

Broaching Machine Specialties

TO REPRESENT
ARTHUR KLINK COMPANY

Broaching Machine Specialties (BMS) of Novi, MI, has entered into a joint operating agreement with the Arthur Klink Company of Pforzheim, Germany. BMS will act as the North American Sales and Service Center for Arthur Klink broaching and grinding systems. BMS also will provide CNC broach sharpening and reconditioning services for all types of broach cutting tools.

The Arthur Klink Company is a manufacturer of helical broaching machines, helical broach tools, hard gear broaching machines, carbide broach tools, CNC broach sharpeners and profile grinding machines. The company also provides large-diameter internal broaching tools up to 20" in diameter and 144" length; combination milling and broaching machines for manufacturing steering racks; and rack tooth milling and grinding machines.

BMS continues to service the international market with its own full line of new and remanufactured turnkey broaching systems, used broaching machines, broaching machine parts, in-field repair and production broaching services.

BMS and Arthur Klink will be at IMTS in booth N-7229, or you can visit www.broachingmachine.com for more information.



for other company business. MHI has determined to build a new plant on the premises of Changshu Ryoju Machinery Co., Ltd. (CRM) in Changshu, Jiangsu Province, an existing local production base for the company's rubber tire machinery. The new facility will serve both for production of gear manufacturing equipment and for expanded production of rubber tire machinery.

Adoption of this "shared factory" scheme is intended to enable the company's gear machinery business to launch local production swiftly and cost-effectively. Production of gear cutting machines at the new plant is slated to commence in March 2011. The initiative will mark the implementation of MHI's first shared factory scheme for launching overseas production.

MHI decided to launch production of the gear cutting machines in expectation of large demand from Chinese automobile manufacturers, whose output has been expanding rapidly. MHI will initially manufacture its best-selling GE15A dry cut gear hobbing machine at the new plant. By securing the same technological features and high quality as in corresponding machines being produced in Japan, the company intends to expand sales to manufacturers of high-precision, small-size gears for automobiles, motorcycles, decelerators, etc. The company looks to produce 40 units during the first year, and 100 units by the fourth year.

In addition to being equipped with various gear cutting machine manufacturing equipment, including assembly and measurement-related facilities, the new plant will also have a showroom to exhibit machines as well as to accommodate test-cutting requests from potential customers.

Plans call for construction to be completed by February 2011.

Mitsubishi

TO BUILD GEAR MACHINES
IN CHINA

Mitsubishi Heavy Industries, Ltd. (MHI) is planning to launch production of gear cutting machines in China at a facility that will simultaneously serve as a production base

Albins Off Road Gear

EXPANDS CAPACITY



Albins Off Road Gear of Ballarat in Victoria, Australia has recently purchased a Samputensili S375G profile gear grinding machine. This is the latest acquisition for this company whose other recent acquisitions include two Seiwa CNC gear cutters; eight CNC lathes, including a Mazak Integrex; numerous CNC Milling machining centers, including 5-axis and pallet-load machines as well as a CNC Klingelnberg Palloid spiral bevel machine; CNC internal and external cylindrical grinders; CNC gear inspection and a 5-axis CMM.

The new Samputensili machine can work with workpieces up to 375 mm diameter and 1000 mm length. Helix angles of 0–90 degrees are achievable with this machine, which exceeds most other common gear grinders by up to 45 degrees.

With the ability to use a grinding wheel as small as 80 mm in diameter, this grinder offers the ability to do fine grinding of shoulders next to gears. This machine also has the capability to grind almost any defined shape at a helix angle.

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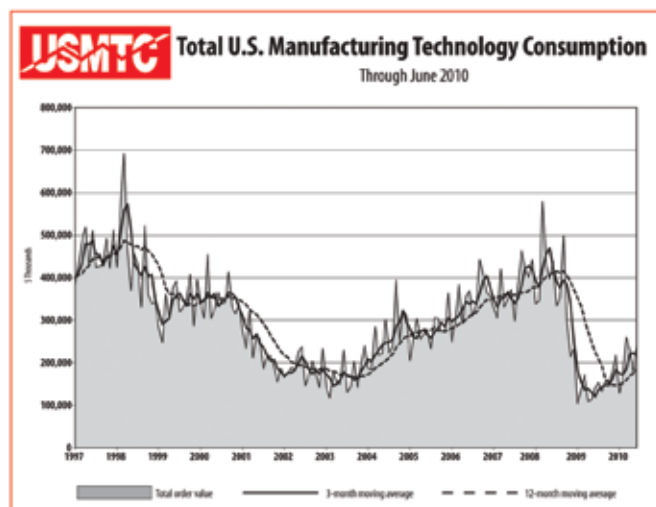
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NEWS

June Manufacturing Technology Consumption Up 35.8%



June U.S. manufacturing technology consumption totaled \$241.47 million, according to AMT—The Association For Manufacturing Technology and AMTDA, the American Machine Tool Distributors' Association. This total, as reported by companies participating in the USMTC program, was up 35.8 percent from May and up 71.1 percent from the total of \$141.12 million reported for June 2009. With a year-to-date total of \$1,207.60 million, 2010 is up 56.1 percent compared with 2009.

These numbers and all data in this report are based on the totals of actual data reported by companies participating in the USMTC program.

"Typically, manufacturing technology order rates slow down in the months leading up to the International Manufacturing Technology Show—IMTS (Sept. 13–18, McCormick Place, Chicago, IL), the largest production technology show in the Americas," said Douglas K. Woods, AMT president. "However, increased foreign direct investment and a doubling of orders in aerospace and construction equipment through the first half 2010 resulted in an acceleration of USMTC orders rather than the typical slow down."

The United States Manufacturing Technology

Consumption (USMTC) report, jointly compiled by the two trade associations representing the production and distribution of manufacturing technology, provides regional and national U.S. consumption data of domestic and imported machine tools and related equipment. Analysis of manufacturing technology consumption provides a reliable leading economic indicator as manufacturing industries invest in capital metalworking equipment to increase capacity and improve productivity.

Second Quarter 2010 Workholding Shipments Up 7.7%

At \$53.8 million for second quarter 2010, shipments of workholding equipment were up 46.3 percent from second quarter 2009, according to the Advanced Workholding Technology (AWT) Group of AMT—The Association For Manufacturing Technology.

Workholding equipment shipments within the U.S. by the 37 companies participating in the AWT statistical report totaled \$45.7 million while exports amounted to \$8.1 million.

The report from the AWT shows that domestic workholding equipment shipments increased 7.4 percent and U.S. exports increased 9.4 percent from first quarter 2010. The Midwest increased 9.2 percent from first quarter 2010 and remained the largest domestic destination with 40.5 percent of total domestic shipments. Growth in the Central region was 4.8 percent, moving it above the Northeast for the second largest share of domestic shipments, with 18.4 percent domestic share. Shipments to the Northeast rose by 2.7 percent, moving down to the third largest domestic market with 16.4 percent of domestic shipments in the second quarter. The South had 13.8 percent of second quarter 2010 domestic shipments, with an increase of 7.9 percent from the previous quarter. The West remained the smallest domestic market again with a 6.5 percent increase from first quarter leaving it with 11.0 percent share. Additionally, second quarter 2010 employment levels were up 1.0 percent from first quarter 2010 but only increased by 0.1 percent when compared to

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NEWS

the second quarter of 2009.

The Advanced Workholding Technology Group is comprised of AMT members that produce chucks, jaws, collets, vises, fixtures, and other workholding equipment. The AWT operates as a forum to serve the interests of U.S. manufacturers of workholding equipment. The overriding goal of the AWT is to develop ways to better serve the workholding customer, and to implement programs to help the workholding community in this endeavor. While AWT members must be members of AMT, any OEM workholding manufacturer or U.S.-based company that is a sole distributor of a foreign-built workholding product line may participate in the AWT statistical program.

SME

GIVES \$382,250 IN SCHOLARSHIPS AND AWARDS FOR STUDENTS AND EDUCATORS

For 2010, the SME Education Foundation awarded \$382,250 in scholarships and awards ranging from \$1,000 to \$70,000 to 140 students and educators at 87 colleges and universities in 24 states and two provinces in Canada. The foundation encourages financial support of manufacturing education programs in the United States where there is a desperate need for highly-skilled technical workers.

"This funding reflects our determination to advance manufacturing education however possible," says Bart A. Aslin, foundation director, SME Education Foundation. "These young people have proven themselves to be engaged and intent in their studies and deserve this financial encouragement. And to our legion of donors who continually provide their support, we thank them for their generosity."

The SME Education Foundation, celebrating its 30th anniversary this year, has invested more than \$4.5 million in youth programs, helping more than 10,000 young people explore careers in science, technology, engineering and mathematics; granted more than \$4.2 million in scholarships to students studying manufacturing-related programs and invested \$17.3 million in grants to 35 colleges and universities to develop industry-driven curricula.

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Mazak

CONSTRUCTING SOUTHWEST TECH CENTER, HQ



Houston is the site of Mazak Corporation's future Southwest Technology Center and Regional Headquarters. The facility will offer support to manufacturers in all industries, with a special focus on those serving the energy sector.

Construction was planned to begin in July on the 30,000-square-foot technology center being erected on 4.5 acres at the intersection of Beltway 8 and Green Crossing Boulevard. The facility will be Mazak's third and largest expansion of its existing Southwest Technology Center, which was originally founded in 1978.

"Throughout the economy of the past two years, Mazak has consistently been a vocal advocate of continued investment in American manufacturing," says Brian Papke, president of Mazak. "It's something we encourage our customers to do and something we do ourselves. We've seen a lot of companies scale back their investment levels over the past several years. We fully understand there may be economic reasons to do so, but we believe that it is an important time to invest in order to be competitive in the future."

"Additionally, we recognize the growing importance of creating machine tools that are not only more productive, but that are also energy efficient and environmentally sound. This new facility will be a place where we can work together with our customers to address and develop improvements in all of these critical areas."

The size of the Southwest Technology Center being built will allow for cutting demonstrations, service and applications support for some of Mazak's largest machining centers. It will serve as a regional service hub, staffed with 20 field service engineers and five phone support engineers.

A 100-seat learning and conference area will be housed at the facility for meetings, regional seminars and training events presented by both Mazak and its suppliers in the industry. Mazak anticipates a grand opening in June 2011 where a range of products will demonstrate various applications.






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Forest City Gear, a world-class manufacturer of precision gears, is currently seeking reps for the following territories:

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The ideal applicant firms will have gear experience, related mechanical or motion control component lines, contacts and knowledge of the buying process in the key Forest City Gear markets, including military, medical, aerospace, marine and extreme accuracy measuring instruments.

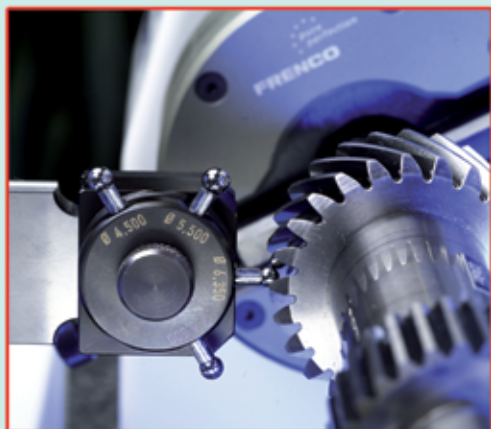
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To arrange an interview, please send info to Wendy Young at wyoung@forestcitygear.com or call her at 815-623-2168.

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NEWS

State of U.S. Manufacturing

DISCUSSED IN WHITE PAPER

The Hollings Manufacturing Extension Partnership (MEP) Advisory Board analyzes the state of U.S. manufacturing and the characteristics of good manufacturers and plots a course to improve the competitiveness of the industry in a recently released white paper.

The MEP is managed by the National Institute of Standards and Technology (NIST). The Manufacturing Extension Partnership Advisory Board (MEPAB) is an external advisory body created to provide guidance and advice on the MEP program from the perspective of industrial extension customers and providers who have a vision of industrial extension with a national scope.

The MEPAB report finds that there are reasons for concern about the industry's future, but there are also reasons for optimism. It presents the view that resolving the competitive disadvantages U.S. manufacturers face is complicated, and innovation alone is not enough to create successful companies. According to the 44-page report, innovation must result in new products, production processes, management practices, as well as green manufacturing and an executive concern for the workforce, which includes developing in-house talent.

Another suggestion the report makes is that manufacturers, government and academia should be involved in developing national manufacturing policies and providing supporting implementation infrastructure. In regards to national policy, the board says developing metrics to measure the return on investments in R&D and federal labs should be priorities. The report recommends rewarding institutions that actively seek out opportunities for translating and transferring the products of their research into commercial technologies.

The entire report is available free to download at www.nist.gov/mep/upload/MEP_advisory_report_4_24l.pdf.

Gary Lehman

APPOINTED TO BOARD OF
TRUSTEES AT PURDUE UNIVERSITY

Indiana Governor Mitch Daniels on August 13 named Gary J. Lehman to the Purdue University Board of Trustees.

Lehman has served since 2003 as president and CEO of Fairfield Manufacturing Inc., the largest independent gear manufacturer in North America. He received his bachelor's degree in industrial management from the Krannert School of Management in 1974 and earned an MBA from Case Western Reserve University.

He co-founded The Cannelton Group, a consulting firm specializing in strategic and operational assistance to manufacturing companies. He also has served as president of Philips Lighting Electronics North America and has held senior positions with Federal Mogul, TRW, Deere and Co., and Allen Bradley.

"It's an honor to be asked to serve this great university in this manner," Lehman says. "My parents, my wife and two of our children are all Purdue grads, and this university has been a large part of my entire life. Purdue has a great history, and it's humbling to be part of helping to assure it retains its outstanding reputation."

Forest City Gear

HIRES AND PROMOTES SIX EMPLOYEES

Forest City Gear (FCG) announced the hiring of four new employees and the promotion of two longtime employees. "We've been growing steadily in the last two years, despite the economic conditions, and this news reflects that situation," comments company president Wendy Young, who runs the business alongside her husband, CEO Fred Young.



Joe Luy

Effective immediately, the following new individuals have been hired: Joe Luy, quality manager; Bruce Haxton, gear processing engineer; Paul Lindquist, process engineer; and Jim Cagle, cost estimator.

Luy will supervise the company's quality lab, acknowledged as one of the finest metrology centers in the gear industry. Over a third of Forest City Gear's current cus-

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GT10

Correction

In the August issue's technical article, "Crowning Techniques in Aerospace Actuation Gearing" by Anngwo Wang and Lotfi El-Bayoumy, Mr. El-Bayoumy's name was misspelled. *Gear Technology* regrets the error.

—The Editors



Bruce Haxton

tomers are other gear companies around the world, who bring FCG work they cannot do themselves, either on tolerance or consistency. Luy will also manage the company's ISO and ITAR registered programs, the latter having been secured this past March.

Haxton will be responsible for the transitions from design to manufacturing protocols at FCG. He brings an impressive background

in gearmaking to the task.

Lindquist oversees the utilization of the company's 80+ machine tools to streamline production workflow through the shop.

Cagle will help keep pace with the hundreds of RFQ's received each week at FCG, a daunting task, to say the least.



Jim Cagle

Also, two long-time employees have been promoted. Krista King was promoted to order processing, She will work with numerous vendors and the strict guidelines of the many government, aerospace and defense contractors served by FCG. Her primary role will be processing purchase orders for the company.

Andrea Bagwell was promoted to Estimating/Quoting Assistant. She will



Andrea Bagwell

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Andrea Bagwell was promoted to Estimating/Quoting Assistant. She will

be responsible for the preparation of quotes, serving the now larger department of inside sales engineers and others, including Fred Young, who continues in his long-time role of reviewing and estimating particularly challenging gear jobs at the company.



Paul Lindquist



Krista King