New Gear Developments at IMTS

The International Manufacturing Technology Show provided one of the biggest ever marketplaces for buying and selling gear-making equipment, with 121,601 attenders, making it the largest IMTS ever. The show took place September 4–11 at McCormick Place in Chicago, IL.

The gear industry made a strong presence at the show, with the introduction of the Gear Pavilion at IMTS. The new focus area allowed visitors to find most of the companies who sell gear manufacturing machinery all in one place.

Several key gear industry companies made announcements or introduced new machines that should have an impact on gear manufacturing for many years to come.

Gleason to Acquire Pfauter Group

Gleason Corporation shocked the gear industry just before the show opened by announcing that it had reached an agreement in principal to acquire all assets of the Hermann Pfauter Group, based in Ludwigsburg, Germany.

The purchase will include Pfauter's gear machinery manufacturing operations in Germany, Italy and the United States as well as the company's 76% interest in Pfauter-Maag Cutting Tools, L.P., located in Loves Park, IL. The Pfauter Group employs about 1,050 worldwide and had combined sales of \$175 million in 1995.

According to Gleason and Pfauter management, the entire deal took place over the last few weeks before IMTS and was kept under tight wraps so an announcement could be made at the show.

"Pfauter has long been recognized as a leading supplier of cylindrical gear production equipment, as Gleason has for bevel gear production equipment. The combination of our two companies will create an excellent strategic fit that will expand our product line, substantially enhance our ability to provide our customers fast and effective solutions to their gear processing needs and offer significant benefits from combining technology, production capabilities and distribution channels," said James S. Gleason, chairman and president of Gleason Corporation.

Mitsubishi Debuts 3-in-1 Gear Center

A unique machine that combines hobbing, deburring and rolling in one machining center was demonstrated for the first time at IMTS by Mitsubishi Machine Tools USA.

The GT06R is aimed directly at automotive manufacturers—it can produce one AGMA Class 10 gear every 10–15 seconds. One machine and one operator can produce gears that leave the machine ready for heat treating.

The machine has a maximum hob speed of 4,000 rpm and a maximum table speed of 750 rpm. It measures 13.2 feet by 11.5 feet. Also available is a GT06S model, which replaces the rolling function with a shaving function to finish the gears.

Fellows Introduces Direct-Driven Shaper

The new FS180 Mark III CNC Hydrostroke gear shaper features six servo-driven axes of motion for higher-speed cutting cycles. In addition, the machine is being introduced at a *lower* price than that of the previous model.

The manufacturer claims the machine may reduce cutting cycle times by as much as 35% with speeds up to 2,000 strokes per minute. It handles pitch diameters up to 7" and face widths up to 1¹/4", which makes it appropriate for automotive transmission applications.

Gleason Knowledge System Demonstrated



The Gleason Works introduced a new software system for its PHOENIX 125GH CNC hobbing machine. The software, installed on a personal computer, provides the machine operator with setup, startup, operational, troubleshooting and maintenance information.

The system combines the knowledge of Gleason's technical experts to include complete fault diagnostics with suggested remedies, a complete set of replacement parts drawings, animated tutorials to explain key concepts and complex procedures and training modules to help the user get accustomed to the machine interface and control panels.

Bourn & Koch Redefines Small Footprint

The Model 25H hobbing machine demonstrated by Bourn & Koch Machine Tool Company is a 4-axis CNC hobber for 1" maximum diameter and 4" maximum face width gears.

The machine is almost a desktop model, occupying a 30" x 30" space on the floor. It includes auto hob shift, double cut and crowning capabilities and can use carbide or HSS hobs.

Star Cutter Introduces Tool & Cutter Grinder

Elk Rapids Engineering, a subsidiary of Star Cutter Company, demonstrated its new UTG-300 CNC five-axis tool and cutter grinder, which includes Windows-format software for sharpening hobs, shaper cutters, broaches, end mills, taper fluted tools and Maag-style cutters.

Pfauter-Maag Introduces Shaving Cutter Line



Pfauter-Maag Cutting Tools, L.P. announced that it has begun offering a complete line of shaving cutters, including standard, underpass, plunge and diagonal-type cutters in a range of sizes and accuracy capabilities.