

**PAKISTAN AERONAUTICAL COMPLEX, KAMRA
MIRAGE REBUILD FACTORY**

TENDER NOTICE : OPEN TENDER

Tender reference	:	MRF/Log/26-27/OT-02
Tender No	:	OT-02
Publishing date	:	02 September, 2026
Last date of submission of bids	:	17 September, 2026 (1000 Hrs)
Opening date & Time	:	17 September, 2026 (1100 Hrs)

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 respectively. 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 (color printed).** The quotations shall be addressed to Managing Director MRF, 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 submission, 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** (where applicable), **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 **(remaining life not less than 75 % at time of delivery)** 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. **Unit of issue** must be same as mentioned in tender notice. 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 MRF, Kamra premises with all liabilities on Suppliers)** and confirmation to the terms and condition of MRF 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

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 MRF.
- (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 MRF 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 MRF karma, for at least 03 years.
- (l) MRF 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 MRF.
- (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, MRF 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 MRF, 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 **051-90994414, 90994727**.

- (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 favor of **Public Fund Account MRF 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 MRF 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 contains under mentioned information.
 - (a) Quote Validity should be minimum **90 days** and extendable on request. Quotations with less validity will be rejected.
 - (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 MRF, 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, MRF 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 (**remaining life not less than 75 % at time of delivery**) range must accompany **MSDS** along with fresh **laboratory test reports** against

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 **BLACKLISTED / UNDER EMBARGO / DELISTED** 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 Indigenous Provisioning office, MRF with tender Inquiry number and opening date.

Officer In charge Indigenous Provisioning
Mirage Rebuild 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 **1000 Hrs** on **11 September, 2026**. All quotations are to be dropped in the tender box placed at the MRF Guard Room. No quotation will be accepted in photocopy, through Fax and after due date and time. Tender will be opened on **same day at 1100 Hrs** in the presence of witnessing officers and available representatives of the firms in Officer In charge Indigenous Provisioning. MRF 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.
13. List of items can also be downloaded from PPRA website www.ppra.org.pk and as well as PACB website www.pac.org.pk free of cost or can be collected from Dte of Log (Local Purchase Section) MRF PAC Kamra Distt Attock from **02 September, 2026** during working hours (except holidays).

Yours Sincerely,

MRF QUALITY SYSTEM REQUIREMENTS

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

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 MRF.
4. Obtain approval from MRF of changes in product / process.
5. Provide Objective evidence of the quality of product.
6. To ensure product conformance to specified requirements.
7. To provide manufacturing date and Lot number.
8. To provide shelf life and expiry date as applicable
9. Competence, including any required qualification of persons.
10. The external providers' interactions with the organization.
11. Control and monitoring of the external providers' performance to be applied by the organization.
12. Verification or validation activities that the organization, or its customer, intends to perform at the external providers' premises.
13. Supplier (External providers) apply appropriate controls to their direct and sub-tier Suppliers (external providers) to ensure that requirements are met.
14. Design and development control.
15. Special requirements, critical items, or key characteristics.
16. Test, inspection, and verification (including production process verification).
17. The use of statistical techniques for product acceptance and related instructions for acceptance by the organization.
18. 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.
19. 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.
20. 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.

S No	Part No	Noun	U/I	Qty	Shop	Remarks / Specifications
1	8305PK1010001	SPL Lint Free Cloth (Cleaning Material)	Mtr	16	AW-139 RMC	Code: - C011
2	LEATHERINKREMOVER	Cleaner Ink C271	Btl	1	AW-139 RMC	Code: - C271
3	92-244	Signal Conditioners	Ea	1	Fuel Regulator Shop	As per attached list
4	3034016	T-56 Oil Accy Test Stand	Ea	1	Accessories T-56	As per attached list
5	EV2983B	Linear Multi Flow Meter (LMM)	Ea	1	Fuel RIG Shop	As per attached list
6	5330-600	Hollow Flange Torque	Ea	1	HYD Shop	As per attached list
7	6850PK28400017	M.E.K	Ltr	1500	Paint And Pickling Shop	As per attached list
8	AVN-500	Paint Remover	Lr	960	Paint And Pickling Shop	As per attached list
9	NSL-CA-01	Auto Fire Fighting Sys	Ea	1	Fuel Regulator Shop	As per attached list
10	ML5	Mercury	Kg	3	PNEU II	As per user sample
11	ML5	Mercury	Kg	3	PNEU II	As per user sample
12	ML5	Mercury	Kg	2	PNEU II	As per user sample
13	501-593-010-0D	Die Set Cuttng +Punching+Bending	Set	1	Metal Shop	(a) Complete Die repairing is required (b) Complete Punch Assy repair is required
14	501-308-008-0D	Die Set Cuttng +Punching+Bending	Set	1	Metal Shop	(a) Complete Die repairing is required (b) Complete Punch Assy repair is required
15	566-397-005-0D	Die Set Bending& Punching&Cutting	Set	1	Metal Shop	(a) Complete Die repairing is required

						(b) Complete Punch Assy is required
16	501-586-032-0D	Die Set Bending& Punching&Cutting	Set	1	Metal Shop	(a) Complete Die repairing (b) New Punch set (Male & Female) is required
17	566-306-005-0D	Die Set Bending& Punching&Cutting	Set	1	Metal Shop	(a) Complete Die repairing is required (b) Complete Punch Assy is required
18	-	Installation of Cameras in Hangers	Ea	As Req	MRF	As per attached list
19	MIL-PRF-7024TYPEII	Calbration Fluid	Gl	60	TFE731 Accessories	As per attached list
20	6670-68-900-0068	Weight 1000 Kg	Ea	1	Auxy Serv Section	As per user sample
21	P-992	Preimer Mb 1200	Kg	As Req	R&F Wing	Part No: P-992 Noun : Preimer Mb 1200
22	PINNE1110103	Heating Element	Ea	12	HT Shop	Molibdeniam 99.99% Pure
23	VOLTALEF3AB1KG	Lubricant Oil Weapons	Ca	2	INST I	As per user sample
24	71A/9424903	Gas Accetylene 98%	M3	As Req	Warehouse Tech	Part No : 71A/9424903 Noun : Gas Accetylene 98%
25	71A/9424903A	Acetone	Kg	As Req		Part No : 71A/9424903A Noun : Acetone
26	71A/9424905S	Argon (Special) AM/6.80M3 Cyl (M3)	M3	As Req		Part No : 71A/9424905S Noun : Argon (Special) AM/6.80M3 Cyl (M3)
27	71A/9424913	Comp Nitrogen S.Purity	M3	As Req		Part No : 71A/9424913 Noun : Comp Nitrogen S.Purity
28	71A/9424914	Comp.Ind.Oxy Im/6.7960M3	M3	As Req		Part No : 71A/9424914 Noun : Comp.Ind.Oxy Im/6.7960M3
29	71A/NIV-L-14	Liquid Nitrogen	Ltr	As Req		Part No : 71A/NIV-L-14 Noun : Liquid Nitrogen
30	71A/9425143A	Gas Oxy Breathing(Medical)	M3	As Req		Part No : 71A/9425143A

						Noun : Gas Oxy Breathing(Medical) Part No : 71A/9425143 Noun : Breathing Oxy Bp/16.000m3 CYL Part No : 71A/NIV-L-12 Noun : Gas Hydrogen 99.90 % Part No : 71A/9424905A Noun : Argon In Liquid Container XL-45 Part No : 71A/9424905 Noun : H-P Argon AM/6.80m3 CYL
31	71A/9425143	Breathing Oxy Bp/16.000m3 CYL	M3	As Req		
32	71A/NIV-L-12	Gas Hydrogen 99.90 %	M3	As Req		
33	71A/9424905A	Argon In Liquid Container XL-45	M3	As Req		
34	71A/9424905	H-P Argon AM/6.80m3 CYL	M3	As Req		
35	ZL-67	Penetrant	Ltr	50	NDI Bay	Make : Magnaflux Type : Fluorescent Name : Penetrant (ZL-67B) Sensitivity Level : III Method : Water Washable (A) Meets Requirements of AMS 2644 and E1417, ASTM E165. Chemical will be accepted with batch certificate, MSDS, Product DATA Sheet
36	HCSK-009	Floor Scrubber Machine	Ea			Part No : HCSK-009 Noun : Floor Scrubber Machine
37	MODELXTREME4100	Floor Scriber Machine	Ea			Part No : MODELXTREME4100 Noun : Floor Scriber Machine
38	SDM-R45G	Floor Scrubber Single Disc Machine	Ea			Part No : SDM-R45G Noun : Floor Scrubber Single Disc Machine
39	1236-254	Floor Polishing Mach	Ea			Part No : 1236-254 Noun : Floor Polishing Mach

40	7910PK2180001	Floor Polishing Equipment	Ea			Part No : 7910PK2180001 Noun : Floor Polishing Equipment
41	N/A	Cleaning Kit	Ea		Aircraft	Part No : N/A Noun : Cleaning Kit
42	1607KR003	Curtain Motor	Ea		SR Wing	Part No : 1607KR003 Noun : Curtain Motor
43	N/A	Refrigerator	Ea		R&F Wing	As per attached list
44	N2966100	Optical Adopter AT120	Ea	01	Inspection Services TFE731	As per attached list
45	102-S-125-M-A-U-25-B	Thermocouple (S) Type	Ea	06	HT Shop	As per user sample
46	C-25374-03	Thermocouple (S) Type	Ea	03	HT Shop J69 O/H Project	As per user sample
47	TC1028	Power Controller	Ea	02	HT Shop	As per user requirement
48	12-K-3000-176-15-21-R100KX	Thermocouple (K) Type	Ea	12	HT Shop J69 O/H Project	As per user sample
49	600851	Magna Valve	Ea	01	Cleaning Bay (F100)	As per attached list
50	MOD-4836	Vapour Blasting Liquid Honing Machine Model 4836 Along With Accy & Auto Filter	Ea	01	Bloeting Bay	As per attached list
51	752373	Air Inlet(Empire Shot Peener)	Ea	04	Cleaning Bay (F100)	As per attached list
52	MTP25AC	Multipurpose Thickness Planer	Ea	01	GE Shop	As per attached list

53	PAH932	Oil Accy Test Rig	Ea	01	Test Rigs Shop	Scope Of Work (i) Repair of Digital flow metering system. The repair of above-mentioned system to be carried out as per defect (The system does not read the flow) Repair Warranty of 06 Months.
54	P-415A	Cleaning Solvent	Ltr	50	NDI Bay (Atar)	Make : Chemetall Name : Cleaning Solvent (Class II, Ardrex5503) Appearance : Colorless Liquid Meet requirement of AMS 2644 chemical will be accepted with batch certificate, Product data Sheet, MSDS.
55	92692292	Oil SSR Ultra Coolant For A/Compressor	Ltr	40	Aux Services Shop	As per attached list
56	DLM1000	Meter Black Light	Ea	01	NDI T56	As per attached list
57	198055	TAM Panel	Ea	01	NDI BAY (TFE 731)	As per attached list
58	N/A	Mobile Silent Diesel Generator 50 KVA With 4-Wheel Trolley attached	Ea	01	Aux Services Shop	As per attached list
59	MIL-DTL-25681	Molybdenum Disulfide	Ea	01	Accessories T-56	Part No : MIL-DTL-25681 Noun : Molybdenum Disulfide
60	625784	LED UV-A Lamp (EV6000)	Ea	02	NDI T56	As per attached list
61	RG-60	D-16 Rectifier	Ea	02	R&F Wing	As per attached list
62	093-997-046-1	ARDROX 2302(P-669)	Ltr	400	ST Shops	As per User sample

63	6850PK0940024	Nickel Sulfamate	Kg	180	ST Shops	As per User sample
64	093-997-483-1	Trichloroethylene	Kg	3080	ST Shops	As per User sample
65	P-364	Anode Agent 550x100x3	Ea	05	ST Shops	As per User sample
66	5772	Pneumatic Accessories Test Stand	Ea	01	TFE 731 Accessories	As per attached list (a & b)
67	1538	Fuel Accessories Test Stand	Ea	01	TFE 731 Accessories	As per attached list (a & b)
68	3074	Oil Accessories Test Stand	Ea	01	TFE 731 Accessories	As per attached list (a & b)
69	VMSEENTERPRISEEDITION	Video Management System	Ea	01	Security Wing	As per attached list
70	CK4290-272	Oil Separator Kit (D) L 132-160	Ea	02	Aux Services Shop	As per attached list
71	FCC3000	Auto Fire System	Ea	01	F100 Mechanical Accessories	As per attached list
72	6799094	T 56 RGB Test Stand With Sound Proof Enclosure	Ea	01	RGB T-56	As per attached list & as per sample by user
73	21B/NIV-L-45AB	Chemistary Analyser (Micro Lab)	Ea	01	Medical Sqn MRF	Part No : 21B/NIV-L-45AB Noun : Chemistary Analyser (Micro Lab)
74	88292006702	Air Compressor Model (LS160HHAC) SNO 38117110009	Ea	01	Aux Services Shop	As per attached list
75	MIL-F-14256	Soldering Flux	Ea	01		As per attached list
76	P-337	Bonderite 880a	Kg	100	ETP Shop	As per attached list
77	093-997-075-1	Bonderite 880a Used For Upkeeping Phosphating Solution	Kg	100	ETP Shop	As per attached list

78	NISLIP520A	Nislip	Gl	20	ETP Shop	Noun: NISLIP520A Remaining life must be 75% at the time of delivery
79	NISLIP520B	Nisilip	Gl	20	ETP Shop	Noun: NISLIP520B Remaining life must be 75% at the time of delivery
80	6850PK0940023	Nickle Chloride	Kg	260	ETP Shop	As per attached list
81	6850PK0940024	Nickel Sulfamate	Kg	180	ETP Shop	As per attached list
82	MIL-C-83231TYPEII	Coating Kit	Ea	03	Paint And Pickling Shop	As per attached list
83	IPS-CRXVISION	Phosphor Imaging Plate	Ea	05	NDI Shop	CR FILM (IPS & IPU) Size = 14" x 17" As per sample & As per attached list
84	622350	Ammeter Shunt Kit	Ea	01	NDI T56	As per attached list
85	6.0VP-4066/48MHV	Vacume Furnace	Ea	01	Heat Treatment Shop	As per attached list
86	CTF-1200	Camera Type Furnace W=1200XL L=1200X H=1200	Ea	1	Heat Treatment Shop	As per attached list
87	32B/9432397	Paper Craft	Mtr	10000	Paint And Pickling Shop	As per sample
88	3M-250	Adhesion Test Tape W-25.4	Ea	21	Paint And Pickling Shop	Made by (3M)
89	3G6230A03952	Peeling Shim	Set	1	RMC AW139	Part No: 3G6230A03952 Noun: Peeling Shim
90	3G6230A03851	Peeling Shim Inner	Set	02	RMC AW139	Part No: 3G6230A03851 Noun: Peeling Shim Inner
91	3G6230A03951	Peeling Shim Outer	Set	01	RMC AW139	Part No: 3G6230A03951 Noun: Peeling Shim Outer

92	3G6430A01851	Lock Washer	Ea	12	RMC AW139	Part No: 3G6430A01851 Noun: Lock Washer
93	A864A1151F020H	Shim	Ea	16	RMC AW139	Part No: A864A1151F020H Noun: Shim
94	3G6420A02252	Lag Damper Washer	Ea	10	RMC AW139	Part No: 3G6420A02252 Noun: Lag Damper Washer

S No 03 Specifications of Signal Conditioners

S No 04 Specifications of T-56 Oil Accy Test Stand

SIGNAL CONDITIONER

MODELS:92-244:

COX 92-244 SIGNAL CONDITIONER MOUNT DIRECTLY ON TO THE FLOW TURBINE VIA AN EXPLOSION PROOF JUNCTION BOX (Y1 ENCLOSURE) CONDITIONAL WIRING IS ACCESSIBLE THROUGH A CAP ON THE JUNCTION BOX. THE INTEGRAL PICK OFF IS WIRE TO THE CONDITIONAL AT THE FACTORY AND THREE WIRE CONFIGURATION IS USED FOR POWER AND SIGNAL OUT. INPUT POWER RANGE FROM 18-27 VOLT VDC WITH A NORMAL INPUT OF 24VDC AND MAXIMUM CURRENT DRAW OF 25MA DC. OUTPUT PULSE GENERATED IS 10V PK-PK. THE FREQUENCY RANGE OF 244 IS NEAR ZERO TO 5KHZ.

SPECIFICATION

MODEL	OP-TEMP RANGE(°F)	TYPE	EXP PROOF	MOUNT ORIENT	POWER IN	SIGNAL OUT	DIM
92-244	-20-165	MAG	YES	METER	12-30VDC	10V PULSE	Y1 ENCLOSURE

SCOPE OF WORK

- (i) Required temperature is not achieved during testing.
- (ii) Temperature relay to trip Test Stand is not working properly.
- (iii) Abnormal noise observed from chiller ~~system~~ ^{system} during testing.

S No 05 Specifications of Linear Multi Flow Meter (LMM)

Linear Multi Flow Meter

PART NO. EV2983 B

SPECIFICATION:

FREQUENCY: 32 Point Linearization curve of frequency verses flow rates

FREQUENCY RANGE: 0.5 Hz -65 KHz with accuracy ± 0.002 Hz $\pm$ least signification digit.

SIGNAL CONDITIONING: on request The LMM can take signals from contact closure.

SENSOR EXCITATION: An adjustable 5 to 24vdc output 100mA each.

ANALOGUE INPUTS: 5-point Linearization, can be either 4-20mA or 0-10vdc

ANALOGUE OUTPUTS: Either 4-20mA or 0-10v dc.

PULSE OUT PUT: TTL or open collector outputs with of 1 hertz to 1 KHz.

RELAYS: Rating : 0.25A at 240Vac

S No 06 Specifications of Hollow Flange Torque

The Leader in Force Measurement

Interface

Model 5330 Hollow Flange Reaction Torque Transducer

Why the Interface model 5330 Reaction Torque Transducer is the best in class:

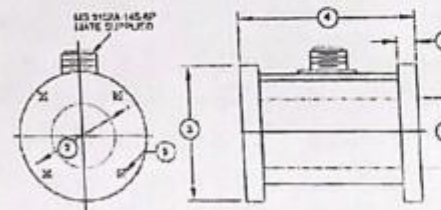
- High torsional stiffness
- Extraneous load resistance
- Compact size
- Large thru-hole



SPECIFICATIONS

ACCURACY - (MAX ERROR)	
Nonlinearity-% FS	± 0.1
Hysteresis-% FS	± 0.25
Repeatability-%	± 0.05
TEMPERATURE	
Compensated Range-°F	-25 to +175
Compensated Range-°C	-24 to +85
Operating Range-°F	-65 to +225
Operating Range-°C	-54 to +107
Effect on Output-%/°F MAX	± 0.002
Effect on Zero-%/°F MAX	± 0.002
ELECTRICAL	
Rated Sensitivity (dynes)	2.0
(5330-40 Dyn EK)	1.0
Bridge Resistance-Ohm (nominal)	350
(5330-3K Dyn 100K)	2000
Excitation Voltage-MAX	10 VDC
MECHANICAL	
Calibration	EW & COV
Size Overload-% CAP	100

See Drawing		MODEL 5330 HOLLOW FLANGE TYPE				
		CAPACITY (IN-IN)				
		50, 120, 240	500, 1200	5K, 6K	10K, 20K	50K, 100K
	inch	inch	inch	inch	inch	inch
(1)	0.3175	0.3175	0.3175	0.3175	0.625	0.625
(2)	2	2.5	3.375	4.375	7.00	
(3)	7.5	3.25	4	5	8.5	
(4)	2.175	2.125	2.125	2.5	3.5	
(5)	2.0625 inch	0.59375 inch	0.4875 inch	0.59375 inch	1.0 inch	
(6)	875 dyn	1.375 dyn	1.375 dyn	1.375 dyn	0.375 dyn	



Model 5330

INTERFACE • 7401 E. Buthenas Drive, Scottsdale, AZ 85250 • PHONE: (480) 948-0555 • FAX: (480) 948-1924
www.interfaceforce.com • ORDER TOLL-FREE 1-800-947-5598

Page 1 of 1

000-00001-0000

S No 07 Specifications of M.E.K

Technical Data Sheet

THYL ETHYL KETONE (M.E.K)

ethyl ethyl ketone is a low boiling, fast evaporating, clear, colorless low viscosity liquid with a mild odour similar to one. It is an industrial solvent which is commonly used in processes involving gums, cellulose acetate, and cellulose coatings. Methyl ethyl ketone dissolves polystyrene and many other plastics.

Key Advantages:

It does not stain and evaporates fast
It is used for cleaning tools
It dissolves various resins in natural solvents
It is used in workshops and manufacturing

It is used for lacquers, ethyl cellulose, acrylic, vinyl acetate chloride copolymers, epoxies and for cleaning oils.

Key Data:

Appearance	Visual Clear and free from water
Odour	Mild Odour
Flash Point	Solvent
Threshold	0.25 ppm
Free Gravity	0.805 ± 0.2
	69.5%
	70.6 °C
	-85 °C
	Flammable
	Lower 1.8% Upper 10%
	100%
	10.3 kPa (@20°C)
	2.11 (air = 1)
	-04°C (250.2 °F)
	CLOSED CUP: 9°C (55.8 °F), OPEN CUP: -5.55°C (22 °F) (Tag)

Usage:

May form heat, sparks, open flames or hot surfaces. No smoking. Keep container tightly closed. Ground bond and receiving equipment. Use explosion-proof electrical, ventilating, lighting, equipment. Use only non-flammable tools. Take precautionary measures against static discharge. Avoid breathing dust, fume, gas, mist, vapour, and liquid. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, eye protection, and full face protection.

SASOL



S No 08 Specifications of Paint Remover

For details of the removal of old paint from metal surfaces, see the following procedure of primers and topcoats.

The information provided is to the best of our knowledge correct. However, we do not assume legal responsibility for use or reliance thereon. We disclaim all warranties, expressed or implied, including the fitness for a particular purpose. This may be subject to modification without previous notice. This sheet is revised every two years, please check validity.

1. Paint Remover 82510 having shelf life 12 months can be used for removal of old paint provided stored in original unopened container and checked on 1. product can be made homogeneous by simple stirring
2. no further separation or lumps after mixing/stirring
3. Corrosion check: immerse a panel of 2024-T3 alu. for 24 hrs in the 82510. After this there should be no color change of panel or evidence of corrosion
4. Paint remover 82510 still can ship the 3-coat Met-Hex-Pec system within 4 hrs.

Limman 17/9/97

Signature: Jan Jemts
A.B. Rasmussen

S No 09 Specifications of Auto Fire Fighting Sys

Appendix C To
SOP No EPPPS 001 Log2

SCOPE OF WORK : PERFORMA

S NO	PART NO	NOUN	U/I	QTY TO BE REPAIRED/ MANUFACTURED	SCOPE OF WORK
1	NSL-CA-01	AUTO FIRE FIGHTING SYSTEM	EA	01	(i) Complete discharge of Qty 24 cylinder and refilled with fresh CO2 in each cylinder. (ii) Cylinders Qty 24 to be retested (pressure check) by A.N.C.C according to the compressed gas rules in force (iii) Flood valves Qty 24 to be replaced with new ones (iv) Complete system serviceability required including check of discharge line and thermostat line for breakage or other issues. (v) Pressure check of each cylinder, filled qty of CO2 and total cylinder weight after filling certificates are also required.

S No 18 (a) Specifications of Installation of Cameras in Hangers

TECHNICAL SPECIFICATIONS OF CCTV EQUIPMENT FOR R&F WING

S No	Name	Qty	Required Specifications
1	Fixed IP Camera 5 MP	25	6 Megapixel 1/2.4" progressive scan CMOS H.265+ H.265/H.264+ H.264 Compression, Main stream 50Hz: 25 fps (3072 x 2048), (3072 x 1728), (2044 x 1856), 25 fps (2560 x 1440), (1920 x 1080), (1280, 720), 60 Hz: 20 fps (3072 x 2048), (3072 x 1728), (2044 x 1856), 30 fps (2560 x 1440), (1920 x 1080), (1280 x 720) Max resolution 3072 x 2048, IR Light Range up to 40 meter, Day / night (ICR), 0 LUX, 3DNR, AWB, AGC, 111 C, True WDR (120dB) Minimum Illumination 0.01 Lux @ (H.2.65C ON), 0.025 Lux @ (H.2.65C OFF) 0 Lux with 1H Max aperture intelligent video analytics: Tripwire / Line crossing, intrusion, object abandoned / missing, face detection, Motion detection, lens 4mm, 2/1 Alarm in / out 1/1 audio in/out 0 Lux performance Smart IR supported Micro SD memory, IP67, IK10, POE+, POE, ONVIF Profile S&G, API, built in microphone, audio supported, built in memory card slot upto 512 GB, aluminum alloy body operating conditions -30 to +60 C, Lightening Proof, surge protection junction box, Pole Mount included certification: CE (EN 60953 : 2000), UL : 60950-1, FCC: Part 15
2	NVR 32 Channel	1	H.265+ H.265/H.264+ H.264 video format, intelligent analysis based on deep learning algorithm, up to 32 inch IP cameras inputs, 256 Mbps incoming bandwidth, HD video output HDMI at up to 4k resolution, VGA outputs, upto 4 SATA interfaces for HDD connection 16 Channel synchronous playback at upto 1080p resolution Support multiple VCA events, Smart switch, smart playback, 2 self-adaptive 100/1000 Mbps Ethernet interfaces, smooth streaming technology, Facial recognition and Face picture comparison, Intrusion detection, upto 12MP resolution of input cameras, 2 x HDMI ports, 4K (3840 x 2160) 60Hz, 2k (2560 x 1440) / 60Hz, 1920 x 1080 / 60Hz, HDMI 1 / VGA simultaneous output, HDMI 2 / VGA independent output, audio output, two way audio input, recording resolution, 32 MP, 24MP, 12MP, 8MP, 5MP, 4MP, 3MP, 1080p, UxGA, 720, VGA Up to 128 Remote connections, Hot plug SATA interfaces, up to 10TB capacity of each disk, 1 eSATA interface, 2x front panel and 1 x rear panel USB port, Power supply 100-240VAC, Working temperature -10 to 55C, 19-inch Rack mounted, 1 Year OEM Warranty.
3	LED Display 60 Inch	4	60-inch 4K LED monitor, LED backlight 3840 x 2160, Auto voltage (AC90-240V) (± 10%) Power supply, 350cd/m2 Brightness/ Luminance, Contrast Ratio 4000:1, 178/178 view angle, Ethernet built in, HDMI 2.0 x 2, USB 2.0 x 1 Audio x 1 RJ45 x 1, LAN x 1 Inputs, Wall Mount Bracket.

CONFIDENTIAL

S No 18 (b) Specifications of Installation of Cameras in Hangers

CONFIDENTIAL

Computer	3	Surveillance Grade SATA interface 6GB/s SSD capacity, 1 Year warranty Dell Vostro 3910 Core i7 12700, (any of latest generation) 6 MB Cache, 16GB DDR4 RAM, 1TB NVMe SSD, Pre-installed windows 10 64 Bits, 10-meter 4K HDMI, 2x ports display converter, 2x USB to RJ-45 converter, standard power cables set, Surge protected power supply, Gigabit Ethernet port, standard keyboard and mouse, OEM Warranty
8 Port POE 2 Uplink Gigabit Network Switch	2	8 x Gigabit POE ports, 2 x Gigabit uplink ports, IEEE 802.3at standard for POE ports, Network topology management, 6KVA surge protection for POE ports, Switching capacity 20GB/s, POE power budget 100W, metal material, fan free design, operating temperature -10 to 55C power supply 48V 2.5A, support up to 150 meter transmission, 1 year OEM warranty.
16 Port POE Network Switch	1	16 x gigabit POE ports, 2 x gigabit uplink ports, IEEE 802.3at standard for POE ports, Network topology management 6KVA surge protection for POE ports, Switching capacity 56GB/s, POE power budget (225W, metal POE ports, fan free design, operating temperature 0 to 45C, power supply 100 to 240 VAC 4A max, support up to 300 meter transmission Rack mount, 1-year OEM warranty.
UPS 2 KVA	2	Power Capacity: 2000 watts / 2KVA, Nominal output voltage: 220 to 230V, output voltage distortion: Less than 5% at full load, output frequency (sync to mains): 47-63 Hz nominal, 57-63 Hz for 60 Hz nominal, online, pure sine wave, surge protection, LCD display, Dual in AVR, 1-Year OEM Warranty
Maintenance Free Batteries	4	Maintenance free sealed Gel polymer battery, 12V 100 AH, 1-Year Warranty
12U Rack (for UPS / NVR)	2	12U wall mount enclosure, ventilated front and side panels for increased air flow, black color, 41.9 max rack depth, weight capacity 100kg, fully assembled for quick installation.
2U 19 inch Rack Mount	12	2U wall mount enclosure adjustable 19" equipment mounting verticals, Top and bottom panel with ventilation and cable entry facility, cooling fans on the top panel, Powder coated finish with pretreatment process meeting all industry standards
1U Rack	2	1U Wall mount enclosure, ventilated front and side panels for increased air flow, meets all industry standards
Copper Cable	3	Hikvision CAT-6 Copper cable role of 305 meters
Fiber Optic	2	Fiber optic cable 6 core role of 1000 meter
Pig Tail	4	60F port with pig tails and accessories
Power Cable	4	Power cable 7/25 Brand Pakistan
Network Switch	1	TP-Link 28 Port Gigabit Smart Managed Network switch with 4 SFP slots and module
Accessories	-	Cable tie, Screw, Power extension, sockets and accessories
Installation & Commissioning of complete CCTV system	-	Installation, configuring & commissioning of complete CCTV system

CONFIDENTIAL

S No 19 Specifications of Calibration Fluid



Safety Data Sheet (MIL-PRF-7024 TYPE II)

6 - ACCIDENTAL RELEASE MEASURES

SPILL PROCEDURES:Wear appropriate personal protective equipment before approaching spill site. For small spills, dilute with water to sewer if allowed by local and state regulations. If unable to wash product with water, absorb with inert material (sand or other approved material) and dispose of in accordance with applicable regulations.

WASTE DISPOSAL:Treatment, storage, transportation and disposal must be in accordance with Federal, State/Provincial and Local Regulations. Regulations may vary in different locations. Characterization and compliance with applicable laws are the responsibility solely of the generator. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

RCRA STATUS:If discarded in its purchased form, this product is considered a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product should be classified as a hazardous waste. (40CFR261.20-24).

7 - HANDLING and STORAGE

STORAGE:Keep in a tightly closed container, stored in a cool, dry, ventilated area below 44°C (110°F). Protect against physical damage. Isolate from incompatible substances. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product. Drum must not be washed out or used for other purposes.

HANDLING:Avoid contact with eyes, skin and clothing. Do not inhale vapors and fumes. Wash thoroughly after handling. Use only with adequate ventilation. Do not take internally. For industrial use only.

S No 43 Specifications of Refrigerator

S No	Item	Specification
(a)	Model	HRF-578TBG
(b)	Brand	Haier
(c)	Size	19 Cubic Feet (516) Litres
(d)	Power Input	220 Volts
(e)	Accessories	Voltage Stabilizer
(f)	Installation	By Supplier
(g)	Spare Parts	Supplier will be responsible for providing the spare parts for at least 10 years

Part no: 600851 Noun: MAGNA VALVE

Model: 578-24 Power: 24 Vdc, Amp: 01 Media:

CW 32 Flow Rate: 30 Lb/Min

(i) OEM calibration certificate required on CW-32

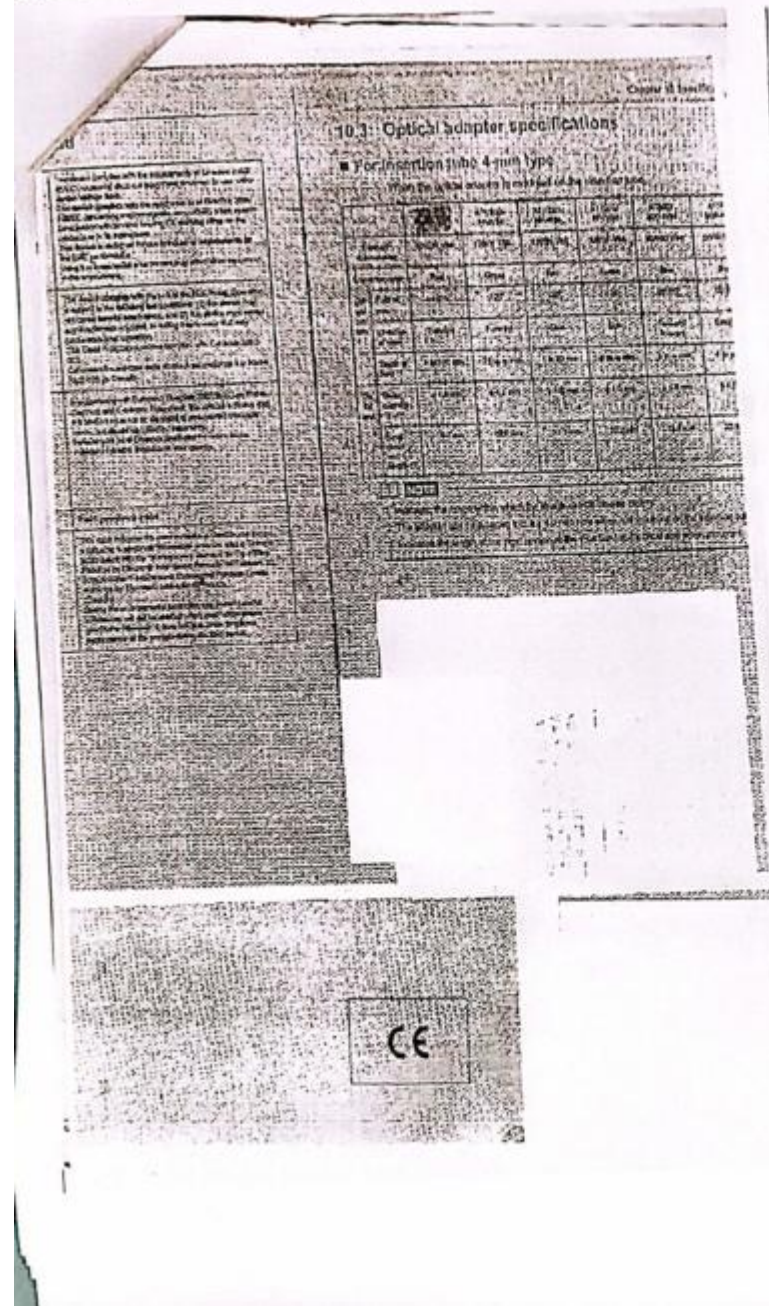
Media Range 4 Lbs/Min

(ii) Warranty: 01 year replace warranty by OEM is required

(iii) Installation of Magna Valve by Vendor

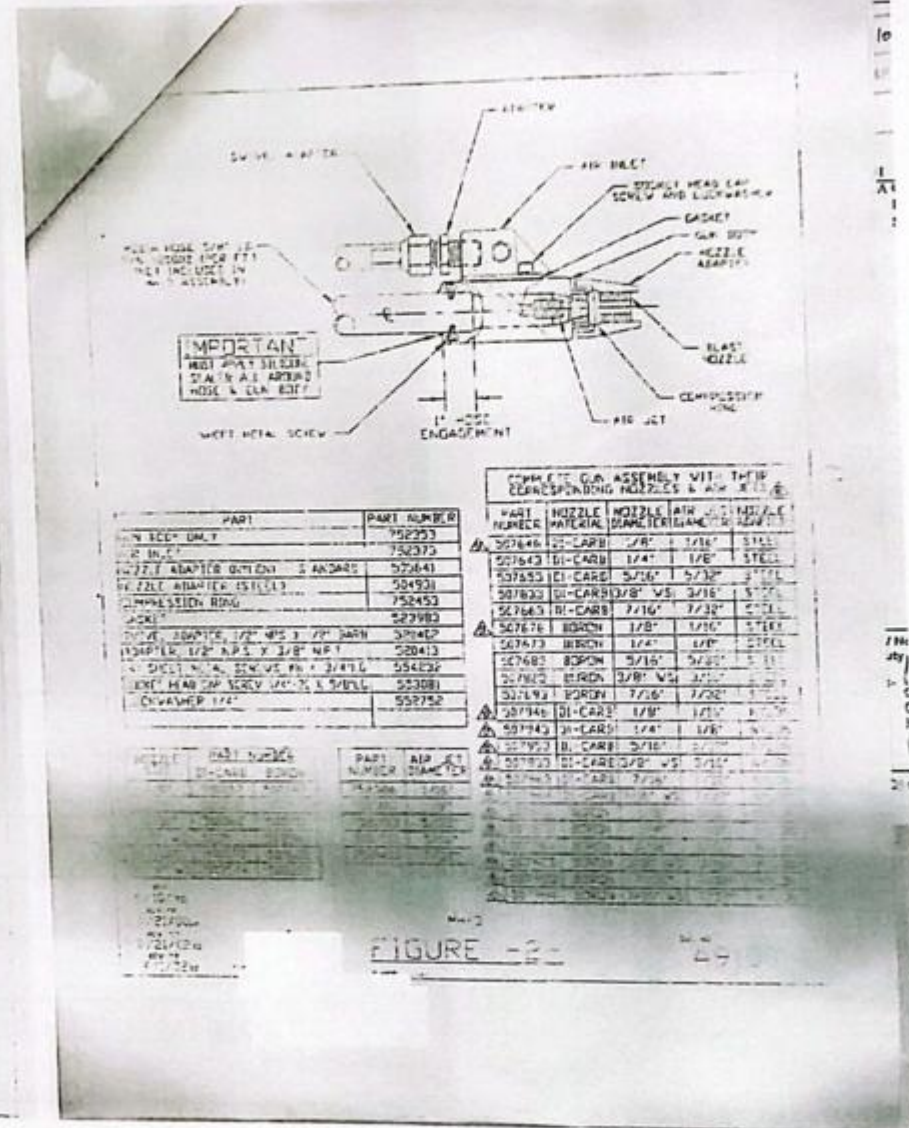
(iv) Final acceptance will be made after checking the Magna valve on the machine

A1/A



SCOPE OF WORK

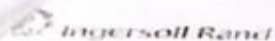
1. Machine cabin need to be replaced
2. Machine door need to be replaced
3. Repair of Exhaust motor
4. Media hopper need to be replaced
5. Perforated table need to be replaced
6. Air pressure and water pipe need to be replaced
7. New lights for cabin illumination
8. Filter and filter cabin need to be replaced
9. 01-year warranty is required



1. Specification of Multipurpose Thickness planar Machine (Estimated Price 2.0 Mill Rs)

SPECIFICATION:

Application	Planning, thickness, moulding, slotting & drilling
Max working width (mm)	490 – 510
Working thickness (mm)	5 – 255
Min working thickness (mm)	4 – 8
Max working length (mm)	200 – 240
Max cutting depth (mm)	8 – 10
Min Cutter head speed (r/min)	4500 – 5500
Min Feed speed (m/min)	3-18
Main motor (Kw)	7 – 8
Voltage	3 Phase
Note: - One week local training, commissioning & installation to be provided by vendor	



SSR ULTRA COOLANT

TECHNICAL DATA SHEET (TDS)

GENUINE
PARTS & LUBRICANTS
BY INGERSOLL RAND

PARAMETER	SPECIFICATION / VALUE
Base Oil Type	Polyglycol / Polyalkylene Glycol (PAG)-based synthetic
Service Life	Up to 8,000 hours (whichever comes first)
Appearance	Light amber liquid
ISO Viscosity Grade	VG 46
SAE Viscosity Grade	10w20
Viscosity Index	172
Flash Point	271°C (520°F)
Autoignition Temperature	388°C (731°F)
Pour Point	-28.9°C (-20°F)
Specific Gravity	0.9901 @ 25/25°C
Vapor Pressure	< 0.01 mmHg

DESCRIPTION

SSR Ultra Coolant is a premium synthetic coolant specially formulated for use in Ingersoll Rand SSR rotary screw air compressors. It provides excellent lubrication, superior thermal stability, outstanding oxidation resistance and long service life under demanding operating conditions.

FEATURES & BENEFITS

- Excellent thermal and oxidative stability
- Long service life up to 8,000 hours
- Superior lubrication and wear protection
- Low volatility and low carbon forming tendency
- Good separation from condensate
- Compatible with system materials and seals

APPLICATIONS

- Ingersoll Rand SSR Series
- Rotary Screw Air Compressors
- Designed for use in high temperature and continuous duty applications
- Consult operator manual for oil change intervals and specifications



IMPORTANT

Do not mix with other coolants or compressor oils.
For optimum performance, follow the service instructions in your compressor operator manual.



STORAGE

Store in a cool, dry place.
Keep container tightly closed.



SAFETY

Refer to the Safety Data Sheet (SDS) before handling or use.



AVAILABLE PACK SIZES

20L, 209L

S No 56 Specifications of Meter Black Light

Technical Data		
Model Number	DLM-1000	DLM-1000L (Lux)
Part Number	N410409001	N410410001
Sensors Included	N410400001 "B" UV Sensor N410401001 "C" White Light (Foot candles)	N410400001 "B" UV Sensor N410397001 "D" White Light (Lux)
Readout Display	13mm (0.5 in.) Constant fluorescing	13mm (0.5 in.) Constant fluorescing
Readout Sampling Time	0.4 Seconds	0.4 Seconds
Range	0-1999 Foot candles 0-19990 microwatts/cm2	0-1999 Lux 0-19990 microwatts/cm2
Spectral Range	"B" UV Sensor.....320 - 400 nm "C" FC Sensor.....380 - 700 nm	"B" UV Sensor.....320 - 400 nm "D" Lux Sensor.....380 - 700 nm
Power Requirement	One 9-volt battery (provided)	One 9-volt battery (provided)
Battery Life	150 - 200 Hours Current drain 2 mA(approx.)	150 - 200 Hours Current drain 2 mA(approx.)
Temperature Ranges: - Operation - Storage	0 - 50 Deg. C (32 - 122 Deg. F) 10- 50 Deg. C (14 - 122 Deg. F)	0 - 50 Deg. C (32 - 122 Deg. F) 10- 50 Deg. C (14 - 122 Deg. F)
Humidity Range	0 to 100% R.H. Non-condensing	0 to 100% R.H. Non- condensing
Dimensions: - Readout Unit Only - Sensor Head Only - DLM-1000 in Polymer Case	108mm x 73mm x 23mm 70mm x 52 mm x 17 mm 250mm x 190mm x 70mm	108mm x 73mm x 23mm 70mm x 52 mm x 17 mm 250mm x 190mm x 70mm
Weight	454 g (1 lb.)	454 g (1 lb.)
Recommended Calibration Interval	The DLM-1000 radiometer should be returned to the factory every six months for recalibration and routine inspection service. The recommended six month interval is based upon normal usage of intermittent readings. If the sensors are used continuously, recalibration should be performed more often. Visible sensors are calibrated to accurately read incandescent light sources, unless a fluorescent light calibration is requested.	

S No 57 Specifications of TAM Panel

OEM/ MAKE: Sherwin

Name: TAM Panel (PSM-5)

Part No: 198055

Certificate: PSM-5 certification according to ASTM
E 1417, MIL-STD 6866 Traceable to NIST.

PSM-5 indication sizes certificate, Comparison
picture

S No 58 Specifications of Mobile Silent Diesel Generator 50 KVA

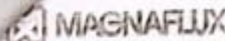
With 4-Wheel Trolley attached

No	Category	Specification
1.	Rated power (Prime)	50 KVA (40 KW)
2.	Standby power	55 KVA (44 KW)
3.	Frequency	50Hz
4.	Voltage	400/230V ($\pm 5\%$ Adjustable) 3 phase, 4 wire
5.	Power factor	0.8 (Lagging)
6.	Engine type	4 Stroke, Turbo Charged, Water cooled diesel generator
7.	Engine brand	Perkin / Cummins / Volvo
8.	Speed	1500 Rpm
9.	Cylinder	4 In-line
10.	Fuel consumption @ 75% load	05 liter per hours
11.	Fuel tank capacity	200 – 250 liters (Integrated in base)
12.	Cooling system	Radiator with Fan and Coolant
13.	Starting system	12V Electric Starter with Battery
14.	Alternator	Brushless, Self-excited, AVR controlled
15.	Insulation class	H
16.	Protection class	IP 23 (minimum)
17.	Voltage regulation	$\pm 1\%$ (AVR)
18.	Control panel	Digital (Deep Sea, SmartGen, ComAp)
19.	Monitoring	V, A, HZ, KW, KVA, PF, RPM, Oil pressure, Temperature, Battery
20.	Protection	Low oil pressure, High temperature, Overload, Over/ Under voltage, Under frequency, Emergency stop.
21.	Noise level	70-75 dB(A) @ 7m
22.	Canopy type	Silent, Waterproof, Power-coated steel.
23.	Base frame (skid base)	Heavy – duty steel with integrated fuel tank, anti-vibration mounts
24.	Safety features	Emergency stop, MCCB output breaker-automatic battery charger, Fuel & Coolant gauges
25.	Documentation	Manual & spare parts catalogue

HEAVY DUTY 4-WHEEL MOBILE TROLLEY

1.	Application	Suitable for 50 KVA Silent Diesel Generator complete with fuel, Battery and accessories.
2.	Tyres	Standard market – available, easily replaceable
3.	Towing system	Heavy duty towing eye/hitch
4.	Hydraulic support	04 manually operated hydraulic stabilizer legs
5.	Braking system	Mechanical
6.	Design responsibility	Manufacturer responsible for complete design & fabrication
7.	Chassis	Heavy duty MS fabricated chassis
8.	Wheel arrangement	04 heavy duty pneumatic wheels
9.	Steering / Turning	Heavy duty front steering mechanism and steering lock mechanism
10.	Axle	Manufacturer's standard design suitable for application
11.	Parking	Hydraulic legs shall relieve tyre load during parking and operation

No 60 Specifications of LED UV-A Lamp (EV6000)



Product Data Sheet

EV6500

Hand-Held Dual-Light LED UV Lamp

The EV6500 is a hand-held, portable LED UV lamp with built-in white light LEDs for non-destructive testing applications like fluorescent penetrant testing and fluorescent magnetic particle inspections.

Designed with broad-beam profile for inline and hand-held use, the EV6500 will decrease inspection time by improving indication visibility with 7,500 $\mu\text{W}/\text{cm}^2$ high intensity UV-A illumination and the widest coverage area in its class.

To improve NDT inspection flexibility, the EV6500 has built-in white light LEDs for visible flaw location, eliminating the need for a separate flashlight. The white light LEDs provide a large, concentrated flood of visible light of over 750 ft-candles.



BENEFITS

- Minimizes time to inspect parts with wide, intense UV beam**
 - Speeds up inspection time with the widest, most even beam on the market
 - Inspections are clearly visible even at the edge of the 10 inch / 25 cm beam, thanks to the high intensity LEDs
- Improves visibility & versatility with built-in white light LEDs**
 - Eliminates the need for a separate flashlight for visible flaw detection with built-in LED white light function
 - See clearly without fumbling in the dark or having to turn on an overhead light with the 10 inch / 41 cm beam of bright white light
- Increases real-world reliability with NDT-focused engineering and dependable construction**
 - Reduces on-the-job downtime with dependable, reinforced construction
 - Fully sealed housing will stand up to the elements, along with a fanless cooling system and non-clouding lens for reliable consistent inspections
 - Fully sealed IP65 rated housing will stand up to the elements

Handheld UV lamp manufactured with green handle before July 2022 and black handles after July 2022

© 2022 MAGNAFLUX

S No 61 Specifications of D-16 Rectifier

Annexure 'A' in PAC Board letter
No MRF/5203/12/DOE (RAAF)/FC-520/PACB/1002/52/Ord
Pakistan Aeronautical Corporation Board Name
Dated 20 January, 2011

SPECIFICATIONS OF RECTIFIER

(a) Input Supply: 400/50 Vols $\pm 10\%$ 3Phase Frequency 50 Hz $\pm 3\%$

(b) Output Supply: DC Voltage 10V Current 150A
 $\pm 1\%$ $\pm 5\%$

(c) Cooling: Air Cooled System

(d) Control: P.A. Control Safety System

(e) Volt Meter: Digital Display

(f) Amp Meter: Digital Display

(g) Efficiency: 80-85%

(h) Regulation: $\pm 5\%$ Voltage or Current

(i) Ripple: $\pm 5\%$

(j) Size Approximate: Length 950mm Width 550mm Height 1200mm

Publication: Two sets of operations and maintenance manual to be provided by the supplier along with one set of quick wear spare.

Installation & Commissioning: Installation & Commissioning to be carried out by supplier. Rectifier will be considered commissioned after two operations and certified by QC Inspector of MRF.

Warranty: One year warranty must be provided by supplier from the date of commissioning.

S No 66 (a) Specifications of Pneumatic Accessories Test Stand

ACCE NAME	PART NO	CMV REF
1. AIR FLOW METER	100000-1	CMV 10-10-10
2. AIR PRESSURE METER	100000-2	CMV 10-10-10
3. AIR FLOW CONTROLLER VALVE	100000-3	CMV 10-10-10

SHIPMENT

Thirty (30) weeks after receipt of purchase order. EXW our plant, Bristol, Connecticut, USA per INCOTERMS 2010

PAYMENT TERMS (Subject to credit approval)

Progress Payments (Payments are due net 30 days from invoice date)

- 30% with order placement.
- 30% at project "halfway" point (15 weeks after placement of order).
- 30% NET 30 days of shipment.
- 10% after final acceptance at the end user's facility or 90 days post-shipment, whichever occurs first.

WARRANTY

Bauer's Standard One (1) Year Warranty (see attached Terms and Conditions for details)

QUOTATION VALIDITY

This quote will remain valid for ninety (90) days from the date of issue

Quotation prepared by

Bob Michael
Bob Michael
Vice President - Sales
(T) 860 583 9100 ext. 134
(F) 860 583 9111
bob.michael@bauerinc.com

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Aircraft Component Test and Support Equipment
"Focused on Our Customer's Success"

S No 66 (b) Specifications of Pneumatic Accessories Test Stand



Bauer, Inc.

175 Century Drive, Bristol, Connecticut 06010 • USA
Tel: 1 860 583-9100 • Fax: 1 860 583-9111 • www.baugroup.com

October 5, 2014

Pakistan Aeronautical Complex Board (PACB)

Subject: TFE731 Engine Accessories Test Equipment (Pneumatic)

Reference: Bauer Quote 60724-3

Bauer is pleased to provide the following budgetary quotation for your consideration.

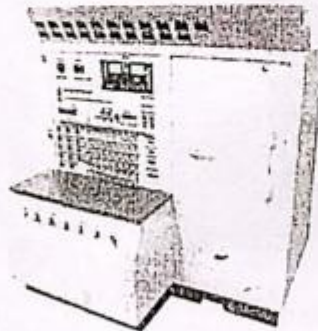
Purchaser agrees to the conditions defined below. All prices are in US Dollars (unless otherwise stated) and are valid for the term stated below. Payment terms are described below, subject to credit approval.

Item Qty Description

1 1 Bauer Model 5772 Pneumatic Components Test Stand

Includes:

MODEL 5772 PNEUMATIC COMPONENTS TEST STAND
TEST TOOLING
SOFTWARE TEST PROGRAM (S172) FOR ALL UNITS
TEST STAND ON-SITE STARTUP & COMMISSIONING



This document contains proprietary information and is furnished solely to provide sufficient information for technical evaluation and purchasing of the items herein disclosed. This information is not to be used for manufacturing or procurement of equipment or services from any source other than Bauer, Inc. and is not to be disclosed to anyone other than persons responsible for technical evaluation and purchasing of the equipment or services herein disclosed, except by the express written permission of Bauer, Inc.

Aircraft Component Test and Support Equipment
"Focused on Our Customer's Success"

S No 67 (a) Specifications of Fuel Accessories Test Stand



Bauer, Inc.

175 Century Drive, Bristol, Connecticut 06010 • USA
Tel: 1 860 583-9100 • Fax: 1 860 583-9111 • www.baugroup.com

November 2, 2016

Pakistan Aeronautical Complex Board (PACB)

Subject: TFE731 Engine Accessories Test Equipment (Fuel)

Reference: Bauer Quote 60724-1, Revision B

Bauer is pleased to provide the following budgetary quotation for your consideration.

Purchaser agrees to the conditions defined below. All prices are in US Dollars (unless otherwise stated) and are valid for the term stated below. Payment terms are described below, subject to credit approval.

Item Qty Description

1 1 Bauer Model 1538 Fuel Accessories Test Stand

Includes:

MODEL 1538 FUEL ACCESSORIES TEST STAND
TEST TOOLING
SOFTWARE TEST PROGRAM (S1538) FOR ALL UNITS
TEST STAND ON-SITE STARTUP & COMMISSIONING
MTS1000 UNIVERSAL ELECTRONIC TEST BOX
MTS1000 ON-SITE STARTUP & COMMISSIONING

2 1 Bauer Model 1059 Portable Fuel Nozzle Test Cart
Used with 1538 Fuel Accessories Test Stand

3 1 Fuel Nozzle Test Tooling
Used with 1538 Fuel Accessories Test Stand

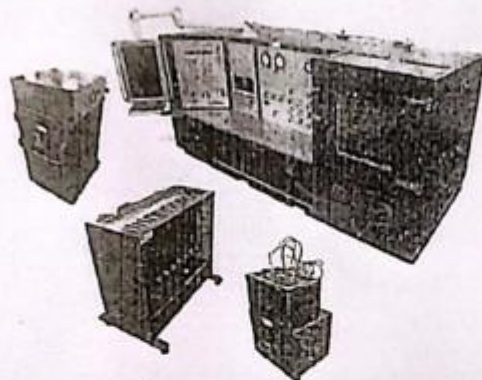
4 1 Bauer Model 1059 Portable Fuel Manifold Test Cart
Used with 1538 Fuel Accessories Test Stand

5 1 Portable Proof Pressure Test Cart
Used with 1538 Fuel Accessories Test Stand

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Aircraft Component Test and Support Equipment
"Focused on Our Customer's Success"

S No 67 (b) Specifications of Fuel Accessories Test Stand



The proposed test equipment (shown above), provides test capability for the following TFE731 engine accessories:

ACCY NAME	PART NO	CMM REF
1 FUEL CONTROL ASSEMBLY	3070800-33	CMM 73-21-01
2 MAIN FUEL GEAR TYPE PUMP	3060710-22	CMM 73-21-33
3 MAIN FUEL VANE TYPE PUMP	3070850-73	CMM 73-21-32A
4 FUEL MANIFOLD ASSY	3073521-2	CMM 73-10-31
5 FLOW DIVIDER VALVE	394390-2-1	CMM 73-10-32
6 FUEL HEATER (FUEL TEST)	158670-5	CMM 79-20-32
7 OIL TEMPERATURE REGULATOR (COOLER ASSY FUEL TEST)	158010-8	CMM 79-20-33
8 SURFACE TYPE OIL COOLER (FLUSHING WITH FUEL)	158005-7	CMM 79-20-31
	159809-3	CMM 79-20-37
	159810-3	CMM 79-20-38

SHIPMENT

Thirty-two (32) weeks after receipt of purchase order, EXW our plant, Bristol, Connecticut, USA per INCOTERMS 2010

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Aircraft Component Test and Support Equipment
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S No 68 (a) Specifications of Oil Accessories Test Stand



Bauer, Inc.

175 Canbury Drive, Bristol, Connecticut 06010 • USA
Tel: 1 800 553-9100 • Fax: 1 800 553-9111 • www.bauerinc.com

Pakistan Aeronautical Complex Board (PACB)

Subject TFE731 Engine Accessories Test Equipment (Oil)

Reference Bauer Quote 60724-2

Bauer is pleased to provide the following budgetary quotation for your consideration

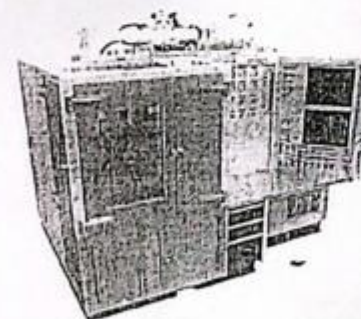
Purchaser agrees to the conditions defined below. All prices are in US Dollars (unless otherwise specified) and are valid for the term stated below. Payment terms are described below, subject to credit approval.

Item Qty Description

1 1 Bauer Model 3074 Oil Accessories Test Stand

Includes

MODEL 3074 OIL ACCESSORIES TEST STAND
FLUSH TOOLING
SOFTWARE TEST PROGRAM (SETUP) FOR ALL UNITS
FLUSH STAND CASSETTE STARTUP & DEMONSTRATION



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Aircraft Component Test and Support Equipment
"Focused on Our Customer's Success"

S No 68 (b) Specifications of Oil Accessories Test Stand

The proposed test equipment (shown below) provides test capability for the following TPE731 engine accessories:

ACC NAME	PART NO	CMM REF
LUBE AND SCAVENGE PUMP	3071949-11	
	3071949-12	CMM 79-70-03
	3060765-2	CMM 79-20-70
OIL TEMPERATURE REGULATOR	150010-6	CMM 79-20-30
OIL TEMPERATURE CONTROL VALVE	150405-3	CMM 79-20-30
SURFACE TYPE OIL COOLER (OIL TEST)	150800-7	CMM 79-20-31
	150900-3	CMM 79-20-37
	150910-3	CMM 79-20-38
FUEL HEATER (OIL TEST)	150870-5	CMM 79-20-32

SHIPMENT

Thirty (30) weeks after receipt of purchase order, EXW our plant, Bristol, Connecticut, USA per INCOTERMS 2010

PAYMENT TERMS (Subject to credit approval)

Progress Payments (Payments are due net 30 days from invoice date).

30% with order placement.

30% at project "halfway" point (15 weeks after placement of order).

30% NET 30 days of shipment.

10% after final acceptance at the end user's facility or 90 days post-shipment; whichever occurs first.

WARRANTY

Bauer's Standard One (1) Year Warranty (see attached Terms and Conditions for details)

QUOTATION VALIDITY

This quote will remain valid for ninety (90) days from the date of issue.

Quotation prepared by

Rob Michel

Rob Michel

Vice President - Sales

(T) 860 583 9100 ext. 134

(F) 860 583 9111

rob.michel@bauerct.com

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Aircraft Component Test and Support Equipment
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S No 69 (A) Specifications of Video Management System

Annexure 'A' To
No MRF/27516/SRI/PC-01/PACB/1002/58/Org
Pakistan Aeronautical Complex Board, Kamra
Dated -

SPECIFICATION OF SSS EQUIPMENT AND ALLIED ACCESSORIES

NOUN	SPECIFICATION	U/I	QTY
Server	Brand: HP/Dell/Any Renowned Brand Processor/Motherboard: Intel Xeon Processor x 2 Platinum Series (Latest 02 Gen) RAM: 128 GB Hard Disk: Data Storage: 6TB X 30 (SAS) Operating System: 1TB X 02 SSD (NVMe) Network: 4 Port Ethernet 1G/10G Optical Fiber Channel Card x 2: 2 Ports 10G (along with 02 SFPs) ILIO/DRAC: Licensed RAID: Licensed Latent AI features like face recognition, human/vehicle classification, intrusion detection and smart search etc. supported Power Supply: Dual Hot standby and Compatible with System Display (KVM): HP/Dell/Any Renowned Brand Input: 8-Ports VGA/HDMI Display: 21" or Higher KVM Display Cable: As per available number of ports Recording Backup Brand: Synology/HDS/60 or any Renowned Brand Processor/Motherboard: Intel Xeon Processor x 2 Silver Series (Latest 02 Gen) RAM: 64 GB Hard Disk: Operating System: 1TB X 02 SSD (NVMe) Data Storage: 10TB X 65 SAS Drive Network: 1G / 10G Ethernet Optical Fiber Channel Card x 2: 2 Ports 10G (along with 02 SFPs) Accessories: All Standard I/O's including Racky Rail, Cables, Genuine Windows Server latest version, Rack 32U along with all PDU's and related accessories Security / Warranty OEM's Certificate of non-availability of V-Pro / Related Technologies and Standard OEM Warranty Special Notes of Action (a) Future Replacement (if any) would be subjected to BOC's' seconded by Director IT. (b) Subject Specification would be reviewed/upgrade/evolve technically before and at the time of procurement	EA	01

S No 69 (B) Specifications of Video Management System

The proposed test equipment (shown above) provides the capability for the following T10731 engine work items:

ACCY NAME	PART NO	CMM REF
LUBE AND DRAINAGE PUMP	107145-11	CMM 75-20-01
	107145-12	CMM 75-20-02
	106076-2	
OIL TEMPERATURE REGULATOR	15810-8	CMM 75-22-06
OIL TEMPERATURE CONTROL VALVE	158405-3	CMM 75-28-06
	158605-7	CMM 75-20-31
SURFACE TYPE OIL COOLER (OIL TEST)	158600-3	CMM 75-20-37
	158310-3	CMM 75-20-38
FUEL HEATER (OIL TEST)	158670-5	CMM 75-20-32

SHIPMENT

Thirty (30) weeks after receipt of purchase order. EXW our plant, Bristol, Connecticut, USA per INCOTERMS 2010

PAYMENT TERMS (Subject to credit approval)

Progress Payments (Payments are due net 30 days from invoice date)

30% with order placement

30% at project "halfway" point (15 weeks after placement of order)

30% NET 30 days of shipment

10% after final acceptance at the end user's facility or 60 days post-shipment, whichever occurs first

WARRANTY

Bauer's Standard One (1) Year Warranty (see attached Terms and Conditions for details)

QUOTATION VALIDITY

This quote will remain valid for ninety (90) days from the date of issue

Quotation prepared by

Rob Michel

Rob Michel
Vice President - Sales
(T) 860 583 9100 ext 134
(F) 860 583 9111
rob.michel@bauerct.com

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Aircraft Component Test and Support Equipment
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S No 70 Specifications of Oil Separator Kit (D) L 132-160

S No 71 Specifications of Auto Fire System

SPECIFICATION OF KIT 'D' OIL SEPARATOR COMPAIR AIR COMPRESSOR R&F WING

SCOPE OF WORK: PERFORMA

PART NO	ITEMS DESCRIPTION	QTY
066901 100004690	SEALING VIC-S/75 88. 9 NITRIL	2 PCS
066901 100007635	SEAL-RING FOR FLEXMASTER	6 PCS
066901 A11427274	FINE OIL SEPARATOR	1 PCS
066901 A93180010	SEAL 100 PN 16	1 PCS
066901 A93190930	PIPE SEAL R-422 x 6 70 NBR/769	2 PCS

S NO	PART NO	NOUN	U/I	QTY TO BE REPAIRED	SCOPE OF WORK
1	FCC3000	AUTO FIRE CONTROL SYSTEM	EA	01	1. Auto fire electrical control panel boards Qty 02 are required to be repair / replaced. 2. 10 Yearly inspection required to be carried out by OEM or their authorized representative. <i>ad Per inspection criteria attached with.</i>

S No 72 Specifications of T 56 RGB Test Stand With Sound Proof Enclosure

SCOPE OF WORK: PERFORMA

S NO	PART NO	NOUN	U/I	QTY TO BE REPAIRED	SCOPE OF WORK
1	6799094	RGB Test Stand	Ea	01	RGB Test stand knob, Transducer, Scavenge pump auto switch and hoses are required to be repaired or replaced.

SCOPE OF WORK

Error given E CohnRot in Electronic system.
Required for repair / recovery of unidentified fault in
Micro-computer controller system from local market.

Liquid Rosin Flux

multicomp

RoHS
Compliant

Description

This is a rosin-based liquid flux with moderate activity. It is composed of pure Wipac White (WW) grade gum rosin in a unique solvent system with highly effective activators. Post soldering residues are nonconductive, non-corrosive, hygroscopic, non-fatty, and fungus resistant. It can be used for both automated and manual soldering applications. It is great for general purpose soldering of PCBs, wire, cable and semiconductors. It is also ideal for solder coating or tinning leads. It may be applied by spray, foam, or wave fluxing for wave soldering applications.

Features and Benefits

- Meets IPC J-STD-004B and type RDM1
- For both leaded and lead-free solders
- Fast wetting
- Excellent foaming

Usage Parameters

Properties	Value
Shelf life	5 y
Storage temperature limits	18°C to 27°C (65°F to 80°F)

* Store in a dry area, away from sunlight.

Properties

Flux Properties	Method	Value
Flux classification	J-STD-004B MSL-F-14256F	RDM1 RA
Flux type	J-STD-004B	Rosin
Flux activity	J-STD-004B	Moderate
Holdes by weight	J-STD-004B	0.44%
Copper mirror	IPC-TM-650 2.3.32	Partial removal
Corrosion	IPC-TM-650 2.6.15	Pass
Cleaning requirements	-	Recommended
Physical Properties	Method	Value
Colour	Visual	Light amber
Solids %	IPC-TM-650 2.3.34	50%
Density	-	0.93 g/mL
Flash point	Closed cup	12°C (53°F)

SPECIFICATION OF PRODUCT

Part no:- 093-997-075-1

Prod No:- P0338

Noun:- Bondrite 880E

Description:-

Used for upkeeping Phosphating Solution.

SPECIFICATION:-

Characteristics:-

(A) Appearance:-

Colourless to slightly coloured Liquid.

(B) Density; -

1.49 KG/DM3 (0.054 LB/CU.IN).

(C) PH of Product : - 1.

S No 77 Specifications of Bondrite 880a Used For Upkeeping Phosphating Solution

SPECIFICATION OF PRODUCT

Bondrite 880A

Part no:- 093-997-074-1

Prod No:- P0337

Noun:- Bondrite 880A

Description:- Phosphatization Product

Characteristics:-

(A) Appearance:- Colourless to slightly coloured product

(B) Density: - 1.50 KG/DM3 (0.054 LB/CU.IN).

(C) PH of Product: - 1.

Bondrite 880E

Part no:- 093-997-075-1

Prod No:- P0338

Noun:- Bondrite 880E

Description:- Used for upkeeping Phosphating Solution.

Characteristics:-

(A) Appearance:- Colourless to slightly coloured Liquid.

(B) Density: - 1.49 KG/DM3 (0.054 LB/CU.IN).

(C) PH of Product: - 1.

S No 80 Specifications of Nickle Chloride

SPECIFICATION OF PRODUCT

Part no: - 6850PK0940023

Prod No: - P-0059

Noun: - Nickel Chloride

SPECIFICATION:-

Description: - Nickel Chloride with 23.7% Nickel

Chemical Formula: - $\text{NiCl}_2 \cdot 6\text{H}_2\text{O}$

Appearance: - Yellow Green color crystals

Chemical Composition:-

(a) Ni+CO = 23.7% min

(b) CO = 1% max

Impurities:-

(a) CU = 0.01% max

(b) Fe = 0.015% max

(c) CU +Fe = 0.025% max

(d) Zn = 0.010% max

(e) Pb = 0.005% max

(f) Impurities not soluble in water = 0.10% max

S No 81 Specifications of Nickel Sulfamate

SPECIFICATION OF PRODUCT

Part no: - 6850PK0940024

Prod No: - P-0060

Noun: - Nickel Sulfamate

SPECIFICATION:-

General Characteristics:-

(A) Chemical Formula: - $\text{Ni}(\text{NH}_4\text{SO}_3)_2$

(B) Appearance: - Clear Green Concentrated Solution

(C) Density: - 1.50 - 1.57 Kg/ Dm³ (0.054 TO 0.056 LB/CU.IN)

(D) Chemical Composition:-

Elements	Limits (in weight)
(a) Nickel	= 145 TO 195 G/L (19 TO 26 OZ/US GAL)
(b) Anhydrous Nickel Sulfamate	= 620 TO 840 G/L (83 TO 112 OZ/US GAL)

(E) Impurities:-

	(in Anhydrous Salt)
(a) Fe	= 0.0025% max
(b) Cu	= 0.0025% max
(c) Fe+Cu	= 0.0050% max
(d) Zn	= 0.0030% max
(e) Mn	= 0.0030% max
(f) So4	= 0.60% max
(e) Pb	= 0.006% max

(F) Electrometric PH at 20 Deg C^o (70 Deg F^o): 3 TO 5

CAAP CO., INC.**POLYURETHANE • Erosion Resistant Aircraft Coatings • FLUOROELASTOMER**

P.O. BOX 2066, HUNTINGTON, CONNECTICUT 06484-2066

Plant: 182 Pepe's Farm Road • Milford, Connecticut 06460

PHONE (203) 877-0375 • FAX (203) 874-6072 • EMAIL: email@caapro.com

APPLICATION PROCEDURE**CAAPCOAT B-274 BLACK AND AS-P108 ANTISTATIC
POLYURETHANE RAIN EROSION COATINGS****AMS-C-83231A (MIL-C-83231A), TYPE II, CLASS A, COMPOSITION I**

CAAPCOAT B-274/AS-P108 Rain Erosion Resistant coating is a two component room temperature curing polyurethane elastomer designed to protect aircraft radomes, antennas and leading edges from rain impact at high speed while preventing static charge buildup on their surfaces. CAAPCOAT B-274/AS-P108 meets the Quality Assurance and Conformance Inspection requirements of AMS-C-83231A (MIL-C-83231A), Type II, Class A, Composition I.

The complete application procedure should be read and understood prior to application.

COMPONENTS

3,000 g	Gallon can	B-274 Black Polyurethane
192 g	Glass bottle	Curing Agent
192 g	Glass bottle	Accelerator
800 g	Quart can	AS-P108 Black Antistatic Polyurethane
24 g	Glass bottle	Catalyst
1,600 g	1/2 Gallon can	PUT-10 Polyurethane Thinner
1 Quart Kit	Qt. can, pint HDPE	Aeroglaze 9947 Wash Primer

SURFACE PREPARATION AND PRIMING

All surfaces to be coated must be primed. Surfaces should first be well sanded or grit blasted and thoroughly cleaned to insure maximum primer adhesion. Aeroglaze 9947 Wash Primer is recommended if stripping or repair of the cured coating may be necessary. Mix the primer 1:1 by volume. If necessary thin to 24 - 28 seconds Zahn #2 with the PUT-10 Polyurethane Thinner. A primer thickness of 0.5 - 1.0 mil is adequate and may be topcoated after 30 minutes to 24 hours dry time without affecting peel strength. Sanding or solvent wiping the primer is not recommended.

POLYURETHANE APPLICATION

B-274 BLACK POLYURETHANE
Add the Curing Agent and Accelerator to the B-274 and mix well. Dilute the activated B-274 to a spray viscosity of 22 - 28 seconds Zahn #2 with the PUT-10 Polyurethane Thinner. Apply 11 - 13 mils in multiple thin coats with suction or pressure spray equipment. Allow 5 - 20 minutes between coats for solvent evaporation. Approximately 0.5 - 1 mil of dry film thickness per crosscoat can be achieved, depending on equipment used and spray technique. Recommended conditions are 60 - 80°F and 40 - 70 % RH. A total of 11 - 13 mils can be applied in less than 6 hours.

Before application of the AS-P108 allow the B-274 coating to cure 1/2 - 1 hour under ambient conditions. Failure to allow this minimum dry time may result in wrinkling or cracking of the AS-P108 film upon curing.

The Accelerator activates the B-274 and causes a moderate viscosity increase with time. Additional thinning may be required periodically for activated B-274 to maintain spray viscosity. Using smaller amounts of Accelerator will extend potlife.

AS-P108 ANTISTATIC TOPCOAT

Thoroughly stir or shake the AS-P108. Add the Catalyst - mix well. Dilute the activated AS-P108 to a spray viscosity of 22 - 28 seconds Zahn #2 with the PUT-10 Polyurethane Thinner. Apply 1 - 2 wet cross-coats over the B-274 base. A dry film thickness of 1-2 mils of CAAPCOAT AS-P108 will provide a surface resistivity of 0.5 - 15 megohms per square.

SMALL QUANTITY ACTIVATION

Small quantities of B-274 can be activated by using 6.4 grams of Curing Agent and Accelerator per 100 grams of B-274 Polyurethane. Small quantities of AS-P108 can be activated by using 3 grams of Catalyst per 100 grams of AS-P108.

CURING

CAAPCOAT B-274/AS-P108 coating cures in 2 - 3 days at ambient conditions. After an initial 24 hour ambient cure, the cure time can be accelerated by heating at 150°F for 3 hours.

COVERAGE

One kit of CAAPCOAT B-274 will cover 25 - 30 square feet to a dry film thickness of 11 - 13 mils depending on application techniques as well as the shape of the article to be coated. Film density is 1.18 g/cc. One kit of CAAPCOAT AS-P108 will cover 100 - 120 square feet to a dry film thickness of 1 mil. Film density is 1.2 g/cc.

CLEAN UP AND REMOVAL OF CURED COATING

All spray equipment should be flushed thoroughly with acetone or methyl ethyl ketone (MEK) immediately after use. Should any material cure within the gun, soaking the affected pieces in acetone or MEK will soften the coating sufficiently for removal. The coating can be stripped with MEK or methyl isobutyl ketone (MIBK). It may be necessary to maintain solvent contact by wrapping the solvent-wetted surface in polyethylene film.

HANDLING PRECAUTIONS

Refer to the MSDS prior to use. CAAPCOAT Polyurethane coatings contain flammable solvents and should not be used in confined areas where there are open flames, arcing equipment, hot surfaces, or where smoking is permitted. Ground all metal surfaces to prevent the accumulation of static charge while spraying. Use only with adequate ventilation. Avoid prolonged or repeated breathing of vapor. Do not get in eyes, on skin or clothing. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes; for eyes, get medical attention. Do not store at temperatures above 38°C (100°F). Contains methyl isobutyl ketone, xylene, and less than 1% free isocyanate.

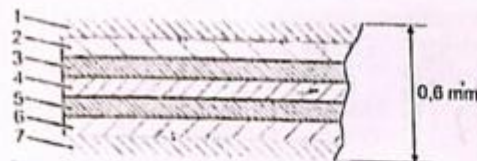
FOR INDUSTRIAL USE ONLY

No warranty, expressed or implied, is made except that the product conforms to CAAP CO.'s specifications. The technical data furnished is believed to be accurate and complete. Buyer assumes all risk of use, storage and handling of this product. CAAP CO., INC. shall not be responsible for special or consequential damages. Nothing contained herein shall be construed as a permission or recommendation for the use of the product in the infringement of any existing patent.

S No 83 Specifications of Phosphor Imaging Plate

Image Plate Details

The structure of the image plates is as follows:



- 1 Top layer / protective coating: Blue (IPU) or white (IPS / IPS2 / IPC2)
- 2 Phosphor layer
- 3 Adhesive layer
- 4 PET support
- 5 Adhesive layer
- 6 Ferromagnetic layer
- 7 Bottom layer / protective coating: Gray*

* The bottom side looks gray, as the ferromagnetic layer is gray, and the protective coating is transparent.



NOTE: The top layer (blue or white) is facing towards the radiation source and needs to be on top when inserting the image plate in the CRxVision for scanning.

Recommended application range per image plate type:

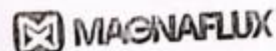
Image plate type	Characteristics	Application
IPU for CRxVision	Small particle size Phosphor. Blue pigment in Phosphor layer and topcoat.	High resolution imaging
IPS for CRxVision	Small particle size Phosphor. Coated topcoat.	Medium resolution imaging
IPS2 for CRxVision	Small particle size Phosphor. Coated topcoat.	Medium resolution imaging
IPC2 for CRxVision	Large particle size Phosphor. Screen printed topcoat.	Medium resolution imaging

For detailed application support and image plate selection guidance please contact your technical sales representative.



NOTE: Each image plate has an IPF (2 digits) and IPS (4 digits) value printed on the back side of the image plate. These values represent the sensitivity of this specific image plate.

S No 84 Specifications of Ammeter Shunt Kit



Product Data Sheet

Digital Amperage Meter

Digital Ammeter Calibration

The Digital Ammeter and Shunt Test Kit is a calibrated reference meter for the verification of magnetic particle equipment performance. The kit includes a calibrated digital ammeter that captures the 1/2-second mag shot and provides AC RMS or DC Peak amperage readings.

The TRUE RMS ammeter is UKAS calibrated with (0.09%) basic accuracy, a digital display with analogue bar graph and backlight. Capable of measuring AC, HWDC and FWDC waveforms up to 10,000 amps.

The kit includes a calibrated reference shunt with leads to connect to the ammeter.



PROPERTIES

Modes	AC / HWDC / FWDC
Display	4 digit LCD
Range	AC: 0-6,000 A RMS DC: 0-10,000 A Peak
Accuracy	AC: +/- 1% DC: +/- 0.09%
Shunt	800 A / 75mV
Power	9V PP3 Battery

SPECIFICATION COMPLIANCE

- ASTM E709
- ASTM E1444
- ASTM E3024
- ASME BPVC Section V Article 7
- ISO 9934

PART NUMBER

005M133

OEM MAKE: Magnaflux
Name: Digital Ammeter Shunt Test Kit
Part No : 622350
Mode of Operation: A/C, HWDC, FWDC
Range: A/C 0 – 6000A, DC 0 – 10000A,
Accuracy: A/C +/- 3% or 30A DC +/- 2 or 20A
Shunt : 75mV / 1000A
Shunt Cable: 5 ft / 1.5 meter
Power: 4 x AAA 1.5 V Battery
Calibration Certificate: 1 year, ISO 17025 NIST.
Warranty: 01 year

Not applicable

YES/NO

emand the word "Not Applicable" is to be endorsed



DCE / Equivalent Officer

S No 85 Specifications of Vacume Furnace

SCOPE OF WORK

1. Furnace shall be capable of achieving and maintain temperature of 1200 °C with uniformity with in ± 10 °C along with installation of PLC Logic, HMI Screen.
2. All unserviceable / damage / missing parts during retrofitting/ repair will be replaced with new one by supplier.
3. Power controller qty 03 u/s of vacuum furnace replaced with new one and same needs to be integrated with system.
4. Replacement of Qty 03 "S" type thermocouple with new one.
5. Festo valve Qty 01 u/s to be replaced with new one.
6. Hydraulic system of door is required to be repair. All u/s parts during repair need to be replace with new one.
7. Updating of software with latest version along with latest Computer (HP All in one DT AI 24-cr 2030d Ultra 7) Processor: Intel core ultra 7 2550 up to 5.20 GHz MAX Turbo (12 Cores). Memory (16 GB DDR-5 5600MHz). Storage (512 GB PC/eNVMe M.2SSD).Softwares, PLC HMI SCADA 165 Ethernet communication interface.
8. Printer (MFP 4303 FDW), UPS (APC Back-UPS CS 350 with 08 hrs. fully discharge time) with battery backup needed to replace with new one.
9. Backup of software, drivers and all necessary programs to be provided in USB and CD.
10. All pneumatic valve controller, pneumatic pipes and water channel replaced with new one.
11. Conduct temperature uniformity survey at 1200 °C with in ± 10 °C after completion of all rectification
12. Warranty at least one year
13. Complete serviceability of furnace to be done on turn key basis.
14. Detail wiring diagrams of all controls (main panel, zone control panels auxiliary systems qty 02 copies).

S No 86 Specifications of Camera Type Furnace W=1200XL L=1200X H=1200

SCOPE OF WORK

1. Furnace shall be capable of achieving and maintain temperature of 1200 °C with uniformity with in ± 5 °C along with installation of PLC Logic, HMI Screen.
2. Backup and handover of all control software, verification files and passwords required in USB or CD write.
3. Detail wiring diagrams of all controls (main panel, zone control panels auxiliary systems qty 02 copies).
4. Process record system of heating process recorder (Digital Chart Recorder) with integrated color printer (MFP 4303 FDW) along with system to log and print process data including temperature vs time for all zones.
5. Conduct temperature uniformity survey after completion of all rectifications works, ensuring compliance with uniformity criteria.
6. Minimum one (01) year comprehensive warranty covering all replaced parts, control components.
7. Complete serviceability and operational readiness of furnace to be ensured on turnkey basis, including all control system, heating elements, sensors, and safety interlocks.
8. All unserviceable / damage / missing parts during retrofitting / repair will be replaced with new one by supplier.