

Unist Spindle Kit Advanced Integrated Lubrication

A more perfect union

Through-spindle MQL is the most consistent, clean, and seamless way to apply MQL in a CNC machine and offers many benefits. With proper tool design, lubricant is delivered precisely where needed; even when cutting holes or slots. This allows every tool in the machine to be individually optimized. Unlike with external nozzles, there is no spraying from a distance. Users have found this approach reduces the amount of lubricant needed up to 70% when compared to external nozzles!

To get the best through-spindle MQL performance, it is necessary to deliver the lubricant and air in separate channels through the spindle to the tool holder. This gives the technique its name, *Dual-channel MQL*. It requires two specially-designed components: a rotary union and a fluid delivery tube.

What's included

Unlike most rotary unions designed for through-spindle coolant, the Unist dual-channel rotary union is specifically designed with separate lubricant and air paths. It has been optimized to provide superior system performance when combined with Unist's proven MQL applicators.

The fluid delivery tube carries the lubricant from the rotary union, through the spindle and to the tool holder. This tube is custom designed and manufactured specifically for your spindle to allow sufficient lubricant and air flow, while not interfering with tool changes.

Fluid delivery tube



For best results, use Coolube[®] with your Unist system. Coolube[®] lubricants are 100% natural, biodegradable, and derived from renewable vegetable products. They are specifically formulated for superior MQL performance and contain no VOC's, chlorine, or silicone. Coolube[®] lubricants will not irritate machinists' skin or stain parts, and will never oxidize or leave a sticky residue.





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