

Outstanding PM Parts Awarded

The 2008 Powder Metallurgy Design Excellence Awards Competition took place at the PM2008 World Congress in June. Several of the winning parts recognized were gears.

Mitsubishi Materials PMG Corporation, Tokyo, took home a grand prize in the automotive chassis category for a gear set with high strength used in a new tilting and telescoping steering column. The tooth lock and two cams making up the gear set were produced from diffusion-alloyed PM steels. They have a density of more than 7.05 g/cm³, a tensile strength more than 159,000 psi and a 57 HRA hardness.

In the hardware/appliances category, Capstan Atlantic of Wrentham, MA won the grand prize for a PM steel gear set used in a high-volume business machine printer. Roll densified to a surface density of 7.8 g/cm³, the gear has an AGMA quality 10 precision level, and the pinion has an AGMA 8 level. The gear and pinion have a core density of 7.3 g/cm³, and the gear-tooth-surface fatigue resistance matches that of a wrought steel 8620 carburized gear. The single-pressed gear replaced two machined gears and saved more than 40 percent in cost.

A grand prize was awarded to Parmatech Corporation, Petaluma, CA, in the medical/dental category for a 17-4 PH stainless steel articulation gear that was used in a surgical stapling unit. This part was formed by injection molding to a density greater than 7.65 g/cm³ with tensile strength of 130,000 psi, a yield strength of 106,000 psi and a 25 HRC hardness. Finishing processes were unnecessary in the gear's production, which saved 70 percent in cost.

A low-alloy steel intake and exhaust sprockets, used in a variable valve timing system for a high-performance, double-overhead cam V-6 engine, received an award of distinction in the automotive engine category. Produced by Cloyes Gear & Products Inc., Paris, AR, the sprockets used warm compaction to form to a density of 7.25 g/cm³. The high-strength timing sprocket achieves cam phasing functions. The sprockets have a typical tensile strength of 170,000 psi, a 52,000 psi fatigue limit and compressive yield strength of 183,000 psi.

The PM Design Excellence Competition is held annually to demonstrate how powder metallurgy is an analytical tool in research and development, problem solving and quality control areas of powder metallurgy. Participants include manufacturers, users, researchers and suppliers of powders and powder-related equipment. The PM World Congress was sponsored by the Metal Powder Industries Federation, which hosted the biennial event in Washington, D.C.



The AVE-208 by Cloyes Gear & Products, Inc. received the Automotive Engine Award of Distinction.



The HA-300 steel gear set from Capstan Atlantic received the hardware/appliances category grand prize.



The ND-108 articulation gear from Parmatech Corp. received the grand prize in the medical/dental category.

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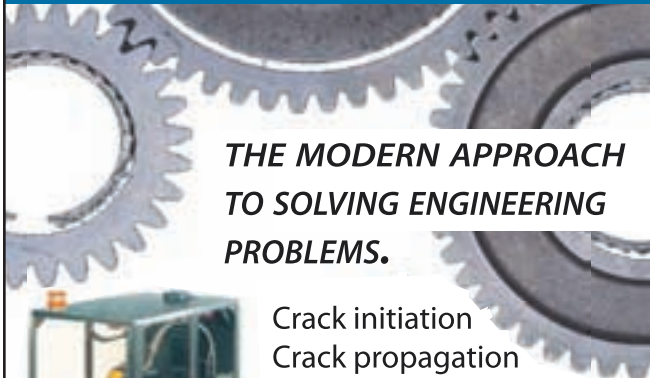
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NEWS

Hannover Fairs USA

APPOINTS KURT MEDERT SALES MANAGER

Kurt Medert, formerly vice president of the business management division of AGMA, joins Hannover Fairs USA, Inc. as the sales manager for industrial trade shows. Hannover Fairs USA is the U.S. subsidiary of Deutsche Messe AG, a Hannover, Germany-based trade show organizer.



Kurt Medert

In his new position, Medert will pursue exhibit sales in the power transmission and motion control; material handling and logistics; and machine tool and metalworking sectors for international events in Hannover such as Hannover Messe, CeMAT, EMO Hannover and extensions of these events in China, India and Turkey.

His former position at AGMA involved supervising commercial activities and programs and directing Gear Expo, the association's main trade show. For 10 years prior, Medert served as deputy executive director of the Packaging Machinery Manufacturers Institute, where he managed day-to-day operations, membership and trade show activities, according to a press release from Hannover.

"We are pleased to have Kurt join our HFUSA team," says Art Paredes, president and CEO of Hannover. "His many years of experience with industrial trade shows and his knowledge of the industry will help us develop new business as we expand the participation of American companies at our worldwide industrial events."

ALD-Holcroft

EXPANDS MANUFACTURING IN NORTH AMERICA

In response to demand for ModulTherm and DualTherm furnace systems in North America, ALD-Holcroft widened

manufacturing capabilities in the region. The ModulTherm and DualTherm treatment chambers and quench chambers will be produced at the Wixom, MI facility instead of being imported from ALD Vacuum Technologies GmbH. The first deliveries of the U.S.-based systems will be ready in the third quarter of 2008.

“Our manufacturing and supplier base is established and work is under way on the first treatment chambers from the United States. We’re pleased the worldwide demand in conjunction with the euro to dollar conversion rate justifies this expansion,” says Jason Sisler, president. “These demands are further proof of a concept that the ModulTherm is the system addressing the future needs of the heat treating community.”

Sunnen

Appoints Director of Marketing and Business Development



Barry Rogers

Barry Rogers is now director, marketing and business development for Sunnen Products Company. He is responsible for leading Sunnen’s global marketing, product development and R&D priorities. “Barry has a significant track record in initiating and managing successful technology launches in the

metalworking industry,” says Mike Haughey, Sunnen COO. “This background, coupled with his overall manufacturing industry knowledge and contacts, positions him as the ideal person to drive the introduction of Sunnen’s new technologies for improving the performance of gears, small engines, hydraulic valves, diesel injectors, diesel cylinder liners and gas and oil products.”

Rogers began his career in the manufacturing sector for Honeywell Micro-Switch Division and John Deere. In 1988, he started working for Renishaw and rose through the ranks to become U.S. national sales and marketing manager in 1998.

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NEWS

“Sunnen is on the verge of a new significance in manufacturing,” according to Rogers. “Its automated, high-production, precision bore machining technology lets manufacturers elevate their products to 21st century performance levels, with lower emissions, noise and vibration, but with higher power densities, energy efficiency and better sealing.

“I am thrilled to be part of the team that brings this to the market.”

Solar Manufacturing

FILLS TWO SENIOR-LEVEL ENGINEERING POSITIONS

John Barron was named vice president of engineering, and Robert Wilson is now the senior mechanical engineer for Solar Manufacturing.

Barron is now in charge of the engineering, quality control and field service efforts of Solar Manufacturing. He is responsible for customer service and technical support, and he provides insight into research projects, the enhancement of current equipment and product development.

“John brings over 35 years of experience and knowledge to our business. He is well respected throughout our industry,” says Jim Nagy, vice president of operations. “It is an asset to have him on our team.”

Barron was previously Solar Manufacturing’s technical director. According to the company’s press release, he has worked for Ipsen as an electrical/software manager; Vacuum Furnace Systems as electrical engineering manager and technical director; and Lindberg Furnaces as electrical engineering manager. Barron received a bachelor’s degree in electrical engineering from Villanova University.

In his new position, Wilson is responsible for every component of vacuum furnace design focusing on quenching processes. “Bob brings a wealth of knowledge about mechanical engineering to our business,” Nagy says.

Wilson previously worked as a senior mechanical engineer for Johnson Matthey, the National Drying Machinery Company and Abar Ipsen Corporation. He earned a bachelor’s degree in mechanical engineering from Drexel University.

Gear Research Institute Board Member Resigns

William Bradley stepped down from the Gear Research Institute's Board of Trustees. He was president of the board from 2003–2007 and retired from AGMA in 2007. AGMA nominated Robert Wasilewski, design engineering manager of Arrow Gear, to fill his seat.

Wasilewski received a bachelor's degree in mechanical engineering from The University of Illinois in 1975 and has worked for Arrow Gear since 1976. He designs spur, helical, spiral, Zerol, hypoid and straight bevel gears and gearboxes for Arrow Gear. He is in charge of failure analysis studies at the company. He is a member of the Technical Division Executive Council for AGMA. The association appointed him chairman of the Bevel Gearing Committee, and he received a Technical Division Executive Committee award in 1991 for contributions to gear design and utilization.

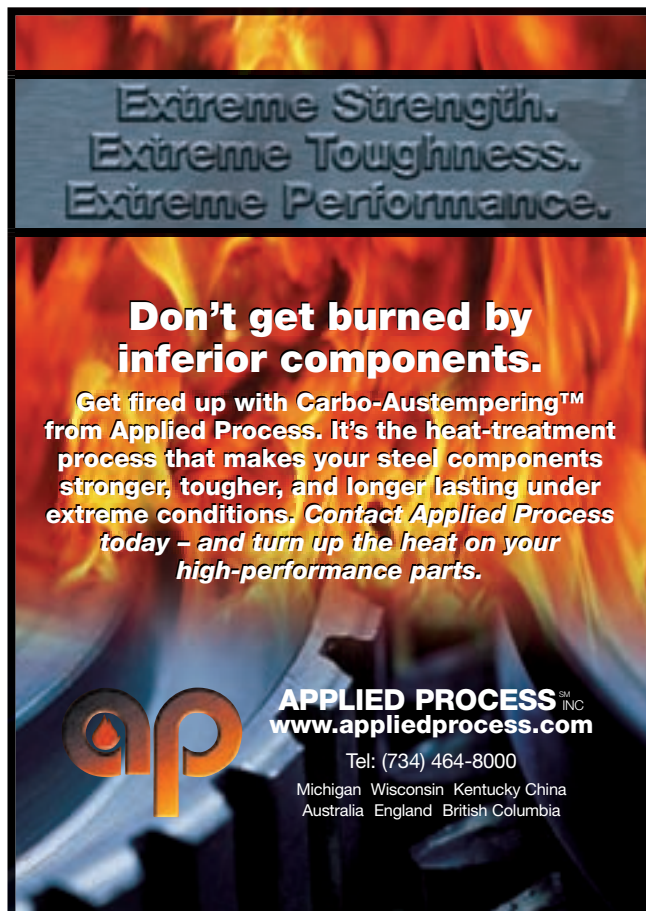
Siemens

OPENING SECOND ELGIN PLANT

The largest producer of wind turbine gear drives in the United States, Siemens Energy & Automation, is creating a \$20 million second plant in Elgin, IL. A groundbreaking ceremony was held in June, and the plant is expected to be completed by March 2009. Siemens employs 150 people at the existing Elgin plant; the additional plant will create 300 production jobs and 55 office jobs over the next three to four years. The existing plant will continue manufacturing gears and components, which will be assembled and tested at the new plant once it begins production.

"Siemens is committed to providing technologies that promote energy efficiency and reduce costs," says Anne Cooney, vice president of the power conversion division for Siemens. "Combined with the expertise and product knowledge we have in Elgin, the new facility will enable Siemens to increase production of our mechanical drives to help our customers meet the growing demand for sustainable energy resources."

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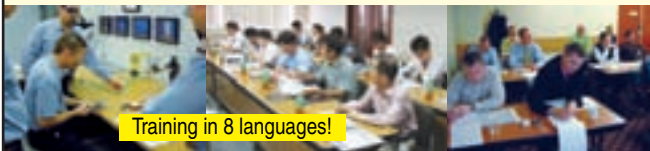


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Upon installation of a YOUJI VTL-1000 CNC vertical turning lathe, Riverside Spline and Gear is capable of turning up to 43 inches. "We have seen an increase in larger gears due to the purchase of the Höfler 900 gear grinder," says Aaron Forest, vice president of operations. "The purchase of the YOUJI VTL-1000 is in response to this demand, allowing all our turning to be done in-house."

