



Unist saw blade lubrication systems deliver all the benefits of **Minimum Quantity Lubrication (MQL)** to your band or circular saw in a durable, easy-to-install package. Longer lasting blades, better cut quality, fluid savings, and clean, dry chips are just a few of the reasons people love our systems and Coolube® lubricant!

Saw Blade Lube Systems

Cutting Edge Technology

Brought to you by



Why Use MQL?

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



 **Sawing with MQL**



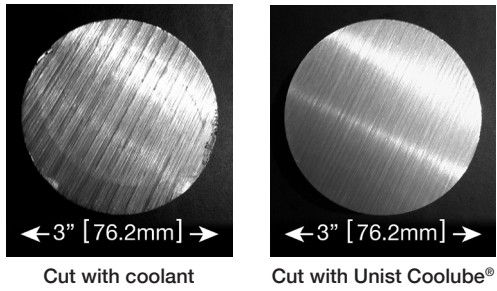
 **Sawing with coolant**



SCAN
To
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MQL: A Better Way To Saw

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.



Images courtesy of Unist customer sawing 3" [76.2 mm] Inconel bar stock. Both cuts were made running at the same speed and feed.

Improved Results Sawing With Unist

The photo on the left shows cut quality before the Unist system was added. This cut was made using flood coolant and shows excessive chatter and a large burr on the edge of the stock. The photo on the right shows the same material cut with an identical blade after a Unist system was installed. The cut was made using our Coolube® lubricant. Not only was the cut quality greatly improved, but blade life increased substantially! This customer was able to eliminate the cost and mess of flood coolant and also save considerably on blade costs.

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 the Coolubricator™ have a proven track record of consistency and reliability. Their unique modular design allows multiple pumps to be "stacked" together when more than one nozzle is required, allowing every system to be tailored specifically for the application. 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 a wide variety of nozzles to apply the lubricant precisely in nearly any metal cutting operation.



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

Typical Saw Blade Lube System

