DVS Group PRESENTS DVS DIGITAL

"Industry 4.0" is much more than a fashionable buzzword. The fusion of classic mechanical engineering and digital intelligence has long been a reality and changes everything.



With DVS Digital, the company is developing a digital platform, the expanded competencies and new forms of work in order to successfully continue on a path to becoming a synergetic solution provider. The DVS Group deals with the Internet of Things, with smart, self-learning machines, with new forms of organization and work in order to further promote flexibility, creativity and innovative strength.

With the DVS Digital walk in lab, an innovation space has already been created in which the company can develop new solutions with colleagues, customers, experts from the industrial and digital spheres.

DVS Digital creates a cloud-based, digital ecosystem, networks machines and productions, works with artificial intelligence and big data to create the all-important added value: future viability.

Topics include: DVS Edge, IoT and the Cloud, machine learning, service innovation and organization.

www.dvs-technology.com/dvs-digital

FVA and AVL

COLLABORATE ON VIRTUAL GEAR DESIGN SOFTWARETOOLS

FVA and AVL have announced they are joining forces to support their customers in developing virtual transmissions at the highest level. The transition to electric drives and increasing virtualization pose new challenges for drive technology companies on a daily basis.

"By combining the FVA-Workbench's proven design analysis capabilities with AVL's multiphysics simulation suite, we have created the most comprehensive gearbox analysis solution available on the market. We now cover the entire development process, from concept to calibration, with high-quality methods and models. Our cooperation with the AVL-Network allows us



to offer our leading products to customers around the world," Norbert Haefke, managing director, FVA GmbH.

FVA-Workbench:

- Leading calculation and simulation methods, based on more than 50 years of research
- Analytical and numerical methods are developed, analyzed, and validated in FVA research projects
- Modern user interface, which makes modeling easy and gives access to a wide range of engineering expertise

AVL Simulation Suite:

- EXCITE: Durability and NVH analysis based on fully flexible structural dynamics simulation
- PreonLab: Highly efficient lubrication analysis with particle based CFD
- FIRE M: Optimization of Performance, Efficiency and Thermal aspects of propulsion systems, based on multi-physics CFD
- CRUISE M: Virtual System Integration, Function Development and Calibration

New developments in these areas will be available as further technical details come into play.

www.fva-service.de/de/software/

Solar Atmospheres

RECEIVES NADCAP 24-MONTH MERIT STATUS

Solar Atmospheres announces that its Greenville, SC facility has been awarded Nadcap 24-month merit status for heat treating, brazing and carburizing. The organization is extremely pleased PRI has recognized Solar's adherence to strict specification



requirements, flawless process execution, and a daily commitment to quality processing which is evident among all employees at Solar Atmospheres.

All Solar Atmospheres facilities, Souderton, PA; Hermitage, PA; Fontana, CA and Greenville, SC have now earned Nadcap 24-month merit status demonstrating Solar's corporate commitment to quality.

"This is the goal that all Nadcap suppliers strive for, and it's not an easy task," states Steve Prout, president of the Solar Atmospheres Greenville, SC facility. "It truly is a team effort from the employees handling our customers' products while conducting the thermal processes and testing, to the post process compliance and review. Everything must be in order and completed without issue. Our team in Greenville, as well as all our other locations, are committed to top-tier heat treating services. This 24-month Nadcap accreditation award is evidence of our unwavering commitment."

www.solaratm.com

Felsomat USA

HOSTS OKTOBERFEST IN SCHAUMBURG, ILLINOIS

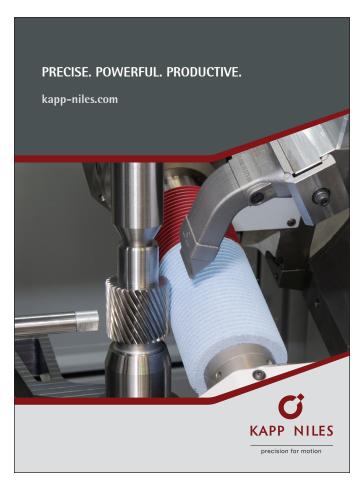
On Thursday, October 28, Felsomat offered delicious German beers, traditional tasty treats, and the opportunity to explore their innovative technologies in person.

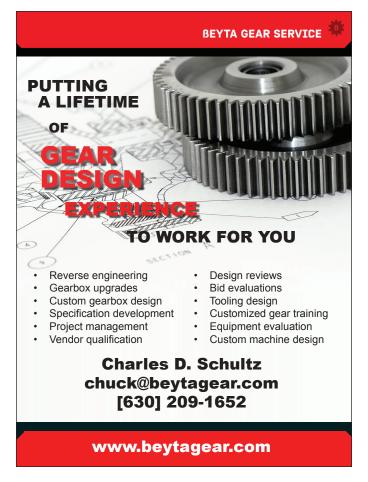


Felsomat prepared a schedule full of live machining demonstrations, exciting technology presentations, and networking opportunities. Two highlights of the open house included the FHC 180 Gear Hobbing machine and the Crankshaft Deburr System

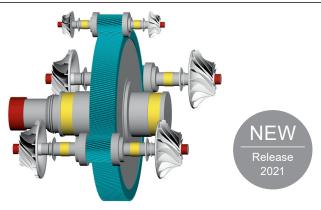
FHC 180 Gear Hobbing Machine

This complete system consists of a gear hobbing machine that includes gear chamfering and a load + unload automation system. The machine will load and unload parts automatically, and then when the hobbing is complete will automatically chamfer the gear and load the part onto alloys for heat treatment. Not only will this improve your processing times, but it will also improve part quality and minimizing clamping errors.





industry news



KISSsoft Features

- Bearing calculation with inner geometry in the "SKF Cloud"
- Collision check during honing and power
- Import possibility of cylindrical gear flank measurement grid
- System reliability at a glance with AGMA 6006-B20
- Compare variants of gear modifications

Free trial version at www.KISSsoft.com

KISSsoft AG/Gleason Sales

Phone (585) 494-2470

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Brian P. Stringer



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 mwgear@midwestgear.net

Crankshaft Deburr System

Deburring can be complicated, and precision during the process is essential. Ensure perfection with the innovative crankshaft deburr system from Felsomat. With this complete system, you'll be able to deburr all oil holes and cross holes in the crank with one system. This complete system will also allow you to chamfer the holes, includes robotic loading and unloading with precision location at the deburr station, allows for the attachment of a gear on the end of the crankshaft using heat stake operation, and the loading/unloading from dunnage while preventing damage to the crank.

www.felsomat.com

Klingelnberg

RELEASES LATEST ISSUE OF GEARS

In the eighth issue of its GEARS inline customer magazine, Klingelnberg presents the projects and developments it has advanced in recent months, with a special focus on trends and developments in renewable energy, particularly wind energy. An exclusive interview on this topic with Gary Gu, executive director the Asian gearbox manufacturer NGC Transmission Equipment, reveals some fascinating responses.



In addition to a range of solutions for wind energy, the current issue also includes customer reports. Mexican automobile manufacturer Transmisiones y Equipos Mecánicos S.A. de C.V. (TREMEC) reports on its experience with the Höfler Cylindrical Gear Generating Grinding Machine Speed Viper. The customer received an entire production system consisting of design software, new operating software and an innovative machine. TANDLER GmbH & Co. KG, which specializes in gears and transmissions, demonstrates the advantages of retrofitting and explains when it's worth it to overhaul a machine. Klingelnberg also introduces its latest machine development: With the Höfler Cylindrical Gear Roll Testing Machine R 300, Klingelnberg is introducing onto the market a machine that is designed for a compact, flexible, high-precision testing technology for 100-percent quality control of cylindrical gears.

Additional articles include: Gary Gu, executive director of the gearbox manufacturer NGC, and Prasad Kizhakel, chief sales officer of the Klingelnberg Group, discuss opportunities, trends, and technologies in wind. Dr. Hartmuth Müller, head

of technology and innovation, explains the history of wind turbine generators and highlights a range of concepts. Product showcases on the Precision Measuring Center P 152, Höfler Cylindrical Gear Roll Testing Machine R 300 and Speed Viper. Jan Greune, head of operations at Tandler, and Loïc de Vathaire, service manager, bevel gear technology at Klingelnberg, discuss the advantages of a machine retrofit.

To order the magazine, call +49 2192 81-0 or send an email to *marketing@klingelnberg.com* with "GEARS inline" in the subject line.

www.klingelnberg.com

STLE

CONTINUES TRIBOLOGY AND LUBRICATION PODCAST SERIES

The Society of Tribologists and Lubrication Engineers (STLE) — the technical society for individuals in the field of tribology and lubrication engineering — is pleased to announce the immediate availability of a new, free podcast titled "Potential Benefits of Tribochemistry."



The podcast features interviews with STLE board members, Kuldeep Mistry, Ph.D. (The Timken Company) and Nicolas Argibay, Ph.D. (Sandia National Laboratories), on how tribochemistry can help perfect motion through the reduction of friction and wear. Tribochemistry enables researchers to design machinery systems that leverage the interaction of specific lubricants with select metal surfaces under standard operating conditions, allowing manufacturers to maximize machine efficiencies and productivity.

The new episode is second in STLE's podcast series, "Perfecting Motion: Tribology and the Quest for Sustainability." The program is hosted by Neil Canter, Ph.D., STLE advisor, technical programs and services and Tribology and Lubrication Technology (TLT) writer, and covers several tribology and lubrication topics—including additive manufacturing, lubricant additives, nano-lubricants, nano-additives, lubricant testing, graphene and more.

"The benefits of tribology and lubrication in manufacturing are numerous," says Canter. "Not only can tribology enable advancements to extend component life in equipment, but it can also enable manufacturers to improve the quality and quantity of outputs and operate their equipment more safely."

STLE offers tribology and lubrication content in a variety of different formats—print, digital, video and now audio. To listen to STLE's new podcast or to access archived episodes, visit www.stle. org/podcast or follow "Perfecting Motion: Tribology and the Quest for Sustainability" on Spotify, Apple Podcasts and Google Podcasts and others to be notified when new episodes are released.

http://www.stle.org/podcast

United Grinding

PARTNERS WITH TITANS OF CNC FOR GRINDING EDUCATION

United Grinding has partnered with Titans of CNC, the well-known global manufacturing education provider, to support specialized education for precision grinding in the manufacturing industry.



The partnership includes the development of a grinding academy, designed to teach individuals new to the industry the basics of grinding in an easily digestible, digital format. United Grinding will launch a new website to support this partnership - titansofgrinding.com - and it will house a variety of information about the partnership. The site will also include a list of machines that Titans of CNC has utilized for training and production and serve as a source for all of the video content Titans of CNC has produced involving United Grinding machine technology.

According to Titan Gilroy, CEO and founder of Titans of CNC, his focus is on the development and delivery of high-level manufacturing education through the Titans of CNC Academy. With its free, online, video-based, step-by-step training system, Titans of CNC continues to provide answers to real manufacturing problems.

"My team and I are excited to officially partner with United Grinding to bring awareness and advanced grinding education to a worldwide audience," said Gilroy. "United Grinding has a great reputation in the industry due to the quality, performance, and versatility of their entire machine line-up. This is why we have chosen to develop the most advanced grinding curriculum in the world on the platform that is United Grinding."

Gilroy started Titans of CNC as a machine shop in Northern California that produced some of the most challenging components for the aerospace industry. From there, the shop progressed to a reality TV series recognized as a leading CNC educational platform among a global network of engineers, machinists, hobbyists, students and educators.

"Our motivation is the success of our customers. Our ambition is, therefore, to accompany our customers along their way and to provide our expertise as a strong and reliable partner to make them even better," stated Stephan Nell, CEO of the United

industry news

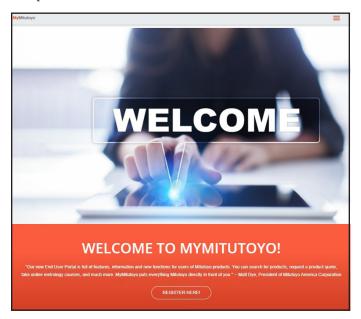
Grinding Group. "The need for trained machinists is greater now than ever, and in our new partnership with Titans of CNC, we are proud to recommit our efforts to building the next generation of young machinists."

Grinding.com

Mitutoyo America

LAUNCHES NEW WEBSITE/ DISTRIBUTOR PORTAL

Mitutoyo America Corporation has announced the launch of the new Mitutoyo website as well as MyMitutoyo, the new end user portal.



Mitutoyo.com has a brand new, updated look with better functionality and an improved user experience, making access to Mitutoyo products, services, and information faster and easier. Mitutoyo products on the new website are better connected to more robust technical specifications and product information for more useful, accurate product searches. This allows visitors to research and qualify Mitutoyo products and solutions for their needs more effectively.

The new Mitutoyo.com also better highlights the company's metrology services and solutions including calibrations, installation, and repairs, as well as enhanced and easier-to-navigate resource and education pages. Mitutoyo.com is also integrated with the new end user portal, MyMitutoyo, giving users the option to request a price quote, find a distributor or request more product information with a click of a button.

The Mitutoyo End User Portal, branded as MyMitutoyo, provides many new features and benefits for Mitutoyo customers, including the ability for customers to search for Mitutoyo products they want, put them in a cart and then generate a quote online to send to a distributor using the new Distributor Locator feature.

The Distributor Locator lists Mitutoyo distributors or Mitutoyo M³ Solutions Centers nearest the zip code a customer enters in their profile during free registration. The Distributor

Locator also can filter distributors for specific product groups, choose a preferred distributor, and send quotes to several different distributors if a customer chooses.

Mitutoyo customers can also register their Mitutoyo products to receive product-specific manuals, technical specifications, product use and maintenance videos, discounts, helpful hints and more.

Additionally, the End User Portal features a list of online metrology courses that offers registered users on-demand, selfpaced education, and training just like being in the classroom, but with more flexibility.

www.mitutoyo.com

API and Prosper Machine Tool

ANNOUNCE RESELLER, SUPPORT AGREEMENT

API has announced their partnership with Prosper Machine Tool, a family-owned machine tool distributor, to provide premium metrology services in Texas.

While some of the most essential work in Aerospace, Defense, and Oil & Gas manufacturing continues to expand throughout Texas, supply of critical dimensional metrology equipment and services often lags behind demand. To bring hands-on customer service to these underserved industries, API and Prosper Machine Tool are bringing together their application expertise, customer service, and world-class equipment.



API Metrology and Prosper offer a combined ten decades of dedicated experience in portable Laser Tracker metrology. This partnership unites API Metrology's state-of-the-art dimensional Metrology equipment, including Radian Laser Tracker Series and XD Laser Interferometer, and Prosper's history of solution-based metrology services. Prosper also offers a full parts and service department that handles installations, parts and any needed repairs.

www.apimetrology.com