# Ron Bullock, Bison Gear

## 1942-2016

It is with great sadness that we announce the passing of Bison Gear owner, chairman, mentor and friend, **Ronald D. Bullock**. Bullock's life not only impacted everyone he directly worked with at Bison over his 30+ years of service and leadership, but also the lives of countless people pursuing a career in the manufacturing industry.

Bullock began his career with Bison in 1981. He served in key R&D, engineering, marketing, operations and general management roles before acquiring Bison in 1987. Since then, he led Bison through unprecedented growth while simultaneously expanding the company's product line, distribution channels and introduction into the European market. He championed Bison's customer focused approach, while also driving a culture of continuous improvement. His strong leadership will be continued by his associates, guided by the principals and the knowledge he shared.

In addition to his work at Bison, Bullock was a dedicated proponent for American manufacturing. He recently completed a two-year term as chairman of the Manufacturing Institute, a 501c3 think tank affiliated with the National Association of Manufacturers - for which he also served on the board of directors. His dedication to improving the manufacturing industry also includes serving as chairman of the Illinois Manufacturing Association, the IMA Education Foundation and founder of the Illinois P-20 council.

He also concentrated on the importance of continuing education and community outreach. BisonCares, (a 501c3 charity organization operated through Bison Gear and Engineering) recently celebrated its 10-year anniversary of providing services and support to local charities. He funded several scholarship programs through the IMA Education Foundation and also offered financial support to children of Bison associates attending college through the Bullock Family Scholarship.

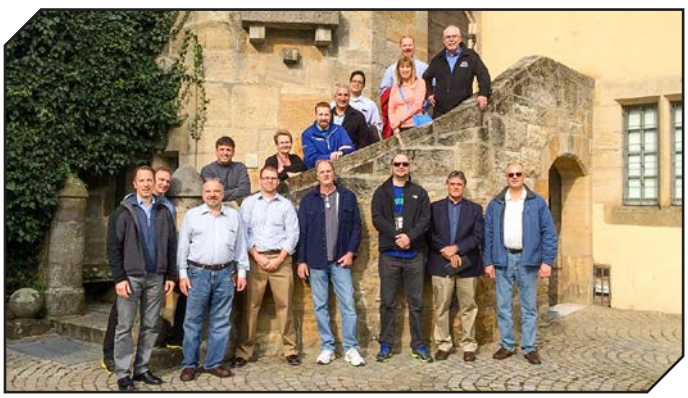
Bullock was a dynamic, charitable human being and a true American innovator at heart. His contributions to his family, community and country will be felt for years to come. He is survived by his daughter, Laurel Novak, daughter-in-law, Kelly Burch, brother-in-law, John Stewart, seven grandchildren and his friends and family at Bison. He will be missed.

Marc Bours, who has 30+ years' experience in the industry and who is the lead director on Bison's board of directors, has been appointed interim CEO of Bison effective immediately.

# Koepfer America Gear Tour

## COVERS HOBBING, SHAPING AND GRINDING TECHNOLOGIES IN GERMANY AND ITALY

Following the 2014 tour, Koepfer America has sponsored a group of North American gear manufacturers for the 2016 Gear Technology Tour. This trip, which took place April 11 through April 19, 2016, focused on the latest technologies for gear hobbing, shaping and grinding that are developing in Germany and Italy. The group comprised key members from the industry's leading gear manufacturers who benefited from personally visiting several original equipment manufacturers, tool manufacturers, as well as gear manufacturers.



In Germany, the tour visited the Koepfer machine tool factory in Villingen-Schwenningen where attendees observed the assembly of fine-pitch horizontal hobbing machines rated up to 6 DP. This stop also included technical presentations covering topics such as Koepfer's flexible automation systems, dry hobbing, multi-thread skiving, Conikron bevel gear hobbing, and non-circular gear hobbing. Finally, nearby gear manufacturers opened their doors for the group to see the latest European manufacturing processes. Armin Wacker, vice president sales and service of EMAG Koepfer GmbH said, "We always welcome American gear manufacturers to our factories, so we can share the latest information on our machine tools. I feel this group learned much to improve their own factories back home."

The tour continued with a stop at Saazor, one of Germany's premier manufacturers of high-speed steel and carbide hobs, in Pforzheim. Next up: Kapp Niles, a top-tier manufacturer of gear grinding machines for small to very large parts. This world leader in grinding technology shared the latest advancements in continuous generating and discontinuous profile grinding.

The tour was not all work. Between technical presentations and factory visits, the group enjoyed cultural stops to the Veste Coburg (a hilltop fortress that once served to protect Martin Luther in 1530), Neuschwanstein (a Romanesque Revival palace that inspired Disneyland's Sleeping Beauty Castle), and the BMW Museum in Munich.

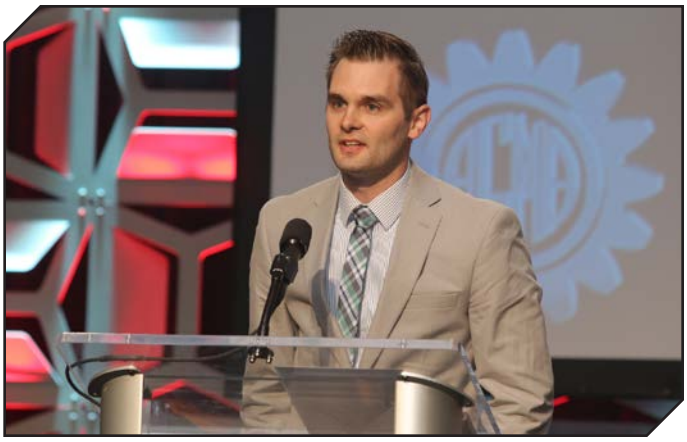
The final featured stop for the tour was at the CLC gear cutting machine tool plant in Italy. The local mayor greeted the

group and expressed thanks and excitement for the collaboration and business between the group's American gear manufacturers and the CLC factory. Claudio Montanari, general manager for CLC, said, "The Koepfer America Gear Technology Tour is a perfect way for gear manufacturers to see the latest hobbing and shaping machines built by CLC, such as the new model 100-SZ gear shaping machine." The group was impressed by this machine's robust set of features, such as 2,000 strokes-per-minute up to 4-inch stroke length and a dual-spindle table for maximum machine productivity.

# ITAMCO's Joel Neidig

## RECEIVES AGMA 2016 NEXT GENERATION AWARD

**Joel Neidig**, an engineer and lead technology developer with ITAMCO, has received the 2016 Next Generation Award from the American Gear Manufacturers Association (AGMA). This award, presented annually since 2011, recognizes innovative work by an individual responsible for one or more significant achievements through his or her effort and work that has enhanced or strengthened the gear industry and/or AGMA. This award honors individuals who are emerging as contributors, innovators and leaders in the gear industry and serves as an incentive for others in the next generation of gear industry talent. The award was presented May 13th at AGMA's Centennial Annual Meeting in Amelia Island, Florida.



The award is the latest in a series of milestones for Neidig and ITAMCO to acknowledge their efforts to transform their precision machining facilities into "smart factories." ITAMCO is part of a research group that recently received an Applied Research and Development award from the Digital Manufacturing and Design Innovation Institute. The group is developing a platform that will integrate every piece of software, hardware and equipment from its accounting program to its machine tools. ITAMCO was chosen as the implementation site because many of their machine tools are already connected to the Internet and each other through MTConnect. "We are only 12 to 15 months away from a totally integrated shop floor. A job will be entered into our ERP system and then every piece of the job, from allo-

cating materials, to manufacturing, to shipping and invoicing, will be routed through the entire facility. Machines will be chosen based on the type of work and availability. And the platform is dynamic — if a machine goes down, the job will be automatically rerouted," said Neidig.

ITAMCO is also part of a team awarded a Research and Development fund by America Makes, a division of the National Additive Manufacturing Innovation Institute. The team is working on a project that will improve the building of support structures with Direct Metal Laser Sintering, an additive manufacturing technique. In addition, the technology team at ITAMCO, led by Neidig, is implementing the "Strategic Technology Initiative for Additive Manufacturing." They have released over 65 apps for mobile devices; designed iBlue, the first industrial Bluetooth transmitter; and developed an award-winning Google Glass application.

Interestingly, despite its innovative approach to gear manufacturing, ITAMCO is not a new company. ITAMCO has provided open gearing and precision machining services since 1955. They specialize in servicing many heavy-duty industries including mining, off-highway vehicles, marine, and aviation. The "next generation" staff members like Neidig are part of a rich history of thinking outside the gearbox. "I was honored to receive this award from AGMA on behalf of ITAMCO. What made it especially meaningful was that Tom Pellette with Caterpillar gave a keynote address on the Internet of Things before the award presentation. Our first purchase order was from Caterpillar in 1956. It was one of those moments where I saw the past, present and future of our company coming together so perfectly," said Neidig.

# Bodycote

## OPENS HEAT TREATMENT PLANT IN MEXICO

Bodycote announced that the company will open a new, state-of-the-art heat treatment plant in San Luis Potosi, Mexico. Mexico is one of the largest automotive manufacturing countries in the western hemisphere, with many of the world's leading car manufacturers investing in manufacturing and assembly plants.

Bodycote's latest investment, a 100,000-square-foot facility, established to serve the country's extensive and growing automotive supply chain, will be capable of supporting large automotive projects and providing the necessary heat treatment ser-

vices for technologically advanced components, such as complicated transmissions.

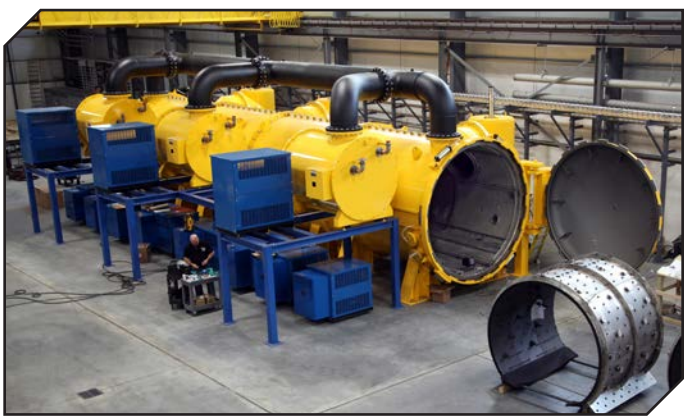
The plant, which will be TS 16949 certified as well as holding all required OEM quality approvals, will offer a wide range of heat treatment processes, including low pressure carburizing, ferritic nitrocarburizing, and Bodycote's proprietary Corr-I-Dur process.

In addition to the existing Silao and Empalme plants, the San Luis Potosi facility will be Bodycote's third plant in Mexico and will be able to provide customers with complementary services and qualified backup to the existing sites, if needed. It is scheduled to be fully operational by fourth quarter.

# Solar Atmospheres and Solar Manufacturing

## WRAP UP PRODUCTION OF WORLD'S LARGEST FURNACE

Solar Atmospheres and Solar Manufacturing, Inc. have been building the largest vacuum furnace in the world and are counting down the days to its completion. The working hot zone of this high vacuum (three 35" Varian diffusion pumps) furnace is 80 inches in diameter by 48 feet in length with a maximum operating temperature of 2400 degrees Fahrenheit. 35 points of temperature will be surveyed to within ±10 degrees Fahrenheit per the stringent AMS 2750E specification. The robust dual load car design will have the capacity to transfer up to 150,000 pounds of material in and out of the furnace. For dimensionally critical, near net shaped jobs, the dual load car design will also have the capability to maintain the critical support needed at elevated temperatures to keep parts flat to within .030-inches.



All of the major components have been delivered and installed. The gas and water systems are in place. The remaining installation of all the electrical components and wiring will occur over the next several weeks. This multi-million dollar project is expected to be completed in June with the commissioning of the furnace into production in July of 2016. This unique piece of equipment will not only open up new production opportunities within the North American vacuum heat treating markets, but also internationally.

# GMTA

## APPOINTS DAN THOMAS PROJECT MANAGER

German Machine Tools of America (GMTA) today announces the appointment of **Dan Thomas** as Project Manager for this major supplier of various machine tools, lasers and parts washers to the North American automotive, off-highway, heavy equipment and other power transmission markets.

GMTA Vice President Scott Knoy comments, "We welcome Dan to our team. His role will be a vital part of our ongoing efforts to be more customer-centric, as we expand our machine offerings, penetrate new markets and expand existing ones."

Thomas will be responsible for the end-to-end coordination of the project flow at GMTA, from initial contact through commissioning of machines and systems onsite.