



HIGH-SPEED SPINDLES. IBAG

North America's 62mm HF 62 spindle offers speeds up to 140,000 rpm, which is often required for medical and dental applications. The spindle is suitable for operations involving automatic tool changing and utilizes the company's P6 collet system. IBAG's Micro Line spindles are from 16mm to 33mm in diameter, provide speeds to 120,000 rpm and power to 390w.

IBAG North America Booth: 121820.



TOOL AND CUTTER GRINDER. The

Model 3000 5-axis CNC profile grinder from **Unison Corp.** is for tool blank preparation. It can rough and finish in one pass with its 9,000-rpm and 12,000rpm direct-drive spindles. An automatic pick-and-place parts loader/unloader enables continuous grinding. The grinder can be equipped with an onboard electric wheel dressing system to automatically dress the finishing wheel and a system to balance the wheels without removing them from the spindles.

Unison Corp. Booth: 236630.



DEEP-HOLE DRILLING. Mollart

Engineering Ltd.'s deep-hole drilling portfolio includes a range of singleand multiple-spindle gundrills and BTA drilling centers, multiple-station microdrilling machines, special-purpose inline and rotary transfer machines, and combination machining centers. The company has expanded its biomass production, producing dies up to 1,500mm in diameter that weigh 2.5 tons and have up to 200,000 gundrilled holes in heat-treated die steel.

Mollart Engineering Ltd. Booth: 339190.



AUTOMATIC LATHE. INDEX Corp.

offers the MS40-8 automatic lathe with eight CNC spindles and two back-working spindles for rear-end machining. The machine handles bar stock through the company's new MBL40-8 bar loader or chucked parts. The 110mm chuck allows machining of preformed, forged or extruded parts up to 80mm. For simple parts, the machine can be used as a double 4-spindle machine, cutting cycle times in half.

INDEX Corp. Booth: 338136.



VERTICAL MACHINING CENTER.

Doosan Machine Tools America's DNM 5700S VMC is a high-speed version of its DNM VMC. The machine has a 15,000-rpm, directly coupled, 40-taper BIG-PLUS spindle. This 25-hp spindle features 87 ft.-lbs. of torque and accelerates from 0 to 15,000 rpm in 3.6 seconds. Roller LM guideways on the X, Y and Z axes enhance speed and rigidity. The 51.2"×21.3" tables hold a maximum weight of 1,764 lbs.

Doosan Machine Tools America Booth: 339100.



MILLING MACHINE. Datron

Dynamics's "M8Cube Next" high-speed milling machine features the "Datron Next" CNC. The intuitive, touch-screen control is image-based and leads the users through the steps required to start milling. The machine has brushless, direct drives, which provide fast acceleration and feed rates up to 866 ipm. A 3kW, 40,000-rpm, liquid-cooled spindle enables heavy machining. The work area measures $40"\times28"\times9"$ (X, Y, Z).

Datron Dynamics Booth: 236008.