

# Productive, Long-Lasting Precision Solid-Carbide Cutting Tools from a Vertically Integrated Manufacturer

The vertically integrated company Eckerle & Ertel GmbH markets the standard tools, highly developed special tools and reground mills, drills and reamers in the Inovatools family to customers in machine construction and such other high-technology industries as automotive and aerospace technology. Known for their performance, flexibility and efficiency, these tools are produced exclusively from high-quality solid-carbide rods supplied by reliable partners. Eckerle & Ertel is equipped to carry out tool construction, grinding, and coating operations in-house.

Several tool lines make up the Ino-



vatools family. The Starmax line of four-flute solid-carbide mills, for instance, is optimized for the machining of tool steels, cast iron and such tough materials as stainless steel, titanium and copper. Their distinctive geometry helps minimize vibrations and allows the tools to be used for extremely deep cutting, while their efficient chip evacuation suits them for high-

performance and high-speed cutting. A dynamic roughing profile with a round chip flute characterizes long-lived, high-performance Quickmax-series tools, well suited for processing materials such as Inco-

The eX-tra-Line group of powder-metallurgical tools for difficult-to-machine materials, constructed from specially treated high-speed steel with enhanced toughness at a functional hardness value of 68-70 HRC, provide much higher feed rates and cutting speeds than ordinary tools in operations involving large chip volumes.

Also available from Eckerle & Ertel are Prime-Line micrograin solid-carbide end mills for high-precision production, Edition Diamond solid-carbide mills for the high-precision milling of graphite, copper and GFK in tool and mould construction, and Dynastar tool and mould cutters suitable for materials as hard as 65 HRC.

All Inovatools have application-specific high-performance coatings supplemented by nanocomposite layers.

**Inovatools**

KINDING/HAUNSTETTEN, GERMANY

[www.eckerle-ertel.de](http://www.eckerle-ertel.de)