**EMO, Milan**

**Hall 10, Stand B10**

**Supermini type 105 for extremely small parts**

The Supermini type 105 tool system from HORN successfully gets to grips with demanding tasks involving hole diameters between 0.2 mm and 6 mm (0.0079" and 0.2362"), with well over 1500 cutting insert versions.

Where it shines is its ability to be used in a whole range of applications for boring out, grooving, chamfering, threading, axial grooving, finish-boring, face turning, and broaching down to the very smallest diameters. Now, its existing scope for machining steel, cast iron, non-ferrous metals, exotic materials and hard materials up to 66HRc is being extended to include boring-out and grooving operations for extremely small parts.

A special cutting edge design for low feed rates at low cutting speeds, intended for micro-machining parts on this scale, has been added to the Supermini range, making it possible to create glossy surfaces with internal diameters from 0.2 mm (0.0079"). Versions for boring out can be obtained either without a corner radius or with one measuring 0.03 mm (0.0012"), while cutting edges with a corner radius of 0.05 mm (0.0020") are available for free-turning. Internal grooves from w = 0.5 mm (0.0020") can be achieved. The cutting edges also feature a matching coating with a hard rim zone.

Following in the footsteps of all HORN's Superminis, clamping the tools is a breeze – only one standard tool holder is required for clamping all inserts of a model series. These holders are available with or without internal cooling and with various left and right machine interfaces.

*1,520 characters incl. spaces*

**Image captions:**

**Image 1:** Small tools, big performance.

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

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