

AGMA

923 REVISIONS EXPECTED IN Q3

According to Dr. Carl Ribaud, Chairman of the AGMA Metallurgy and Materials Committee, the next edition of the widely used and referenced AGMA 923 Information Sheet is expected for publication by the third quarter of 2021. The revision is the first major update since the first edition was published in 2000. The Committee is currently working through its second draft of review and comments. The title of the Information Sheet has been expanded to “Metallurgical Specifications for Steel and Cast-Iron Gearing” to reflect first-time guidance on gray iron, ductile iron, and austempered ductile iron materials.

The definitions section has been thoroughly reviewed to provide greater clarity and accessibility. For example, all terms related to hardness, such as core hardness, continue to be listed individually, but the definitions now appear under a single heading.

In the procedures section, both methods and references have been updated. The reduction ratio calculation methodology has been expanded with new figures that illustrate several common metal conversion sequences including closed die forging and ring rolling.

- Significant changes were made to the tables of metallurgical characteristics in the document:
- Requirements now appear in the order of processing
- Chemistry and cleanliness requirements have been revised to reflect current processing capabilities and field experiences.
- The footnotes have been reworded and renumbered for uniformity.

It should be noted here that this revision project would not have been possible without the active participation, collaboration and contributions of U.S. as well as international gear manufacturers, steel suppliers, forge shops, heat treaters, testing and certification firms and many others.

And finally, when published, the new edition will be more closely aligned with the current edition of ISO 6336-5. AGMA Metallurgy & Materials committee members actively participated in the development of the ISO standard's development, adds Dr. Ribaud, who is also the U.S. delegate representing the metallurgical and materials interests of the U.S. gearing industry on the ISO TC 60/ WG 14.

www.agma.org

EMAG Group

ACQUIRES SAMPUTENSILI MACHINE TOOLS AND SAMPUTENSILI CLC

The acquisition of Samputensili Machine Tools and Samputensili CLC by the EMAG Group - including the 87 employees across two sites near Bologna and Reggio Emilia, Italy - took place on February 3, 2021. The two companies will be legally integrated into the newly founded EMAG technology company, EMAG SU Srl. Over time, the plan is for the two plants of Samputensili Machine Tools and Samputensili CLC to physically merge, with a shared location near Bologna, Italy. The new company is aiming to reach 35 million euros in sales by 2025.



EMAG has decades of experience in an extremely diverse range of technologies and applications. The machine builder from southern Germany controls the entire process chain from soft to hard machining—a key factor in its ability to successfully manufacture individual production solutions and complete production systems. With the acquisition of Samputensili Machine Tools and Samputensili CLC, EMAG is systematically expanding its scope of technology by adding a range of gear production processes: shaving, gear shaping, tooth flank grinding as well as profile grinding and generating grinding. These methods perfectly supplement EMAG's existing portfolio, which already includes hobbing, chamfering and deburring. The benefits of this addition are bigger than just the individual technologies, it shapes EMAG's entire mechanical engineering process by making new, holistic production solutions possible. These include everything from the first turning and gear cutting operations on a blank, to the grinding of diverse shoulders, and even the final tooth flank grinding step—the latter with Samputensili technology.

By acquiring Samputensili Machine Tools and Samputensili CLC, EMAG is not only expanding its technologies, but also its customer base. This is because the technology of the Italian machine manufacturers is also used in the production of pumps and compressors, as well as components for wind turbines, aerospace applications, shipbuilding, industrial transmissions and agricultural machinery.

“The powertrain electrification in automotive engineering increases the quality requirements for gears in terms of mechanical load, accuracy and noise emission. The hard fine machining of gears plays a decisive role here,” explains Achim Feinauer, CTO of the EMAG Group. “We are also striving to highlight our extensive process expertise in the non-automotive industries. The networking opportunities for our sales department within Samputensili’s customer industries provides us with a really great opportunity to do that.”

Win-Win for Both Companies

Samputensili Machine Tools technology is in high demand all over the world, in industries ranging from aerospace, automotive, shipbuilding and more. These industries profit from the expertise and experience that the Italian machine manufacturer has in gear machining. Within these industries, high-precision grinding, shaping, and shaving machines are used, and few companies can match the wide variety offered by Samputensili. With this background, and wide-ranging level of experience, Samputensili has an excellence chance of continuing its success within the market. This is even more true because each of these industries is undergoing technological transformations, while still striving to stay competitive on a global level. These changes require very specialized mechanical engineering, with many users requiring increasingly powerful production solutions that reduce costs per unit, while also meeting growing demands on component quality, within the micrometer range. In this area, Samputensili will profit from the global reach of the EMAG Group. The South German machine manufacturer handles the global distribution of machines, laying the foundation for a successful future, by supplementing and expanding existing sales and service structures within Samputensili.

When it comes to application areas for certain EMAG technologies, customer consulting is vital. “Most markets and industries are very tight-knit and having a presence close by to provide advice and support for individual questions or concerns is critical. With EMAG’s global sales and service organization, we are guaranteeing that. We have set a goal for ourselves to open up new application areas for EMAG SU, and are focused on continued growth,” says Markus Heßbrüggen, CEO of EMAG GmbH & Co. KG. Additionally, the companies are combining their production network: In the future, various subassemblies, and parts for Samputensili machines will be manufactured at EMAG’s production site in Zerbst — one of the most sophisticated tool factories in Europe. The final assembly of machines will remain in northern Italy. With this system, many Samputensili solutions will be completed faster, and more efficiently.

www.emag.com
www.samputensili.com

Star Cutter ANNOUNCES NEW SERVICE MANAGER

Star Cutter Company has promoted **Bradley Cooper** to service manager at its Elk Rapids, Mich., location, responsible for the Star brand CNC tool and cutter grinders. Cooper will be responsible for managing and developing service group offerings, enhancing customer communication, order processing procedures and project management, and supervising the service team.



Cooper was previously the production supervisor at the Elk Rapids facility, providing him with a strong background knowledge of the company’s CNC equipment and customer base. Prior to joining Star Cutter Company, he was plant manager for Inphastos and an electronics production supervisor for Microline Technology Corporation, both located in Traverse City.

Before entering the private sector, Cooper served as a United States Marine where he was an electro-optical ordinance technician for TOW/SABER missile guiding systems, night vision and thermal sights for the US Military where he received the Navy and Marine Corps Achievement Medal.

He has a bachelor of science degree in business and organizational leadership from Arizona State University. In addition to this education, he is a certified ABB US420 Programmer, and CIT (Association Connecting Electronics Industries) trainer.

www.starcutter.com

MHI ANNOUNCES NAKAMURA TO REPLACE KAWAGUCHI

After nearly six years, Atsuhiko Kawaguchi, general manager of Mitsubishi Heavy Industries America, Inc.’s Machine Tool Division, will rotate back to Japan. Filling the newly created role of president is Katsunori Nakamura.



Nakamura has served numerous roles for Mitsubishi, most recently leading the cutting tool division in Ritto, Japan. Nakamura stated, “We will work together to ensure a smooth transition and maintain the USA Machine Tool Division to be in a strong position for the sustainable growth, smooth operations and profitability, all with keeping our concept of ‘Legendary Reliability’ for the future.”

In other personnel actions, Neil Sawyer has been promoted to senior vice president — service and administration. Sawyer, with over 20 years with Mitsubishi, will take on more duties including development of suitable organization structure and strategic planning for the future needs of MTD.

The Machine Tool Division in Wixom, MI, provides service, support and sales for Mitsubishi Heavy Industries machine tools. These include gear hobbers, shapers, shavers, gear grinders, as well as large machines such as the MVR-Ex double column milling machine.

www.mitsubishigearcenter.com

Marposs

ANNOUNCES INTERACTIVE VIRTUAL SHOWROOM FOR E-MOBILITY SOLUTIONS

Marposs has launched a new virtual and interactive showroom that highlights its solutions for the gauging, inspection and testing of components manufactured for the electric vehicle market. Upon visiting the URL at www.marposs.com/vs/ev/index.htm, visitors press an arrow to enter the virtual



showroom where they can use the 360° navigation tool to view content, which is divided into two areas — Electric Drive Units and Battery+Fuel Cells. From there, information is available on:

- Functional testing of stators (electrical discharge)
- Dynamic dimensional gauging of rotors (contact electronic)
- Dimensional gauging of hairpins
- Dimensional gauging of gears
- Inline gauging stations for magnet wire (laser technology)
- Inline gauging of film thickness (confocal technology)
- Thickness measurement of pouch welding (interferometric technology)
- Flexible dimensional gauging of rotors (optical and contact technology)
- Leak testing stations for the cooling jacket, battery pack, battery cell and PEM bi-polar plate (helium and air); and
- Automated assembly solutions for quality assurance

The navigation tool enables users to click on they solution

they are interested in and see a video and other supporting documentation on that particular technology. General information on the Marposs Corporation is also available.

Said Matteo Zoin, Marposs market development manager, “Many of the solutions we are known for within powertrain quality assurance can be applied to electric vehicles. Plus, we have made strategic acquisitions within this area, positioning Marposs as a comprehensive solution provider within the e-mobility sector.”

www.marposs.com/vs/ev/index.htm

FANUC and Rockwell Automation

FORM COALITION TO ADDRESS MANUFACTURING SKILLS GAP

FANUC America and Rockwell Automation officially formed a coalition to kick off accelerated work and learn apprenticeship programs designed to upskill current and future workers for jobs in advanced manufacturing, robotics and automation.



The coalition includes APT, a FANUC and Rockwell Automation systems integrator, and NOCTI Business Solutions, which provides independent assessments of occupational standards and validation using recognized International Organization for Standardization (ISO) process validation methods. Franklin Apprenticeships is also a key partner of the coalition, ensuring apprenticeship support structure and success enablers for employers and apprentices.

The coalition has developed new apprenticeship programs offering people opportunities to gain credentials that include fundamental robotics (Robot Operator) and automation (PLC Operator). The program offers a second level of credentials for Robot and PLC Technicians. A third credentialing level called Integration Specialist builds on the fundamental and technical skills that teaches people to operate and troubleshoot integrated FANUC-Rockwell Automation technologies. All of the new apprenticeship offerings will provide more people with fulfilling careers and help companies to bridge the demand for skilled workers.

“Our number one goal is to help create a worker pipeline that will not only help people increase their skills and future earning potential, but to help manufacturers achieve their production goals and maintain a thriving economy,” said Paul Aiello, director of education, FANUC America. “In most cases, current and future workers can complete the apprenticeship skills training

and achieve their industry-recognized certifications in less than one year. It's also important to note that these programs support all types of apprenticeship and certification models, including pre-apprenticeships."

"As industry adopts new technologies, it is vital to be able to quickly adapt with a well-trained workforce," said Michael Cook, director global academic organization, Rockwell Automation. "Having the most current standards will drive manufacturing competitiveness and simultaneously grow new talent to these new occupations, upskill current employees, and allow companies to be more agile in their workforce planning."

The apprenticeship programs aim to help companies rapidly upskill employees at every level from Operator to Technician to Integration System Specialist. In addition to improving the skills of current production workers, these programs will be extremely valuable for engineers who are working to implement new automation systems and processes that require new employees trained in the latest automation technologies.

"As technology advances at a fast pace, it is important that companies play a bigger role in education to ensure a safe, productive and sustainable work environment," said Aiello. "FANUC and our coalition look forward to helping as many people as possible take advantage of these accelerated work and apprenticeship programs."

Over 40 leading companies, including Dana, Magna, Tyson Foods and Flex-N-Gate, have agreed to support and participate in apprenticeships for automation technologies, ensuring that their employees receive adequate training and are qualified to succeed.

Industry leaders FANUC and Rockwell Automation have worked together over the past decade developing training, certifications and an education and training delivery network. FANUC's network of educational partners includes more than 1,200 high school and post-secondary FANUC-certified training organizations, and over 150 university and career technical training partners associated with this industry team. FANUC's network of schools coupled with Rockwell Automation's education partners represent nearly 1,600 schools, the largest nationwide collaboration of industry and education working to narrow the skills gap.

www.fanucamerica.com

Verisurf Software

APPOINTS BAER REGIONAL SALES
MANAGER

Verisurf Software has appointed **Milton 'Milt' Baer** to the position of regional sales manager, North East. In his new role, Baer will assist current customers and help develop new opportunities by identifying and solving measurement, inspection, reverse engineering, and tool-building challenges across all manufacturing segments.



"We are happy to have Milt as part of our team leading the North East Region. His customer focused approach and experience in selling engineering solutions will prove valuable to our customers and partners alike," said Pat Bass, director of sales for Verisurf.

Baer has been directly involved in sales management, marketing, manufacturing, training, and customer service for more than 27-years. He has spent the last 10-years applying his experience to consult, sell, and support engineering software solutions to customers throughout the North East region.

Baer completed his undergraduate studies at Penn State University and earned his bachelor of arts degree in business administration from the University of Pittsburgh.

www.verisurf.com

APMI International NAMES 2021 FELLOW

APMI International's most prestigious award recognizes APMI members for their significant contributions to the goals, purpose, and mission of the organization as well as for a high level of expertise in the technology, practice, or business of the industry. The 2021 Fellow Award recipient will receive elevation to Fellow status at

PowderMet2021, during the Opening General Session on Monday, June 21, in Orlando. The 2021 recipient is **Cynthia Freeby**, regional sales manager, Ametek Specialty Metal Products.

During her 40 plus year PM industry career, Cindy has been dedicated to the advancement of the PM industry. She co-chaired the annual MPIF PM/87 technical conference and served on many boards and committees. She is the only person to have chaired three APMI chapters, Philadelphia, Dayton, and Michigan, after holding numerous officer positions within each Chapter. She received the MPIF Distinguished Service to PM Award in 2005, as well as the ASTM Distinguished Service Award in 2019 for her work in developing PM standards.

Established in 1998, the Fellow Award recognizes APMI members for their significant contributions to the society and high level of expertise in the technology of powder metallurgy, practice, or business of the PM industry. Fellows are elected through their professional, technical, and scientific achievements; continuing professional growth and development; mentoring/outreach; and contributions to APMI International committees.

www.apmiinternational.org

