

# Eaton

## IMPLEMENTS 3D METAL PRINTING PROGRAM

Eaton has announced its Vehicle Group is implementing a new 3D metal printing program as a part of its Industry 4.0 strategy to reduce development time and improve efficiency. The first metal printer system was installed at the Kings Mountain, N.C., facility, and a global deployment of 3D polymer printing technology is slated to be completed by first-quarter 2021.

The 3D printers are being utilized to create high-quality fixtures, safety devices, automation grippers for assembly and handling, and maintenance components requiring replacement. Prototype development is following the same strategy to support faster product development trials and improve efficiency.



### Improving output and efficiency

To speed up the design process, scanners are used to create 3D models of existing components. This process allows components to be reverse-engineered to better leverage 3D printing capabilities, including changing component design to use less material, the addition of different topography elements or consolidating multiple components into a single part.

As an increasing number of 3D printers are deployed across the globe, Eaton's Vehicle Group has been realizing further operational improvements including lead-time reduction and cost savings.

The 3D printing technology adds material only where it is needed and allows more advanced designs to be developed. Together, these two factors reduce the amount of post-processing operations needed while reducing material cost.

### A closer look at 3D printing

The process to print metal parts and components begins with powdered metal stored in a rod and held together by wax and a polymer binder. Similar to extrusion, the metal is melted, and the 3D printer begins to add layer after layer, based on its programmed schematics.

Once the printing process is complete, the part or component is run through a chemical bath to remove most of the polymer

binder. The part then goes through a furnace to remove the remaining wax and polymer, and to fuse the metal material in a high-density structure. Depending on what the printed part or component is to be used for and which material it was printed with, an additional heat treatment process can be performed to increase part strength even further.

The total lead time to get a component printed depends on several criteria, including the size and intricacy of the part. Depending on the part or component design and required tolerances, it also can undergo post-processing. The debinding operation and heat treatment are done in batches, with several different components going through these processes together while the next components are being printed. Although the printer, debinding and furnace work in an integrated loop, there is flexibility to increase the number of printers without having to duplicate either the debinding or furnace.

Going forward, the Vehicle Group's 3D printing capabilities will be used to further reduce production time and drive efficiency. Learn more about the Vehicle Group's Industry 4.0 technologies and benefits. ([www.eaton.com](http://www.eaton.com))

# Helios Gear Products

## IMPROVES SUPPORT WITH NEW SERVICE ENGINEER

Helios Gear Products proudly announces the addition of **Jack Jaeger** in the position of service engineer. Gear manufacturers will benefit from Jaeger's experience and technical aptitude. Said Adam Gimpert, president of Helios: "Jack significantly boosts Helios's ability to support gear manufacturers with his unique ability to troubleshoot and solve technical machine problems on-the-spot. With Jack on the team, Helios continues its dedication to personal and professional customer service."



Jaeger launched his career from a background in construction and carpentry into precision gear manufacturing as a machine operator on Koepfer hobbing equipment. (This experience particularly helps Helios support its 300+ Koepfer machine installations.) His formal education includes a degree from Waukesha County Technical College as an Industrial Maintenance Technician. While in school, Jaeger earned multiple scholarships from the AGMA (American Gear Manufacturers Association) Foundation, the mikeroweWORKS Work Ethic Scholarship, and the Nuts, Bolts & Thingamajigs Foundation. Before joining the Helios team, Jaeger applied his education servicing printing press equipment.

As part of the Helios service group, Jaeger adeptly covers several duties. These include machine rebuilding, recontrolling, and reconditioning; machine installations; customer service; and mechanical troubleshooting. Jaeger joined Helios in 2018 and has already solved many machine challenges,

such as hob head rebuilds, recasting hobbing machine ways, and the mechanical reconstruction of a complete hobbing machine. Helios customers are better supported today because of Jaeger's additional experience on Koepfer, K-Repowered, KFS, and Hera machines. Said Troy Kutz, service manager for Helios: "Jack has really added value to our team, and this helps Helios service gear manufacturers better than ever. With him onboard, our customers are confident they will remain productive through thick and thin." ([heliosgearproducts.com](http://heliosgearproducts.com))

## Index

### NAMES NEW PRESIDENT AND CEO

Index has named **Cris Taylor** as the new president and CEO of Index Corporation, effective January 1, 2021. Taylor will be taking over for Tom Clark, who has announced his retirement at the end of 2020. Taylor will be joining the Index Group in October to ensure a seamless transition for the organization and its customers.

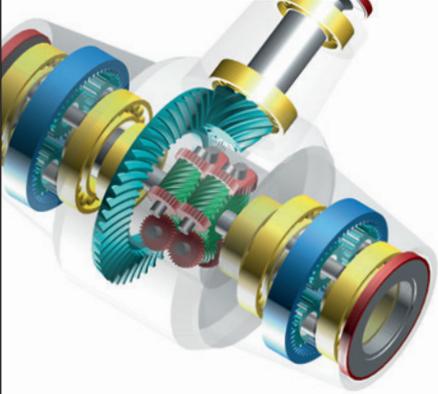


Taylor has over 30 years of experience in the machine tool industry, both in Europe and the United States. Having grown up in the United Kingdom, Taylor spent most of his working career in Germany. This includes 27 years at Chiron, where he held positions of increasing responsibility. He established the Chiron UK's sales and service and engineering operations, then built Chiron's used machinery division in Germany. Taylor spent five years with Chiron America in Charlotte, NC and, most recently, served for eight years as managing director of Stama, Chiron's sister company.

"Cris brings to Index Corporation international sales and service experience combined with a long career working in Germany, which will greatly benefit our operations in North America," said Clark. "When one leaves a leadership position, you always hope to transition to someone who can build on previous accomplishments and continue to grow the organization. Cris will be a great addition to the Index team."

Clark's mandate four years ago was to pursue aggressive growth within the North American market. Under his leadership, Index revitalized its distribution network, grew its service and applications capabilities, expanded the team in North America and achieved record sales in 2018 and 2019. ([www.index-usa.com](http://www.index-usa.com))





### KISSsoft Highlights

- Rainflow method for load data analysis
- Reliability evaluation with AGMA 6006, VDMA 23904 and Bertsche
- Revised tooth root and flank rating according to ISO 6336:2019
- Scripting language for automation and extension of calculations
- Gearbox data exchange with REXS

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### PUTTING A LIFETIME OF GEAR DESIGN EXPERIENCE TO WORK FOR YOU

<ul style="list-style-type: none"> <li>• Reverse engineering</li> <li>• Gearbox upgrades</li> <li>• Custom gearbox design</li> <li>• Specification development</li> <li>• Project management</li> <li>• Vendor qualification</li> </ul>	<ul style="list-style-type: none"> <li>• Design reviews</li> <li>• Bid evaluations</li> <li>• Tooling design</li> <li>• Customized gear training</li> <li>• Equipment evaluation</li> <li>• Custom machine design</li> </ul>
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## Klingelberg Mexico CELEBRATES 20-YEAR ANNIVERSARY

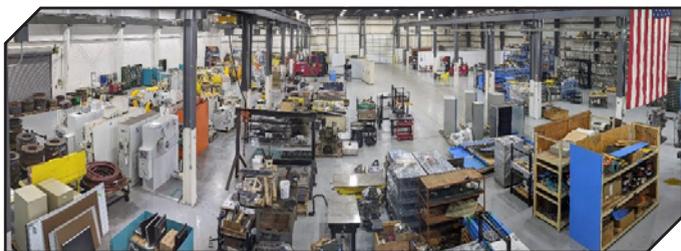
On November 1, 2020, Klingelberg México, S.A. de C.V. celebrated a milestone anniversary. For 20 years, Klingelberg has been offering distribution services and individual technical service at its Mexico location in Querétaro City. Since it was established in 2000, the Mexican branch office has undergone continuous development.

The Grinding Service Center, which commenced operations in 2011, is yet another component of the company's commitment to meeting the growing customer requirements locally. State-of-the-art tool adjusting and measuring devices guarantee an optimum workflow, from servicing and repairing the tool to

use in the machine tool. To enable efficient, trouble-free production of drive components for our customers, Klingelberg offers a broad portfolio in a Closed Loop process. The company is therefore able to ensure optimal grinding results for quality assurance on the shop floor.

Managing Director Adrián Hernandez extended a warm thank you to all customers, business partners, and colleagues: "I wish to thank my colleagues in particular, who have been delivering superb service to our Mexican customers from the very start." ([www.klingelberg.com](http://www.klingelberg.com))

## C&B Machinery MOVES TO NEW MANUFACTURING FACILITY



C&B Machinery has moved to a new manufacturing facility located in New Hudson, Michigan. The company now has more than 26,000 sq. ft. of manufacturing space to provide customers with the highest quality of precision grinding machines in today's global market. C&B Machinery designs and builds custom grinding solutions. All mechanical and controls engineering is done in-house. They can build a custom integrated grinding machine cell, update and rebuild existing machines, supply a used machine from the company's extensive inventory, or serve as an accessory and spare parts supplier for machines. ([www.cbmachinery.com](http://www.cbmachinery.com))

## Big Kaiser ANNOUNCES NEW PRESIDENT/CHIEF OPERATING OFFICER

Big Kaiser Precision Tooling has announced the promotion of **Jack Burley** to president/chief operating officer as of January 1, 2021. Chris Kaiser, Big Kaiser president and CEO of 30 years, will take on the role of executive advisor.

"Jack has been my right hand in this company from the very beginning," said Kaiser. "He's shown his leadership in managing the sales and engineering teams and has made many significant contributions to Big Kaiser including new product designs and development. He's more than ready and deserving of this promotion."

Burley began his career with Big Kaiser more than 30 years ago and is currently vice president, sales and engineering. Burley is a U.S. Marine veteran and earned his degree in mechanical engineering from State University of New York at Alfred. As president/COO of the North American operations for Big Kaiser, Burley will continue to hold his seat on the board



of directors for Big Kaiser.

"I am very honored and excited about my new position with Big Kaiser, and truly grateful to the executive management at Big Daishowa and to Chris for placing their trust and confidence in me to lead the company," said Burley. ([www.us.bigkaiser.com](http://www.us.bigkaiser.com))

## MHI

### HIRES NEW VICE PRESIDENT OF SALES

Mitsubishi Heavy Industries America is pleased to announce and welcome **J. Scott Knoy** as the new vice president of sales for the Wixom, Michigan based Machine Tool Division. Knoy will be responsible for sales team leadership, driving revenue, strategic planning and marketing, as well as management responsibilities.



Knoy brings 26 years of experience in the gear machine and tooling industry. His career includes 12 years with the Gleason-Pfauter organization working as a regional sales manager in both the tooling and machinery sales groups and 14 years with GMTA (American-Wera) where he served as the vice president of sales, vice president and president.

"Scott has an impressive background in sales and executive management within the gear machine industry," says Atsuhiro Kawaguchi, general manager of the Mitsubishi Machine Tool Division. "Scott will aggressively lead our sales team and I believe with his leadership we will overcome this unforeseen market condition."

Knoy who resides in Howell, MI is married (Holly) and has 2 adult children (Kelsey, Karlyn). His education includes an MBA from Lawrence Technological University as well as a bachelor degree from the University of Michigan in Ann Arbor. Additionally, Knoy served as a combat engineering officer in the U.S. Army Reserve for 10 years.

He will be replacing long standing Senior Vice President Tom Kelly. Kelly began his career in the machine tool business in 1987 when he started selling Mitsubishi Machine Tools for a local dealer. Two years later, he joined Mitsubishi International Corporation (the importer for MHI). After more than ten years of local success, he approached Mitsubishi Heavy Industries America with a proposal to eliminate the existing dealer network and take over all sales and service responsibilities for North America. Tom will be retiring at the end of December, and will move with his wife Cayce to their home in North Carolina. ([www.mitsubishigearcenter.com](http://www.mitsubishigearcenter.com))

# Spiral Bevel Gears

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## You Have Questions. We Have Answers.

Gear Technology's "Ask the Expert" column has been one of our most popular features over the years. But our experts are getting bored and lonely! Give us some questions, and we'll help you get the answers you need, while educating the gear industry at large! We're looking for your technical questions on gear design, manufacturing, inspection and use. And just like when you were in school, there are no dumb questions!

[www.geartechnology.com/  
asktheexpert.php](http://www.geartechnology.com/asktheexpert.php)

# Solar Atmospheres

## SOUTH CAROLINA FACILITY NUCLEAR APPROVED

Solar Atmospheres, Greenville, SC facility was recently approved to NQA-1, 10CFR50 Appendix B, and 10CFR21. These standards represent the nuclear power industry's requirements for quality operating systems within the supply chain. Additionally, the approval allows Solar to eliminate our customer's need within the Nuclear Industry to provide ongoing oversight of heat treatments.



Site Quality Manager and NQA-1 Lead Auditor Kevin Cyrulik states, "With this progression from Commercial Grade Supplier to externally approved NQA-1 Supplier, Solar continues to show its dedication and commitment to unmatched quality and product safety."

Steve Prout, Solar Atmospheres Southeast President states, "At a time when the entire manufacturing world is facing unprecedented operational challenges, Solar is thrilled to be able to support our customers with an opportunity to streamline their processes, saving them time and money."

([www.solaratm.com](http://www.solaratm.com))

# Marposs

## ANNOUNCES REMOTE VIDEO CONFERENCE AND ACCEPTANCE SERVICE

Marposs has announced its real-time Remote Testing and Acceptance Service. Marposs is enabling customers to participate in live testing, review and acceptance of their machines/gauges/applications without having to travel, enabling work to continue in an efficient manner while saving time and money.

"The manufacturing industry is often criticized for a lack of modernization. With the pandemic preventing the ability to meet in-person, companies must adopt new technologies," commented Matteo Zoin, Marposs, head of marketing and new market development. "We are living in a challenging time and to stay competitive requires aggressively moving into the digital space."

Tests for North American customers are run at Marposs' Technology Labs in Auburn Hills MI, Fremont CA, or at



HQs in Europe. The sessions livestreamed through the Zoom Conference platform are supported by video cameras and wireless equipment to ensure a highly detailed and accurate experience. Customers can provide immediate feedback and any requested alterations can be made in real-time.

Marposs has produced a video on this service to provide potential users a better understanding of the experience.

([youtu.be/gUrSurWUNno](https://youtu.be/gUrSurWUNno))

# Siemens Digital Industries Software

## EXPANDS ADDITIVE MANUFACTURING ECOSYSTEM

Siemens Digital Industries Software is expanding its ecosystem for industrial additive manufacturing (AM) through partnerships with Morf3D, Sintavia and Evolve Additive Solutions. Through these new partnerships, Siemens is adding support for new methods of AM production, further strengthening Siemens' end-to-end solution for industrialized additive manufacturing as part of its Xcelerator portfolio of software and services.

"Over the past year, through acquisitions and technology advancements, the launch of the

new Siemens Additive Manufacturing Network

and these relationships, we have continued to expand

our ecosystem for additive manufacturing, which will

help us enable all our customers to be

successful adopting industrialized additive manufacturing," said

Aaron Frankel, vice president of the AM Program for

Siemens Digital Industries Software. "These key partnerships can help move us forward to enable customers not only prototype, but manufacture ground-breaking products at scale, in order to meet the demands of the current marketplace." ([www.sw.siemens.com](http://www.sw.siemens.com))

