

MPIF

ANNOUNCES AWARD-WINNING POWDER METAL PARTS

The winners in the 2016 Powder Metallurgy (PM) Design Excellence Awards competition, sponsored by the Metal Powder Industries Federation (MPIF), amply demonstrate PM's capabilities in their own ways. They focus on PM's strong points to gain and extend their competitive advantage, push production capabilities and process tolerances to their very limits, and bring originality to the conception of what is possible through creative design.

Grand Prize Awards

The Grand Prize in the Automotive — Transmission Category was awarded to GKN Sinter Metals, Auburn Hills, Michigan, for five components — a side gear, two pinion gears, a locking side gear and a locking plate — comprising a forged PM electronic locking differential gear set made for Ford Motor Company. The parts go into the rear axle differential of the Ford F-150 light truck, the first time forged powder metal differential gears have been used in such an application.

The Grand Prize in the Automotive — Chassis Category went to Keystone Powdered Metal Co., St. Marys, Pennsylvania, for seven components — rake cam, left-hand inner cam, retainer guide, right-hand rake teeth energy-absorbing eccentric strap cam, column mounting insert teeth and left-hand rake teeth — made for its customer Nexteer Automotive. The heat-treated diffusion-alloyed steel components are all part of the steering column in the Chevrolet Colorado and GMC Canyon trucks.

The Grand Prize in the Aerospace/Military Category was won by Advanced Forming Technology, an ARC Group Worldwide Company, Longmont, Colorado, for a front sight base. The MIM-4605 low-alloy steel part is used on the AR-15



rifle. The front sight base, made by metal injection molding (MIM), is much larger than the typical MIM part and has a complex geometry.

The Grand Prize in the Medical/Dental Category was won by Parmatech Corporation, Petaluma, California, with four stainless steel MIM components — articulation lock bar, articulation connector, articulation drive block and knife guide — used in an articulating endoscopic surgical device designed specifically for thoracic surgery.

ITAMCO's Joel Neidig

RECEIVES AGMA 2016 NEXT GENERATION AWARD

Joel Neidig, an engineer and lead technology developer with ITAMCO, has received the 2016 Next Generation Award from the American Gear Manufacturers Association (AGMA). This award, presented annually since 2011, recognizes innovative work by an individual responsible for one or more significant achievements through his or her effort and work that has



enhanced or strengthened the gear industry and/or AGMA. This award honors individuals who are emerging as contributors, innovators and leaders in the gear industry and serves as an incentive for others in the next generation of gear industry talent. The award was presented May 13th at AGMA's Centennial Annual Meeting in Amelia Island, Florida.

The award is the latest in a series of milestones for Neidig and ITAMCO to acknowledge their efforts to transform their precision machining facilities into "smart factories." ITAMCO is part of a research group that recently received an Applied Research and Development award from the Digital Manufacturing and Design Innovation Institute. The group is developing a platform that will integrate every piece of software, hardware and equipment from its accounting program to its machine tools. ITAMCO was chosen as the implementation site because many of their machine tools are already connected to the Internet and each other through MTConnect. "We are only 12 to 15 months away from a totally integrated shop floor. A job will be entered into our ERP system and then every piece of the job, from allocating materials, to man-

ufacturing, to shipping and invoicing, will be routed through the entire facility. Machines will be chosen based on the type of work and availability. And the platform is dynamic — if a machine goes down, the job will be automatically rerouted,” said Neidig.

Mitutoyo America

OPENS RENOVATED M³ SOLUTION CENTER

Mitutoyo America Corporation recently announced the grand opening of the newly renovated M³ Solution Center in City of Industry, CA. This nearly 35,500-square-foot facility is conveniently located for customers to schedule appointments for product demonstrations, assistance with application challenges and metrology solutions, as well as product and edu-



cational training seminars. The M³ Solution Center is located at 16925 East Gale Avenue, City of Industry, CA 91745. “Our goal is to provide relevant and timely metrology solutions to our customers, in a region that is home to aerospace, defense, medical and general machining industries. In updating our M³ Solution Center, we’re providing our customers with industry-leading technology and training all under one roof,” says Jeff Thompson, Western regional sales manager.

GMTA

PROVIDES SAMAG MACHINING CENTERS TO NORTH AMERICA

Now available from German Machine Tools of America (GMTA), a full line of Samag machining centers, including multi-spindle, horizontal machining centers, deep hole drilling machines and combination milling/drilling machines, is offered for the North American market.

Samag, based in Saalfeld, Germany with offices worldwide, engineers and builds a variety of multi-spindle machines, including the MFZ Series for large workpieces, the smaller, modular WBM Series for up to six spindle deep drilling and the combination TFZ Series, which offers users the ability to bore and mill complex cubical workpieces on four sides with a single clamping. On the largest standard machine, large scale mold-making is possible, with a maximum drilling depth of 2,300 mm (over 90”), 65 mm (over 2-1/2”) bore and a 50-ton capacity worktable.

The company also supplies complete turnkey operations, including robotic articulation, parts handlers and transfer

Spiral Bevel Gears

- Spiral & straight bevel gear manufacturing.
- Commercial to aircraft quality gearing.
- Spur, helical, splined shafts, internal & external, shaved & ground gears.
- Spiral bevel grinding.
- Midwest Transmissions & Reducers.
- ISO compliant.



Midwest Gear & Tool, Inc.
15700 Common Rd., Roseville, MI 48066
Tel: 586.779.1300 midwestgear@sbcglobal.net

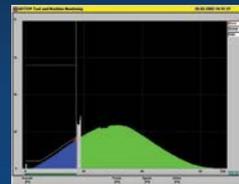


Marposs Tool Monitoring Solutions

Safeguard your hobs and maximize tool life based on **real tool condition data.**

Increase hob life 40-60% while protecting from costly damage.

Developed specifically for gear cutting using Artis technology.



MARPOSS

IMTS2016
See us at IMTS
Booths E-5516 & S-8719

www.marposs.com/gearcutting
248-364-2734 or 1-888-627-7677

SUHNER

 Transmission expert.



Spiral bevel gears

Strongest transmission.
Realizing your production yield.



SUHNER MANUFACTURING INC
43 Anderson Rd, Rome, GA 30161
706-235-8046
info.usa@suhner.com

SUHNER
EXPERTS. SINCE 1914.



Kean
TRANSMISSION

*Connecting to the world
Gear up for the future*



www.keanchina.com

Situated in Jiangyin City of Jiangsu Province, China, Jiangyin Ke'an Transmission Machinery Co., Ltd. is a dedicated manufacturer of high-precision bevel gear and machinery parts with 17 years' experience. The company possesses 8 units of US Gleason bevel gear grinding machine, gear milling machine, heat treatment instrument and over 80 units of other auxiliary equipment. With gear processing module ranging from 2 to 30 and gear grinding diameter of 30-980mm, the maximal precision is up to US AGMA13. The company has been US ABS, French BV and CCS – certified. Motivated by the business philosophy of 'Our professionalism produces high-quality Integrity paves the way to a success', we devote ourselves to the World transmission machinery industry by substantially satisfying customers' need.



Jiangyin Ke'an Transmission Machinery Co., Ltd.
ADD: No.8 Huangtai Road, Yunting Industrial Park, Jiangyin, Jiangsu Province, China
TEL: 86-510-86151187, 86013998 Fax: 86-510-86012666 Email: ka@keancn.com



mechanisms for high-production work such as connecting rods and complete machining of differential housings.

GMTA Vice President Scott Knoy comments, "This new partner dramatically expands our capability in the large block milling market. Plus, with deep drilling technology and the combination machine concepts, we will be able to offer significant advantages to our current and potential customer base. We're excited to have the Samag name and reputation for quality machine tools added to our family."

Schafer Industries
ACQUIRES CUSTOM GEAR AND MACHINE

Effective July 1, 2016, Schafer Industries, Inc., through its wholly owned subsidiary, Schafer Gear Works Rockford, LLC, has acquired the assets and business of Custom Gear and Machine, Inc. The acquisition was announced jointly by Bipin Doshi, president of Schafer Industries, and Stan Blenke, the company's executive vice president. The manufacturing facility includes a 50,000 square foot plant in Roscoe, Ill. producing gears and machined products for a variety of industries, including oil and gas, construction, mining, agricultural, power transmission and defense. Schafer owns and operates a similar facility in Rockford, Ill. The Rockford facility will be shut down by the

SCHAFER
INDUSTRIES

end of August 2016 and all manufacturing and management functions will move under a single roof in Roscoe.

According to Blenke, the purchase of Custom Gear and Machine, Inc. was an opportunity that aligned with Schafer's strategic objectives and its product mix to secure a stronger market position in all market segments served by the two companies. "For over 80 years, Schafer has been involved in providing gears nationally and internationally for many applications and customers. This acquisition, along with the combination of manufacturing and management functions, creates additional capacity and engineering capabilities to serve our existing customers as well as attract new customers," Blenke stated.

He went on to say that “combining our two engineering departments creates a stronger team to address complex issues in process development. It also enhances our ability to solve customer issues around reducing manufacturing costs and provides a best value option for their needs.”

Solar Atmospheres

RECEIVES NADCAP 24 MONTH MERIT STATUS FOR HEAT TREATING

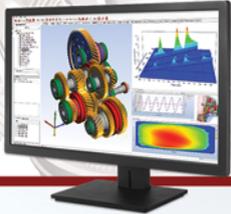
Solar Atmospheres of California recently announced that it has been awarded Nadcap 24-month Merit Status for Heat Treating. Solar has held Nadcap accreditation since 2011. Having demonstrated their ongoing commitment to quality by satisfying customer requirements and industry specifications, the Nadcap Task Group has determined that Solar Atmospheres of California has earned this special recognition. Instead of having their next Nadcap audit in eighteen months, Solar Atmospheres of California has been granted an accreditation that lasts until July 31, 2018.

“Achieving Nadcap accreditation is not easy; it is one of the ways in which the aerospace industry identifies those who excel at manufacturing quality product through superior special processes. Companies such as Solar Atmospheres of California go above and beyond achieving Nadcap accreditation to obtain Merit status and they should be justifiably proud of it,” said Joe Pinto, executive vice president and chief operating officer at the Performance Review Institute. “Benefitting from a less frequent audit schedule reduces audit costs and associated pressures and demonstrates the trust that the aerospace industry has in Solar Atmospheres of California based on their past performance in Nadcap audits. PRI is proud to support continual improvement in the aerospace industry by helping companies such as Solar Atmospheres of California be successful and we look forward to continuing to assist the industry moving forward.”



MASTA

CAE solutions for the design, analysis and optimisation of complex transmission systems trusted by engineers worldwide



- Accurately and rapidly design and analyse transmission systems from scratch or troubleshoot existing designs
- Comprehensively understand the life of a mechanical part over the customer duty cycle
- Identify potential failure modes early in the development cycle
- Rapidly predict key performance characteristics at the design stage
- Easily explore changes in transmission layout, component selection and/or design, materials and manufacturing processes
- Perform full system simulations for any transmission or driveline configuration
- Incorporate manufacturing simulation at the design stage to reduce process development time & cost



Evaluate for free and discover more at masta.smartmt.com

Certified Compatible with  Windows 10

© 2016 Smart Manufacturing Technology Ltd.  SMART MANUFACTURING TECHNOLOGY

BEYTA GEAR SERVICE

**PUTTING
A LIFETIME
OF
GEAR
DESIGN
EXPERIENCE
TO WORK FOR YOU**

- Reverse engineering
- Gearbox upgrades
- Custom gearbox design
- Specification development
- Project management
- Vendor qualification

- Design reviews
- Bid evaluations
- Tooling design
- Customized gear training
- Equipment evaluation
- Custom machine design

Charles D. Schultz
chuck@beytagear.com
[630] 209-1652

www.beytagear.com