

Unparalleled Precision

The Infinity™ sets the standard for accuracy and reliability in dual-channel, through-spindle Minimum Quantity Lubrication (MQL) systems. Designed for high-production operations, it consistently, reliably, and accurately delivers MQL fluids over a wide range of flow rates.

Infinite Control

The Infinity™ uses patented pump technology to deliver fluid accurately and repeatably, even at very low flow rates. It delivers continuous flow rates from 5-500 mL/hour, is not sensitive to fluid viscosity or temperature, and eliminates the need for output calibration. This technology simplifies the overall system, eliminating fluid heaters and complex valves often associated with other approaches.

The Infinity™ gives you direct, digital control of air and fluid flow rates. This provides a nearly unlimited number of air/fluid combinations for use in any operation. The Infinity's™ precision and accuracy make process control simple and effective, and its reliability makes it a shop favorite.

Active monitoring of spindle back pressure, fluid flow rates, fluid tank levels, and other important operational parameters ensure the system is performing well. In the rare case that an issue does arise, detailed tracking of the system behaviors make troubleshooting fast and precise.

The Infinity™ can be integrated with the machine controller to give complete and seamless control from the operator interface or an optional touch screen interface is available to give operators an easy and intuitive interface at the unit itself.



(Unist Spindle Kit)



Patents:

US10576596B2

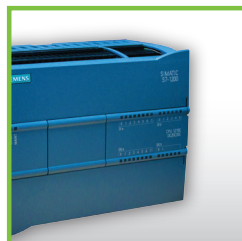
US11135694B2

US11559866B2

- Reliable operation
- Accurate delivery



Digitally-controlled output tracks fluid usage



Integrates with the controller on your machine



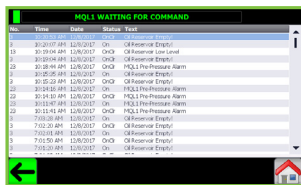
Consistent output at all flow rates



Nearly unlimited programmable MQL rates

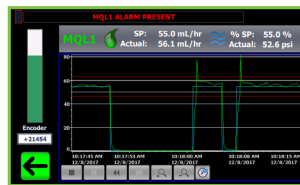


Active monitoring to ensure optimal performance



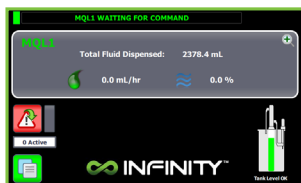
Active monitoring

Active process monitoring ensures optimal performance and an alarm history log makes troubleshooting simple



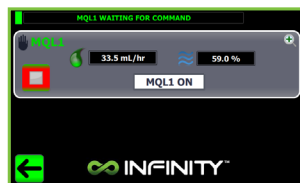
Continuous output

The patent-pending continuous-flow pump delivers accuracy and repeatability, even at very low flow rates



Unlimited control

Directly set the output flow rates. Nearly unlimited MQL output settings provide precise control to optimize your operation



Repeatable performance

The volumetric nature of the Infinity's pump technology makes it inherently accurate and repeatable at all output levels for all fluids in all environmental conditions

Less Is More

The Infinity's™ positive-displacement pump technology results in a much simpler system than those based on other technologies. This reduction in complexity has a direct relationship to the reliability and maintainability of the system. The elimination of fluid heaters and complex valves that are required for a time-based flow MQL system means there are fewer parts to maintain. Furthermore, the elimination of output calibration saves not only the time and effort, but an entire class of errors related to a bad calibration.

Easy Integration

A robust set of control parameters are available in the Infinity™ controller which allows a full and complete integration with the machine controller and access to all of the advanced capabilities of the Infinity™. A compatibility interface for controllers that may already have interfaces for other MQL applicators is also supported. This compatibility interface gives basic control of the unit with minimal integration effort.



System Specifications

MQL outputs:	2	Pump output:	5 - 500 mL/hr per pump	
Unist Spindle Kit available:	yes	Low fluid level sensor:	yes	
Fluid delivery approach:	continuous-flow positive-displacement pump	Fluid flow sensor:	sensing with measurement down to 1 mL/hr	
Programmable MQL rates:	nearly unlimited	Dimensions:		
Reservoir size:	5 gal [19 L]	Control enclosure:	<u>1 outlet</u> H - 22.50" [572 mm] W - 16.00" [406 mm] D - 7.60" [193 mm]	<u>2 outlet</u> H - 26.50" [673 mm] W - 16.00" [406 mm] D - 7.60" [193 mm]
		Fluids enclosure:	H - 25.00" [635 mm] W - 15.00" [381 mm] D - 11.50" [292 mm]	

