

AGATHON



WORLD NOVELTY

Evo Penta with new application: ball track milling cutter for CV-Joints

Today, various manufacturing solutions are used to produce ball track milling cutter. Agathon now offers a groundbreaking solution for grinding ball track milling cutter. Customers get a mature industrial solution that builds on the proven Evo platform.



www.agathon.ch/evo-penta



www.youtube.com/agathonag

Agathon has been dealing with the topic of «ball track milling cutter» for several years and put a lot of development work into the new process technology. Due to the large grinding wheel with 400 mm diameter and

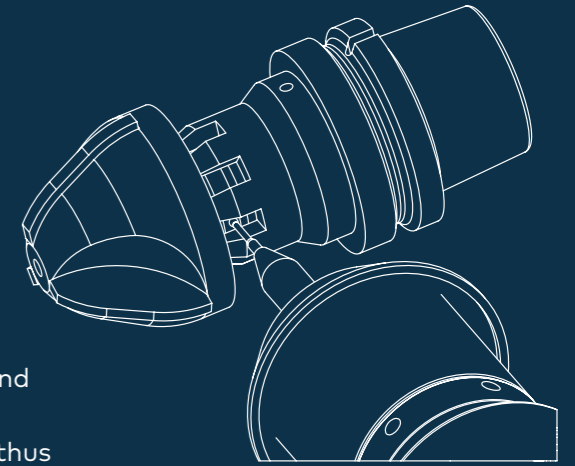
in-process dressing, the cycle times could be reduced by 20 % compared to previous processes. The three most important functions and advantages of the new application:

1. Individual measurement of the tip plane before grinding

All possible position and orientation errors of the brazed-on cutting edges (tip planes) can be evaluated and taken into account during grinding. In this way, tilting errors caused by the brazing of the individual cutting edges are considered. The cutting edges are ground individually and all describe the same envelope curve – at the same time, a uniform chamfer is produced. Another advantage of individual grinding is the increased tool life.

2. Genius clamping correction

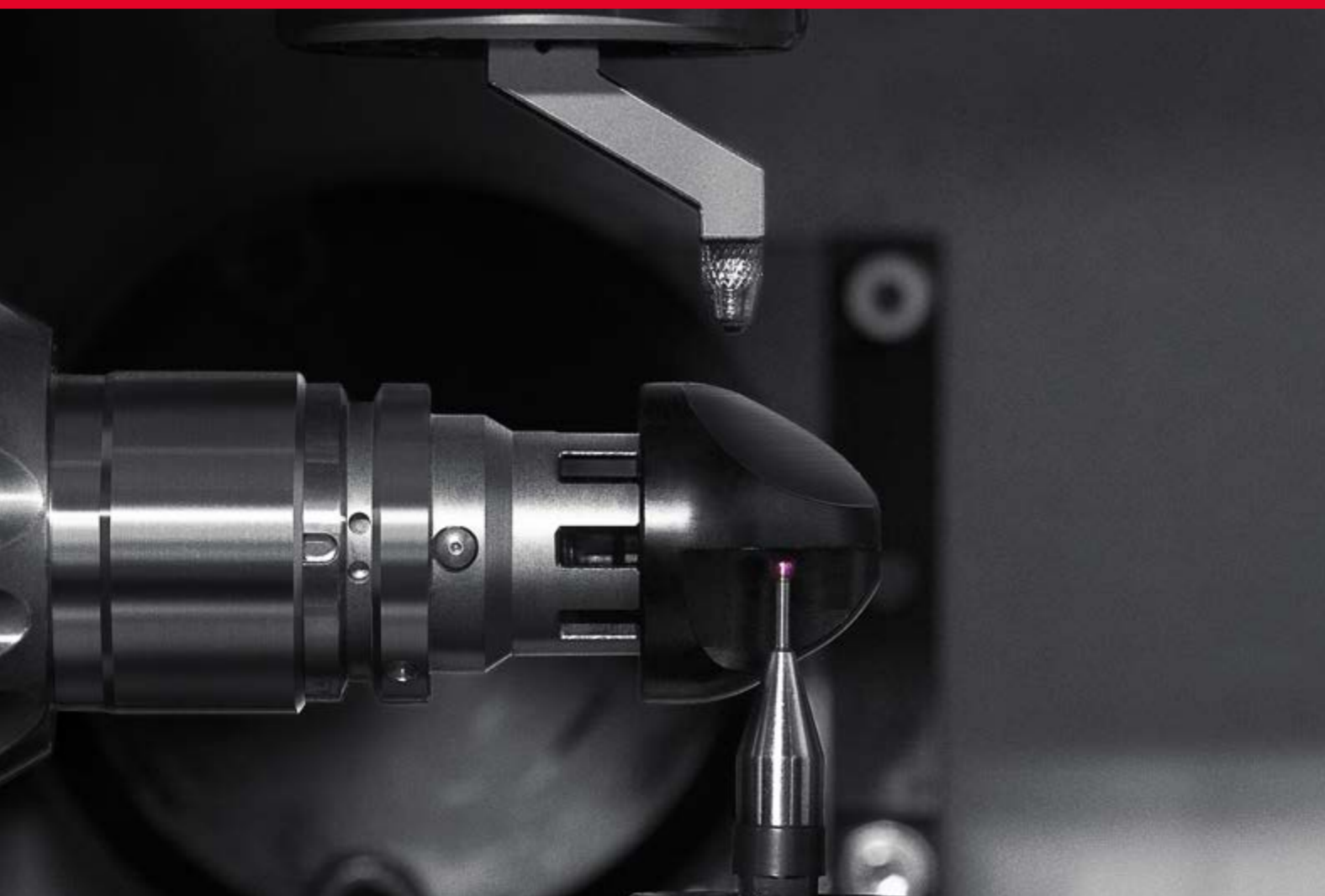
The patented process enables individual measurement and clamping correction of the ball track milling cutter in the clamped status in the machine. Any interface errors are thus eliminated and the envelope curve is always ground in relation to the clamping surface in the tool.



3. Measuring the finished ball track milling cutter in the clamped status with the 3D measuring probe

This enables extensive 3D control of the finished ball track milling cutter. Rejects for setting up the workpiece are reduced and grinding wheel wear as well as thermal influences can be compensated for.

The new application can be combined with all dressing options, so you can take advantage of the vast experience in CBN grinding. For programming, you use the well-known Agathon syntax and thus benefit from a freely programmable environment. This allows you not only to secure your know-how, but also to have full control for diversification and customization.



3D Measuring probe measures all tips individually



Proven Evo platform

The new application builds on the innovative and proven Evo platform. The Evo Penta is our high-precision 5-axis grinding center for machining inserts with complex geometries. The advantages of the Evo Penta:

- **Low costs per workpiece due to high productivity**
- **Flexibility for material, process and geometry**
- **Maximum availability**
- **User-friendly operation and programming**

You can find more information on the Evo Penta here:
www.agathon.ch/en/evo-penta.



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