

Grinders and Other Products



New Linear Motion Threader

The GS:TE:LM from Drake Manufacturing is a full helix thread grinder that automatically corrects wheel form for helical path interference or generates forms from standard plated wheels.

According to the company's press release, the machine can grind threads, splines, key slots, rings and other forms in a single set-up on one machine. In addition, the grinder monitors acoustical emissions to optimize the dress and grind process.

Other features include linear motors on linear ways, Drake's Smart Spindle and Smart Form technology, a polymer base and Fanuc CNC system.

For more information, contact Drake Manufacturing of Warren, OH, by telephone at (303) 847-7291.



New Ball Nose Insert from LMT-Fette

The WPR-D helical ball nose insert from LMT-Fette was designed in response to problems associated with machining complex contoured workpieces. It uses a helical cutting edge that results in the incremental entry of the cutter and reduces vibration.

According to the company's press release, these cutting edges are always under load for increased stability and further reduced vibration due to penetration.

The low and equal cutting forces enable milling operations with greater chipping depth and higher chip removal rates with less wear.

For more information, contact LMT-Fette of Cleveland, OH, by telephone at (800) 225-0852 or on the Internet at www.lmtfette.com.

New Grinder for Gear Cutter Blades

The SBG cutter grinder from ANCA can grind parts to ± 5 microns, and it includes a chuck and palletized auto load that is specifically designed to handle gear cutting blades.

The grinder features a 24 hp, 10,000 rpm spindle, an automatic wheel changer

for 200 mm wheels, a 3,000 rpm head-stock and a high-volume pick-and-place type autoloader.

According to the company's press release, the development software allows users to enter information from a remote workstation and make geometry compensations locally. Different stick geometries can be loaded into the pallet for processing.

The grinder is equipped with a patented Big Plus wheel mounting system for ultra high precision running of the grinding wheel. Complete changeover time of the wheel pack, coolant system, workholding collet and pallet is less than three minutes.

For more information, contact ANCA of Farmington Hills, MI, by telephone at (248) 477-5588.



New Right Angle Gearhead from Alpha Gear

The new HG right angle gearhead from alpha gear drivers Inc. can achieve an efficiency greater than 96% with a backlash of 4 arc-minutes, according to the company's press release. Other features include a ratio of $i = 3-10$ and an acceleration torque of 20-640 Nm.

The HG is designed for compact servo-motor applications, such as packaging and converting machinery, handling and gantry robots and flatbed machinery. Available in five sizes, it can mount to servomotors

using a universal system.

For more information, contact alpha gear of Elk Grove Village, IL, by telephone at (847) 952-5301 or on the Internet at www.alphagear.com.

New Bore Gauge from Marpos

The M1Star MBG mechanical bore gauge from Marpos is designed for manual mechanical use in precision checking

of I.D., ovality or taper of through bores, and blind and super blind bores.

According to the company's press release, the gauge features a mechanical measurement system that lasts for more than 10,000,000 measuring cycles and allows interfacing with any dial indicator, digital indicator or pencil probe. Its application range is 0.12-11.81" (3-300 mm).

The gauge also includes a measuring

head that allows self-retooling and reconditioning by replacing the removable nosepiece and contacts. Only one master is needed for the zero setting.

For more information, contact Marposs of Auburn Hills, MI, by telephone at (248) 370-0404.

New Advancement in Inertia Friction Welding

The inertia friction welding cycle from Manufacturing Technology can now orient parts using inertia or direct drive friction welding. The company is awaiting patent approval on this technology.

According to the company's press release, the overall weld cycle is shorter,

and the time it takes for the spindle's deceleration from weld speed to zero is always longer in the inertia cycle. The longer adjustment period assists with accuracy.

Weld data is used to reproduce deceleration during the weld so adjustments needed to duplicate the deceleration are smaller and easier to make.

Other features are more spindle positions for the same weld, no over-specification for drives and motors, and orientational compatibility with the inertia welding process

For more information, contact Manufacturing Technology of South Bend, IN, by telephone at (574) 233-9489.

Engineered Plastic Gears made of Calaumid



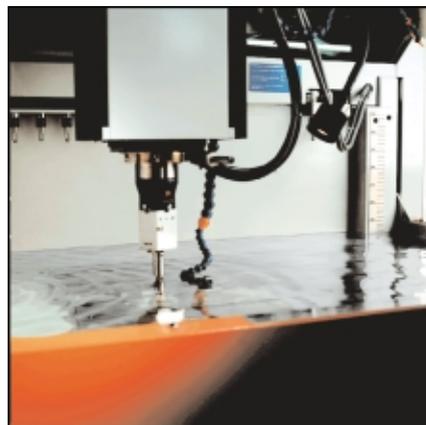
Timco's Calaumid Gears offer the best properties of both steel & plastics. The alloy core allows you to run a nylon gear on the same size shaft as a steel gear, without the need for an enlarged keyway. Calaumid gears are corrosion resistant, reduce noise, provide shock absorption and eliminate lubrication requirements.

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New EDM Fluid from Hangsterfer's Laboratories

The Crystal Brite EDM fluid from Hangsterfer's Laboratories was designed for use in both high and low amperage spark erosion processes.

According to the company's press release, the EDM fluid is a mixture of ultra-pure hydrocarbons with the latest synthetic technology, increasing metal removal rates by 30% due to the more efficient flushing and filtration methods. Therefore, particulates are prevented from returning to the electrode work-piece interface.

Fluids are odorless and do not contain solvent-based hydrocarbons.

For more information, contact Hangsterfer's Laboratories Inc. of Mantua, NJ, by telephone at (800) 433-

5823 or on the Internet at www.hangsterfers.com.

New Bearing Steels from NSK

The newest steels, “Z”, “EP” and “SHX” from NSK provide spindle bearings with resistance to seizure and minimum levels of heat generation.

According to the company’s press release, these steels have reduced amounts of non-metallic oxide because of the clean steel-making process.

“Z” steel is the company’s standard material of manufacture for the new angular contact and cylindrical roller bearings. Bearings made from this steel have 1.8 times longer service life than conventional vacuum degreased steel, according to NSK.

The “EP” steel was made more reliable due to a new evaluation technique in which fewer large sized particles are removed than vacuum arc remelted steel or refined “Z” steel.

Lastly, the “SHX” steel integrates the operating stability and low heat generation of “Z” and “EP” steels. This steel can be used as a bearing material in motorized machine tool spindles where the possibility of bearing seizure exists.

For more information, contact NSK of Ann Arbor, MI, by telephone at (734) 913-7500 or on the Internet at www.us.nsk.com.

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