Metkon Application Note

SAMPLE : Cutting Operation of Motor Parts

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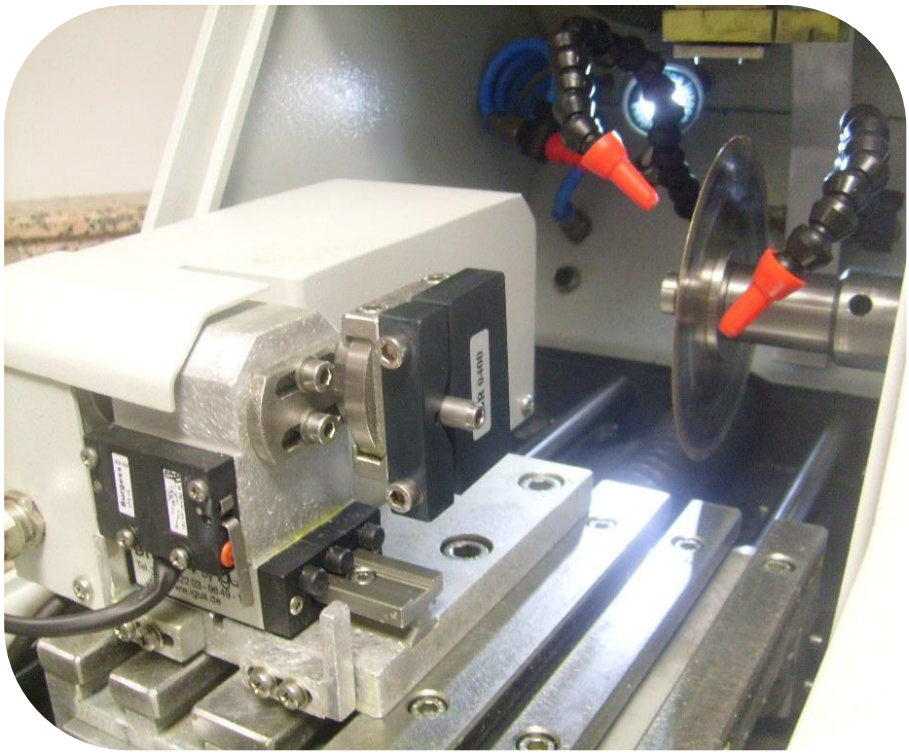
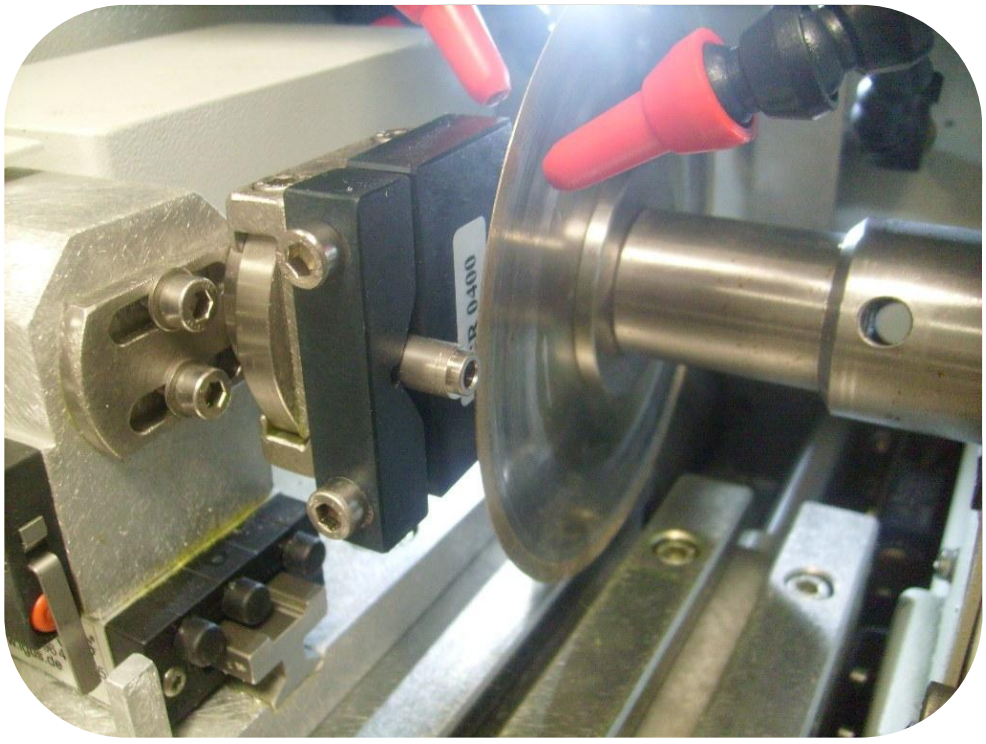
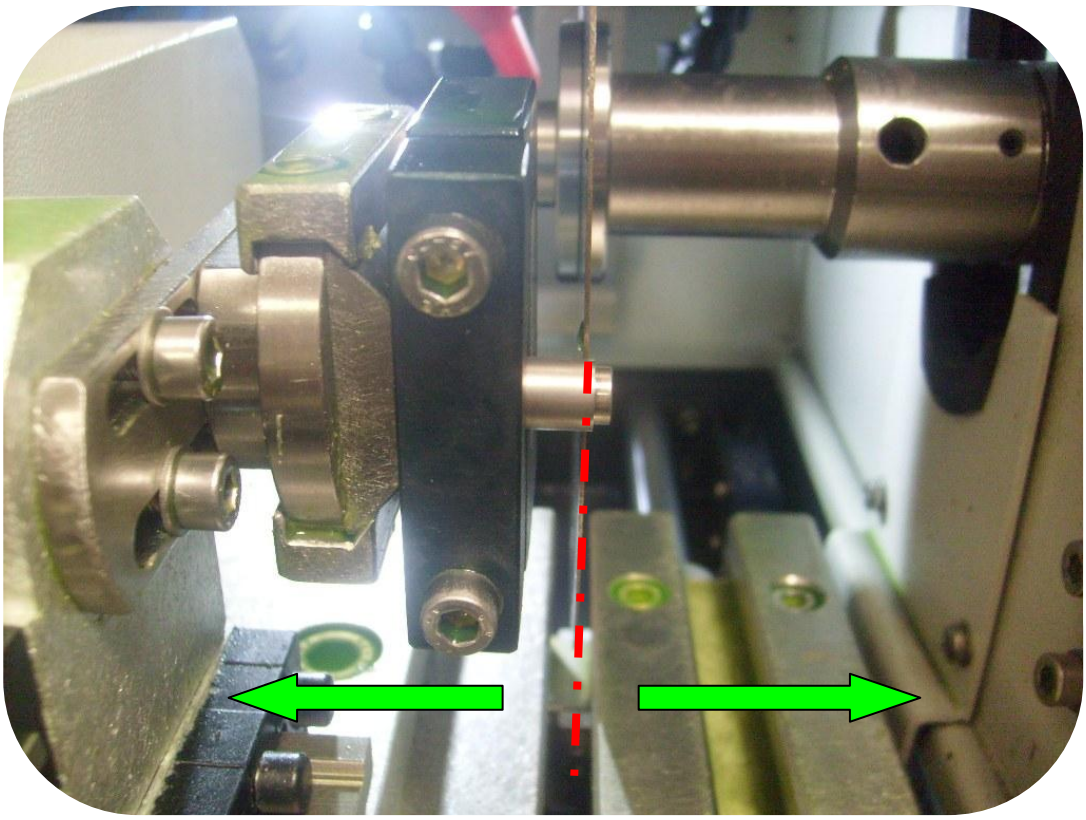
A. SECTIONING

	Order Code	Description
Equipment Used :	17 02	Micracut 201
Clamping Device :	GR 0824	Automatic X-axis positioning unit
	GR 0400	Universal Specimen Vise for MICRACUT 125&150
Cutting Fluid :	19-904	Micracool – Oil for precision cutting soluble oil
Cutting Disc :	19-175	Dimos – Ø 178 mm Diamond cut off wheel

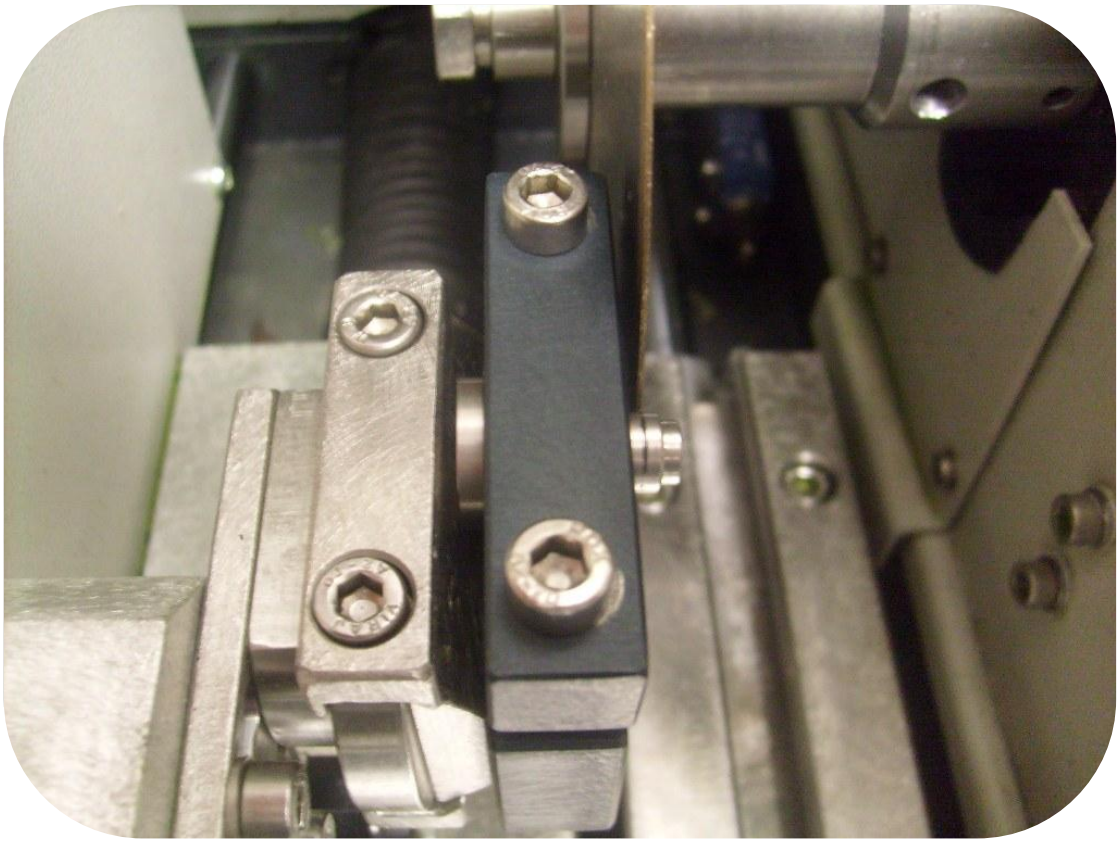


The sample is attached as it shown in the photos with the Universal Specimen Vise Assembly and Automatic X-axis positioning unit.





After marking the cut-off point of sample, you can adjust the position with Automatic X-axis unit.



The cutting parameters are below;

The Table feedrate is adjusted to; **150 µ / sec**
The Rpm is adjusted to; **2500**
The Travel is adjusted to; **9 mm**
The Force is adjusted to; **3A**

With these parameters in the cutting process takes about 1 minute per sample.
Cutting time can be reduced by increasing the feed rate and rpm.
For example when the feedrate is adjusted to; **250 µ / sec** and the Rpm is adjusted to; **3000** the cutting time reduce by half and half. However surface quality will also change. These parameters can be changed according to the required surface quality.

As a result we have the cut piece from our samples with a very smooth surface. During operation we have keeped the originality of the surface and do not let any overheating which can destroy the surface quality.

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