



Inovatools

NEW PRODUCTS

Tools for Shaping Hard and Abrasive Materials

A range of high-performance, solid carbide mills that meet exacting requirements for mold, fixture, and die manufacturing.

DEC 30, 2020

Tool manufacturer [INOVATOOLS](#) is providing the North American metal industry with a broad product range of high-performance, solid carbide mills that meet exacting requirements for mold, fixture, and die manufacturing.

scene. Enabling the cost-effective creation of 3D contours and shaped elements, for example, imposes particularly demanding requirements on the mills and on process management.

Moldmakers need tools that they can use to produce molds, dies, matrices, and electrodes of high quality as quickly as possible and above all, economically, while observing the narrowest of production tolerances.

“Our special range of mill products is designed for the most varied of applications in this machining segment,” Douglas Kline, managing director of Inovatools USA LLC, said. “The tools have been adapted for the relevant applications and materials in terms of substrate, geometry, chip control, and coating.” They include universal, roughing, finishing, and special mill series such as mini-shank, copying, and full-radius end mills in a wide array of designs and dimensions and featuring application-optimized high-performance coatings.”

In addition to in-person technical advice, Inovatools gives users the opportunity to find tailor-made tools for their specific cutting requirements quickly and easily with “First Choice Inovatools.” As Kline explained: “First Choice Inovatools is a powerful instrument and our special recommendation for quickly identifying top tools in the Inovatools online shop or in the main catalog, including for tool and mold construction. With the INOCUT cutting data program, users can search for tools by the application and specified cutting values. In the complete catalog, the tools are marked as ‘First Choice’ accordingly. One of the things we are trying to achieve is to guide tool manufacturers and moldmakers to the advanced geometries and technologies that are most suitable for them via the fastest possible route. Ultimately, that helps them to reduce production times and deliver top surface quality while benefiting from a longer service life, for example.”

and a special high-performance coating that provides a high resistance to heat, FightMax mills can withstand high levels of tool wear over very long periods, even at high feed rates and cutting speeds.

The solid-carbide curve segment cutting (CSC) mills in the CURVEMAX series are an example of Inovatools' tool technology with adapted process technology for copy milling. In tool and mold construction, the solid carbide curve segment mills in tangential and conical form shorten the process times required for finishing complex, freeform surfaces in a wide variety of materials.

Thanks to their special geometries, Inovatools CURVEMAX mills permit bigger path distances and line jumps during pre-finishing and finishing. Although the working radius is larger than that of a traditional full-radius mill, the tool still has the same diameter. This leads to a significant reduction in process times. Thanks to the larger engagement width, the cutting edge does not suffer from wear at any point. Combined with the extremely smooth, high-performance VAROCON coating, this helps to increase the tool's service life. The larger and flatter overlap reduces roughness and ensures surface finishes even better than those created by traditional full-radius mills. Inovatools offers the new CSC-CURVEMAX mills in conical and tangential form as four-edged cutters for finishing in different sizes and radii.

The curve segment milling technology also opens up new production options. For example, undercuts, freeform surfaces, and variable setting angles can be reliably created. In addition, complex contours can be pre-finished and finished, even on narrow inside radii. *Learn more at www.inovatools.eu*

For more new products, visit newequipment.com