

New equipment

More chamfer tools

Following close collaboration with its customers, ITC, Tamworth (Tel: 01827 304500), has extended its range of 4071 Cyber series chamfer tools to include new angles that meet the needs of a wide range of applications. The series now includes 60, 82 and 90deg inclusive angles as standard.

The four-flute solid-carbide chamfering tool is manufactured from an ultra-tough micro-grain substrate that gives the 4071 series long tool life and high performance levels. It is also available as a coated cutter to meet the needs of manufacturers with particularly difficult machining applications. With four teeth in a staggered design, the cutter offers improved performance and surface finish and delivers smooth cutting on the hardest of materials.

This new range of tools is available with diameters of 4, 5, 6, 8, 10 and 12mm, with all three angles available for each diameter. The overall length of the 4 and 5mm cutters is 50mm, with the 6 and 8mm tools being 64mm long and the 10 and 12mm cutters having overall lengths of 70 and 76mm respectively; and because ITC has its own manufacturing facility, it can produce special cutters with additional angles, to suit the exact needs of the user.

Compact collet closer

Designed for use on either vertical or horizontal machining centres, the Lexair Tri-Grip collet closer maximises the raw material loading capacity of any machining centre. This work-holding unit is available from UK agent Leader Chuck Systems, Birmingham (Tel: 0121 771 4843).



Featuring a compact design with three closers integrated into one body, the Tri-Grip unit has simplified hydraulic plumbing and an accessible-from-the-top collet locking screw that allows the part to be correctly oriented. With a maximum working pressure of 5,000lb/in² and a draw-tube force of 1.1-

times the applied pressure, the unit provides ample grip for any machine shop's work-holding needs.

Double-acting fixed-length operation maintains the height from part to part. Moreover, the Tri-Grip units can be combined in multiple configurations on a fixture by the use of connector bushings (this eliminates the need for external pipe-work between the units).

For vertical machining centres, the units can be located on a plate that is subsequently fitted to the machine's work-table; while for horizontal machines, units can be mounted on a cube or tombstone fixture.

Precise tool setting

The latest V10210MVIII universal vertical pre-setting and measuring centre from DMG (UK) Ltd, Luton (Tel: 01582 570661), has been developed to provide quick and error-free tool setting. The system combines the flexibility and accuracy of the CMOS-type camera-based automatic electronic edge detection of a cutting tool with intelligent image processing, with the option of a wireless transfer of tool-setting data to the machine tool control.

In addition, the pre-setter can be used as a stand-alone unit or can be fully integrated within DMG's Tool Manager system for the logging, pre-ordering, allocating and recording of tool information in order to optimise off-line support to the metal-cutting operation. With a rigid cast-iron platform, the instrument has the capacity to handle larger tool assemblies — up to 420mm in diameter x 465mm overall length (with an option for lengths up to 700mm).

The unit, which is located on a tool cabinet, has a 17in TFT colour screen that provides a large and clear view of the cutting edge, with up to 30x magnification possible. Meanwhile, the system's Microvision III image processor means that the user has access to two measuring systems via the selectable option of fixed or 'flying' cross-hairs. As an option, a touch-screen can be provided, as can software to interface with the reading/writing chips used in tool identification systems. Post-processors are available for all current machine tool control systems.

This new machine expands the DMG range of tool set-up and measuring equipment that includes the Prima; this is a CNC machine featuring Microvision IV, and it accommodates tools up to 550mm in diameter x 1,000mm long.



Linear encoders

Newall Measurement Systems Ltd, Leicester (Tel: 0116 264 2730), has launched a second-generation linear encoder known as the Spherosyn 2G. Designed for the conventional machine tool market, this device is quick to install, requires no maintenance and comes with a five-year warranty on the encoder and a life-time warranty on the scales.

The Spherosyn 2G encoder, which provides consistent accuracy under even under the harshest working conditions, has completely new electronics. The latter facilitates more-accurate alignment, which makes installation easier and some 30-50% quicker than traditional technology.