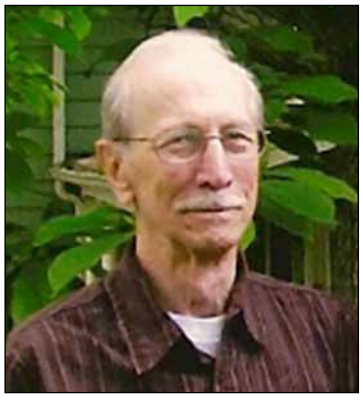
In Memoriam

RICHARD E. BREIDENSTEIN (1935–2012)

Dennis Richmond, vice president at Reishauer, recently commented on the passing of Richard E. Breidenstein: "The gear manufacturing community is deeply saddened with the recent passing of Richard E. Breidenstein, one of the industry's pioneers in gear manufacturing and technology application.Breidenstein lost his fight with his CHF illness on Saturday, March 10, 2012. Those who knew Breidenstein understood his passion for dancing, playing the accordion, traveling, golfing, playing with his cat Mandy and enjoying his family. Some of his happiest and fulfilling moments were playing with his 10 grandchildren.He got his start in the gear industry just out of high school in 1953 as an apprentice for Oliver Gear in Buffalo, New York. His first assignment was cutting gears on a hobbing machine. Oliver thought so much of Dick that they encouraged him to seek additional education to advance his skills; they even paid for his tuition. After earning his degree in Tool Design from Erie County Technical Institute in 1961, he was promoted to estimator for Oliver Gear. He worked at Oliver gear until 1971. After that he moved to the Chicago area to take a position with Illinois Gear. Later in 1977 he opened his own shop: Geometric Machine in Bensenville, Illinois. Unfortunately, due to poor economic conditions, he was forced to close the doors in 1981. He then went to work for Chicago Gear as a manager of production. In 1985 when the desire to be his own boss again was overwhelming, he formed the company Rebco Industrial Products."



Richard E. Breidenstein

He is survived by his loving wife of 57 years, three daughters, Michelle (Michael) Klave of Pahrump, Nev., Denise Beaudoin of Marengo and Rene (Kevin) Wolke of Crystal Lake; three sisters, Betty (Perry) Erhard of Concord, N.C., Ruth (Louis) Pondolfi of Depew, N.Y., and Barbara (John) Marillo of Concord, N.C.; his grandchildren, Melissa, Mary and Mason Klave, Matthew, Eric and Jessica Beaudoin, and Christopher, Malerie, Andrew and Daniel Wolke; and numerous nieces, nephews and cousins. He was preceded in death by his parents, Henry and Charlotte; and a sister, Joyce (Frank) Sette.

"Over the decades, he was able to use his vast knowledge of the industry along with his numerous contacts to build a successful business in the gear industry selling new and used gear cutting tools. We salute his achievements," Richmond says.

Condolences can be made to his wife Beverly Breidenstein at 12355 Laurel Lane, Huntley, Illinois 60142.

AGMA Awards Key Members at Annual Meeting

The American Gear Manufacturers Association recently announced that Bipin and Linda Doshi, of Schafer Gear Works, Inc. have been named the recipients of the AGMA Lifetime Achievement Award. This award is bestowed "to the rare individual or individuals who have demonstrated superior vision, leadership and dedication in advancing the gear industry and the American Gear Manufacturers Association." This is only the seventh time that the award has been presented in the Association's 96 year history.

Bipin and Linda Doshi, of Schafer Gear Works, Inc. were recipients of the AGMA Lifetime Achievement Award.

Presenting the award in Bonita Springs, Florida, AGMA chairman Matt Mondek commented, "Leadership is the lifeblood of an association like AGMA, and everyone should aspire to be like the couple that receives the AGMA Lifetime Achievement Awards tonight. Bipin and Linda Doshi have independently and together been major contributors to AGMA's transformation and growth over the last quarter century."

Schafer Gear joined AGMA in 1943 and was acquired by the Doshis in 1988. Immediately after the acquisition, Bipin, president of Schafer Gear and Linda, corporate secretary of Schafer Gear, began participating in AGMA's Annual Meeting, Marketing Council, Small Business Council and others.

In the early 1990s Bipin and two other members were leaders in the creation of the Training School for Gear Manufacturing. This one-week course blends theory with hands-on experience at the Daley College in Chicago. This course has been responsible for introducing hundreds of employees to the theory of gearing and has helped each one apply that knowledge by making a gear during the hands-on portion of the training. He received the Administrative Division Executive Committee Award in 1994 for his leadership in education programs.

In 1994, Bipin joined the AGMA Board of Directors and served as chairman of the association from 1999 to 2000. In that role, in addition to his advocacy for improving AGMA's education offerings, he helped create useful statistical reports for benchmarking gear companies against the rest of the industry. Subsequently, Bipin has served as a trustee to the AGMA Foundation and currently serves as the foundation's treasurer.

While Bipin has been very active in AGMA, Linda has been just as active in the industry and with the AGMA Foundation. She served two terms on the AGMA Foundation's Board of Trustees, from 1997 to 2004. She was elected chair of the foundation from 2002 to 2004. Under her leadership, the foundation sponsored the development of the three online courses for worker training. These courses are still used a decade later as the introduction for many to the gearing industry.

In their personal lives they are both highly involved in their local community in South Bend, Indiana, chairing several boards of philanthropic organizations. Linda is the past president of the Center for History; a past board member of the Penn Harris Madison school foundation board; a current board member of the South Bend Century center; a board member of the South Bend Community Foundation and a board member of the Mishawaka public library.

Bipin is a board member for the local South Bend Memorial Hospital; He served as chairman of the board in 2006 and 2007. He continues to serve on the board and has chaired several committees. Bipin is also is very active with his alma mater, the Missouri University of Science and Technology (formerly Missouri School of Mines and Metallurgy).

Two additional AGMA leaders were honored during AGMA's 2012 Annual Meeting, held March 15–17 in Bonita Springs, Florida. Sulaiman Jamal, managing director of Bevel Gears India was awarded the AGMA Chairman's Award; and Rustin Mikel, vice president of operations for Forest City Gear, was awarded the Next Generation Award.

CHAIRMAN'S AWARD

Earlier in February 2012, AGMA held a trade delegation to India. The group of 18 individuals traveled about 2,000 miles in five days - visiting seven cities, seven companies and one coffee plantation. According to AGMA executives, this trip would not have been possible without the help of Jamal. He is a member of the AGMA board of directors and one of the reasons AGMA has more members in India than any country outside of North America. He was instrumental in the creation of the International Power Transmission Exposition which opened in Mumbai two years ago and was held again this February. He was part of the advisory group that developed the program for AGMA's first International Business Conference. To recognize his leadership and hands-on assistance with AGMA's activities internationally and especially in India, he was presented with the Chairman's Award.

NEWS

NEXT GENERATION AWARD

In the six short years since Mikel has joined the gear industry and Forest City Gear, he has become very active within AGMA as a leader of both the Strategic Resources Network and the Annual Meeting Planning Committee. He has demonstrated significant leadership skills guiding the members of the Annual Meeting Planning Committee over the last three years. He has kept the group on target and engaged as they brainstorm ideas for speakers and events for the Annual Meetings, and also worked with the staff of AGMA and ABMA to execute the committee's ideas. He has taken time away from his young family, copious duties at Forest City Gear, and his studies for his MBA to guarantee the success of the combined annual meeting the last few years.

In addition to his duties as Annual Committee Chair, he was instrumental in the formation of AGMA's Strategic Resources Network, a group of younger industry executives who promote professional development opportunities and networking within the gear industry. And for this Annual Meeting he married his involvement with the SRN with his duties as Annual Meeting chairman, gathering a dozen of his SRN colleagues together to help sponsor the Capitol Steps. Mikel was assisted in this effort by last year's Next Generation Award winner, Cory Sanderson from Koepfer America. He has been a willing participant in many other AGMA endeavors. For more information, visit *www.agma.org*.

Stadtfeld

RELEASES GLEASON BEVEL GEAR TECHNOLOGY

Gleason Bevel Gear Technology (Expert Verlag; ISBN: 978–3–8169–2983–3; 500 pp.), by Dr. Hermann J. Stadtfeld, vice-president/bevel gear technology–R&D at Gleason, is now available in bookstores (The English version will be available at the end of the year). *Gear Technology* readers, with Dr. Stadtfeld's and Gleason Corp.'s kind permission, were privy to advance access to the work in an eight-part serialization that took place from August 2010 to August 2011. The book discusses the various tribology aspects of angular gear drives including cylindrical, conical, bevel, crossed helical, worm, hypoid gears and more. Dr. Stadtfeld has published more than 300 technical papers and several books on bevel gear technology. He holds more than 50 international patents on gear design and gear process, as well as tools and machines.

Schafer Gear Welcomes Basham and Miller

Jeffery Basham

Jeffery Basham has joined Schafer Gear Works, Inc., as advanced manufacturing engineer in the company's South Bend office. Basham will be responsible for all advanced planning of new parts, including CNC programming, tooling design and application of the latest technologies in cutting tools and machine tools. Basham has over 18 years of experience in manufacturing. Prior to joining Schafer Gear, he worked as a machining manager and programming engineer. In making the announcement, Paresh Shah, Schafer Gear's vice president of engineering and business development, said, "We are excited to have Jeff join our team. With his expertise, he will be able to oversee all new parts throughout Schafer's production process and smoothly implement cutting-edge technology."

Additionally, Rodney Miller has joined Schafer Gear Works, Inc. as manufacturing engineer in the company's South Bend office. Miller will be responsible for engineering support for all gear manufacturing processes. Prior to joining Schafer Gear, Miller worked as a manufacturing engineer at B&J Medical in Kendallville, Indiana. He also has extensive experience in manufacturing/design and CNC programming in automotive devices as well as in the recreational vehicle industry. Miller has an associate's degree in industrial manufacturing from Indiana Tech. In making the announcement, Schafer's production manager, Dennis Sharp, said, "Rodney brings a strong manufacturing background to Schafer Gear and will be a valuable asset in providing engineering support and process improvement for our shop floor."

Rodney Miller

NTN Develops Technology for Powder Metal Gears

NTN Corporation has developed a manufacturing technology for sintered alloy, capable of manufacturing alloy with an absolute density ratio of 95 percent or higher, and endurance strength of 300 MPa or higher (maximum stress 700 MPa). This allows drivetrain components such as gears that require precision and durability, which had been manufactured with cutting processes until now, to be replaced with sintered alloy.

The powder-metallurgy process is one manufacturing method that is available to reduce waste of materials and energy consumption while manufacturing mechanical components as a means of addressing recent environmental and energy issues. Yet as this process involves compressing metal powder together, micropores can easily develop inside the components, resulting in a decrease in fatigue characteristics compared to components manufactured using cutting process of solid metals. The use of sintered alloys in drivetrain components that require excellent fatigue characteristics had been limited due to this reason.

NTN has made improvements to the powder material and forming and sintering conditions to manufacture high-density sintered compact with an absolute density of ratio 95 percent or higher, using a relatively low casting pressure of 6 to 10 ton/cm^2. The combination with NTN's proprietary heat treatment technology results in an endurance strength of 300 MPa or higher under single press, single sintering process. When used for gears, this high endurance strength results in 2 GPa or higher strength (1.5-times conventional products) at the tooth surface, as well as better durability at the base of the tooth. Different combinations of technologies such as metal powder, forming and heat treatment allow high-precision, high-density sintered alloy to be manufactured with a much easier process, making use of the alloy in drivetrain components and other applications.

NTN will coordinate with group company Nippon Kagaku Yakin Co., Ltd. into the future to accelerate the development of products using sintered alloy, as well as the research and development of stronger, higher precision sintered alloy or composite materials. These developments will be used to improve yield, shorten processing times and reduce energy consumption, and applied to the entire product lifecycle in areas such as materials, manufacturing and functionality to help reduce the impact on the environment.

Mazak Announces Midwest Open House

As part of its ongoing commitment to American manufacturing, Mazak will host a special three-day Discover More with Mazak open house at its Midwest Technology Center in Schaumburg, Illinois. Slated for June 26–28, the event will highlight the facility's recent 18,000-square-foot expansion, cutting demonstrations on the latest productivity-improving machine tools and industry expert presentations. Mazak will also offer a sneak peek of its plans for IMTS 2012 and the expansion of its Kentucky manufacturing operations.

The Midwest Technology Center expansion allows Mazak to further support the continuous upswing of manufacturing business throughout the region as well as provide its customers with even more advanced technology, support and training for increasing their competitiveness. The expansion also offers an increased opportunity for collaboration with local manufacturers with respect to new technology and process development and improvement.

"The vibrant manufacturing market and our long-term commitment to our customers in the Midwest convinced us to accelerate our expansion plans for our Technology Center in Illinois," said Brian Papke, president of Mazak Corporation. "Business across all industry segments, including automotive, aerospace, medical and energy, is improving in the Midwest and nationwide. The expansion of our Midwest Headquarters and Technology Center gives manufacturers more resources to improve their productivity."

The Midwest Technology Center's new 124-seat auditorium and two state-of-the-art training rooms give Mazak the means to host more events with its VIP technology partners. In fact, an incredibly diverse array of no-charge classes and seminars will ensure customers achieve a maximum return on their machine tool investments and achieve greater effectiveness in meeting their customers' needs.

Visitors to the expanded Midwest Technology Center will also find spacious areas for turnkey projects and test cuts, as well as expanded machine tool technology demonstration facilities. Such additions give Mazak customers even more opportunity to process actual industry components from various materials, including polymers, steels, aluminum and high temperature alloys, using the latest machine tool technology.

For more information, visit *www.mazak.com.*