

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

**TENDER NOTICE : OPEN TENDER**

**MRF/6504/1/LOG : 22-23/08 DATED : 22 September, 2022**  
**TO BE OPENED ON : 11 October, 2022 TENDER INQUIRY : OT-08**

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

**Pattern of Quotations**

2. The quotation shall comprise a single package containing 02 separate envelopes. Tender reference along with due date of opening and Category Number must be clearly marked. Each envelope shall contain separately, the financial proposal and the Technical proposal 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 (colour 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 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 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

- (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 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 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 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 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 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 **051-90994727**.

### **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 Indigenous Provisioning office, MRF with **tender Inquiry number and opening date**.

**O i/c 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 October, 2022**. 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 O i/c 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. Details of requirements is as follows:- "

"Humidity Indicator, Blue Gold, Tank A1-A9, Fan Filter Assembly, Diffuser Filter, Inserter, Pin Extractor, Hose Recoiler, Surfactant Foaming Agent Used For Wet Sand Blasting, Machining Tool, PTZ IP Camera 2MP Day And Night View IR, Sleeve Expander (S), Pin Crimper, Pin Extractor, Soca Pex Pin Extractor, Extractor, Extraction Tool, Steel Cut Wire Shot, Stand Transportation, Sealing Compound C032, Cleaner C 451, Head Assembly For DCP Fire Ext, ERSA Soldering Station, Sodium Di Chromate, Sulfamic Acid, EDV Charger, Counter Sunk Bit, Counter Sunk Bit, PPC Machine (Nashuatec 3527), Snap Gauge With DTI 0-40MM, Outside Digital Micrometer 125 To 150 MM, Brass Wire 0.45MM, Working table steel 7.5'x3.5', Workline Framework Bench, Pneumatic Grinder (25000 RPM), Phosphor Imaging Plate, Electronic Gauge (lin), Vacuum Furnace, Brake Disc Of Crane, Allen Head Bolt, Tape Thread

Sealing (Tiffelant Tape), Growler, Anti Seizing Liquid Used When Diassembling Items Aftir Opration, Computer Intel Core i3 With Complete Accessories, Welding Wire, Thermostate Upper HS-32, Thermostate Lower HS-32, Deft Chemical Paint, Working table steel 4'x3'

13. List of items can also be downloaded from PPRA website [www.ppra.org.pk](http://www.ppra.org.pk) and as well as PACB website [www.pac.org.pk](http://www.pac.org.pk) free of cost or can be collected from DTE of Log (LP Section) MRF PAC Kamra Distt Attock from **23 September, 2022** during working hours (except holidays).

**Yours Faithfully,**

**(ABDUL QADIR)**  
Squadron Leader  
for Managing Director  
MRF, PAC Kamra

## 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.

**MRF/6504/1/LOG/22-23/08 Dated 22 September, 2022 Opening Date 11 October, 2022**

S No	Part No	Noun	Qty	UI	Shop	Remarks / Specifications
1	PMC1284	Blue Gold	2	Dr	Cleaning Bay (F100)	Blue Gold
2	A-1-A9	Tank A1-A9	3	Ea	Cleaining Bay (Atar)	<b>Scope of Work</b> Water rinsing pipelines are to be repaired with non-magnetic stainless steel pipe fitting with rinsing jets of brass.
3	M33004	Fan Filter Assembly	2	Ea	Chemical Lab	Fan Filter Assembly (92 mm) Plastic
4	1607KR2100	Diffuser Filter	10	Rol	Paint And Pickling Shop	(i) <b>Product group:</b> Filter (ii) <b>Affective for:</b> Filtration of Air (iii) <b>Thickness:</b> 2-3 Cm (iv) <b>Color:</b> White (v) <b>Unit of Issue:</b> Rol (vi) <b>Length Per Rol:</b> 50 Mtr
5	8400-482(A)	Insertor	1	Ea	Inst Shop	Insertor
6	8500-29B	Pin Extractor	1	Ea	Inst Shop	Pin Extractor
7	156-1085	Hose Recoiler	5	Ea	Metal Shop TFE	Hose Recoiler
8	093-997-279-1	Surfacto Antt Foaming Agent Used For Wet Sand Blasting	12	Btl	Cleaining Bay (Atar)	<b>Description:</b> Antifoaming agent used for wet sand blasting. Appearance: Yellow Liquid or White Lianoyonel Jel
9	98-AU-136	Machining Tool	2	Ea	Machine Shop TFE	Machining Tool
10	NEZ-5230-IRCW4	PTZ IP Camera 2MP Day And Night View IR	1	Ea	Surveillance Recovery Team(SRT)	Specifications are attached at the end, please.(Procurement)
11	410-032	Sleeve Expander (S)	10	Ea	Electric Febrication Shop	Sleeve Expander (S)
12	15500-20	Pin Crimper	1	Ea	Electric Febrication Shop	Pin Crimper
13	8500-29B	Pin Extractor	10	Ea	Electric Febrication Shop	Pin Extractor
14	809710	Soca Pex Pin Extractor	15	Ea	Electric Febrication Shop	Soca Pex Pin Extractor
15	8400-448	Extractor	10	Ea	Electric Febrication Shop	Extractor
16	8400-446	Extraction Tool	9	Ea	Electric Febrication Shop	Extraction Tool
17	CW-32	Steel Cut Wire Shot	25	Kg	Cleaning Bay (F100)	Almen Strip Type A Grade A-1 Steel Cut Wire Shot

18	6796177	Stand Transportation	1	Ea	Compressor Bay T-56	Specifications are attached at the end, please.(Procurement)
19	501-990-609-0	Humidity Indicator	50	Ea	R&D BAY	Sample may be collected from LP Store
20	MIL-S-38249TYPE1	Sealing Compound C032	1	Kit	AW-139 Helicopter O/H Project,RMC (PAF Project)	Specifications are attached at the end, please.(Procurement)
21	100205-000	Cleaner C 451	2	Gl	AW-139 Helicopter O/H Project,RMC (PAF Project)	Specifications are attached at the end, please.(Procurement)
22	21F/PK-189	Head Assembly For DCP Fire Ext	90	Ea	Fire Flt	Head Assembly with safety disc for DCP Fire Extinguishers
23	875-170	ERSA Soldering Station	1	Ea	Electronic Shop	(i) ERSA Soldering Station (ii) Type Fluke 8600A or Equivalent (Original) (iii) DC-AC 20.000 Points (iv) Sensitivity 0.1 MV
24	6850PK0940030	Sodium Di Chromate	50	Kg	ETP Shop	(i) <b>Description:</b> 86% Sodium Bichromate or Crystallized Dichromate (ii) <b>Chemical Formula:</b> NA2CR2O7,2H2O (iii) <b>Appearance Orange:</b> Coloured Crystals (iv) <b>Chemical Composition:</b> Elements NA2CR2O7 Anhydrous, Limits(In Weight) 86% Min, 0.2% Max, 0.4% Max (v) <b>Impurities:</b> CRO3, NACL + NA2SO4
25	6850PK0940028	Sulfamic Acid	50	Kg	ETP Shop	Specifications are attached at the end, please.(Procurement)
26	EAGLE48V-22A-5M	EDV Charger	1	Ea	Dis Assy Bay	EDV Charger
27	S2-4880-13DIA3.5MM120	Counter Sunk Bit	5	Ea	Fuselage Repair Shop	Counter Sunk Bit
28	S2-4880-13DIA3MM120	Counter Sunk Bit	5	Ea	Fuselage Repair Shop	Counter Sunk Bit
29	14C/NIV-L-125	PPC Machine (Nashuatec 3527)	1	Ea	Dte Of HRM	<b>Scope of Work</b> Paper miss feeding problem and needs servicing
30	452000	Snap Gauge With DTI 0-40MM	1	Ea	Machine Shop (Atar)	Snap Gauge With DTI 0-40MM
31	1A/2734B	Outside Digital Micrometer 125 To 150 MM	1	Ea	Machine Shop (Atar)	Outside Digital Micrometer 125 To 150 MM
32	6145PK0940042	Brass Wire 0.45 MM	5	Kg	Kinematic Chain Bay	Brass Wire 0.45 MM
33	5510PK003000001	Working Table Steel 7.5'x3.5'	5	Ea	T56 Production Cell	Specifications are attached at the end, please.(Procurement)
34	35-9436	Workline Framwork Bench	5	Ea	A/C Docks	Workline Framwork Bench



35	LSF28-S250E-1	Pneumatic Grinder (25000 RPM)	5	Ea	Metal Shop (Atar)	Pneumatic Grinder (25000 RPM)
36	IPS-CRXVISION	Phosphor Imaging Plate	5	Ea	NDI Shop	GE Inspection technologies (i) <b>Size:</b> 17x43CM (ii) Must be compatible with CRX-Vision (iii) Computed radiography equipment
37	4495081	Electronic Gauge (IIN)	1	Ea	T56 Eng Quality	Electronic Gauge (IIN) specs from user
38	6.0VP-4066/48MHV	Vacume Furnace	1	Ea	Heat Treatment Shop	<b>Scope of Work</b> Power Controller of hot zone is unserviceable and is required to be repaired and serviceability check on vacuum furnace along with circuit related issues resolving
39	AUX-0235	Brake Disc Of Crane	4	Ea	Aux Services Shop	Brake Disc Of Crane
40	CH-H027	Allen Head Bolt	16	Ea	Aux Services Shop	Allen Head Bolt
41	5136PK0860016	Tape Thread Sealing (Tiffelant Tape)	18	Ea	Boiler Shop	Tape Thread Sealing (Tiffelant Tape), Large Size
42	3GRTYPE623A	Growler	1	Ea	Electrict II	3GR Type 623A or Equivalent. Armature size 30MM to 150MM.
43	P-636	Anti Seizing Liquid Used When Diassembling Items Aftir Opration	5	Can	Jet Pipe Bay	Anti Seizing Liquid Used When Diassembling Items Aftir Opration
44	21B/7010PK0008502	Computer Intel Core i3 With Complete Accessories	3	Ea	A/C Docks	Specifications are attached at the end, please.(Procurement)
45	AMS6456	Welding Wire	2	Lb	Turbine Bay T-56	<b>Thickness/Length</b> 0.062 Inch x 36 Inch With one end Taged, with OEM conformance certificate
46	K9050003	Thermostate Upper HS-32	2	Ea	HT Shop J69 O/H Project	Thermostate Upper HS-32, Temperature 104°C
47	K9050004	Thermostate Lower HS-32	2	Ea	HT Shop J69 O/H Project	Thermostate Lower HS-32, Temperature 288°C
48	03-GY-401	Deft Chemical Paint	2	Kit	RGB T-56	(i) SDS/ MSDS required (ii) NSN 80100165895185 (iii) (OEM Conformance certificate with minimum 75% remaining shelf life required)
49	5510PK3550002	Working Table Steel 4'x3'	3	Ea	Boiler Shop	<b>Length</b> 04 Feet <b>Width</b> 03 Feet

**S NO: 10 SPECIFICATIONS OF PTZ IP CAMERA 2MP DAY AND NIGHT VIEW IR**

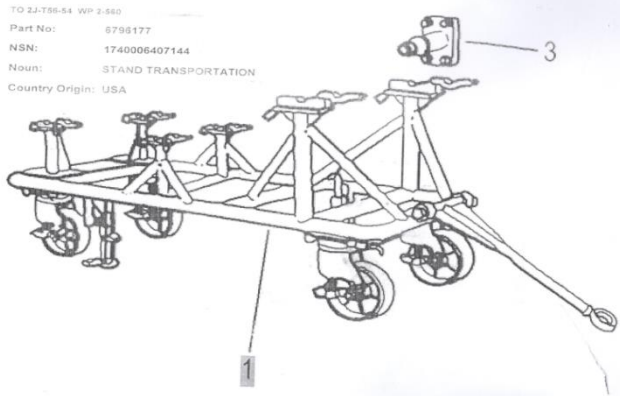
**Included**  
**PTZ IP camera: 2 Mega pixel Full HD (1920 x 1080) resolution, Full HD(1080p) image 30fps streaming, 30x optical zoom lens (4.3 mm - 129 mm (F 1.6 - F 5.0), 16x Digital Zoom, Min illumination 0Lux, 180 Mtrs IR Range, Network Protocol IPv4/6 - TCP/IP, UDP, HTTP, HTTPS, RTP, RTSP, DHCP, ICMP, FTP, SMTP, iSCSI, APIPA, NTP, ARP, SNMPv1/v2c/v3, DDNS, UPnP, CHAP, digest authentication, Web Viewer: Internet Explorer, Google Chrome, Firefox, Encryption: TLS 1.0, SSL, DES, 3DES, H.264 / MPEG-4 / MJPEG Multiple Streams, Intelligent Video Analytics: Tampering, Virtual Line, Enter/Exit, (Dis) Appear, Face Detection Network, Disconnection, 360° Endless Pan, Tilt/Zoom, WDR, UPnP supports, Defog, IP66, Open Protocol ONVIF Supported, SD Memory Slot, Weatherproof Housing & Mounting Kit.**

Equivalent / latest specification available in the market at the time of procurement .

Warranty of CCTV cameras & allied Equipment	3 Years Replacement Warranty for CCTV cameras and allied equipment
Video management Software Validity	Surveillance License valid for Life Time and also supported all noun brands of CCTV in the world
After Sale Service/Spare parts availability	10 years
Training	Training about CCTV cameras and allied equipment

**S NO: 18 SPECIFICATIONS OF STAND TRANSPORTATION**

**S NO 20 SPECIFICATIONS OF SEALING COMPOUND**



**Specification requirement/General Characteristics**

The sealing compound has the physical and chemical properties described as follows:

Color:	(1) Black (2) Black (3) Black
Base viscosity :	(1) 12,000 poise (2) 10,000 - 12,000 poise (3) 12,000 poise
Specific gravity at 25° C (77° F):	(1) 1.36 (2) 1.33 (3) 1.33
Service temperature range:	(1) -54° C (-65° F) to 204° C (400° F) (2) -54° C (-65° F) to 204° C (400° F) (3) -54° C (-65° F) to 204° C (400° F)
Nonvolatile content:	(1) 70% (2) 68% (3) 65%

**S NO 21 SPECIFICATIONS OF CLEANER C 451**

**Support Equipment**

Table 5 Support Equipment

Nomenclature	Identification No.	Qty
Container ((spray) - P/N 100101-000 or 100201-000 or 100205-000)	ZZ-00-00	1
Bottle ((squeeze - 400 cc (0.105 us gal) capacity - P/N 100100-130 or 100100-140)	ZZ-00-00	1
Brush (soft bristle)	ZZ-00-00	1

**Supplies**

Table 6 Supplies

Nomenclature	Identification No.	Qty
Oil, light paraffin	C448	AR
Cleaner ((Air filter) - P/N 100201-000 and	C451	AR

**S NO 25 SPECIFICATIONS OF SULFAMIC ACID**

APPLP NO:- 202220300996

ISSUEP  
Demand no:- 202219508844

Part no:- 6850PK0940028

Prod No:- P-0011

Noun:- Sulfamic Acid

Usage:- Required to be used for PH adjustment in nickel plating.

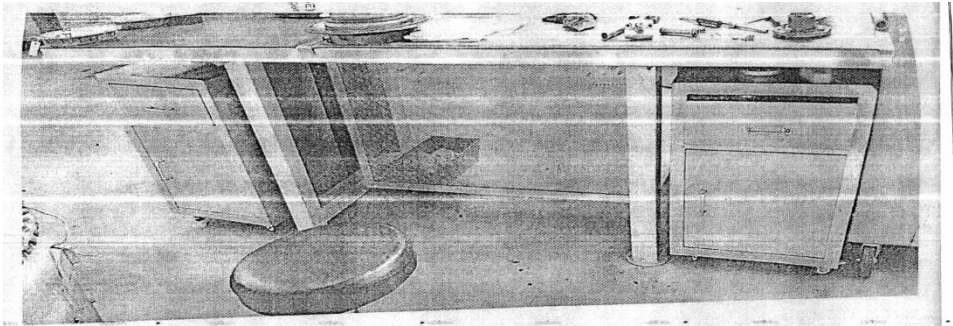
**SPECIFICATION:-**

Description:- Amidosulfuric OR amidosulfonic acid

Chemical Formula:- HSO3NH2

Appearance:- Colorless crystals supplied in "technical" condition

**S NO: 33 SPECIFICATIONS OF WORKING TABLE STEEL 7.5'X3.5 COMPLETE ACCESSORIES**



**S NO: 44 SPECIFICATIONS OF COMPUTER INTEL CORE I3 WITH**

1.	Motherboard	Intel® H81 Chipset (Intel® DH82H81 PCH) or higher
2.	Processor	Intel®™ i3-4160 Processor (3M Cache, 3.60 GHz) or higher
3.	RAM	04 GB DDR-III or more
4.	Hard Disk	500 GB SATA RPM or more
5.	Network Card	10/100/1000 MBPS Built in or more
6.	Key Board & Mouse	Branded
7.	Casing	Tower Branded
8.	Power Supply	Branded 450 W or higher with built in 600/70100 VA Surge Protector Installed
9.	Display	18.5" LED Multimedia Branded or Higher
10.	Warranty	OEM Minimum 03 years







