILL	5	EA	107	2/6*10*30*70R0
210	GXLXZY3GWT/12*14*50R3	END MILL	5	EA	107	3/12*14*50*100R3
211	GXLZY2GWT/10*12*45R1	END MILL	10	EA	107	2/10*12*45*90R1
212	GXLZY2GWT/20*24*60R3	SPECIAL CUTTING TOOL	10	EA	107	2/20*24*60*110R3
213	XLPY2G/20X30X50R5	SPECIAL MILLING CUTTER	10	EA	107	2/20*30*50*110R5
214	GXLZY2GWT/12*14*40R6	SPECIAL CUTTING TOOL	10	EA	107	2/12*14*40*90R6
215	GXLZY2GWT/10*12*40R5	END MILL	10	EA	107	2/10*12*40*90R5
216	JDXBAY3GWT/40*12*100R6	INDEXABLE MILLING CUTTER	5	EA	107	As per part number
217	JGXLZY2/12X14X50R1	SPECIAL CUTTING TOOL	10	EA	107	2/12*14*50*100R1
218	JGXLZY2/12X14X60R3	SPECIAL CUTTING TOOL	10	EA	107	2/12*14*60*110R3
219	GZ15-FC1-06021-103-YMC6	SPECIA END MILL CUTTER 25SR1	20	EA	107	As per part number
220	JGXLZY2/12X14X40R1	SPECIAL CUTTING TOOL	10	EA	107	2/12*14*40*90R1
221	EB508	EXTENSION BAR	2	EA	107	Walter Company
222	ST24W-CK2-150	CYLINDRICAL SHANK (CEMENTED CARBIDE)	1	EA	107	Seco Company
223	ST19W-CK1-230	CYLINDRICAL SHANK (CEMENTED CARBIDE)	1	EA	107	Seco Company
224	ST16W-M10-100	EXT.BAR KAISER	2	EA	107	Seco Company
225	A760E30	BORING BAR (TOOL MATERIAL : CARBIDE)	3	EA	107	Seco Company
226	EB349.WC05	CARTRIDGE WITH W INSERT	1	EA	107	Walter Company
227	241583	HIGH PRESSURE PUMPING UNIT	2	EA	109	As per part number
228	YC504	RIVET SQUEEZER SMALL BRAND (QIANSHAO MFG CHINA)	1	EA	109	Mfg China , INECO company, 4 in 1

229	32C/AMF-21	RUBBER MAT	250	MTR	109	Density : 0.868, Kinematic viscosity: 6.6, viscosity ondex : 100, Flash point : 210c, Pour point :-9c
230	4G/AMF-144	CLEANER FUEL SYSTEM (AVIATION)	205	LTR	109	AS PER part Number
231	4G/AMF-144	CLEANER FUEL SYSTEM (AVIATION)	615	LTR	109	AS PER part Number
232	ZYC2-65C	CORBON FELT	30	FT	110	Material Graphic
233	ZYC2-65-LUTE	VACUUM LUTE	2	KG	110	Sealant No.80
234	KF-09-511-HN-442	KINEMATIC SOLENOID VALVE	5	EA	110	Specs Attached
235	KF-10-520-HN-442	KINEMATIC SOLENOID VALVE	2	EA	110	Specs Attached
236	(2X-70)-01	VACUUM PUMP OIL NO 1	20	LTR	110	Viscosity Grde = 100 @ 40c, Synthetic Grease is used for the lubricant of roughing pump of Horizontal Vacuum Frunace 110-02.
237	ZYC2-65	VACCUM OIL QUENCHING AIR COOLING FURNACE	1	EA	110	Total Gauges 04 req to be callibrated. (a) Digital Display vacuum gauge set Qty 01 model ZDR-II-LED Range 0.5 Pa~2500 Pa. (b) Vacuum gauge tube Qty 03 Model ZJ-52T/KH10/16 Range 0.5 Pa~2500 Pa.
238	2.0VVP-20Q-34/48HV	LARGE SIZE VERTRICAL VACUUM OIL QUENCHING AIR COOLING FURNACE	1	EA	110	Total Gauges 05 req to be callibrated. ( a) Low vacuum gauge Qty 04 Model TTR 91S Range $1 \times 10^{-3}$ ~100 m Bar. (b) Ceravac vacuum gauge Qty 01 Model CTR100 Range 0~10 Torr.
239	CTR100	VACUUM GAUGE (CERAVAC VACUUM GAUGE)	1	EA	110	Ceravac guage (CTR-100) part No 230 302 Flange No: DN16 ISO -KF Torr: 10-3... 10 (FS) Output signal analog , Valtage range-5...+10.24V, Measuring range -0...+10V Relation voltage pressure Liner Output impedance: 0
240	21BB/AMF-21	ELECTRIC DRILL MACHINE	1	EA	51	220 VAC MAX 10MM DRILL
241	21C/1038	WEIGHT SCALE (DIGITAL MADE IN JAPAN)	1	EA	51	0~50 KG
242	40-135	ROUTER CUTTER HSS UPCUT SPIRAL 3-3/4 INCH	10	EA	51	Made In USA Part No (40-133) Length 95mm, Bit type, spiral dia mete 12.6mm, length of cutting edge 40mm, cutting edge diameter 9.5mm, material being cut aluminum.
243	40-133	ROUTER CUTTER HSS UPCUT SPIRAL 3-1/2 INCH	10	EA	51	Made in USA (Part No 40-133)Length 88.5mm, Bit type, spiral dia mete 12.6mm, length of cutting edge 12mm, cutting edge diameter 9.5mm, material being cut aluminum.



### 3. Material for cylindrical reference block of Longitudinal wave inspection:

Table 1 dimension for each area of cylindrical test block of longitudinal wave inspection unit: mm

Material	<i>R</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>
Cr16Ni6	20 (Φ40)	10	20	30	8	25	25	295
Cr16Ni6	25 (Φ50)	13	25	38	10	25	40	325
23Co14Ni12Cr 3MoE (A100)	25 (Φ50)	13	25	38	10	25	40	325
23Co14Ni12Cr 3MoE (A100)	32 (Φ64)	16	32	48	12	25	40	325
0Cr12Mn5Ni4M o3Al(69111)	20 (Φ40)	10	20	30	8	25	25	295
0Cr12Mn5Ni4M o3Al(69111)	25 (Φ50)	13	25	38	10	25	40	325
0Cr13Ni8Mo2Al (PH13-8Mo)	20 (Φ40)	10	20	30	8	25	25	295
<b>LC9R</b>	50 (Φ100)	25	50	75	12	25	40	325

Note: test report shall be attached to every block (including practical values for above-mentioned values). It can be manufactured by referring to **GB/T 4162**.

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# TECNOLOGY

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## Maintenance

TABLES - Machine component lubrication

<p>air system lubrication</p> <hr/> <p>suggested oil brands for air system lubrication</p> <table> <tr><td>Esso</td><td>Spinesso 22 ✓</td></tr> <tr><td>Agip</td><td>OSO 15</td></tr> <tr><td>Mobil</td><td>Velocite Oil</td></tr> <tr><td>I.P.</td><td>Hydrus 15</td></tr> <tr><td>Castrol</td><td>Hyspin 45</td></tr> </table>	Esso	Spinesso 22 ✓	Agip	OSO 15	Mobil	Velocite Oil	I.P.	Hydrus 15	Castrol	Hyspin 45	<p>drive casing</p> <hr/> <p>Content: about 25 Kg</p> <hr/> <p>suggested oil brands for drive casing lubrication</p> <table> <tr><td>Esso</td><td>Nuto H150 ✓</td></tr> <tr><td>Agip</td><td>Acer 150</td></tr> <tr><td>Mobil</td><td>DTE oil extra heavy</td></tr> <tr><td>I.P.</td><td>Hermea oil 250</td></tr> <tr><td>Castrol</td><td>Magna 150</td></tr> </table>	Esso	Nuto H150 ✓	Agip	Acer 150	Mobil	DTE oil extra heavy	I.P.	Hermea oil 250	Castrol	Magna 150
Esso	Spinesso 22 ✓																				
Agip	OSO 15																				
Mobil	Velocite Oil																				
I.P.	Hydrus 15																				
Castrol	Hyspin 45																				
Esso	Nuto H150 ✓																				
Agip	Acer 150																				
Mobil	DTE oil extra heavy																				
I.P.	Hermea oil 250																				
Castrol	Magna 150																				
<p>nibbler lube pump</p> <hr/> <p>Content: 0.7 Kg.</p> <hr/> <p>suggested oil brands for</p>	<p>clamp booster ✓</p> <hr/> <p>suggested oil brands for clamp booster lubrication</p>																				

## Part-II

# SPECIFICATION OF UNI-DIRECTIONAL (CCTV) CAMERAS PROJECT TECHNICAL SPECIFICATION OF NET WORK SWITCH

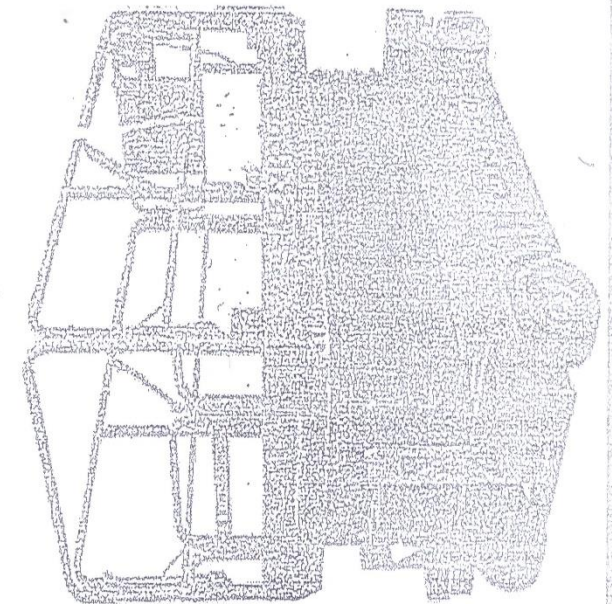
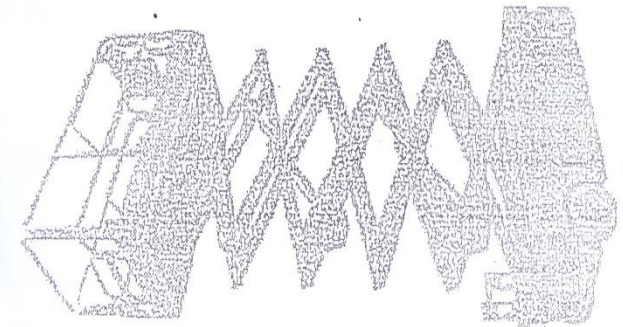
<b>PHYSICAL PORTS</b>	
Giga Bit Combo Ports with 100/1000 Base-T(X) and 100/1000 Base-X SFP port with 02 SFP modules, 20 KM (single mode)	02
100/1000 Base-T(X) Ports in RJ45 Auto MDI/MDIX with PSE, POE	08
<b>TECHNOLOGY</b>	
Ethernet Standards	IEEE 802.3 for 10Base-T IEEE 802.3u for 100Base-TX and 100Base-FX IEEE 802.3z for 1000Base-X IEEE 802.3ab for 1000Base-T IEEE 802.3x for Flow control IEEE 802.3ad for LACP (Link Aggregation Control Protocol ) IEEE 802.1D for STP (Spanning Tree Protocol) IEEE 802.1p for COS (Class of Service) IEEE 802.1Q for VLAN Tagging IEEE 802.1w for RSTP (Rapid Spanning Tree Protocol) IEEE 802.1s for MSTP (Multiple Spanning Tree Protocol) IEEE 802.1x for Authentication IEEE 802.1AB for LLDP (Link Layer Discovery Protocol) IEEE 802.3af PoE specification (up to 15.4 Watts per port for P.S.E.)
MAC Table	8192 MAC addresses

Priority Queues	4
Processing	Store and Forwarded
Switch Properties	Switching latency : 7 us Switching Bandwidth: 5.6 Gbps Max Number of available VLANs: 4096 IGMP multicast groups : 1024 Port rate limiting : User Define
Security Features	Enable/disable ports, MAC based port security Port based network access control (802.1x) VLAN (802.1Q ) to segregate and secure network traffic Supports Q-in-Q VLAN for performance & security to expand the VLAN space Radius centralized password management SNMP v1/v2c/v3 encrypted authentication and access security
Software Features	<ul style="list-style-type: none"> <li>- STP/RSTP/MSTP (IEEE 802.1D/w/s)</li> <li>- Redundant Ring (Sys-Ring) with recovery time less than 10ms over 250 units</li> <li>- TOS/Diffserv supported</li> <li>- Quality of Service (802.1p) for real-time traffic</li> <li>- VLAN (802.1Q) with VLAN tagging and GVRP supported</li> <li>- GMP Snooping for multicast filtering</li> <li>- Port configuration, status, statistics, monitoring, security</li> <li>- SNTP for synchronizing of clocks over network</li> <li>- Support <b>PTP Client</b> (Precision Time Protocol) clock synchronization</li> <li>- DHCP Server / Client support</li> <li>- Port Trunk support</li> <li>- MVR (Multicast VLAN Registration) support</li> <li>Modbus TCP</li> </ul>
Network Redundancy	Sys-Ring Uni-Ring Sys-Chain STP/RSTP/MSTP

S No 83

Self-Propelled Scissor Lift  
Capacity kg 250-350  
Lift max Height 20-25 ft

Width = 3-4 ft.



10  
(initial)

Warning / Monitoring	Relay output for fault event alarming
System	Syslog server / client to record and view events Include SMTP for event warning notification via email Event selection support
DDM Function	Voltage / Current / Temperature
RS-232 Serial Console Port	RS-232 in RJ45 connector with console cable. 9600bps, 8, N, 1
Power/POE Indicators	Green: Power LEDx3, Green: PoE LED x 8
Sys-Ring Indicator	Green: Indicates System Operated in Sys-Ring Mode
RM Indicator	Green: Indicates System Operated in Sys-Ring Master Mode
Redundant Input Power	Dual DC inputs. 48VDC on 6-pin terminal block or compatible power supply
Power Consumption	9 Watts (power consumption of P.S.E. is not included)
Overload Current Protection	YES
Reverse polarity protection	YES
Physical Characteristic	Enclosure : IP-30
<b>Environmental</b>	Storage Temperature : -40 to 85°C (-40 to 185°F) Operating Temperature : -40 to 70°C (-40 to 158°F) or above Operating Humidity : 5 % to 95 % Non-condensing
<b>Regulatory approval</b>	EM1 : FCC Part 15, CISPR (EN55022) class A EMS : EN61000-4-2 (ESD), EN61000-4-3 (RS), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (CS), EN61000-4-8, EN61000-4-11 Shock: IEC60068-2-27 Free Fall : IEC60068-2-32 Vibration : IEC60068-2-6 Safety: EN60350-1
<b>Grade</b>	Industrial Grade
<b>Warranty</b>	03 Years replaceable warranty

MATERIAL HANDLING EQUIPMENT: HYDRAULIC STACKER

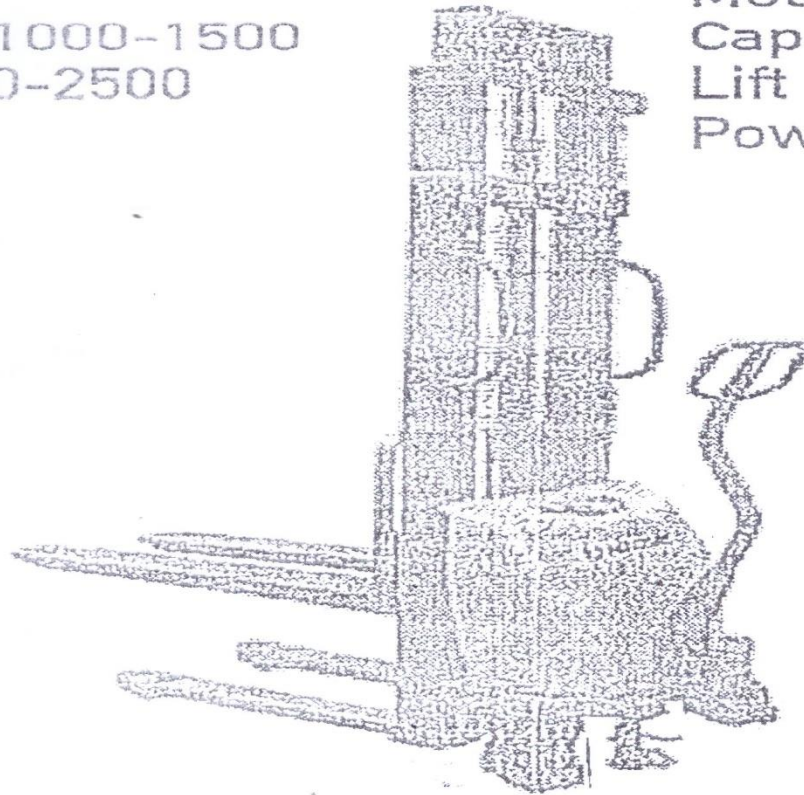
PRODUCTS ARE CERTIFIED

S No S No 84

Stacker

Capacity : 1000-1500  
Lift : 1600-2500

Semi- Electric Stacker  
Model : USES  
Capacity (kg): 1000-2000  
Lift (mm): 1600-3500  
Power: AC/DC



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(Signature)  
cut





Valves > electrically operated valves > ATEX




## Series KM-09 and KM-10



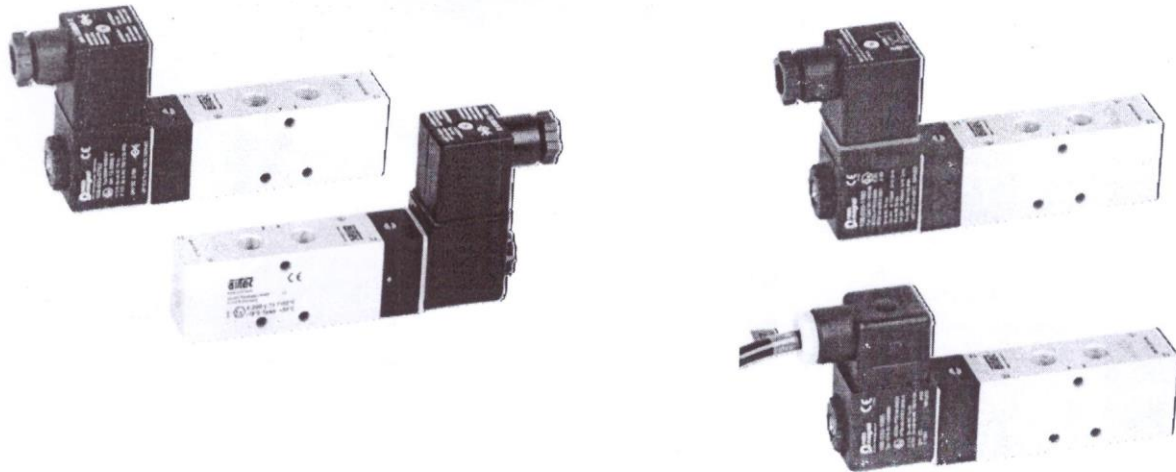
### Device marking

Electrically operated valves are marked as follows:

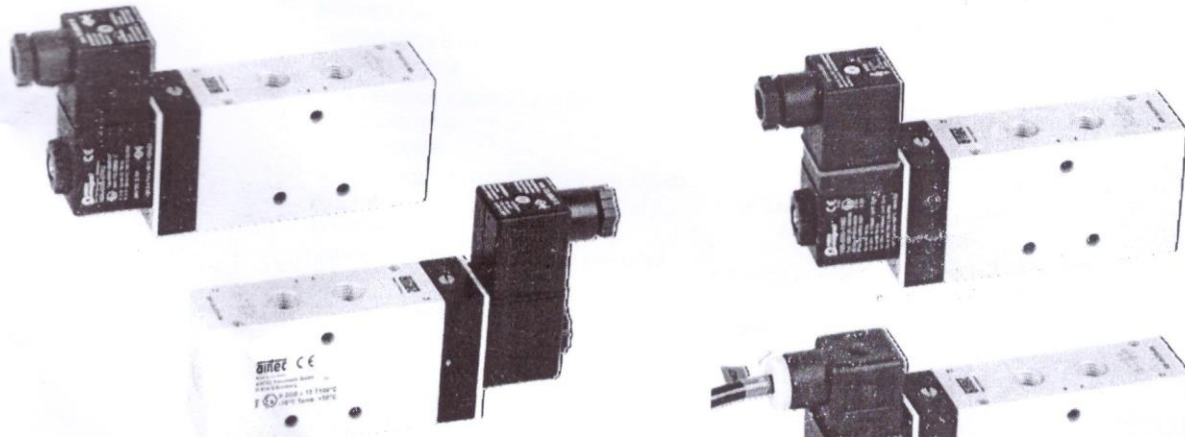
 II 2G Ex h IIC T5 Gb  
II 2D Ex h IIIC T100°C Db  
-10°C T<sub>amb</sub> +50°C

Marking according to DIN EN ISO 80079-36/ -37.

### Series KM-09

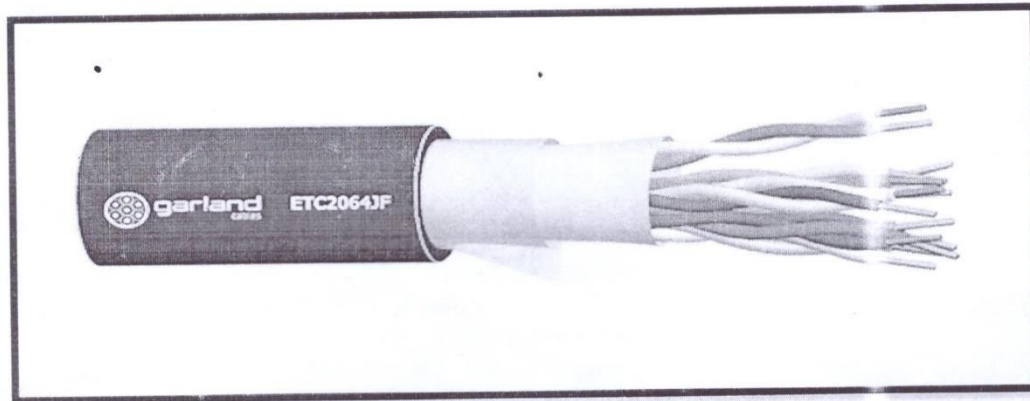


### Series KM-10



**SPECIFICATION UNDERGROUND CABLE 50 PAIR ARMoured****External Telephone, 50 Pair 0.64, Armored, UG, Jelly Filled, Poly**

0.64 mm Solid Bare Copper Conductors, Polyolefin Insulated, Twinned, unitized in 50 Pair Units with an Identifying Binder, Cabled, Jelly Filled, Overall Wrapped, UV Resistant Polyethylene Jacketed, 50 Pair External Telephone Cable to TS-008

**Specification**

Copper Conductor	0.6 MM ARMORED
Insulation	Colour High Molecular Weigh Solid High-Density Polyethylene (HDPE)
Suitable Applications	For telecommunications system
Colour Coding	Cables should be fully colour coded in accordance with PIC even count colour code
Pairing twisted	Two coloured insulated conductors should be uniformly
Filling Compound	Water Resistant filling compound should be applied
Core Covering	A Non-hygroscopic and dielectric heat resistant Polyester Tape and water blocking should be applied helically having a suitable overlap

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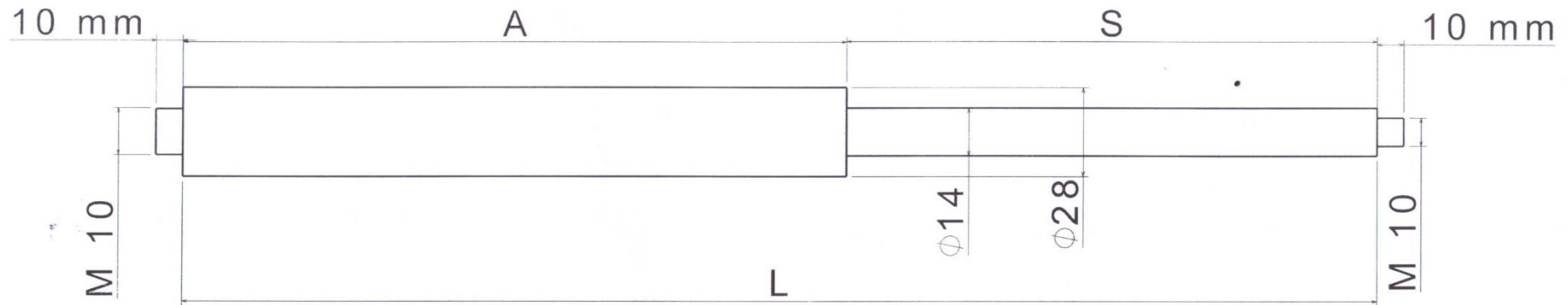
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# GAS STRUT SPRING



## SPECIFICATION

(All dimension are in mm)

Lenght of Cylinder (A)	Stroke / Rod Length (S)	Force	Cylinder Dia	Rod Dia	Working Life	Qty	Total Lenght(L)
915	500	1300 N	28	14	50,000 times	04	1415
765	645	900 N	28	14	50,000 times	12	1410