



# **Minimum Quantity Lubrication Systems**







Coolube<sup>o</sup> 2210 Coolube<sup>o</sup> 2210EP Coolube<sup>o</sup> 2210AL

Use only ounces per shift!



Enjoy a lifetime warranty on your system's pumps when you use Coolube®



Unist is a world leader in the design and manufacture of fluid application systems for the industrial market. We provide innovative solutions that save money in manufacturing by reducing the amount of fluids consumed. Our systems improve efficiency and are friendly to the environment by reducing waste. Unist products represent 60 years of experience, continuous product improvement, and field-proven performance.



Unist MQL systems apply very small amounts of lubricant directly to the cutting tool/work piece interface instead of using traditional flood coolants.

### **MQL** stands for "Minimum Quantity Lubrication"

Unist MQL systems can:

- · Increase tool life
- · Improve cut quality and surface finish
- · Reduce your environmental impact
- · Eliminate costly coolant equipment and hassles
- · Keep your shop clean and eliminate coolant spills and overspray
- · Reduce cleaning costs
- · Increase recycling profits (dry chips/swarf)

Unist MQL systems and Coolube® lubricant together form a very cost-effective lubrication solution for metal cutting. Unist systems apply Coolube® very sparingly. Typically, a Unist MQL system user will apply only a few ounces in an eight hour shift. This is in stark contrast to traditional flood coolant systems that require gallons of coolant, testing equipment, filtering equipment, and costly disposal.

#### Coolube®

Using the right lubricant is very important in MQL applications. The perfect lubricant will adhere to the surface of the tool and provide a thin, low-friction barrier between the cutting tool and work piece. Unist Coolube's® polar properties create a strong bond between Coolube® and metallic surfaces. This creates an even and durable layer of lubrication resulting in extended tool life and improved surface finish.

Coolube® is 100% natural, non-toxic, and made from renewable plant-based material. It is safe for worker's skin and contains no petroleum products, no chlorine or silicone and produces no harmful VOC's. Coolube® is completely biodegradable yet features a long shelf life. Metal cutters who use Coolube® exclusively in their Unist MQL systems, enjoy a lifetime warranty on their system's pumps.

#### Quantum™

The Quantum<sup>™</sup> system is a leap forward in Minimum Quantity Lubrication (MQL) technology. This state-of-the-art system interfaces directly to machines giving you unprecedented control over your MQL application.

With the Quantum<sup>™</sup>, you can specify the fluid output down to a fraction of a drop to fine-tune machining processes, accurately measure and control usage, and share settings between multiple machines.

# **Minimum Quantity Lubrication Systems**







Unist has a wide variety of MQL nozzle types to fit your application



#### **Coolubricator**<sup>™</sup>

The Unist Coolubricator™ is the ideal Minimum Quantity Lubrication solution for all continuous metal cutting applications such as sawing, drilling, milling, etc... The Coolubricator™ features continuous delivery of lubricant in a highly-adjustable spray allowing you to dial-in the correct amount of lubrication for your cutting process.

## Serv-O-Spray<sup>™</sup>

The Unist Serv-O-Spray<sup>™</sup> delivers MQL performance for operations where only a precise intermittent pulse or shot of lubrication is required. Perfect for drilling and tapping small holes, punching, and more.

### Saw Blade Lube System

Unist Saw Blade Lube Systems deliver all the benefits of MQL 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.

#### **Nozzles**

Whatever your application, Unist has a nozzle for you. Whether semi-rigid copper, flexible stainless steel, plastic, or specialized nozzles for band and circular saws, we have the nozzle to perfectly compliment your Unist system. Nozzles are available in a wide range of sizes and configurations. Contact Unist for more information.



Unist headquarters in Grand Rapids, Michigan

## **Solutions For Metal Forming**

Our MQL systems for metal cutting have become well known around the world. Since 1993, Unist has offered precision lubrication application systems for the metal forming industry as well. Unist's Uni-Roller® applicators feature a unique internally-fed roller design and provide an environmentally friendly solution for applying lubricants to coil or blank stock.



