



Saw Blade Lube Systems

Cutting Edge Technology

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Unist Saw Blade Lube Systems deliver all the benefits of MQL (*Minimum Quantity Lubrication*) to your band or circular saw in a durable and easy to install package. Longer lasting blades, better cuts, fluid savings, and clean, dry chips are the main reasons users love our Saw Blade Lube Systems and our Coolube® lubricant.

If you're currently using a traditional flood coolant system, make the switch to a Unist Saw Blade Lube System and eliminate the mess that coolants can cause, their health/safety concerns, and the need to treat and dispose of them.

Unist offers numerous system options to make sure your Unist Saw Blade Lube System is perfect for your application and we'll work with you to make sure your system is a success. Get started enjoying the benefits of MQL today!



- Eliminate the mess of traditional flood coolant systems
- Save money with reduced fluid usage
- Extend blade life and reduce downtime
- Dry chips are worth more money when recycled

What is MQL?

Minimum Quantity Lubrication (MQL) replaces the flood coolant commonly used in sawing operations with a minute amount of high-quality lubricant precisely applied to the saw blade. The lubricant minimizes friction between the stock and the blade, greatly reducing the heat that is generated during sawing. In contrast, the purpose of traditional flood coolant is to absorb the heat after it has been created. MQL technology has been used for over 25 years and has proven its effectiveness in a broad range of sawing operations.

Why Use MQL?

Many of the benefits of MQL are a direct result of eliminating flood coolant and the issues it creates. Studies have shown that the cost of dealing with flood coolants, including mixing, treatment, circulation, and disposal can account for up to 15% of total sawing costs. Additionally, splashing coolant often coats equipment and surrounding areas, negatively affecting saw reliability and creating hazardous, slippery floors.

In contrast to using flood coolant, an MQL applicator dispenses environmentally friendly lubricant in such minute amounts that it is often consumed in the process. This leaves little or no excess fluid to clean up or dispose of, and the chips produced are dry enough to be recycled without additional processing.





Precision Fluid Application

Precise fluid application is the key to maximizing the benefits of Minimum Quantity Lubrication. Applying too much lubricant is a waste and can adversely affect chip formation, whereas inadequate lubricant reduces blade life. Precise fluid application requires accurate pumps for consistent lubricant delivery and appropriate nozzles to create and direct the spray.

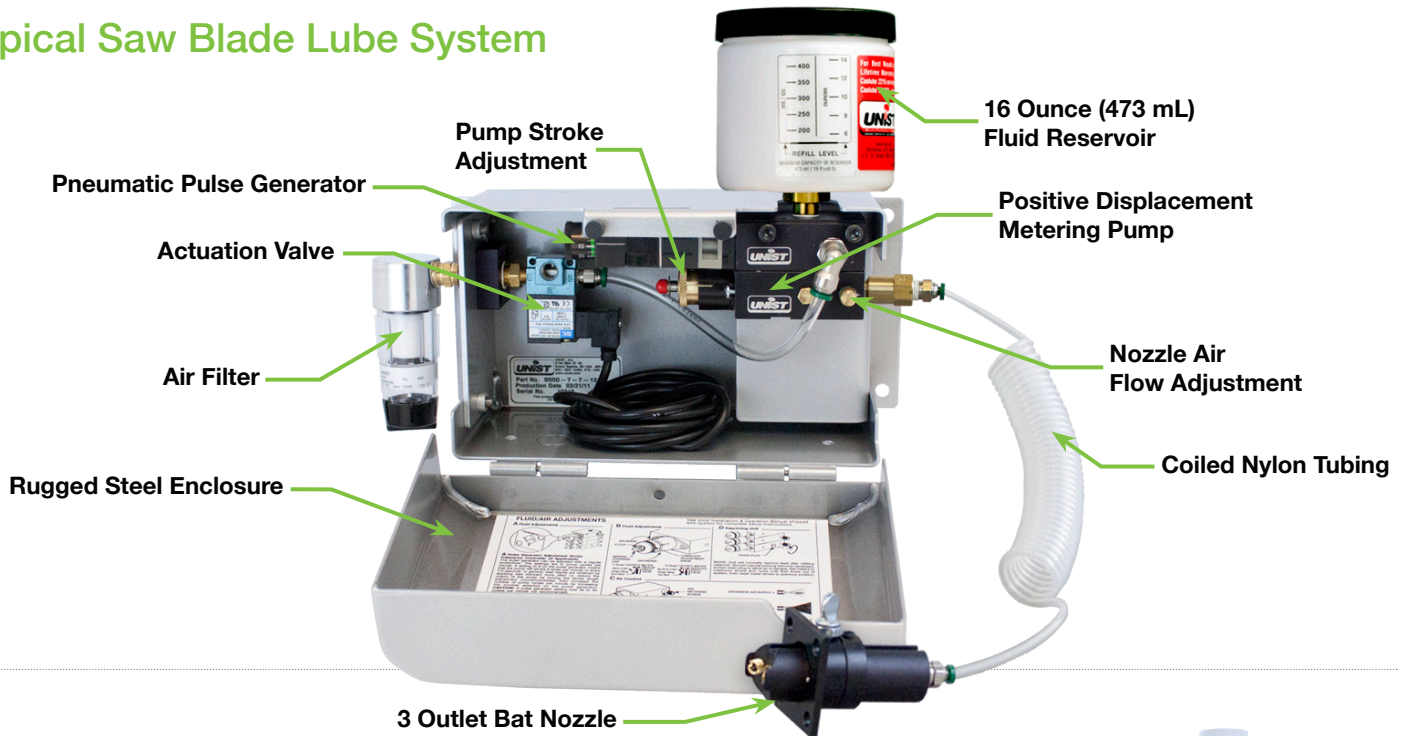
The adjustable positive displacement pumps used in our systems have a proven track record of consistency and reliability. Each pump module includes a stroke adjustment for the pump output and a precise metering screw for the nozzle air flow. The combination of these adjustments provides complete control of the spray output.

Although supplying the perfect amount of fluid is important, it doesn't do any good unless it is properly delivered to the cutting tool/work piece interface. To make this possible, Unist has developed several nozzles to precisely apply the lubricant in nearly any metal sawing operation.



Easily adjust cycle rate, pump stroke, and air flow for the perfect spray.

Typical Saw Blade Lube System



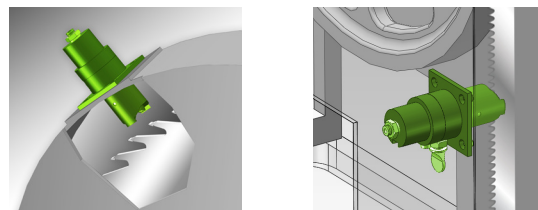
Why Coolube®?

Unist Coolube® is a 100% natural biodegradable lubricant derived from renewable vegetable products. It is specifically formulated for superior results using MQL and contains no VOC's, chlorine, or silicone. It will not irritate machinists' skin or stain parts, and will never oxidize or leave a sticky residue. When considering the minute amount of Coolube® required compared to traditional flood coolant, Coolube® is one of the most cost effective metal cutting fluids available. As an added bonus, Unist guarantees the pumps in our Saw Blade Lube Systems forever when Coolube® is used exclusively.

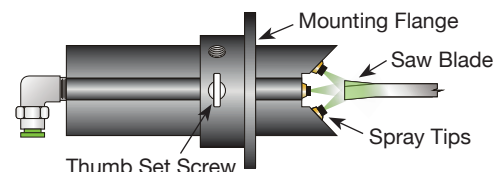


Bat Nozzle – Our Standard Nozzle For Circular And Band Saws

The Bat Nozzle was designed to easily fit on a wide variety of circular saws, vertical band saws, and horizontal band saws. The nozzle includes a 1.75" (45 mm) square mounting flange that can be attached to the blade guard. A 1" (25 mm) diameter hole drilled through the guard allows the nozzle to be centered over the blade. The nozzle position can then be adjusted as close to the blade as required with a thumb screw. Two outlets on the sides of the blade and a third outlet spraying directly into the gullet of the teeth assure superior application of lubricant to the saw blade. The Bat Nozzle is available in various lengths to accommodate a broad range of saws.



Easily mount a Bat Nozzle to a circular saw or band saw.

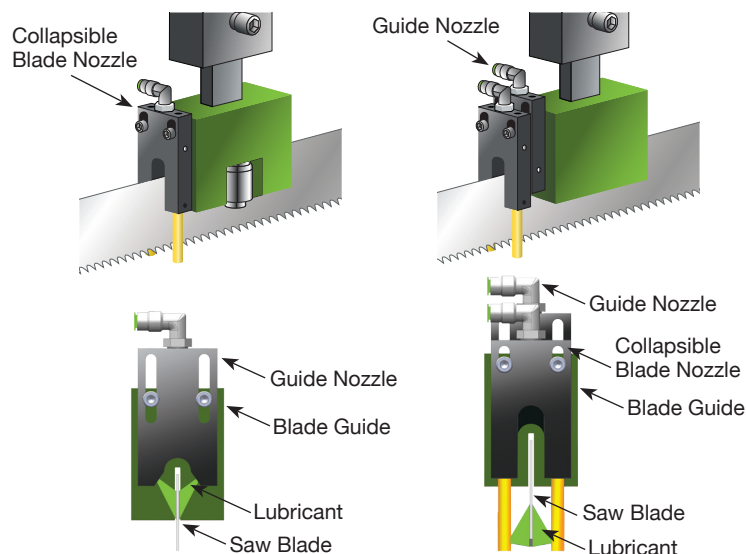


Nozzles For Horizontal Band Saws

On some horizontal band saws, there is not enough room to mount the Bat Nozzle. For these situations, Unist offers two additional nozzles engineered specifically for horizontal band saw applications.

The Collapsible Blade Nozzle is mounted to the leading blade guide and straddles the blade with legs which spray directly up and into the blade teeth on both sides. The legs are collapsible and retract into the nozzle body at the end of the cut.

The Guide Nozzle is designed to accompany the Collapsible Blade Nozzle or Bat Nozzle. The Guide Nozzle applies lubricant to the blade where it comes in contact with the guides to reduce friction and extend blade and guide life.



Other Nozzles

Unist also manufactures a wide variety of stainless steel, copper, and plastic nozzles, which offer the ability to quickly and easily install our systems on any saw where mounting the nozzles above may not be feasible.

Our nozzles are available in a variety of lengths, styles, and mounting options so they can be tailored specifically to your needs. Please visit unist.com for details or call us at 800.253.5462.

