Germany

OFFICIALLY RELEASES DIN ISO 1328-1:2018-3

Germany has officially released *DIN ISO 1328-1:2018-03*, and thereby has joined the United States, U.K., France and Japan in adopting *ISO 1328-1 Cylindrical gears — ISO system of flank tolerance classification — Part 1: Definitions and allowable values of deviations relevant to flanks of gear teeth*, without modification, as their national standard.

Now the gearing community has a single globally adopted standard for classification of gears by elemental measurements. This standard applies to gears from 5 to 1,000 teeth, diameters from 5 mm up to 15 meters, facewidths from 4 mm to 1.2 meters, normal modules from 0.5 to 70, and helix angles up to 45°. In other words, it applies to practically all cylindrical gears. Its stated goal is to provide "the gear manufacturer and the gear buyer with a mutually advantageous reference for uniform tolerances."

The last ISO TC60/WG2 meeting took place in Milan. Clockwise from the front of the doors are: Amir Aboutaleb (United States), John Rinaldo (United States), Heinz Roehr (DE, Germany), Ryohei Takeda (Japan), Michel Octrue (France), Elisabetta Fava (Italy), Michele Deni (Italy), Massimiliano Turci (Italy) and guest.

"From discussions with members of large companies (Siemens, ZF, Getrag) I got the impression that they really need and appreciate a new globally adopted standard. It makes the dialog between companies or branches of companies worldwide much easier if they can refer to the same rules and definitions. Otherwise there are always discussions about the interpretation of a parameter when the people are not familiar with it," said Heinz Roehr, a VDI committee member for the measurement of gears and gear drives, head of the DIN committee "Terminology and Tolerances," and a member of ISO/TC60 WG2 "Accuracy of Gears."

Formulas in the global standard are provided for:

- Single pitch tolerance, f_{pT}
- Total cumulative pitch (index) tolerance, F_{pT}
- Profile slope tolerance, $f_{H\alpha T}$
- Profile form tolerance, $f_{f\alpha T}$
- Total profile tolerance, $F_{\alpha T}$
- Helix slope tolerance, $f_{H\beta T}$
- Helix form tolerance, $f_{f\beta T}$
- Total helix tolerance, $F_{\beta T}$

There are also annexes covering runout, sector pitch deviation, adjacent pitch difference, and single flank composite testing. This standard not only provides formulas for tolerances, but also includes requirements on how the measured data is to be filtered and interpreted. In the past there was no guidance given on data filtering, and differences in filtering can result in different reported results. This latest edition of *ISO 1328-1*, along with the companion technical report *ISO/TR 10064-1*, should provide all those who measure gears with consistent results.

For the work on *ISO 1328-1:2013* it was very important that Roehr was also a member of VDI.

"Because we have VDI guidelines for the evaluation of modifications of segmented profiles and helices, I supplied the members of the committee with information about these strategies. So they found their way in *ISO 1328-1:2013* and have become an important part of the standard. It also helped that I took care that all definitions were absolutely precise without room for interpretation," Roehr added.

The group is currently working on a tolerance standard for the composite inspection of gears based on (ISO) 2015-2 as well as turning the AGMA 2002 Tooth Thickness Specification and Measurement into an ISO standard.

(*www.iso.org*)

Mahr

APPOINTS DON FOISY DIRECTOR OF OPERATIONS

Mahr Inc. recently announced that **Don Foisy** has been promoted to director of operations to support continued company growth. In his new position, Foisy will be responsible for overseeing the engineering, manufacturing, planning and facilities departments. With seven years of experience at Mahr, Foisy's strong managerial skills and mechanical engineering expertise will help to further enhance the company's standards of operational excellence and commitment to high quality.

"I look forward to the opportunity to work with our entire operations team as we strive to perfect our internal processes to help us meet our company's expanding goals," said Foisy. "We want to foster new ideas and innovative technologies to improve our efficiency in providing market-leading precision metrology solutions. Our focus will continue to be the delivery of high quality products, on-time to our customers to support their growing needs."

He joined the Mahr team in 2011 in the position of design engineering supervisor and was later promoted to engineering manager. With more than 17 years of industry experience, Foisy previously served as a mechanical engineer at John Crane and as a product engineering manager at Dresser-Masoneilan. He has a bachelor's degree in mechanical engineering from New England Institute of Technology. (*www.mahr.com*)

Röhm Products of America

OFFERS COMPREHENSIVE CHUCK REPAIR AND REBUILD SERVICES

To better serve its customers, Röhm Products of America has made significant investments in its ability to offer comprehensive chuck repair and rebuild services at its Suwanee, Georgia-based headquarters, as well as onsite at its customers' manufacturing facilities across the country. In doing so, the company creates a one-stop shop for all chuck service needs.

"When we moved to our new headquarters in 2015," said Adis Malkoć, manager of Röhm's Service Center. "We dedicated a lot of space for our service team, along with new 2-ton and 10-ton cranes for the biggest repair/rebuild jobs. With this investment, we've created a turnkey approach that has been very popular with our customers. We offer the quickest way for shops to install, maintain and repair their workholding devices."

Röhm's engineering staff possesses nearly 50 years of combined experience with the fixturing, equipment and processes necessary for the precision repair and rebuilding of even the largest sized chucks. These same service engineers also provide new customers with installation assistance along with guidance in proper product use and in the development of an optimal preventative maintenance schedule. They also conduct training sessions for products currently in use to keep operator skills and knowledge current.

"It's hard for shops to maintain the level of expertise our specialized team has," noted Service Engineer Doug Thompson. "But after our training, we can ensure that manufacturers have the know-how to keep fixtures in working order until they need to be sent back for periodic rebuilding."

The Röhm Service Center provides rebuild quotes and services that extend the life of valuable products. Most parts needed for these rebuild processes are in stock at the company's Georgia facility, though large, complex or custom fixtures may require parts from the company's German factory. These scheduled rebuilds can also identify worn parts before they fail completely, which results in significant savings for those manufacturers that take preventative maintenance seriously. (*www.rohm-products.com*)

Kitagawa North-Tech

ANNOUNCES NEW REGIONAL SALES MANAGER

Kitagawa North-Tech, Inc. recently announced that **Mike Johnston** has joined the company as regional sales manager. Mr. Johnston's sales territory for Kitagawa NorthTech will include Pennsylvania, Ohio and Indiana of the Great Lakes regions of the USA. He is supporting Kitagawa's offering of workholding which includes standard power chucks, advanced chucks, automated workholding (AJPS), engineered rotational and prismatic workholding solutions, turning and grinding line of steady rests, hydraulic cylinders, grippers and rotary tables.

Johnston will also sell and represent Kitagawa NorthTech's inhouse repair, rebuild and preventative maintenance services. Johnston adds, "Kitagawa NorthTech's Machine Tool accessories such as their Tri-Kote grease for lubricating power chucks and their digital grip force analyzer software and kit for measuring grip force are unique products that every machine shop should use for everyday chuck maintenance, as if you do not know your grip force you cannot optimize your machine tool to produce the maximum amount of parts safely."

Johnston will be servicing and supporting a wide range of customers for the company including: end-users, OEMs, machine tool distributors and cutting tool distributors for the Kitagawa workholding and chuck offering. With over 30 years of metalworking industry experience, Johnston has an extensive and broad background. Throughout his career in metalworking and machining, he has worked in several capacities including: CNC programming, design engineering, applications engineering, machine tool sales and accessories sales, as well as owned a machine shop focused on machining parts for the Medical industry. Most recently Johnston was a regional sales manager for workholding manufacturer ATS Systems.

Johnston resides in Euclid, Michigan and will be report out of Kitagawa NorthTech's headquarters and full-service manufacturing facility for the Americas based in Schaumburg, IL. The Kitagawa NorthTech facility features in-house design, engineering, manufacturing and repair services for workholding.

In addition, Kitagawa North-Tech, Inc. recently announced **Edward Borsos** has joined the company also as a regional sales manager. Borsos has over 30 years of machining and metalworking industry experience. He will be responsible for supporting and developing channel partners and end-users selling Kitagawa's standard chucks, advanced chucks and engineered rotational and prismatic workholding solutions. Borsos has extensive experience in automotive and oil and gas, as well as general turning and milling workholding applications.

Borsos began his career as a toolmaker and machinist and worked in various supervisory positions at metalworking machine shops and later transitioned into technical workholding sales for MSCI Industrial Supply. In his most recent position he worked in regional sales management for Rohm, German-based workholding company before joining Kitagawa NorthTech.

Borsos will help support and manage projects for the custom engineered solutions business. Kitagawa NorthTech's engineered workholding solutions are supported by an in-house applications engineering team committed to developing custom workholding for turning and prismatic applications. In addition to designing and engineering custom solutions, Kitagawa NorthTech utilizes their in-house design, manufacturing, inspection and testing facility to manufacturer, modify and test components and workholding systems for their customers.

Borsos resides in Waterford, Michigan and will be report out of Kitagawa NorthTech's headquarters and full-service manufacturing facility for the Americas based in Schaumburg, IL. Upon joining the company, Boros adds, "I am excited to join a company with such a rich history in workholding. Kitagawa has always been the gold standard of chucks in the workholding industry. In addition, Kitagawa NorthTech's custom engineered workholding capabilities offer customers superior part-specific machining solutions for turning and prismatic applications."

(*www.kitagawa.us*)