# PRESS RELEASE

**Hufschmied introduces C-Razor for copper machining**

**Efficient production of copper electrodes**

Bobingen (Germany), May 6, 2025 – Hufschmied Zerspanungssysteme has set itself the task of improving the manufacture of copper electrodes for spark erosion machining. The result is the C-Razor milling tool series. The HSC tools, which have been specially developed for copper machining, reduce machining times, have a long service life, and produce products with excellent surface quality and maximum dimensional accuracy. This is achieved by sharp, polished, and coated tools with optimized tool geometry and specially post-treated cutting edges.

Copper has some unfavorable properties in machining, which Hufschmied addresses with the C-Razor. The high ductility and tendency to stick of this soft metal lead to built-up edges. This phenomenon is exacerbated by the material's good thermal conductivity. The low heat concentration at the cutting edge can lead to work hardening. The result of particularly persistent material build-up on the cutting edge is poor surface quality and increased tool wear. Good chip removal is therefore particularly important for copper machining tools. Hufschmied achieves this with polished chip groove, among other things.

Parameter recommendations

The soft structure of copper can also lead to unwanted vibrations during milling, which has a negative effect on dimensional accuracy. Stable machine guidance is therefore essential. “When optimizing milling operations, in addition to suitable tools and cleverly selected tool paths, the cutting parameters always play a major role. Given the properties of the material described above, this is particularly true for copper. That's why we also provide recommendations for cutting speed, feed rate, and cutting depth with the C-Razor,” explains Christel Hufschmied, Managing Director of Hufschmied Zerspanungssysteme GmbH.

The C-Razor tool family for copper electrode production includes torus milling cutters and ball milling cutters with diameters from 0.3 to 12 mm.

**Available images**

The following images can be downloaded from the Internet in printable quality:  
<https://kk.htcm.de/press-releases/hufschmied/>

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| Image source: Hufschmied Zerspanungssysteme  **Get to the copper electrode faster with the tool C-Razor by Hufschmied.** | Image source: Hufschmied Zerspanungssysteme  **Thanks to its special geometry, coating, post-treated cutting edges, and polished chip groove, C-Razor mills copper faster and with better results than conventional tools. (Detail of press photo)** |

About Hufschmied Zerspanungssysteme GmbH

Established in 1991 and headquartered in Bobingen near Augsburg, Hufschmied Zerspanungssysteme GmbH is a manufacturer of high-quality tools for machinable production and friction stir welding. By specializing at an early stage in the machining of plastics, fiberglass materials and carbon fiber, Hufschmied has become a leader in Europe in the development of solutions for new materials. The company is an established system supplier to renowned machine tool manufacturers. Tools and manufacturing process consulting from Hufschmied are particularly valued in the automotive and aerospace industries as well as in medical technology. The company is involved in numerous organizations, including Composites United Deutschland e. V. Hufschmied's manufacturing operations are located in Bobingen, Winterlingen and Sigmaringen on the Swabian Alb. Hufschmied is certified according to ISO 9001:2015 (quality management) and ISO 14001:2015 (environmental management).

*Hufschmied Zerspanungssysteme GmbH – One Cut Ahead*

For more information: www.hufschmied.net

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