



Gear Technology

HOSTS DINNER FOR TECHNICAL CONTRIBUTORS TO THE GEAR INDUSTRY

On October 23 on the eve of Gear Expo in Columbus, Ohio, the editors and staff of *Gear Technology* and *Power Transmission Engineering* were pleased to host a dinner for many of our technical editors, authors, regular contributors and others who share our vision and passion for advancing the collective knowledge of the gear industry. In attendance were (seated, from left to right): **Don Houser**, Professor Emeritus, OSU GearLab; **Dave Friedman**, Associate Publisher & Sales Manager, *Gear Technology*; **Dipl.-Ing. Christian Güntner**, FZG; **Joseph R. Mihelick**, *Gear Technology* technical editor and Principal, Gears Plus Inc.; **Randy Stott**, Associate Publisher & Managing Editor, *Gear Technology*; **Frank Uherek**, *Gear Technology* technical editor and Principal Engineer - Gear Software Engineering

Development, Rexnord; **Tony Norselli**, Gleason Dr. Hermann J. Stadtfeld, VP Bevel *Gear Technology* and R&D, Gleason; **Irebert Delgado**, Researcher, NASA Glenn Research Center; **Alex Cannella**, Associate Editor, *Gear Technology*; **Robert Shandro**, Researcher, CETIM; **Dr.-Ing. Karsten Stahl**, Head of the Gear Research Centre, FZG; **John Lange**, *Gear Technology* technical editor and Instructor, Gleason; and: (Second Row, Standing, from Left to Right) **Octave Labath**, *Gear Technology* technical editor and independent consultant; **Jack McGuinn**, *Gear Technology* Senior Editor; **Carlo Gorla**, Professor, Politecnico di Milano; **Michael Hein**, Team Leader, FZG; **Todd Praneis**, Chairman, AGMA Technical Division Executive Committee and Director of Product Development,

Seco/Warwick

WINS INTELLIGENT DEVELOPMENT AWARD 2017



Seco/Warwick has been granted the Intelligent Development Award 2017 for the development of the innovative UniCase Master system, which challenges traditional heat treatment methods. It significantly reduces the mechanical distortion created during the heat treatment process of hardening, in result the automotive industry can save billions of euros a year.

Seco/Warwick received the award in October at the Gala of the Polish Intelligent Development Award 2017, a prestigious event that constitutes a meeting point for business and science, bringing together leaders of development and investment, who give the direction of the innovative economy.

The UniCase Master, which has been recognized by the Intelligent Development Program chapter, is the latest technology for continuous heat treatment based on vacuum carburizing and tempering in high pressure gas. It is used mainly in the auto-



Photo by David Ropinski, *Gear Technology* Art Director.

Cotta Transmission; **Michael Otto**, Department Leader, FZG; **Dr. Alfonso Fuentes**, Professor, Rochester Institute of Technology; **Dr. Oliver Winkel**, Head of Applications Engineering, Liebherr; **Dr. Michel Octrue**, Senior Mechanical Engineer, CETIM; **Matthew Croson**, President, AGMA; **Michael Goldstein**, Publisher & Editor-in-Chief, *Gear Technology*; **Julian Theling**, Researcher, WZL-RWTH Aachen; **Matthew Jaster**, Senior Editor, *Gear Technology*; **Jim Bregi**, Chairman of the Board, AGMA and President, Doppler Gear; **Dr. Thomas Tobie**, Head of Department for Load Carrying Capacity of Cylindrical Gears, FZG; **Alex Kapelevich**, President, AK Gears; Charles Schultz, *Gear Technology* technical editor and Principal, Beyta Gear Service.

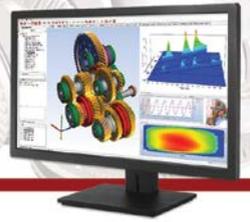
motive industry for hardening toothed gears and bearing rings.

“Unlike conventional methods, UniCase Master ensures high repeatability, and thanks to a dedicated, single chamber detail equipped with an omnidirectional gas cooling system with simultaneous 4D Quenching, minimizing such common and cumbersome hardening deformations,” explains Maciej Korecki, vice president, segment of vacuum equipment, Seco/Warwick.

Hardening of steel parts by carburizing and hardening is the most common heat treatment technology used in mass production of mechanical transmission components such as gear wheels, shafts, rings, etc. Traditional hardening is based on atmospheric carburization and oil hardening - a process characterized by low precision and accuracy as well as large deformations that require expensive finishing. At present, the factories spend about 20 billion euros per year only on repairing distortion.

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Hardening deformation correction is one of the most expensive processes in gearbox manufacturing. This technology eliminates all the weaknesses of traditional methods, so that using the innovative UniCase Master system will allow the entire automotive industry to save billions of euros a year.

“The experience gained from the various parts demonstrates the perfect precision and reproducibility of the results and reduction of deformation to such an extent that some finishing operations can be completely eliminated,” Korecki said. (www.secowarwick.com)

Oelheld

CELEBRATES GRAND OPENING OF NEW U.S. HEADQUARTERS BUILDING

Oelheld recently celebrated the grand opening of the company’s new U.S. headquarter building in West Dundee, IL. Along with co-presidents Philipp and Martin Storr guests included officials from the village of West Dundee, customers, vendors and neighbors.



All in all more than 200 guests enjoyed the “Oktoberfest-style” open house which featured authentic Bavarian food, music and door prizes. The day concluded with a family-style party for employees, spouses and friends.

The new 24,000 square foot building increases production and warehouse capacity and features a new R&D laboratory. With a state of the art tanker unloading station and a sunken floor in the warehouse designed as a spill containment the facility exceeds all environmental safety requirements. With automatic LED lighting and radiant floor heat it is also very energy efficient. The property allows for future expansion to 42,000 square feet. (www.oelheld.com)

Ipsen

EXPANDS SERVICE OFFERINGS

Ipsen has expanded their offerings to include calibration and survey services that adhere to strict Nadcap requirements. As Ipsen continues to focus on providing advanced aftermarket support, this new service will fill a niche demand and help those that need to meet the requirements of highly regulated industries.

Ipsen’s technicians will perform NIST-traceable calibrations and periodic testing of heat-treating systems so companies can comply with AMS 2750E, which is recognized as the gold stan-



dard for both Nadcap and MedAccred. This includes calibrating and testing the furnace’s temperature and vacuum control systems, as well as verifying those systems are operating properly. If any non-conformances are discovered, Ipsen’s trained technicians are capable of quickly analyzing, troubleshooting and correcting them.

Key services include:

- Calibration of the temperature controlling, monitoring and recording instruments
- Calibration of vacuum process and recording instruments
- Full reports that comply with the requirements of AMS 2750E, complete calibration results (including “As Found/As Left”) and data for Ipsen’s NIST-traceable standards used
- Temperature Uniformity Surveys (TUS) using data acquisition (DAQ) and software fully compliant to ASM 2750E and 21 CFR-Part 11
- System Accuracy Tests (SAT)
- Certificate of conformance (www.ipsenUSA.com)

U.S. Powder Metals

APPOINTS DIRECTOR OF SALES AND BUSINESS DEVELOPMENT

U.S. Metal Powders, Inc. (USMP) has announced that Benjamin Giralico has joined its subsidiary, Ampal, Inc. filling the role of Director of Sale and Business Development for the Palmerton, Pennsylvania based company.

USMP is the largest domestic aluminum powder producer with the production facilities in both Palmerton, PA and the town of Hermillon in the French Alps.

“We are very excited to have Ben join our team and welcome him to our company,” said Louise Ramsey Thomas, the president of the company. “His focus will be on enhancing our sales and customer engagement process and developing new business opportunities for the company beyond the market segments we currently serve. Ben brings a wealth of technical sales experience and will be a huge asset to our team.”

Before joining USMP, Ben held sales management positions in the metals processing, chemical, and semiconductor material segments. His most recent position was with Dow Chemical in its electronic materials division. (www.usmetalpouders.com)

Hexagon Manufacturing Intelligence

OFFERS METROLOGY EQUIPMENT AT FULLERTON COLLEGE

Hexagon Manufacturing Intelligence recently announced that its portable and stationary coordinate measuring machine (CMM) technologies will be integrated into a new Metrology Program offered at Fullerton College, North Orange County, in Fullerton, CA. Fullerton College is one of the largest and best equipped machinist trade schools in California. Starting in Fall 2018, students will learn how to use a wide array of measurement and inspection tools including ROMER Absolute arms, laser scanners, CMMs and more. The new curriculum will enable students to study the science of measurement and acquire job skills that are in high demand by science laboratories and industries using advanced manufacturing technologies such as aerospace, defense, automotive, medical, and power generation. Students can begin work toward a Metrology Certificate of Achievement with several compulsory courses currently available.



The Metrology Program is a natural extension of the Machine Technology curriculum already in place at Fullerton College. Course study will cover fundamental metrology concepts and offer hands-on usage of shop floor CMMs and portable measuring machines (PCMMs) for practical measurement and inspection operations conducted in machine shops and manufacturing cells. The ROMER articulating arm is a versatile measurement tool designed to meet the needs of almost any measurement application, whether scanning or touch-probing. This portable CMM provides the foundation for Fullerton College's rigorous program of electives designed to prepare students for scientific research and today's data-driven manufacturing environments. The ROMER Absolute arm with integrated RS4 laser scanner will provide the means for precision 3D data capture across a range of surfaces and applications.

"Our new metrology program will add additional certificates and skills competencies making our students even more valuable and employable within our local industries," states Dan



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O'Brien, instructor and machine technology department coordinator at Fullerton College. "Manufacturing companies are challenged with filling employment positions that utilize new digital manufacturing and measuring technologies. This program intends to help fill this critical gap."

"Hexagon Manufacturing Intelligence is very pleased to support the new Metrology Program being offered next year at Fullerton College, a premier academic institution that strongly supports vocational programs," states Zvonimir Kotnik, business unit manager, portable products, Hexagon Manufacturing Intelligence. "Measurement professionals will be in very high demand for the foreseeable future. Metrology education can open many career doors and introduce students to data-driven manufacturing and other diverse applications requiring 3D data for analysis, measurement, automation alignment, visualization, and more. The ROMER Absolute Arm with Integrated Scanner is the ideal teaching toolset as industry uses this technology for point-cloud inspection, product benchmarking, reverse engineering, rapid prototyping, virtual assembly and CNC milling."

(<http://machine.fullcoll.edu>) (hexagonmi.com)

Heller Machine Tools

APPOINTS VP OF SALES FOR NORTH AMERICA

Heller Machine Tools has announced that **Stephen Pegram** has joined the company as vice president of sales for North America. He will be based at the Heller USA headquarters and manufacturing facility here.

Pegram joins Heller after a long and successful career in the machine tool industry which included management positions within Mazak, DMG and Hyundai Wia.

"My focus is to grow our special machine tool business including our very profitable applications into new market segments," Pegram said. "Heller has always been a supplier of full production solutions, which we will continue into the future. Total client satisfaction is at the very top of our business plan."

"The Heller product range is of the very highest quality, and this includes several new products including 5-axis horizontal machining centers. It is these new products and applications that will help provide future business growth both for Heller and our customers," he said. (www.heller-us.com)



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