**AMB Stuttgart**

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**Horn titanium milling cutters: An extensive range of tools**

Horn has developed an impressive array of special tools for machining titanium materials such as Ti6Al4V. With their sharp cutting edges, positive cutting angle, large relief angle and polished cutting edges, these tools are designed to overcome the main problems encountered during titanium machining. The TSTK cutting material grade that Horn has developed for its solid carbide milling cutters is specifically intended for machining titanium in the aviation/aerospace and medical technology industries. As well as offering good tribological properties and high temperature resistance, this introduces minimal heat into the substrate and acts as a kind of thermal shield. Another important aspect that had to be considered when developing the solid carbide end mills was that they had to have different helix angles and different pitches. This ensures a soft and gentle cut while avoiding vibrations. Sufficient quantities of coolant are essential when machining titanium. The Horn titanium range includes a completely new line of solid carbide milling cutters with diameters ranging from 2 mm (0.0787") to 20 mm (0.7874"). These are available with four or five cutting edges and in 2 x D and 3 x D versions.

*1,268 characters incl. spaces*

**Image caption:**



**Image 1:** A comprehensive range for machining titanium.



**Image 2:** New milling cutters for high-tech machining in the aerospace industry.

**Image credits:** Paul Horn GmbH, Nico Sauermann

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