Environmentally Safe Lubricants and Micro-Lubrication Systems for Near-Dry Machining

The Natural Choice in Metalworking Lubricants & Equipment
The Natural Choice in Metalworking Lubricants and Equipment

ITW ROCOL North America is the leader in scientifically advanced fluid products for the metalworking industry.

Natural-based Accu-Lube lubricants are formulated to provide superior performance, economy and safety compared to conventional water-soluble coolants and cutting fluids.

Accu-Lube standard applicators are available for most metalworking operations, and our applications engineers can design a custom micro-lubrication system for any application.

Benefits of Near Dry Machining

- Eliminates Flood Coolant
- No Waste Disposal
- Longer Tool Life
- Safer Working Conditions
- Less Fluid Consumption
- Long Term Cost Savings
- Cleaner Machine Operation
- No Discoloration of Parts
- Non Toxic
- No Disposal Cost
- Less Machine Maintenance

Proven Results In Many Applications

- Circular Sawing
- Bandsawing
- Milling
- Drilling
- Reaming
- Tapping
- Stamping
- Broaching
- Grinding
- Thread Rolling
- Tool and Cutter Grinding
- Edge Trimming
- Punching
- Roll Forming
- Spine Rolling
- Abrasive Belt
- Bending
- Chain Lubrication

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The Natural Choice In Metalworking Lubricants

Use Accu-Lube For Easier, Safer And More Profitable Metalworking Operations

Accu-Lube offers a complete line of natural-based lubricants along with specially-developed, patented micro-lubrication systems. These products are non-toxic, environmentally compatible and can be applied to a variety of materials without fear of contamination or discoloration. As a result, the production process becomes more efficient, worker safety is increased, and the bottom line improved.

ITW ROCOL North America, manufacturer of Accu-Lube products, is the industry leader in providing scientifically advanced fluid products for the metalworking industry. Our parent company, Illinois Tool Works, Inc. (ITW), a Fortune 200 company, is one of the most technologically innovative in the world.

Save money with Accu-Lube

<table>
<thead>
<tr>
<th></th>
<th>COOLANT</th>
<th>Accu-Lube</th>
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<tbody>
<tr>
<td><strong>Initial Cost</strong></td>
<td>$47.55</td>
<td>$893.00</td>
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<tr>
<td><strong>Replacement Fluid Costs (1)</strong></td>
<td>$680.00</td>
<td>$260.00</td>
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<tr>
<td><strong>Disposal Cost (2)</strong></td>
<td>$351.00</td>
<td>None</td>
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<tr>
<td><strong>Recharge Costs (3)</strong></td>
<td>$85.00</td>
<td>None</td>
</tr>
<tr>
<td><strong>Labor For Downtime (4)</strong></td>
<td>$300.00</td>
<td>None</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Year 1</strong></td>
<td>$1,463.55</td>
<td>$1,153.00</td>
</tr>
<tr>
<td><strong>Year 2</strong></td>
<td>$1,463.55</td>
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</tr>
<tr>
<td><strong>Year 3</strong></td>
<td>$1,463.55</td>
<td>$260.00</td>
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</table>

Additional Factors Not Included:
1) No Mess
2) No EPA Paperwork
3) No Health and Safety Problems
4) Increased Tool Life
5) Increased Productivity

Assumption: Using CNC machine with 60-gallon sump. Water-soluble coolant costs $15.85 per gallon. Coolant mixture is 20:1. Replacement fluid mixture is 35:1. Machine runs 8 hours per day, 5 days a week, 50 weeks per year.

Notes: 1) Average loss of fluid is 10% per day. 2) Average cost of disposal in New England is $2.25 per gallon. 3) Assuming 3 recharges of entire system per year. 4) 2 hours labor and machine downtime per recharge of system: labor rate $10.00 per hour; machine time $40.00 per hour.

Environmentally Safe

Accu-Lube is non-toxic and non-irritating. Accu-Lube applicators carry fluid to the cutting edge without atomizing the lubricant.

Accu-Lube is biodegradable and environmentally compatible. It will not harm the quality of water, air or earth. It is consumed naturally while being used.

Accu-Lube is a neutral product that does not cause any contamination or discoloration of products and it can be cleaned up easily by using soap and hot water (160°F).

A small amount of Accu-Lube replaces larger quantities of conventional coolants.
The Leader in Environmentally Safe Lubricants

Accu-Lube's unique, natural-based formulas provide the highest level of lubricity to the cutting edge of any tool. Since it is naturally consumed in the cutting process, the need for clean up and disposal are virtually eliminated. Accu-Lube is 100% environmentally safe and biodegradable. Accu-Lube lubricants are free from any hazardous ingredients. All ingredients are listed on the Toxic Substance Control Act (TSCA) registration list as non toxic, and none are subject to SARA (Superfund Amendment and Reauthorization Act) reporting.

Increased Tool Life

Accu-Lube lubricants are used in their concentrated form and offer a substantial increase in lubricity over soluble oil mixtures. The high lubricity factor reduces the friction involved in the machining process, allowing both the tool and workpiece to remain at room temperature. This eliminates any thermally induced dimensional problems in either the part or the tool and increases tool life.

No Disposal or Parts Cleaning

Typically, only two ounces of Accu-Lube lubricant per nozzle are required each day for most machining operations, all of which are fully consumed in the process. There are no coolants or oils requiring disposal. Down-time cleaning operations can be eliminated, saving time, energy, inventory and costly cleaner and chemical disposal.

Physical Properties

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Pin &amp; Vee Block</td>
<td>4500</td>
<td>4500</td>
<td>1750</td>
<td>1500</td>
<td>4500</td>
<td>4500</td>
<td>1250</td>
<td>1000</td>
<td>4500</td>
<td>1250</td>
<td>900</td>
<td>4500</td>
</tr>
<tr>
<td>ASTM D3233A Load Value - ft. lbs. Test w/#8 Pin*</td>
<td>4500</td>
<td>4500</td>
<td>1750</td>
<td>1500</td>
<td>4500</td>
<td>4500</td>
<td>1250</td>
<td>1000</td>
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<td>900</td>
<td>4500</td>
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<tr>
<td>Flash Point – Degrees F</td>
<td>535° F</td>
<td>593° F</td>
<td>608° F</td>
<td>608° F</td>
<td>598° F</td>
<td>400° F</td>
<td>418° F</td>
<td>374° F</td>
<td>400° F</td>
<td>400° F</td>
<td>335° F</td>
<td>None</td>
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<tr>
<td>Viscosity 100F SUS ASTM D4212</td>
<td>150</td>
<td>148</td>
<td>145</td>
<td>145</td>
<td>155</td>
<td>30</td>
<td>19</td>
<td>62</td>
<td>35</td>
<td>25</td>
<td>33</td>
<td>60</td>
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<tr>
<td>Pour Point – Degrees F</td>
<td>5° F</td>
<td>5° F</td>
<td>-4° F</td>
<td>-4° F</td>
<td>5° F</td>
<td>-40° F</td>
<td>-40° F</td>
<td>40° F</td>
<td>-38° F</td>
<td>-40° F</td>
<td>40° F</td>
<td>32° F</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.93</td>
<td>0.94</td>
<td>0.91</td>
<td>0.91</td>
<td>0.94</td>
<td>0.94</td>
<td>0.92</td>
<td>0.85</td>
<td>0.95</td>
<td>0.92</td>
<td>0.87</td>
<td>1.01</td>
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*These numbers are to be used as a guide only; actual results will vary based on metals being machined, type of tooling and machine speeds.
# Metalworking Lubricants

## High Performance Natural Base Oil Must Be Cleaned Off Prior To Heat Treating

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>RECOMMENDED APPLICATIONS</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LB-1000</td>
<td>Heavy-Duty Machining and Sawing&lt;br&gt;Deep Hole Drilling (Up to 3x Diameter)&lt;br&gt;Tapping of Large Diameter (5/8”) and Deep Holes</td>
<td>High Performance Natural Base Oil With Extreme Pressure Additive for Severe Applications&lt;br&gt;Not Recommended for Use on Titanium&lt;br&gt;Must be Cleaned Off Prior to Heat Treating</td>
</tr>
<tr>
<td>LB-1100</td>
<td>Heavy-Duty Machining&lt;br&gt;For Use in All Heavy-Duty Applications, Including Milling, Deep Hole Drilling, Tapping and Sawing&lt;br&gt;Good for All Metals Including Aluminum, Titanium and Carbide Dies&lt;br&gt;Recommended in Aerospace Applications</td>
<td>Ideal for Machining Operations Where Maximum Tool Life is Desirable&lt;br&gt;Non Chlorinated EP Package&lt;br&gt;Water Washable&lt;br&gt;Must be Cleaned Off Prior to Heat Treating</td>
</tr>
<tr>
<td>LB-2000</td>
<td>Medium to Heavy-Duty Machining&lt;br&gt;For Use in General Machinery, Drilling, and Tapping Small Diameter Holes (Under 5/8”)&lt;br&gt;Excellent for Sawing of Solids Up to 6” in Diameter.&lt;br&gt;Tubing Almost Any Size&lt;br&gt;Good for All Metals</td>
<td>#1 Accu-Lube Product Used to Eliminate Flood Type Coolants&lt;br&gt;Excellent Base Lubricity&lt;br&gt;High Performance, Pure, Natural Base Oil&lt;br&gt;Environmentally Friendly &amp; Worker Safe&lt;br&gt;Must Be Cleaned Off Prior to Heat Treating</td>
</tr>
<tr>
<td>LB-3000</td>
<td>Medium-Duty Machining&lt;br&gt;Sawing, Solids and Tubing&lt;br&gt;Drilling and Tapping of Small Holes&lt;br&gt;Stamping, Rolling and Other Medium-Duty Applications&lt;br&gt;Good for All Metals</td>
<td>Economical High Performance Replacement for Mist Type Coolant&lt;br&gt;Environmentally Friendly and Worker Safe&lt;br&gt;Must Be Cleaned Off Prior to Heat Treating</td>
</tr>
<tr>
<td>Power Stamp III</td>
<td>Heavy-Duty Machining&lt;br&gt;For Stamping or Any Heavy-Duty Application That Requires Extreme Performance and Easy Water Clean-Off</td>
<td>Medium Viscosity Natural Base Oil&lt;br&gt;Delivers Excellent Lubricity&lt;br&gt;Non-Chlorinated EP Package&lt;br&gt;Must Be Cleaned Off Prior to Heat Treating</td>
</tr>
</tbody>
</table>

## High Performance Natural Base Oil Non-Staining During Post Heat Treating

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>RECOMMENDED APPLICATIONS</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>LB-6100</td>
<td>Heavy-Duty Machining of Non-Ferrous Metals&lt;br&gt;For Milling, Drilling, Reaming, Tapping and Sawing of Non-Ferrous Metals</td>
<td>Very Light Viscosity Lubricant&lt;br&gt;Will Not Build up on Machines or Part&lt;br&gt;Non-Chlorinated EP Package</td>
</tr>
<tr>
<td>LB-6000</td>
<td>Medium-Duty Machining of Non-Ferrous Metals&lt;br&gt;For Sawing, Drilling and Tapping</td>
<td>Suitable as a Replacement for “Mist” Type Lubricants and Coolants Due to a Very Light Viscosity&lt;br&gt;Non-Chlorinated EP Package</td>
</tr>
<tr>
<td>LB-5000</td>
<td>Medium-Duty Machining&lt;br&gt;For Use on Aluminum Requiring Post-Heat Treating</td>
<td>Very Light Viscosity Lubricant&lt;br&gt;Non-Chlorinated EP Package&lt;br&gt;Water Washable</td>
</tr>
<tr>
<td>Power Stamp II</td>
<td>Designed to Meet the Needs for Stamping Industry or Any Heavy-Duty Application that Requires:&lt;br&gt;Excellent Chemical &amp; Base Lubricity</td>
<td>Light Viscosity Clean Lubricant that Won’t Gum Up On Parts or Equipment&lt;br&gt;Non-Chlorinated EP Package&lt;br&gt;Water Washable</td>
</tr>
<tr>
<td>LB-6800</td>
<td>High Performance Aluminum Sawing Lubricant&lt;br&gt;Designed for Aluminum Extruders</td>
<td>Outperforms Conventional Fluids for Aluminum Due to Superior Lubricity&lt;br&gt;Non-Chlorinated EP Package</td>
</tr>
<tr>
<td>LB-4600</td>
<td>Economical Aluminum Sawing Fluid</td>
<td>For Light-Duty Sawing on Aluminum&lt;br&gt;Non-Chlorinated EP Package</td>
</tr>
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## Synthetic (Water Based)

<table>
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<th>PRODUCT</th>
<th>RECOMMENDED APPLICATIONS</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic</td>
<td>Multi-Purpose Economical Lubricant&lt;br&gt;Water-based Synthetic&lt;br&gt;Versatile: Good for Many Applications in the Shop&lt;br&gt;Cleans Easily With Water</td>
<td>Formulated From Synthetic Lubricants&lt;br&gt;Rapid Heat Dissipation Eliminates the Smoke Associated With Straight Oils&lt;br&gt;Non-Chlorinated EP Package</td>
</tr>
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Material Safety Data Sheet

Product Name: Accu-Lube LB-2000 Metalworking Lubricant (Medium to Heavy-Duty Machining).
55 Gal.: LB2055

SECTION 1. MANUFACTURER IDENTIFICATION
Manufacturer Name: ITW Rocol North America, 3624 West Lake Avenue Glenview, Illinois 60026
Emergency Phone: 800-424-9300
Information Phone: 800-452-5823
Name of Preparer: Lee Hitchcock
Date Revised: 05/17/06

SECTION 2. INGREDIENTS
This product contains no chemicals subject to the reporting requirements of OSHA’s Hazard Communication Standard 29 CFR 1910.1200.

SECTION 3. PHYSICAL/CHEMICAL CHARACTERISTICS
Boiling Point: >400°F
Vapor Density: (Air = 1): >1
Coating V.O.C.: 0.00 lb/gl
Solubility in Water: Insoluble
Appearance and Odor: Blue viscous fluid with mild odor.
Specific Gravity: (H2O = 1): 0.92
Evaporation Rate: (BuAc = 1): <1
Material V.O.C.: 0.00 lb/gl

SECTION 4. FIRE AND EXPLOSION HAZARD DATA
Flash Point: 608°F
Method Used: COC
Flammable Limits in Air By Volume - Lower: n/a Upper: n/a
Extinguishing Media: Water No, Co2 Yes, Dry Chemical Yes, Foam Yes, Alcohol Foam No
Special Firefighting Procedures: Firefighters should wear self-contained breathing apparatus in confined areas.
Unusual Fire and Explosion Hazards: None.

SECTION 5. REACTIVITY DATA
Stability: Chemically Stable
Conditions to Avoid: None
Incompatibility (Materials to Avoid):

Strong Oxidizing Agents
Hazardous Decomposition or Byproducts: Oxides of Carbon
Hazardous Polymerization: Will not occur.

SECTION 6. HEALTH HAZARD DATA
Inhalation Health Risks and Symptoms of Exposure: Unlikely at normal room temperatures.
Skin and Eye Contact Health Risk and Symptoms of Exposure: None
Skin Absorption Health Risks and Symptoms of Exposure: None
Ingestion Health Risks and Symptoms of Exposure: None
Health Hazards (Acute and Chronic): None
Carcinogenicity:
NTP Carcinogen: No
IARC Monographs: No
OSHA Regulated: No
ACGIH Carcinogenicity: No
Medical Conditions Generally Aggravated By Exposure: None
Emergency and First Aid Procedures:
Eyes: Flush well with water.
Skin: Wash with soap and water.
Inhalation: No emergency care anticipated under normal conditions.
Ingestion: Do not induce vomiting. Contact a physician. If vomiting occurs, keep head below hips to prevent aspiration of liquids into lungs.

SECTION 7. PRECAUTIONS FOR SAFE HANDLING AND USE
Steps to be Taken in Case Material is Released or Spilled: Mop up or use absorbent material, wash area, discard in suitable containers.
Waste Disposal Method: Remove to a waste disposal facility operating in compliance with federal, state and local regulations.
Precautions to be Taken in Handling and Storing: Avoid generating mists in the use of this product; the following values reflect the established levels for organic/natural oils:
ACIGH - TLV/TWA = 10 mg/m3/8hr
OSHA - PEL/TWA = 10 mg/m3/8hr
ACGIH - TVL/STEL = 10 mg/m3

SECTION 8 CONTROL MEASURES
Respiratory Protection: None required at normal handling temperatures.
Ventilation: Local exhaust is recommended for confined areas. General mechanical ventilation is adequate for normal use.
Protective Gloves: None
Eye Protection: None
Other Protective Clothing or Equipment: None required under normal use.

SECTION 9. REGULATORY INFORMATION
Non-Hazardous Substance - as defined by: U.S. Department of Transportation and U.S. Coast Guard: CFR Title 49 (Transportation), Chapter 1, Section 172 paragraph 101.
U.S. Department of Labor/Occupational Safety & Health Administration: CFR-Title 29 (Labor), Chapter XVII, Section 1910, Paragraph 1200.
Non-Carcinogenic or Mutagenetic as defined by: IARC (International Association for Research of Carcinogens) NTP (National Toxicology Program) Third Annual Report
Not subject to Chemical Release Reporting as defined by: U.S. Environmental Protection Agency: Title III (Emergency Planning and Community Right to Know Act), Section 313 of the SARA (Superfund Amendment and Re-authorization Act)
Non-Toxic as defined by: FHSA (Federal Hazardous Substances Act)/U.S. Food and Drug Administration

SECTION 10. DISCLAIMER
ITW ROCOL North America bases the information and recommendations in this document on data believed to be correct. No warranty of any kind, however, is made as to the information in this document.
Safe for Short-Run and Hand-Held Machining Projects

Accu-Lube hand-held products put the convenience and high quality performance of the finest organic cutting lubricants at your fingertips. For short-run and hand-held machining projects, nothing can match the quality of Accu-Lube Products. All are environmentally safe, non-toxic and can cleanup with soap and water.

**Accu-Lube Pump Spray**

The Accu-Lube pump spray is the ideal choice for drilling, tapping and reaming. The precision nozzle allows you to apply lubrication only where needed.

Available in 8 Ounce Pump Spray (16/case) Part # 79026

**Accu-Lube Paste**

This is the industry standard for horizontal applications. Brush it on for tapping, reaming or drilling.

Available in 8 Ounce Jar (16/case) Part # 79030

**Stick Lubricants**

Reduces heat build-up in belt, disc or wheel grinding operations. Apply the ready-to-use stick to the tool before start-up.

Available in 2.2 Ounce Push-up stick (24/case) Part # 79042
13 Ounce Tube (24/case) Part # 79045

**#10 Perfect Tapping Oil**

Recommended for tapping operations on all metals. Its thickness allows the tap to cut several holes before recoating is required.

Available in 8 Ounce Bottle (16/case) Part # 7583
1 Gallon Part # 7584

**Accu-Clean**

Accu-Clean safely removes oil, grease, dirt and grime from any surface, including cement, all metals, all painted surfaces, upholstery, clothing and plastics. Non-toxic, non-caustic and biodegradable, it can clean without contaminating water and drain systems. Accu-Clean contains no hazardous ingredients, no solvents and no Butyl Cellosolve, so it is safe for your employees, equipment and the environment.

Available in 1 Gallon (4/case) Part # AC-1001
5 Gallon Part # AC-1005
55 Gallon Drum Part # AC-1055

**Accu-Lube Blocks**

Accu-Lube blocks make grinding operations hassle-free. Lubrication is as simple as making an “X” on belts or discs. Packaged in 12 blocks per tray and 10 trays per case.

Available in 2.6 ounce Solid Block (120/case) Part # 79037

**Accu-Lube LS-10 Paste**

Paste Form for application on any cutting tool. Apply LS-10 with a brush or immerse product in the paste.

Available in 8 Ounce Bottle (16/case) Part # 7603

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13 Ounce Tube (24/case) Part # 79045

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Available in 2.6 ounce Solid Block (120/case) Part # 79037

**Accu-Lube LS-10 Paste**

Paste Form for application on any cutting tool. Apply LS-10 with a brush or immerse product in the paste.

Available in 8 Ounce Bottle (16/case) Part # 7603
Accu-Lube Applicators

The Unique Advantage of Accu-Lube Applicators

Accu-Lube applicators regulate the lubricant supplied to the cutting edge in exact quantities - no guesswork.

- Lubricant is carried by air, with pinpoint accuracy onto the cutting edge. Hazardous atomizing and “mist” are eliminated.

- Additional pumps and automatic on/off controls (electric solenoid) can be added in the field. Just order a complete pump assembly or a solenoid valve. This process is limited to the box size.

- Minimal or no equipment modification is required for system installation.

- Pneumatic timing device (frequency generator) and a 5-180 stroke per minute control range for pneumatic timing device.

- Easy lubricant and air flow adjustment.

- Durable metal locking box

- Multiple on/off controls: manual switch, solenoid valve, foot pedal or air pilot valve.

- Multiple nozzle types available: Copper, Stainless Steel and Loc-Line with Magnetic Base.

Limited 2 Year Warranty

All Accu-Lube applicators undergo systematic, rigorous testing in order to confidently offer extremely reliable application systems. This allows us to offer a limited 2-year parts warranty on all equipment when used with Accu-Lube lubricants.

FREE TRIAL
Accu-Lube in your Plant

Prove to yourself how Accu-Lube can specifically improve your operations. Accu-Lube offers a 2 week guaranteed trial to end users on any standard applicator.

Complete Standard Applicators

All standard applicators come in a metal box with:

- 12 foot hoses
- 12 inch copper nozzles with standard tip
- 10 oz. reservoir for 1 to 3 nozzle units
- 1 quart reservoir for units with 4 or more nozzles

<table>
<thead>
<tr>
<th>No. of nozzles</th>
<th>Manual</th>
<th>Electric</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>01A0-STD</td>
<td>01A1-STD</td>
</tr>
<tr>
<td>2</td>
<td>02A0-STD</td>
<td>02A1-STD</td>
</tr>
</tbody>
</table>

How to Choose an Applicator

Answer these questions:

- Is the application to be controlled automatically or manually?
- Is the application production or not?
- Do you require portability?
- Do you need flexible or rigid nozzles?
- Will the applicator be dedicated to a specific machine or multiple machines?
### Information and Operating Instructions

1. **Liquid Reservoir:** Lightweight, durable polycarbonate reservoir. Ten-ounce reservoirs are standard on 1-3 nozzle units. One-quart reservoirs are standard on all units 4 nozzles and above. Reservoirs are also available in 1/2 gallon and 1 gallon sizes.

2. **On/Off Switch:** This switch allows the flow of air to enter the applicator. Turn switch clockwise to turn air on, and counter-clockwise to turn air off, or automate your applicator with an electric solenoid.

3. **Filter/Air Pressure Gauge:** A standard particle filter is supplied with an air pressure gauge on each applicator. This filter will help eliminate particles and water from entering the system. Air pressure should be a minimum of 80 psi to a maximum of 150 psi. 80-100 psi is optimal. If there is a problem with oil in the air lines, we suggest running a coalescing filter (part # 9402) in tandem with the particle air filter.

4. **Frequency Generator:** This valve controls the frequency at which the pumps cycle. To increase the speed of the pumps, turn screwdriver adjustment counter-clockwise.

5. **Air Flow Valve:** For aluminum pumps; each individual pump has its own air flow adjustment that can be operated independently.

6. **Liquid Flow Adjustment:** Knobs regulate the amount of lubricant that is supplied with each stroke of the pump.

7. **Box:** Durable metal locking boxes are available with double door design for more convenient access.

8. **Mounting Holes:** Pre-drilled holes for permanently mounting applicators to machine tools or for installation of magnetic mounts (for 1 and 2 nozzles units only).

9. **Air Supply:** Accu-Lube applicators require a minimum of 80 psi of air to operate effectively. The systems can operate anywhere from 80 psi to 150 psi. Accu-Lube systems will consume approximately 1 to 2 oz. of fluid per nozzle per 8 hours under normal operating conditions.

10. **Accu-Lube Positive Displacement Pump Stack:** For precision delivery of Accu-Lube Lubricant.
Special Applicators

5 Easy Steps To The Perfect Applicator

Accu-Lube professionals can custom design an applicator to meet specific needs. With our component architecture it is easy to customize applicators.

STEP 1

06 A 1 - SPC ( 3x2x1 - CCCM )

Number of Pumps

Pump Configuration (If Necessary)

Enter using the following format:

A 3 by 2 by 1 configuration would be denoted 3 x 2 x 1. This means that 3 pumps would work simultaneously, 2 more would work together but separate from the others, and one would work independently of the others.

Pump Type

A  Aluminum
B  Brass

Control Method

0  Manual
1  110 VAC Solenoid
2  220 VAC Solenoid
3  24 VDC Solenoid

Non Standard Items

C  Toggled switch to control pump operations
D  Remote ON/OFF Switch with bracket
F  Foot activated ON/OFF switch
M  Air accelerator blow-off nozzle
N  110 VAC solenoid activated blow-off nozzle
P  24 VDC solenoid activated blow-off nozzle
Z  Special manufacturing instructions

Enter as many of these features as are required. If multiple quantities of a feature are required, enter the appropriate letter, the number of times that the feature is needed.

For example, the above unit requires 3 toggle switches and an air accelerator blow-off nozzle.

STEP 2 - Hose Length Part #

12 feet: 90050
20 feet: 90051
45 feet: 90053
60 feet: 90054

STEP 3 - Reservoir Options

10 ounce: 9380
1 quart: 9381
1/2 gallon: 9382
1 gallon: 9384

STEP 4 - Nozzle Options Part #

12” Copper w/standard TIP 79101
12” Copper w/magnetic base and standard TIP 79104
12” Loc-Line w/magnetic base and standard TIP 79107
18” Loc-Line w/magnetic base and standard TIP 79108

STEP 5 - Other Options Desired

Applicator magnetic mounts (3 per box) 79120
Coalescing Filter 9402

See Price Schedule for more details. This is only a selection of Accu-Lube applicator options
**Accu-Lube Junior Applicator**

This economical positive displacement pump applicator offers many of the same unique features of Accu-Lube's top of the line applicators without the box.

- Comes standard with 10 oz. reservoir, flexible 18" magnetic base nozzles and magnetic mount
- Pneumatic timing device controls pump strokes for smooth operation
- Multiple controls ensure exact rates of fluid usage and operator control
- 2 Year warranty on all Accu-Lube positive displacement application systems

**Available in**
- 1 Nozzle: 01DO-STD
- 2 Nozzles: 02DO-STD

**Non-Production Applicator**

**Accu-Lube Advantage**

*Ideal for Versatile machine shop requirements!*

Compact design, comes standard with 12" flexible mag-base nozzles and magnetic mount.

- Ideal for tapping, milling, drilling
- Individual adjustments for air and fluid flow rates
- Versatile and portable with enhanced drip viewing sight glass
- 90 day warranty

**Available in**
- 1 Nozzle: 01CO-STD
- 2 Nozzles: 02CO-STD

**Accu-Lube LS-Style Applicators**

*Ideal for intermittent machine use!*

Compact design, comes standard with 12" flexible mag-base nozzles and magnetic mount.

- Comes standard with FLR (Filter/Lubricator/Regulator)
- 12" flexible mag-base nozzles and magnetic mount
- 90 day warranty

**Available in**
- 1 Nozzle: 01EO-STD
- 2 Nozzles: 02EO-STD
**Near Dry Circular Sawing**

**Bundled Single Pump Jr. Applicator with 9878 Circular Saw Nozzle**

The circular saw nozzle is designed to span wider kerf of a circular saw up to 1/4” and is acceptable for blades up to 16” diameter. Mount through the blade guard with the simple wing mount for weld free installation. Comes with a manual on/off or add a #9518 solenoid.

**Part#: 01D0-CIR**

**Large Diameter Circular Saw Blade Nozzles**

The nozzles are designed for use on large circular saw blades cutting ferrous and non-ferrous metals. This rugged nozzle mounts firmly on the saw and is designed to withstand the harsh environment during cutting and slides out of the way to change blade. *Requires a three pump Accu-Lube applicator.*

**Part#: 9045 - 36” to 120” Diameter Circular Saw Blades**

**Part#: 379165 - 24” to 36” Diameter Circular Saw Blades**

**Nozzle For Circular Saw**

For circular saw up to 18” diameter. 45° angle head. 1 input, 3 outputs.

**Part#: 9878**
Two Nozzle Accu-Lube Pump Standard Applicator with Lockable Steel Box

The two nozzle Accu-Lube pump applicator is the most popular configuration for industrial operations.

Part#: 02A1-STD

Bundled with Nozzle for Band Saws, two pump input up three port spray

Add the #9857 or the 9877 band sawing nozzle for rock solid installation and dependable application of the lubricant. For band saw blades two inches and larger this rugged nozzle sprays lubricant right were you need it at the cutting edge. Easy to install requires a two pump system.

Part#: 9857
Part#: 9877 - For Deep Throat

Bundled Single Pump Jr. Applicator with 9692 Band Saw Nozzle

This is the perfect fit for band saws with small to medium size band saws blade, (width between 1” to 2.5”). Point the nozzle directly at the teeth of the blade up by the drive wheel and out of the way. If you blade mounts with the teeth towards the back of the saw, drill a hole and mount from the back. If the blade mounts with the teeth to the front, mount on the blade guard. This installation is out of the way and will provide trouble free operation for years. Comes with a manual on/off or add a #9518 solenoid.

Part#: 01D0-SAW

U Style Nozzles for Band Saws

This unique design allows lubricant to be applied from behind the blade. The single nozzle allows a single pump Accu-Lube Applicator to split the lubricant and apply it to the three side of the blade.

Part#: 9696  N-Nozzle (blade size 1" to 1.375")
Part#: 9857* R-Nozzle (2 inputs, 3 outputs)
Part#: 9877* Nozzle (2 inputs, 3 outputs) for Band Saws - Throat size 2-1/8”

* Requires 2 Pump Applicator

Bundled Single Pump Jr. Applicator with 9696 N-Nozzle (1-1.375)

Easy to install this tuning fork design wraps around the back of the blade and sprays lubricant out three ports, two at an angle to lubricate the teeth of the blade and one centered over the back of the blade just before entering the cut. Great for vertical or horizontal band saws this simple design is easy to install on just about any saw. Comes with a manual on/off or add a #9518 solenoid.

Part#: 01D0-NNZ

Band Saw Nozzle

Uses a single pump applicator and applies a smooth coat of lubricant directly to the gullet and on both sides of the saw blade.

Part#: 9692

Near Dry Band Sawing

The oil tube should only be inserted up to this point to guarantee optimum lubrication.

Lubricate the cutting face of the blade and into the gullet.
Specialty Applications

**Milling/Drilling/Tapping**

Milling is an excellent application to benefit from Near Dry Machining. Lubricate the cutting edge before it enters the cut. Follow the cut. For high speeds and smaller tools use the inline atomizer.

Two and three nozzle Accu-Lube applicator with Loc-Line are recommended. Accu-Lube Junior (illustrated at left) or standard applicator.

**In-Line Atomizer - Travel Lubricant Farther**

The in-line atomizer breaks up the lubricant into small particles and allows the lubricant to travel easier with the stream of compressed air to the cutting tool.

Part #: 9693

**Aerospace AFIL-2000**

Specifically build to meet the needs of aerospace manufacturing professionals. The system is designed for use on self-feeding pneumatic drill motors.

- Unique flow sensing valve detects the operation of the air tool and applies lubricant to both the cutting tool and the air tool motor at the same time.
- Compact design, easy to carry with a handle and a hose wrap.

Part#: 02M0-AER

**Tap Arm Lubricators**

Senses the flow of air when the air tool is activated. Delivers one stroke of lubricant and a constant flow of compressed air each time the tool is triggered.

Part#: 02K0-STD - Delivers one stroke of lubricant
Part#: 01K0-MWS - For constant flow of lubricant
# Accu-Lube Parts & Accessories

## Sub Assemblies

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<tr>
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<th>Part #</th>
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<tr>
<td>1- Pump Stack Assembly (Aluminum) with 15 ft. oil line</td>
<td>9722A</td>
</tr>
<tr>
<td>2- Pump Stack Assembly (Aluminum) with 15 ft. oil line</td>
<td>9722B</td>
</tr>
<tr>
<td>Pump Repair Kit (Aluminum) For Latest Generation Only</td>
<td>9668</td>
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<tr>
<td>1- Pump Stack Assembly (Brass)</td>
<td>9713</td>
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<tr>
<td>2- Pump Stack Assembly (Brass)</td>
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</tr>
<tr>
<td>Injector Kit (Brass)</td>
<td>9301</td>
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<tr>
<td>Pump Repair Kit (Brass)</td>
<td>9721</td>
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<tr>
<td>Electric Solenoid (110 VAC) On/Off Valve (1/4” NPT)</td>
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<td>Electric Solenoid (24 VDC) On/Off Valve</td>
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## Parts & Accessories

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<td>Reservoir - 10 oz. (Standard)</td>
<td>9380</td>
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<tr>
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<td>9381</td>
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<tr>
<td>Reservoir - 1/2 Gallon</td>
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<td>Reservoir - 1 Gallon</td>
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<tr>
<td>Air Filter 1/4”NPT With Pressure Gauge</td>
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<tr>
<td>Toggle Switch</td>
<td>9471</td>
</tr>
<tr>
<td>Valve, Foot</td>
<td>9476</td>
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<tr>
<td>Applicator Magnetic Mounts</td>
<td>79120</td>
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<tr>
<td>Coalescing Filter (1/4” NPT) w/o gauge</td>
<td>9402</td>
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</table>

## Nozzle Types

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<tr>
<td>Wide Angle Nozzle Tip for Loc-Line (Assy)</td>
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<tr>
<td>12” Copper Nozzle With Standard Tip</td>
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<tr>
<td>12” Copper Nozzle With Standard Tip and Mag Base</td>
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<tr>
<td>12” Stainless Steel Nozzle With Standard Tip</td>
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<tr>
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<tr>
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<tr>
<td>Wide Angle Nozzle Tip for Copper or Stainless</td>
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<tr>
<td>In Line Atomizer</td>
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<tr>
<td>Nozzle for Band Saws N-Nozzle - Blade Size: 1” to 1.375”</td>
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<td>Nozzle for Band Saws R-Nozzle</td>
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<td>Nozzle for Band Saws - Throat Size: 2 1/8”</td>
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</tr>
<tr>
<td>Nozzle for Circular Saws 45° Nozzle - Up To 18” Dia. Blade</td>
<td>9878</td>
</tr>
<tr>
<td>Large Diameter Circular Saw Blade Nozzle: 36” to 120”</td>
<td>9045</td>
</tr>
<tr>
<td>Medium Diameter Circular Saw Blade Nozzle: 24” to 36”</td>
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