

# Mazak

## CONVERTS PLANT TO MTCONNECT PROTOCOL

As a first in the machine tool OEM industry, Mazak Corporation is converting its Florence, Kentucky, manufacturing plant over to the MTConnect open communications protocol. The transformation will allow Mazak to monitor its manufacturing equipment and gather valuable data that will be used to further improve manufacturing operations. These improvements, in turn, will ensure that Mazak customers are provided the advanced technology they need as quickly as possible to keep pace with today's increased manufacturing production demands.



In implementing the protocol into the Kentucky operations, Mazak continues its MTConnect leadership and demonstrates its commitment to the protocol as a powerful tool for all manufacturers to improve productivity, machine utilization and efficiency. Mazak has been an ardent supporter of MTConnect since its inception, offering all its machines with MTConnect compatibility. Currently, over 100 Mazak customers are at various stages of MTConnect integration within their own facilities involving approximately 300 machines within a wide range of model types.

"We continue to take a leadership position in propagating the MTConnect open protocol," said Brian Papke, president of Mazak Corporation. "MTConnect's value to our customers is in the ability for them to establish extensive and open channels of communication for plug-and-play interconnectivity between devices. MTConnect allows software to be universally applied between different types of machine models so that information is readily available for improving machine tool utilization. Using this capability, Mazak is taking another positive step in further increasing the productivity of our North American operations and ensuring the strong competitiveness of our Kentucky manufacturing."

With MTConnect, Mazak will initially monitor overall equipment efficiency. The company will also use MTConnect for several custom applications unique to its manufacturing opera-

tions. These applications include monitoring machine tool spindle sensors for valuable maintenance data, as well as tracking part cycle times to benefit the company's scheduling department. But most significant, MTConnect working with third-party software will make it possible for Mazak to incorporate the use of mobile apps as methods for monitoring its manufacturing in real time.

With these apps, Mazak managers and other key personnel will have access to live real-time data from equipment monitoring dashboards via mobile devices. Additionally, text and/or email alerts and notifications can be received instantaneously when certain manufacturing or equipment issues or conditions arise.

According to Neil Desrosiers, Mazak's developer of digital solutions, the full improvement potential resulting from MTConnect at the Kentucky plant will be achieved when the measurement data is collected and full potential machine tool utilization is realized in the factory. This data will then be made available for review to those attending Mazak's Discover 2013 event beginning October 8. By that time, most machines in the Kentucky factory will be able to be monitored via iPhones. "We want to demonstrate to our customers that they, too, can improve their productivity through MTConnect machine monitoring capability. Because when it comes to machine tool performance, you have to measure it before you can improve it," said Desrosiers.

## Star SU

### APPOINTS VICE PRESIDENT OF SALES

Star SU has appointed **Thomas Bell** as vice president of sales for its Cutting Tool division. Bell earned a Bachelor of Science in Marketing from Ferris State University and an MBA from Lake Forest Graduate School. He has extensive experience in sales, marketing and product management within the metalworking and steel industry. Bell was formerly the director of sales for Schmiedewerke Groditz's USA sales office. Groditz, located in Germany, is a large open-die forging company. Prior to his Groditz experience, he spent 19 years with specialty steel-maker Bohler Uddeholm, where he served as vice president of Cold Work Application & International Account Management. During his tenure, he gained experience in all facets of tool and die applications as well as concentration on specifier selling strategies, field sales management and distribution channel management. Bell has held various trade association committee positions within Precision Metalworking Association as well as membership to APMI, SME and MSCI.



# GKI

## ANNOUNCES MARKETING AGREEMENT WITH ESCOFIER

GKI Incorporated, Crystal Lake IL, and Escofier, Chalon-sur-Saône France, have announced a marketing agreement for Escofier's products in the U.S. Escofier specializes in cold rolling technology, including: gear burnishing, thread rolling, spline rolling, knurling and cold forming of finned tubes. The company's proprietary systems are used by companies like BMW, Ford, Hyundai, Mercedes Benz, Bosch and many others. GKI has specialized in metalworking products & services in the U.S. for 42 years, and is recognized for providing exceptional service to its customers throughout North America. With this partnership, GKI will provide support, service and spare parts for Escofier's customer base in the U.S. Escofier will be exhibiting their tooling and equipment at the EMO international manufacturing show in Hannover Germany, September 16-21 2013, Hall 9.

## Seco Tools

### INKS SPONSORSHIP DEAL WITH ANDRETTI AUTOSPORT

Seco Tools recently signed on as a technical and supplier sponsor of the Izod IndyCar Series championship racing team Andretti Autosport. The team led by racing legend Michael Andretti also competes in the Firestone Indy Lights, Pro Mazda Championship and Cooper Tires USF2000 Championship.



**ANDRETTI**  
AUTOSPORT

Seco is the latest to join an elite group of technical sponsors that includes leading machine tool company DMG/Mori Seiki USA. "We are excited to be affiliated with the legendary Andretti name that has grown and transcended the sport of auto racing over the past 50 years," said Kurt Nordlund, president of Seco Tools in North America. "Our partnership with Andretti Autosport is a natural fit as both of us uphold a winning tradition of performance excellence, and speed, precision and reliability are all key to success in our respective industries."

In addition to its new partnership with Andretti, Seco also works with vehicle-based organizations around the world that rely on the company's advanced cutting tool solutions to overcome tough machining challenges. Whether it involves helping a shop reduce costs on a cylinder head application or developing new ways to cut engine materials, Seco's advanced technologies, tools, strategies and component solutions help drive success within the automotive industry.

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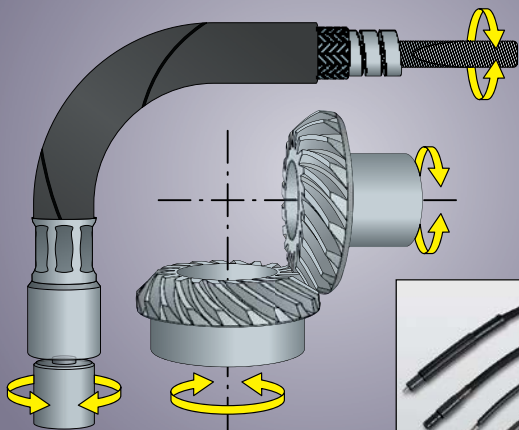
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## William Mark

RELEASES BOOK ON GEAR METROLOGY

*Performance-Based Gear Metrology: Kinematic-Transmission-Error Computation and Diagnosis*, written by William Mark, Ph.D., is a mathematically rigorous explanation of how manufacturing deviations and damage on the working surfaces of gear teeth cause transmission-error contributions to vibration excitations

Some gear-tooth working-surface manufacturing deviations of significant amplitude cause negligible vibration excitation and noise, yet others of minuscule amplitude are a source of significant vibration excitation and noise. Presently available computer-numerically-controlled dedicated gear metrology equipment can measure such error patterns on a gear in a few hours in sufficient detail to enable accurate computation and diagnosis of the resultant transmission-error vibration excitation. How to efficiently measure such working-surface deviations, compute from these measurements the resultant transmission-error vibration excitation, and diagnose the manufacturing source of the deviations, is the subject of this book.

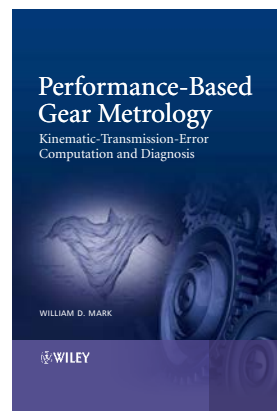
Use of the technology in this book will allow quality spot checks to be made on gears being manufactured in a production run, to avoid undesirable vibration or noise excitation by the manufactured gears. Furthermore, those working in academia and industry needing a full mathematical understanding of the relationships between tooth working-surface deviations and the vibration excitations caused by these deviations will find the book indispensable for applications pertaining to both gear-quality and gear-health monitoring.

Key features:

- Provides a very efficient method for measuring parallel-axis helical or spur gears in sufficient detail to enable accurate computation of transmission-error contributions from working-surface deviations, and algorithms required to carry out these computations, including examples.
- Provides algorithms for computing the working-surface deviations causing any user-identified tone, such as 'ghost tones,' or 'sidebands' of the tooth-meshing harmonics, enabling diagnosis of their manufacturing causes, including examples.
- Provides explanations of all harmonics observed in gear-caused vibration and noise spectra.
- Enables generation of three-dimensional displays and detailed numerical descriptions of all measured and computed working-surface deviations, including examples.

The book is currently available from Amazon.

Mark is senior scientist applied research laboratory and professor emeritus of acoustics at The Pennsylvania State University.



# GMTA

## ANNOUNCES RENOVATIONS AND PERSONNEL CHANGES

German Machine Tools of America (GMTA) represents various top-quality German metalworking machine builders, including Profilator, Pittler, Praewema and WMZ. These machines are sold to the North American market by GMTA primarily for gear and spline production, as well as other power transmission applications. The company's target markets include automotive, off-highway, OCTG and other heavy equipment manufacturing. Machines are provided for gear honing, gear grinding, Scudding, polygon milling, turning, gear tooth pointing and multiple machining operations.

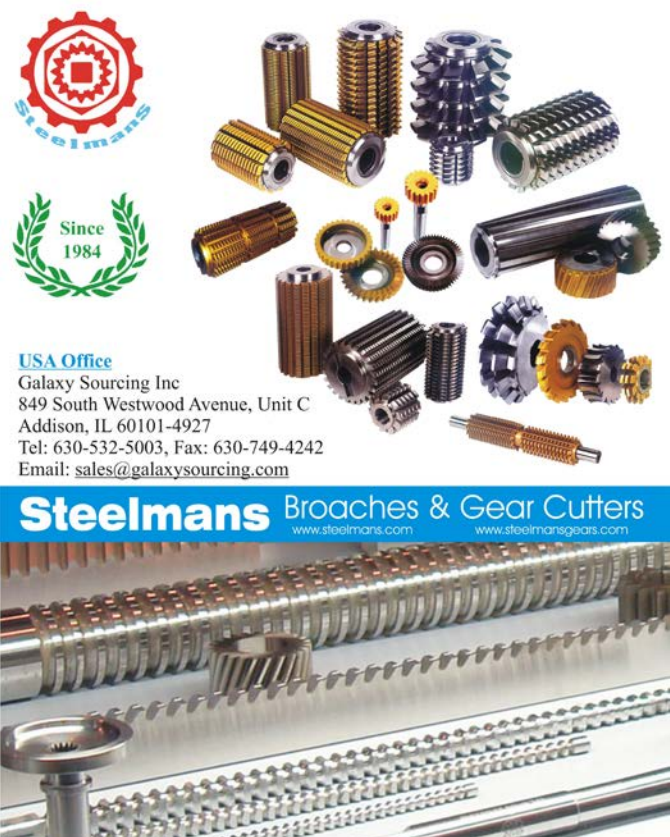
The renovation of the GMTA facility in Ann Arbor, Michigan is now complete with plans in the works for future expansion of the campus. Additional floorspace, showroom capacity and training facilities, plus more personnel, are planned, according to company VP Scott Knoy. In that regard, two personnel announcements were made by GMTA company President Walter Friedrich on August 1. **Doug VanDeven** is now GMTA parts manager and **Shawn Wilkin** is now GMTA service manager. As Friedrich remarked, "These two positions are essential parts of our business, as they reflect our company's image to our customers."



# Sandvik Coromant

## APPOINTS VP MARKETING AND COMMUNICATION

**Björn Roodzant** has been appointed vice president marketing and communication at Sandvik Coromant. He takes over from Jessica Alm, who recently became executive vice president and head of group communications at the Sandvik Group. Roodzant most recently served as senior manager of Global Web, Mobility and E-marketing at Sandvik Coromant. Prior to that, he was director of communications, Sandvik Coromant U.S., based in Fair Lawn, New Jersey, where he drove U.S. marketing operations, including communications, public relations and online marketing.

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