

EUROPEAN TOOL & MOULD MAKING

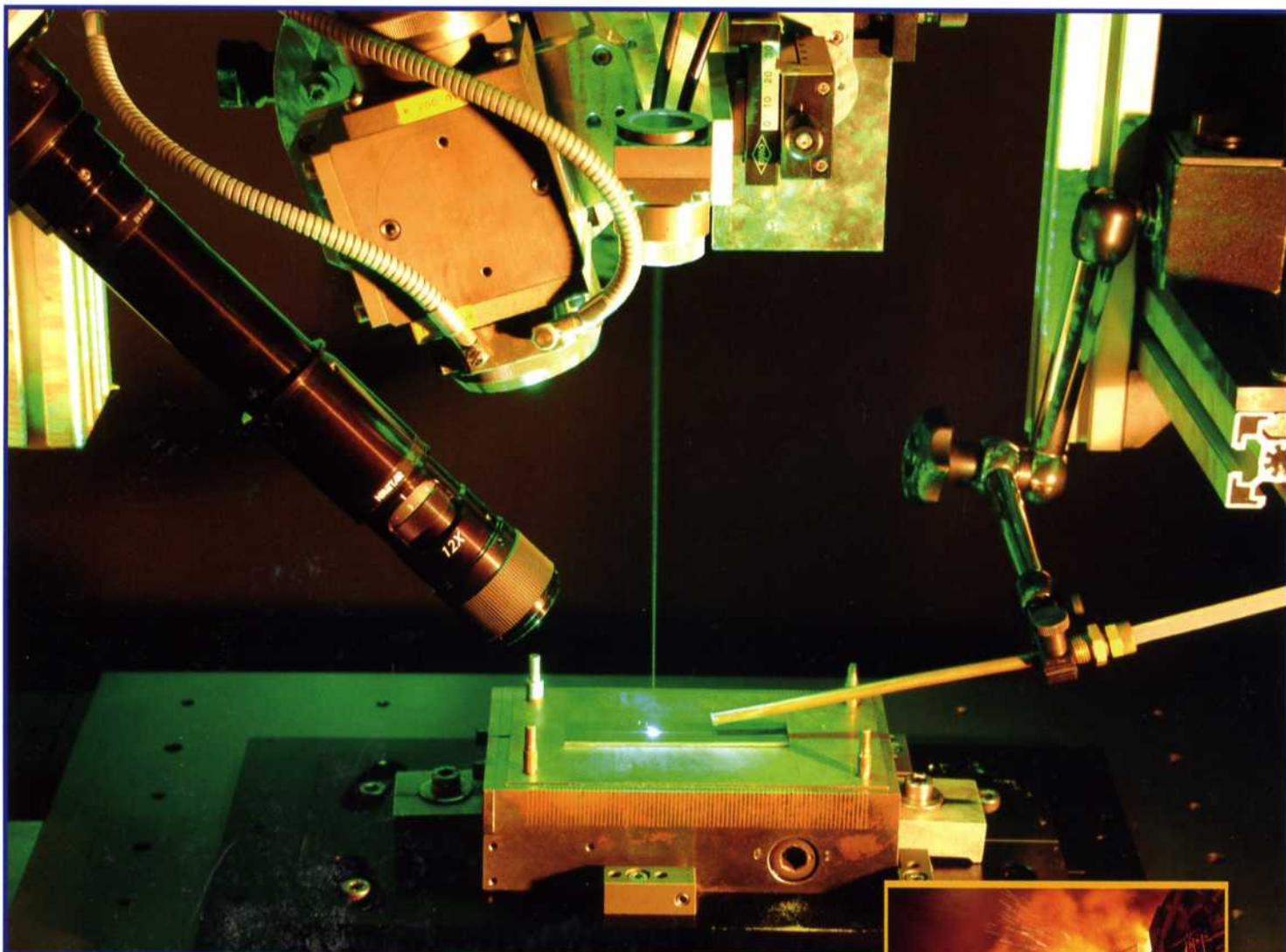
ETMM

JUN 12

The trade magazine for tool, mould & die making

Volume XIV | Issue 6 | June 2012 | €11

www.etmm-online.com



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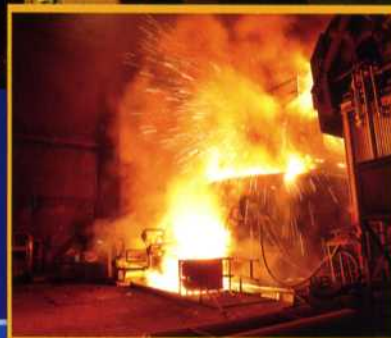
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European metal prices
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Vogel Business Media

Clamping system reduces costs without loss of tool precision

A finish-boring tool with a built-in ER connection can be connected directly to an ER collet chuck to deliver high rotational accuracy.



New EcoLine finish-boring tools from Swiss Tool Systems can be directly attached to a standard collet chuck via the ER connection. Additional clamping elements such as collets are not needed.



The clamping nut for ER connections is a technology breakthrough. The nut makes it easy to screw the boring tool onto clamping devices. The tool and the chuck cone behave as a single unit, and the highly rigid resulting conical and planar connection ensures high precision.

The ER connection allows users of the boring tool to save on tooling costs by eliminating the need for a master shank and for extensions or reductions. According to Swiss Tool Systems, the breakthrough clamping concept, which includes a chuck cone grip and face contact, delivers very good rotational accuracy, maximum rigidity and a very strong retention force. Collet chucks that have an ER connection as specified in DIN 6499 are commonly used in mechanical workshops around the world.

The ER connection provides manufacturers with a rigid tool for finish-boring whose clamping principle is similar to that of HSK systems. The monoblock EcoLine system, which consists of the boring tool and an integrated chuck cone, is simply screwed onto the clamping device by means of a clamping nut. The tool and the chuck cone of the clamp form a single unit, and behave as such. Because the resulting conical and planar connection is extremely rigid, high precision is ensured.

The ER clamping technology that distinguishes the EcoLine range of finish-boring tools delivers a stable connection comparable to that provided by HSK-T and Big Plus clamping systems. However, says Swiss Tool Systems, the technology comes with a sizable cost advantage.

For one thing, additional clamping elements such as collets are not required. The ER system's chucking capacity is also significantly greater, as the clamping nut is built into the connection. For instance, the Vario-Head boring tool can be used with an ER40-size clamp, which is suitable for boring holes with diameters in the range of 3 to 152 mm.

Swiss Tool Systems additionally manufactures a comprehensive range of high-precision milling and turning tools with HSK, PSC and KM interfaces. Another company speciality is modular tool systems.

» Swiss Tool Systems AG
Bürglen, Switzerland
www.swisstools.org

Swiss Tool Systems AG has introduced the EcoLine finish-boring tool, an innovative development that includes a built-in ER connection which enables the tool to be directly attached to an ER collet chuck. This, says the manufacturer, is a world first.