

Welcome to the new **Revolution!**



Your CNC machine is a money drain.

Sure you can create great parts, and it's fast, accurate, and completely automated. But you still have a problem with the coolant: all the fluid you are dumping on the tool eventually goes down the drain. And not just any drain, but an expensive EPA regulated drain.

Unist has a revolutionary new solution. The **Revolution** is the world's first integrated, programmable MQL (Minimum Quantity Lubrication) applicator designed specifically for CNC machines. Its patent pending technology brings the same level of computer controlled accuracy, precision, and repeatability to your cutting tool lubrication as the CNC controls bring to your machining operations.

Designed to be programmed from M-Codes, the **Revolution** allows the operator to precisely control the amount of fluid being dispensed for each job. Featuring two independently controlled fluid applicators and an air blow-off nozzle for chip removal, the **Revolution** allows you to dispense the lubricant exactly where needed, in the amount needed – down to 0.20 ounces (6 ml) per hour. Whether it's being applied through the cutting tool or an external nozzle, the **Revolution** is the ultra-precise lubrication system that will take your CNC machine to new levels of performance.

The **Revolution** not only improves the efficiency of your CNC machines, but also your bottom line. Unist systems routinely eliminate the need for flood coolant while also significantly increasing tool life and feed rates. Fluid disposal costs are now a thing of the past, and overall production costs can be reduced by up to 10%. Since the lubricant application is so minimal, your chips will be dry and ready to recycle without any further processing. Now that is revolutionary! Eliminate the ongoing costs of flood coolant and welcome the **Revolution** to your shop today!



Revolution

TECH SPECS

The **Revolution** includes many features which make it easy and versatile to use. All operational setup and configuration are done through easy to follow menus which are shown on a high-contrast 4-line X 20 character LCD display.

Specifications:

MQL Application*

- Two independent 2-channel (separate air and oil) MQL outputs allow for instantaneous response to changes in output quantity
- User selectable maximum oil output from 10-255 drops/minute (0.33-8.42 ml/minute)
- Oil delivered in programmable steps of 25, 50, 75, or 100% of maximum output setting
- Proven Unist positive displacement oil pumps
- MQL air flow electronically controlled with proportional flow valves
- Optional pulsed air blow-off nozzle for chip removal with electronically adjustable frequency (1-255 pulses/minute) and duty cycle (1-100%)

Programmability*

- Three M-code inputs available to control two independent MQL outputs and a pulsed air blow-off nozzle
- Works with pulsed, confirmation, or latched M-code signals from dry contact M-code inputs
- Isolated SPDT alarm relay (2 amp maximum load)

Alarms

- Audible/Visual alarm and an alarm relay output
- Supports alarms for:
 - Low air pressure via integrated air pressure sensor
 - Low fluid
 - No fluid flow (with optional oil flow sensors)

General

- 2 quart (1.9 liter) polyethylene oil reservoir
- 20 character, 4 line LCD display
- Tactile membrane switch user interface
- Integrated low oil level switch
- NEMA type 2 enclosure
- 24 VDC power input (1.5 amps maximum current)
- Password protected lock on control panel to prevent tampering

Options

- Oil flow sensors
- Auto-refill of reservoir from a pressurized central fluid supply
- Pulsed air blow-off nozzle

Dimensions

- 14.3" (363 mm) Height
- 6.7" (170 mm) Width
- 8.28" (211 mm) Depth



Lifetime warranty on the positive displacement pumps with the use of Unist Coolube!

