GMTA

REPRESENTS WEMA GLAUCHAU GMBH

German Machine Tools of America (GMTA) is now the North American distributor of WEMA Glauchau GmbH.

WEMA's internal grinding machines maximize operating times with more efficient and integrated procedures. A repeatedly allocable tool and workpiece headstock are guided on up to six axes with an accuracy of 0.1 µm. WEMA SI is scalable and is adapted to the clients' needs through specific mounting for the greatest machining efficiency. Powerful drives ensure quick availability with additional work and peripheral modules reducing costly non-productive times. Available in 4 different series (S2I, S3I, S6I and S10I), it offers machining of chuck and shaft-shaped parts. In addition, the internal grinding machines are equipped with internal cylinder/ cone, internal polygons, internal screw threads, up to 4 applicable grinding tools and high rigidity through the use of cast beds/hydropol beds.

With WEMA SU, universal grinding machines are available for the complex task of three-way machining of all major workpiece sizes. The machines are equipped with external and internal grinding units. Clamping operations provide decisive efficiency and precision benefits. WEMA's technology enables machines to perform highly complex operations, while peripheral modules permit greater flexibility. These machines' features include up to 3 swivel axes, machining of 4 sides in one clamping operation, machining of chuck and shaft-shaped parts and external grinding wheels with a maximum diameter of 600 mm. WEMA SU also offers additional features such as: 4 insertable internal grinding tools, 4 external grinding tools and cones, polygons, etc.

The company's external grinding machines can machine parts up to 1,500 kg with external lengths of Ø600 mm and 2,700 mm. Grinding wheels are available in Ø500, 600, and 750 mm. Typical workpieces include railway axles, rollers, pipes and shafts.

Assemblies of the roller bearing grinding machines feature a strict modular structure used for various operations. One is for sequential internal, external and rim machining operations. Another is for simultaneous internal and external machining operations. Other modular structures are used for external machining operations, internal machining operations and rim machining operations. Machining jobs can be carried out on single or multi-row outer rings (OR) and inner rings (IR) of diverse bearing types. Notable features on these WEMA machines include three different types of milling centers (SW3, SW6, SW10), grounding of borings and tracks of inner rings, as well as tracks and outer diameters of outer rings. Outside rings have a diameter of approximately 300 mm to 900 mm. Shoulders, rims, etc can also be ground and different grinding operations can be performed in sequential or simultaneous grinding procedures.

Although the company's grinding machines cover a wide range of possible applications, they also build and design grinding machines to order ranging from more or less customized adaptations to complete designs of the machine. (*www.gmtamerica.com*)

Solar Atmospheres

PROMOTES PAPONETTI TO SOUTHEAST SALES MANAGER

Solar Atmospheres South Carolina facility proudly announces that **Mike Paponetti** has accepted the position of Sales Manager. Prior to accepting this position, Mike was the Regional Sales Manager at our Hermitage, PA facility. Mike will lead the sales efforts to maintain and promote sales for Solar Atmospheres in the Southeastern United States and we are confident Mike will provide our customers with exceptional support.

Solar Atmospheres Southeast President, Steve Prout says, "We are excited to have Mike as a part of the Solar Atmospheres Southeast team. With over 20 years of thermal processing experience, his heat treating and brazing expertise will be a tremendous resource for our customers." (*www.solaratm.com*)

Methods Machine Tools

APPOINTS GENERAL MANAGER FOR MEMPHIS TECHNOLOGY CENTER

Methods Machine Tools, Inc., North America's foremost supplier of leading-edge precision machine tools and automation, has announced that **Jon Dobosenski** has been appointed as general manager of Methods' new state-of-the-art Memphis Technology Center. A ribbon cutting was recently held on November 14th, 2018 to celebrate the center's opening.

For over 30 years, Dobosenski has held various roles at machine tool and manufacturing companies ranging from executive level positions to operations, service, application management and sales. He has also been well established at Methods, including a successful run as regional sales manager, leading up to his current role of general manager for Memphis operations.

"We are thrilled to have Jon at the helm of our new modern Memphis Technology Center," said Jerry Rex, president and CEO Methods Machine Tools, Inc. "Jon brings a unique skill set and excellent leadership abilities, combining extensive machine tool and manufacturing knowledge with a genuine passion for the industry." (*www.methodsmachine.com*)

Bodycote

HOLDS OPENING CEREMONY FOR NEW FACILITY

Bodycote recently held an official opening ceremony at its brand new facility on the Advanced Manufacturing Park (AMP), Rotherham, Yorkshire.

The new advanced heat treatment center, now fully operational and supporting customer requirements, offers a range of heat treatment services and has been established to support the aerospace and power generation markets in the U.K. and Europe.

The Rotherham facility was officially opened by Andy Greasley, executive vice president of Rolls-Royce's Turbines Supply Chain Unit, in recognition of the enduring partnership between Bodycote and Rolls-Royce. Greasley commented: "Heat treatment and processing is a vital part of our supply chain and Rolls-Royce are delighted to be supported by Bodycote on the Advanced Manufacturing Park in Rotherham. Close coupling of this capability to our own Rolls-Royce business is critical for our future success and our relationship with Bodycote is one that we truly value."

Also speaking at the event, AMRC (Advanced Manufacturing Research Center) CEO, Colin Sirett, said the new center will bring a key capability to the Advanced Manufacturing Park: "We've got everything from aircraft parts through to carbon fiber chassis for supercars all being manufactured on this site; the one piece of the process that was missing was materials processing. We can cast, we can forge, we can assemble, we can machine, but the one key element that was missing is exactly what Bodycote brings to the park. So it's great to welcome the Bodycote team here and we are looking forward to working with them for many years to come."

VIP delegates were also the first to hear about Bodycote's plans for significant expansion of the new site, which includes the securing of extra units on the Advanced Manufacturing Park. Tom Gibbons, president of Bodycote's Aerospace, Defense & Energy division, commented: "Due to customer demand and interest since the announcement of this new plant in July, we are investing in further capacity and technology. The additional space we secured here at Rotherham is nearly three times the size of our existing unit. We are committed to ensuring we are able to meet our customers' demand in the years ahead."

Additionally, Bodycote recently announced plans to open a new heat treating facility in Elgin, Illinois. The new facility will include advanced heat treating technologies such as low pressure carburizing and carbonitriding, vacuum nitriding and ferritic nitrocarburizing, Bodycote's proprietary Corr-I-Dur process, and traditional carburizing of large parts. The facility, scheduled to be operational by late 2019, will support the automotive, agricultural, mining, construction and various other manufacturing supply chains in the upper midwest region.

Dan McCurdy, president automotive and general industrial, North America & Asia division, adds: "This investment demonstrates Bodycote's commitment to serving the Midwest with the services our customers ask for and require."

(*www.bodycote.com*)

Ingersoll

OFFERS LIVE CUTTING TOOL SEMINARS

Ingersoll Cutting Tools is offering seminars in 2019 to learn how cutting tools can work for you. These seminars will include informative product presentations with an emphasis on ways to increase productivity, discussions on cutting tool theory and application, and live demonstrations in a state-of-the-art Technology Center in Rockford, Illinois, showcasing product capabilities and performance. The Ingersoll Cutting Tools Seminar covers a full range of cutting tool applications, including milling, hole-making, turning, grooving, threading and more. They feature presenters/instructors with decades of industry experience. There is no charge for the seminar, and lodging and meals are provided.

A quick look at the upcoming schedule: (Gold Productivity Seminars: Feb. 6–7, March 13–14, April 3–4, May 8–9, Aug. 7–8, Oct. 3–4, and Dec. 4–5), (Turning Seminar June 5–6), (Die & Mold Seminar July 17–18), (Swiss Seminar Sep. 4–5), and (Automotive Seminar Nov. 6–7). Vist the website below for additional details. (*www.ingersoll-imc.com/seminars/live?qwikcuts=20181204&source=external*)

3M

DEVELOPS GLOBAL ADHESIVE SOLUTIONS LAB

As more and more industries are moving towards automation, design engineers are being challenged to increase production efficiencies and solve assembly challenges. Exploring new solutions and pushing the boundaries of what's possible is the everyday expectation. That's why 3M has developed the Global Adhesive Solutions Lab — to provide one-on-one attention and individualized solutions designed to advance its customers' overall manufacturing processes.

3M Science. Applied to Life.™

"Pushing the envelope with your designs takes time and effort, and it can be a very intimidating process if you're unsure where to start," said Pauline Allison, global business director, 3M. "The Global Adhesive Solutions Lab is 3M's way of offering its expertise so that our customers can exceed the expectations of their customers."

Located in St. Paul at the 3M global headquarters, the Global Adhesive Solutions Lab encourages collaboration and engagement with live, professional application engineers who are at the ready to support customers in a personalized setting. On-site, automated dispensing equipment and robotic cells from various manufacturers are also available, giving customers the chance to observe adhesive applications firsthand and interact with available tools to help ensure optimization.

"At 3M, we are constantly striving to improve the overall

assembly solutions process by working directly with our customers to help them overcome issues and advance their process efficiencies," continued Allison. "We understand our customers and they appreciate having a room full of problem-solvers at their disposal to explore options and test new and creative ideas."

Every business has its own inherent challenges. This state-of-the-art laboratory will serve as a useful tool for customers interested in identifying solutions specific to their business. Users will benefit from personalized product and process recommendations, including help identifying adhesive solutions for their applications.

"We are excited to have Nordson technology and products featured in the new customer lab facility at 3M," said Justin Hall, general manager, Nordson Sealant Equipment. "This collaboration will give 3M the unique ability to demonstrate both the performance of their materials and the application process to their customers, creating confidence in the total dispensing solution. Nordson looks forward to supporting 3M in their testing allowing us to continue to strengthen our material and application expertise, leading to innovative, highly valued solutions for the market." (*www.3m.com*)

CTI Berlin

PRESENTS YOUNG DRIVE EXPERTS AWARD

Once again, three candidates qualified for the CTI Young Drive Experts Award at the 17th CTI Symposium: "Automotive Drivetrains | Intelligent | Electrified." The finalists Lukas Pointner (Technical University of Munich), Marc England (Leibniz University Hannover) and Ruben König (Technical University of Darmstadt) first presented their work in the form of Pecha Kucha presentations to an audience of 1,000 industry representatives. Then the Applausometer determined who placed first, second and third.

Lukas Pointner received the greatest response from the expert audience for his work "Multibody Simulation for Characterization of High-Dynamic Form-Fit Shifts of Alternative Shifting Elements for Automatic Transmissions". He was referring to a project in which the TU Munich, together with the company Hoerbiger, developed the so-called

"TorqueLINE Cone Clutch" in order to increase the efficiency of ATs and DCTs. In this context, Pointner has developed a multi-body simulation that can be used to predict the influence of various clutch geometries and wear on operating behavior. He has thereby made an important contribution to the design and control of this innovative transmission component. Dr. Ing. Ruben König was also able to win the crowd with his Master's thesis on "Gear Shifts and Mode Changes in Electric and Hybrid Electric Powertrains with Dog Clutches", and secured second place and the recognition of the experts that were present. Jaw clutches can make an important contribution to cost savings and increased efficiency. In order to ensure comfort when switching and changing models at a level comparable to AT/DCT, he has investigated a parallel hybrid concept with a double electric motor. In his work, he presents the corresponding vehicle simulation model, as well as the implementation, in a demonstrator vehicle.

Last but not least, M.Sc. Marc England provided an automated method for optimally designing the wiring of multi-layer hairpin windings in his Master's thesis entitled "Automated Design of Hairpin Windings as Tabular Winding Diagrams". The use of electric motors with hairpin windings makes it possible to produce high torques and power in confined spaces. This is particularly successful when the number of layers is high. With regard to electrical vehicle systems, his work provides an attractive approach for installing cost-effective e-machines with hairpin windings in passenger car propulsion systems. (*www.transmission-symposium.com*)

Weiler Abrasives

APPOINTS NEW DIRECTOR OF SALES-WEST

Weiler Abrasives, a provider of abrasives, power brushes and maintenance products for surface conditioning, has announced the promotion of **Jennifer Hawkins** to director of sales — west.

Hawkins has been employed with Weiler Abrasives since August 2013 when she joined the company as a district sales manager covering Houston and the surrounding areas. Since then, she has served in additional sales capacities of increasing responsibility at the company. In her prior sales roles, Hawkins successfully built end-user and distributor partnerships focused on growth and was successful in launching new product categories to markets she served. She has also been a critical part of the successful execution of the Weiler Vision and Strategy across the United States.

In her new position, Hawkins will lead a team of district sales managers that are focused on executing the Weiler Vision and Strategy with distributor business partners at the local level. She will also be responsible for delivering the Weiler Value Package in a way that creates mutually beneficial growth for Weiler Abrasives, distributors and end users by providing value-add solutions, innovative new products, marketing support, and training focused on safety and proper use of Weiler products.

"Since Jennifer joined Weiler Abrasives, she has excelled in every sales role she has held of increasing responsibility. Jennifer understands the needs of our distributor business partners, and she has seen the challenges that our end users face every day. She is an expert at delivering the Weiler Value Package so that it leads to growth and formidable distributor partnerships," says Jason Conner, vice president of sales — U.S. and Canada. "We are very excited and fortunate to have such a strong, experienced leader like Jennifer in this important role." (*www.weilerabrasives.com*)

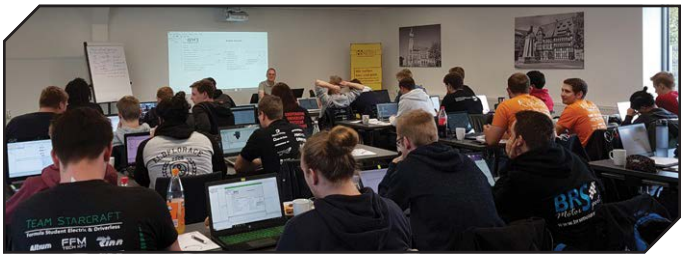
GWJ Technology

OFFERS CALCULATION WORKSHOP FOR FORMULA STUDENT TEAMS

At the end of October 2018, GWJ Technology, a provider of software solutions for gear and gearboxes, organized a workshop for the second time for Formula Student Teams addressing "Gear Calculation, Dimensioning and Optimization System Calculation."

Attracting attendees from more than 20 racing teams, the students enjoyed two insightful days of sharing knowledge, learning and networking. The first day kicked off with an introduction to gear calculation and the calculation software eAssistant. Basics for calculation and dimensioning of the geometry and the load capacity of cylindrical gears were the focus of the first workshop day.

Topics covered in this workshop included also planetary geartrains in addition to cylindrical gear pairs. The students received tips and tricks as well as optimization strategies. The theoretical basics were illustrated with examples and deepened with practical exercises. The second day was another concentrated day of learning which focused on system calculation using the eAssistant SystemManager to configure and calculate complex systems with just a few mouse clicks. This workshop provided attendees with a hands-on introduction to the SystemManager basics and the students got the idea of what they could do with the software.



The workshop included a series of practical exercises, especially multistage cylindrical gears as well as different forms of planetary geartrains. Advanced features such as the import and automatic meshing of housings and planet carrier were introduced following free-practice time at the end of the workshop. The workshop gave attendees the chance to work on their concrete transmission concepts and additional guidance was provided if needed. In 2019, GWJ Technology will continue its support of Formula Student Teams. (*www.gwj.de*)