Aviation Cleaning and Maintenance

Maintenance

Avionic Repair

www.techspray.com
MAINTENANCE

Techspray aviation maintenance cleaners improve performance, efficiency and safety for degreasing, contact cleaning, and aircraft surface cleaning. Degreasers and contact cleaners remove a wide variety of soil, oil, grease, oxides, and baked-on lubricants. Formulas available to maximize cleaning power and comply with stringent environmental regulations. Clean and maintain corrosion-prone areas like exhaust trail areas, battery compartments and vents, bilge areas, landing gear, cooling vents, wing flap and more.

Specialized Degreasers for Aviation and Aircraft Parts

These specially engineered aviation degreasers quickly remove hydraulic fluid, fuel oils, lubricating oils and greases, and other organic residues. They are fast evaporating, quick penetrating, and ideal for cleaning aviation parts. Both are free of hazardous air pollutants (HAPs), and CARB compliant.

Aviation Degreaser

*Exceptional nonflammable cleaner for aircraft parts degreasing*

**2851-205** 20 oz (567g) aerosol

Specifications:
Meets Airbus UK ABR9-0140 General Purpose Cleaning Solvent, FedEx CPN 0311737, Boeing D6 17487, Rev T

- Nonflammable
- Fast evaporation
- Zero residue
- Non-ozone depleting
- Does not contain n-propyl bromide
- Dielectric breakdown of 13.7 kV
- CARB compliant

Aviation Degreaser II

*NESHAP compliant cleaner for removing hydraulic and lubricating fluids*

**1647-165** 16 oz (454g) aerosol

Specifications:
Boeing D6 17487, Rev T, NESHAP 63.741-753

- Nonflammable
- Low VOC / NESHAP compliant
- Fast evaporation
- Zero residue
- Non-ozone depleting
- Does not contain n-propyl bromide
- Dielectric breakdown of 11.9 kV
- CARB compliant
Degreasers

Maintenance Cleaner
Blasts away oil and contaminants off of contacts, printed circuit boards, barcode instruments, switch boxes, gear boxes, and electronic motor controllers. Grease and oil flow right off, reducing the time and materials needed to scrub off stubborn soils.
• Nonflammable
• Much safer than most common industrial solvents — TCE, nPB, Perc & Methylene Chloride
• Powerful cleaner — Ideal for degreasing and contact cleaning
• Available in aerosol or bulk for vapor degreasing, ultrasonic and immersion cleaning
• Rapid evaporation
• Non-ozone depleting
• Cleaning applications: electronics, relays, switches & breakers, transformers, and electric motors and generators
3400-20S  20 oz. (567g) aerosol
3400-G    1 gal. (3.8L) pail
3400-5G   5 gal. (18.9L) pail

Blue Shower Maintenance Cleaner
Nonflammable, powerful cleaner
Clean oil and contaminants off of metal parts, printed circuit boards, barcode instruments, switch boxes, gear relays, and electronic motor controllers.
1630-16S  16 oz. (454g) aerosol

Universal Cleaner
Nonflammable, powerful liquid cleaner
Engineered to remove oils, fluxes and other contamination using a manual soak cleaning process or ultrasonic equipment.
1638-G    1 gal. (3.8L) pail
1638-5G   5 gal. (19L) pail

3400-20S  20 oz. (567g) aerosol
3400-G    1 gal. (3.8L) pail
3400-5G   5 gal. (18.9L) pail
Degreasers

**Plastic-Safe Universal Cleaner**

*Plastic-safe, nonflammable cleaner for sensitive electronics*

Plastic-safe formula is engineered for use on sensitive plastic components, packaging and casemnts. Ideal for optics cleaning, critical electronics and other sensitive surfaces. Qualifies under the aerospace NESHAP VOC guidelines.

**1652-10S**

10 oz. (283g) aerosol

- Nonflammable
- Low VOC
- Safe on sensitive plastics
- High precision – residue-free
- Rapid evaporation
- Non-ozone depleting

Specifications:

NESHAP 63.741-753

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**Blue Shower Maintenance Cleaner**

*Powerful and economical aerosol cleaner*

Clean oil and contaminants off of metal parts, printed circuit boards, barcode instruments, switch boxes, gear boxes, and engines.

**1620-10S**

10 oz. (284g) aerosol

- Powerful cleaner
- Ideal for sensitive plastics
- Low toxicity
- Non-ozone depleting

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Contact Cleaners

**Contact Cleaner**

*Nonflammable, powerful contact cleaner*

Clean oxidation, oil, and other contaminants from contacts, metal switches, relays, edge connectors, buss bars, and circuit breakers.

**1632-16S**

16 oz. (454g) aerosol

- Nonflammable
- Powerful cleaner
- Rapid evaporation
- Non-ozone depleting
- Dielectric strength – 36.2 kv

Specifications:

Boeing D6 17487, Rev T
Boeing Aircraft 127713

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**Contact Cleaner**

*Powerful and economical electronic contact cleaner*

Clean oxidation, oil, and other contaminants from contacts, metal switches, relays, edge connectors, buss bars, and circuit breakers.

**1622-10S**

10 oz. (284g) aerosol

- Powerful cleaner
- Ideal for sensitive plastics
- Low toxicity
- Non-ozone depleting

**1622-13S**

13 oz. (369g) aerosol

- Nonflammable
- Low VOC
- Safe on sensitive plastics
- Rapid evaporation
- Non-ozone depleting
Isopropyl Alcohol (IPA)

Techspray has the broadest line of isopropyl alcohol (IPA) in the industry, ranging from aerosol, pre-saturated wipes, and bulk packaging. Two grades of IPA are available: 99.8% anhydrous (containing as little water as possible) for fast-drying cleaning and 70% IPA / 30% DI for stencil and other cleaning when slower evaporation is desired.

99.8% Bulk – Technical Grade IPA

- 1610-P 1 pt. (473mL) bottle
- 1610-G4 1 gal. (3.8L) bottle sold only 4/cs
- 1610-5G 5 gal. (19L) container
- 1610-54G 54 gal. (205L) drum

Specifications:
- ACS reagent grade, fed spec TT-1-735A (amend 3, notice 2) grades A&B
- ASTM D770-05

Pop-up Tubs

- 5"x8" (127mm x 203mm) wipes
- 100 wipes/tub
- Lint-free, tear resistant polyester

70% IPA Wipes
- 1608-100DSP 100 wipes in Disposable Tub
- 1608-100FL 100 wipes in Flip-Top Tub
- 1608-100R 100 wipes refill roll

99.8% IPA Wipes
- 1610-100DSP 100 wipes in Disposable Tub
- 1610-100FL 100 wipes in Flip-Top Tub
- 1610-100R 100 wipes refill roll

Individually Wrapped Wipes

- 99.8% pure IPA
- 5.5”x5.5” (140mm x 140mm) wipes
- 50 wipes/box
- Lint-free, tear resistant poly-cellulose

1610-50PK
Dusters

Nonflammable Duster
Nonflammable, 100% HFC-134a duster
1671-10S 10 oz. (283g) aerosol
1671-15S 15 oz. (425g) aerosol
NSN 6830-01-335-9925

- Nonflammable
- Safest choice for energized equipment
- Velocity – 11.3 m/s

Vortex™ High Velocity Duster
High velocity, 100% HFC-134a duster
- Most powerful blast
- Nonflammable
- Safest choice for energized equipment
- Vortex 360° sprays upside-down
- Velocity – 14.6 m/s
1697-8S Vortex 360° 8 oz. (227g) aerosol

Economy Duster
Economical HFC-152a duster
- Best value – 30% more volume
- Lower global warming potential – 10% of HFC-134a
- Velocity – 11.4 m/s
1673-10S 10 oz. (283g) aerosol

Note: not for use on powered electrical equipment, on hot surfaces, and around open flames or sparks.

Specifications:
Fed Spec A-A-58060
ARI Standard 700, App. C

General Purpose Cleaners

Zero-VOC General Purpose Cleaner
General purpose remover of adhesives and coatings
Ideal for heavy-duty degreasing and for removing paint, coatings and sticky adhesive residues. Because it is VOC-free, there are no VOC restrictions – even in southern California!
1611-P 1 pt. (473mL) can

- Pure acetone
- Ideal for removing inks & adhesives
- VOC exempt
- Low toxicity
- Fast evaporation
- Non-ozone depleting

Glass Cleaner
Foaming aerosol glass and surface cleaner
1625-18S 18 oz. (510g) aerosol

- Foaming action
- Streak-free
- Safe on glass & plastics
- Nonflammable

Label & Adhesive Remover
Fast acting, citrus-based label and adhesive remover
Citrus-based solvent safely and effectively removes labels and adhesive gums off equipment and products. Penetrates quickly and allows label to be peeled off without gummy residue.
1613-6S 4.5 oz. (128g) aerosol

- Removes labels and adhesive without scraping
- Penetrates rapidly
- Citrus-based solvent
- Safe on most plastics

Note: Not available in California
AVIONIC REPAIR

Techspray products clean and maintain sensitive avionics to prevent corrosion, and ensure reliability of controls, sensors, displays, touch panels, communication and other critical systems. Flux removers quickly and safely blast off corrosive flux residues. Freeze spray helps diagnose faulty components and solder joint. Techspray desoldering braid and TraceTech™ PCB repair products give you the capability to easily remove faulty components and perform trace repair without unsightly and unreliable jumpers. With Techspray, you can repair circuit boards and replace faulty components instead of replacing whole modules.

Solvent Defluxers

Flux Remover

*Strong and fast-acting flux remover*

Remove flux residues and other contaminants left by manufacture, rework, or repair of printed circuit boards.

1631-16S 16 oz. (454g) aerosol
1631-16SB 16 oz. (454g) aerosol w/brush attachment

- Nonflammable
- Powerful cleaner
- Proven effective for lead-free processes
- All-in-one cleaner and defluxer
- Rapid evaporation
- Non-ozone depleting

IPA Electronics Cleaner

*99.8% IPA in convenient aerosol package*

Ideal for defluxing, stencil cleaning and fiber optic connector cleaning.

1610-12S 12 oz. (340g) aerosol

- 99.8% pure IPA
- Compliant with SCAQMD rule 1171
- Plastic safe
- Low toxicity
- Non-ozone depleting

Specifications:
Fed spec TT-1-735A (amend 3, notice 2) grades A&B
ASTM D770-05

Flux Remover & Maintenance Cleaner

*Powerful and economical flux remover*

Hydrocarbon-based defluxer formulated to be powerful, yet very economical. Eliminates brushing and scrubbing, saving time and materials.

1621-10S 10 oz. (283g) aerosol
1621-G 1 gal. (3.8L) can

- Powerful cleaner
- Proven effective for lead-free processes
- Ideal for sensitive plastics

Flux Remover & Maintenance Cleaner

*Nonflammable and powerful precision cleaner*

Clean off flux residues, oil, and other contamination from electronics and other sensitive surfaces.

1651-16S 16 oz. (454g) aerosol
1651-G 1 gal. (3.8L) pail
1651-5G 5 gal. (19L) pail

- Nonflammable
- Low VOC
- Safe on most plastics
- High precision – residue-free
- Rapid evaporation
- Non-ozone depleting
**Freeze Sprays**

**Freeze Spray**
*Pure HFC-134a freeze Spray*
- Chills down to -60°F (-51°C)
- Nonflammable
- Safe for energized equipment

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Capacity</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1672-10S</td>
<td>10 oz. (283g) aerosol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1672-15S</td>
<td>15 oz. (425g) aerosol</td>
<td></td>
<td></td>
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</tbody>
</table>

Specifications:
- McDonnell Douglas 558

**Anti-Static Freeze Spray**
*ESD-Safe Diagnostic Freeze Spray*
- Avoids static build-up
- Prevents latent failures
- Chills down to -60°F (-51°C)
- Nonflammable
- No frost buildup

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Capacity</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1747-10S</td>
<td>10 oz. (283g) aerosol</td>
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<td></td>
</tr>
</tbody>
</table>

**ESD Products**

**Permanent ESD Coating**
*LICRON CRYSTAL*
- Rugged static dissipative coating
- Surface resistivity of 10^6 To 10^9 ohms
- Operating temperature range – up to 302°F (155°C)
- Humidity independent
- Superior adhesion to variety of surfaces: glass, plastic, etc.
- Non-ozone depleting

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Capacity</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>1756-8S</td>
<td>8 oz. (226g) aerosol (coats up to 200ft^2)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1733-QT</td>
<td>1 qt. (.95L) bottle with trigger sprayer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1733-G</td>
<td>1 gal. (3.8L) bottle</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Zero Charge Anti-Stat Coating**
*Anti-static coating for fabrics & flexible surfaces*
- All-purpose static control
- For plastics, fabrics, and carpet
- Fast drying
- Nonflammable

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1726-QT</td>
<td>1 qt. (.95L) bottle with trigger sprayer</td>
<td></td>
</tr>
</tbody>
</table>

Specifications:
- MIL-B-81705B

**Zero Charge Mat & Tabletop Cleaner**
*Safe, effective cleaner for ESD mats*
- Rejuvenates ESD-safe mats
- Will not dry out surfaces
- Leaves no insulative film
- Nonflammable
- No ammonia
- Non-corrosive

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1733-QT</td>
<td>1 qt. (.95L) bottle with trigger sprayer</td>
<td></td>
</tr>
</tbody>
</table>

**Zero Charge Hand Lotion**
*Non-contaminating hand lotion for ESD sensitive environments*
- Improves wrist and heel strap contact
- Does not contain silicone or lanolin
- Non-contaminating — does not interfere with soldering
- Non-greasy

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1702-8FP</td>
<td>8 fl. oz. (237ml) bottle with finger pump</td>
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</tr>
</tbody>
</table>
## Rework & Repair Pens

### TraceTech™

**Flux Remover Pen**  
*Spot cleaning for PCB rework and repair*  
2506-N  Single-pack of 11.5 ml pen  
- Fast stripping action  
- Non-corrosive  
- Rapid evaporation  
- Pen tip allows controlled application

**No-Clean Flux Dispensing Pen**  
*Non-clean flux applicator pen for PCB rework and repair*  
2507-N  Single-pack of 11.5 ml pen  
2507-N100  144 pack of 11.5 ml pens, 12 boxes of 12  
- Excellent wetting  
- Works with lead and lead-free solders  
- Boost wetting for lead-free wire solder  
- No cleaning necessary

**Conductive Pen**  
*Silver ink pen for repairing electronic traces*  
2505-N  Single-pack of 4.9 ml pen  
- Repairs traces  
- Makes smooth jumpers

**Overcoat Pen**  
*Resist repair pen for PCB rework and repair*  
2509-GN  Single-pack of 5 ml pen  
- Repairs solder resist  
- Green to match resist  
- Prevents shorting and arcing

**Conformal Coating Remover Pen**  
*Spot coating remover in applicator pen for PCB rework and repair*  
2510-N  10 ml pen  
- Fast stripping action  
- Non-corrosive  
- Rapid evaporation

### Heat Sink / Transistor Grease

**Silicone Heat Sink Compound**  
*Heat sink compound for electrical applications*  
1977-DP  4 oz. (118ml) squeeze tube  
- Thermal conductivity – 0.70 W/m-K  
- Functional temperature Range -67°F to 401°F (-55°C to 205°C)  
- Easy application  
- Will not harden and crack

**Silicone-Free Heat Sink Compound**  
*Heat-sink for electronics, avoid silicone contamination*  
1978-DP  4 oz. (118ml) squeeze tube  
- Thermal conductivity – 0.92 W/m-K  
- Functional temperature range -40°F to 392°F (-40°C to 200°C)  
- Avoid solder defects due to silicone contamination  
- Easy application  
- Will not separate  
- Will not harden and crack
Desoldering Braid

Techspray wick is available in static dissipative bobbins for static sensitive environments.

Techspray No-Clean wick is coated with proprietary flux that only leaves a slight clear residue, which does not cause service issues. Cleaning after using Techspray No-Clean wick is strictly optional.

Specifications: Meets or Exceeds MIL-F-14256; NASA NHB 5300, 4 (34-1); NASA NPC 200-4; NASA SP5002; 1821 HP 8690-0588; 1823: HP 8690-0577; IPC Standard-J-STD-004

Pro-Wick® Rosin — ESD-Safe Bobbin

For the fastest wicking action, rosin flux coated braid is ideal for high volume PCB production/repair environments.

No-Clean Wick — ESD-Safe Bobbin

The cleanest No-Clean braid in the industry. The proprietary flux formula is specially designed to avoid catastrophic and latent PCB failures caused by ionic flux residue.

Unfluxed Wick — ESD-Safe Bobbin

For customers who use water-soluble flux, or their own flux for aqueous processes.

### DESOLDERING BRAID SELECTION CHART

<table>
<thead>
<tr>
<th>#1 White</th>
<th>#2 Yellow</th>
<th>#3 Green</th>
<th>#4 Blue</th>
<th>#5 Brown</th>
<th>#6 Red</th>
</tr>
</thead>
<tbody>
<tr>
<td>.035” (0.9mm)</td>
<td>.055” (1.4mm)</td>
<td>.075” (1.9mm)</td>
<td>.098” (2.5mm)</td>
<td>.130” (3.3mm)</td>
<td>.193” (4.9mm)</td>
</tr>
</tbody>
</table>

Wick in selection chart shown actual size.

Specifications:
MIL-F-14256
NASA NHB 5300, 4 (34-1)
NASA NPC 200-4
NASA SP5002
IPC Standard-J-STD-004
# Brushes

## Brushes

<table>
<thead>
<tr>
<th>FRONT VIEW</th>
<th>SIDE VIEW</th>
<th>Product</th>
<th>L Bristle Length</th>
<th>W Bristle Width</th>
<th>T Bristle Trim</th>
<th>Bristle Material</th>
<th>Handle Material</th>
<th>Handle Length</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Brushes Image" /></td>
<td><img src="image2" alt="Brushes Image" /></td>
<td>2020-1</td>
<td>1.375” (35mm)</td>
<td>0.25” (64mm)</td>
<td>0.44” (11mm)</td>
<td>Horse Hair</td>
<td>Wood</td>
<td>7.75” (19.7cm)</td>
</tr>
<tr>
<td><img src="image3" alt="Brushes Image" /></td>
<td><img src="image4" alt="Brushes Image" /></td>
<td>2021-1</td>
<td>1.375” (35mm)</td>
<td>0.25” (64mm)</td>
<td>0.44” (11mm)</td>
<td>Hog Bristle</td>
<td>Wood</td>
<td>7.75” (19.7cm)</td>
</tr>
<tr>
<td><img src="image5" alt="Brushes Image" /></td>
<td><img src="image6" alt="Brushes Image" /></td>
<td>2022</td>
<td>2.125” (54mm)</td>
<td>0.875” (22mm)</td>
<td>0.75” (19mm)</td>
<td>Hog Bristle</td>
<td>Wood</td>
<td>8.375” (21.3cm)</td>
</tr>
<tr>
<td><img src="image7" alt="Brushes Image" /></td>
<td><img src="image8" alt="Brushes Image" /></td>
<td>2030-1</td>
<td>0.125” (3.2mm)</td>
<td>0.0625” (1.6mm)</td>
<td>0.125” (3.2mm)</td>
<td>Goat Hair</td>
<td>Stainless Steel</td>
<td>3.5” (8.9cm)</td>
</tr>
<tr>
<td><img src="image9" alt="Brushes Image" /></td>
<td><img src="image10" alt="Brushes Image" /></td>
<td>2031-1</td>
<td>0.25” (64mm)</td>
<td>0.19” (4.8mm)</td>
<td>A - 0.25” (6.4mm)</td>
<td>Horse Hair</td>
<td>Stainless Steel</td>
<td>4.5” (11.4cm)</td>
</tr>
<tr>
<td><img src="image11" alt="Brushes Image" /></td>
<td><img src="image12" alt="Brushes Image" /></td>
<td>2032-1</td>
<td>0.5” (13mm)</td>
<td>0.375” (9.5mm)</td>
<td>A - 0.19” (4.8mm)</td>
<td>Horse Hair</td>
<td>Zinc Plated Steel</td>
<td>4.5” (11.4cm)</td>
</tr>
<tr>
<td><img src="image13" alt="Brushes Image" /></td>
<td><img src="image14" alt="Brushes Image" /></td>
<td>2033-1</td>
<td>0.44” (11.2mm)</td>
<td>0.375” (9.5mm)</td>
<td>0.75” (19mm)</td>
<td>Horse Hair</td>
<td>Zinc Plated Steel</td>
<td>4.5” (11.4cm)</td>
</tr>
</tbody>
</table>

## TechSwabs

*All swabs shown actual size – 1:1 scale*

### Cotton TechSwabs

<table>
<thead>
<tr>
<th>Product</th>
<th>Tip Width</th>
<th>Attachment of Tip</th>
<th>Handle Length</th>
<th>Handle Material</th>
<th>30 Pack Bag</th>
<th>100 Pack Bag</th>
<th>1000 Pack Bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>2300</td>
<td>0.1875”</td>
<td>Wrapped</td>
<td>6” (15cm)</td>
<td>Wood</td>
<td>—</td>
<td>2300-100</td>
<td>2300-1000</td>
</tr>
<tr>
<td>2302</td>
<td>0.44” (11.2mm)</td>
<td>Heat Sealed</td>
<td>6” (15cm)</td>
<td>Polypropylene</td>
<td>2302-50</td>
<td>2302-1000</td>
<td></td>
</tr>
</tbody>
</table>

*Cotton Bud Wrapped in Foam, Rigid Head*

### Foam TechSwabs

<table>
<thead>
<tr>
<th>Product</th>
<th>Tip Width</th>
<th>Attachment of Tip</th>
<th>Handle Length</th>
<th>Handle Material</th>
<th>50 Pack Bag</th>
<th>1000 Pack Bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>2302</td>
<td>0.44” (11.2mm)</td>
<td>Heat Sealed</td>
<td>6” (15cm)</td>
<td>Polypropylene</td>
<td>2302-50</td>
<td>2302-1000</td>
</tr>
</tbody>
</table>

*Cotton Bud Wrapped in Foam, Rigid Head*

<table>
<thead>
<tr>
<th>Product</th>
<th>Tip Width</th>
<th>Attachment of Tip</th>
<th>Handle Length</th>
<th>Handle Material</th>
<th>50 Pack Bag</th>
<th>1000 Pack Bag</th>
</tr>
</thead>
<tbody>
<tr>
<td>2306</td>
<td>0.5” (13mm)</td>
<td>Heat Sealed</td>
<td>5” (13cm)</td>
<td>Polypropylene</td>
<td>2306-50</td>
<td>2306-1000</td>
</tr>
</tbody>
</table>

*Rigid Head*

For full selection of swabs and wipes, go to www.techspray.com or full line Techspray product catalog.
For more information and the full product line for electronics and general industry cleaning and coating, including:

- Aerosol, ultrasonic & vapor degreaser solvent cleaners
- PCB assembly cleaners, temporary solder masks & conformal coatings
- PCB rework & repair products
- Full line of wipes, swabs & brushes

Quality Tools for Electronic Assembly & Repair

- Soldering & desoldering tips
- Shear cutters
- Tip cleaners & other soldering accessories