

## **Smallest Vibration-Damped Turning Tool!**

Capable of Making 10mm (3/8") Holes with Depth up to 88mm (3.46")!

According to an article written in *Cutting Tool*Engineering Magazine in August, 2023, a manufacturer hit a roadblock when turning an internal bore 10mm (0.39") in diameter and 80mm (3.15") deep and could not get close to the surface finish specification even after purchasing one of the priciest carbide bars? MAQ came up with the solution! The smallest Vibration-Damped Turning Tool.





The challenge to build a vibration damped turning tool small enough for this application has been solved by MAO! They have designed it with through-coolant capability because it's critically important to excavate chips out of small holes.

The result is the STMD M08·120 SCLCR 06, part number 300310, vibration-damped turning tool, which is 8 mm (0.315") in diameter. MAO reports that the tool imparted an Ra 0.8 to 0.9  $\mu$ m surface finish at a 10 times diameter setup when turning 34CrNiMo steel with a hardness of 28 to 30 HRC at a depth of cut of 0.25 mm (0.01") and a cutting speed of 200 ml min. (656.2 sfm) with coolant on.

This product can reach a surface finish below Ra 1 µm. The tool can effectively turn small bores but is also suitable for finishing larger ones, which might be needed to turn more than one bore size in a component.

