

THE RECORD

> SERVING THE NEEDS OF
MANUFACTURING COMPANIES
FOR OVER 60 YEARS

2012 LOOKS TO BE "THE YEAR OF THE MANUFACTURER"

You've seen it in the news and on TV more and more: America is finally focusing on manufacturing and its importance to our economy. —p3

DESPERATELY SEEKING AMERICANS FOR FACTORY JOBS

U.S. factories are creating many new jobs. But owners are hard pressed to find skilled American workers to fill them. —p6

EPA ISSUES HISTORIC AIR POLLUTION LIMITS, FEDERAL COURT ISSUES DELAY

A recent U.S. District Court ruling impacted far-reaching air pollution regulations. —p8

MANUFACTURING CREATES VALUE FOR EMPLOYEES AND COMMUNITIES

On Januay 24th's, State of the Union Address, President Obama discussed improving employment. —p17







Freedom and Flexibility

In the past, shop owners felt they could "never get away from the shop" because they would lose touch with what was going on with their business. E2 allows shop owners to instantly access all mission-critical business information from their phone, iPad, Tablet or laptop. The information itself is what's really important, not the device that you access it with.

Since 1984 the E2 Shop System has helped thousands of shops streamline their business and increase profit margins. Most people work hard but the key is working smarter through the use of the #1 shop management system on the market today.

See why E2 is the #1 most widely used shop management system on the market today. Visit www.shoptech.com or call 800-525-2143 for a free information packet.

The Authority on Shop Floor Control.





CONTENTS

3

2012 LOOKS TO BE "THE YEAR OF THE MANUFACTURER"

4

CHAIRMAN'S CORNER

6

DESPERATELY SEEKING AMERICANS FOR FACTORY JOBS

8

EPA ISSUES HISTORIC AIR POLLUTION LIMITS, Federal court issues delay

10

NTMA WELCOMES JEFF WALMSLEY

10

ACCUROUNDS LAUNCHES NEW WEBSITE

12

PARTNERS IN THINC WELCOMES AEC
AS A NEW PARTNER

13

SWEARING IN OF 2012 ATMA BOARD OF DIRECTORS

14

MAZAK NORTHEAST EVENT SUPPORTS GROWTH
IN AEROSPACE. MEDICAL MANUFACTURING

16

NTMA MEMBER HIKES TO HELP OTHERS

17

MANUFACTURING CREATES VALUE FOR EMPLOYEES AND COMMUNITIES

18

SWM MANUFACTURERS WANT TO HIRE, CAN'T FIND QUALIFIED EMPLOYEES

19

KENNAMETAL TO ACQUIRE DELORO STELLITE

20

GF AGIECHARMILLES HSM 600U LP Takes precision to the next level

23

DID YOU KNOW?

23

CONGRESSMAN BILIRAKIS JOINS
MANUFACTURING CAUCUS, TOURS LOCAL PLANT



2012 LOOKS TO BE "THE YEAR OF THE MANUFACTURER"

You've seen it in the news and on TV more and more: America is finally focusing on manufacturing and its importance to our economy. Over the past several years, NTMA and its One Voice partner, PMA, have been steadily beating the drums, working to make this moment arrive.

President Obama mentioned "manufacturers" or "manufacturing" 16 times during his State of the Union address, a big change from previous Presidential addresses. Almost every week, major media outlets are reporting on the comeback of U.S. manufacturing. In 2011 alone, Congress introduced over 700 bills and amendments mentioning manufacturing. Our message is resonating.

The President's speech kicked off introduction of his "Blueprint for an America Built to Last." The "Blueprint" contains tax proposals focused on manufacturing, including 100% expensing, focusing the 199 Domestic Production Activities Deduction on manufacturers, and creating incentives to re-shore manufacturing. All in all, both the "Blueprint" and several bills introduced by both Republicans and Democrats in Congress include a number

of proposals that One Voice supports.

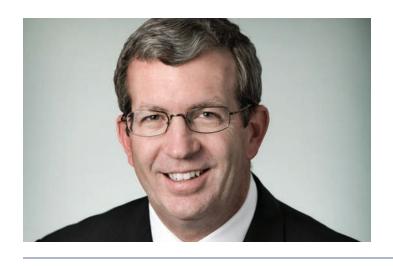
Now that we're back on the radar, how do we seize the moment?

Republicans and Democrats obviously have different ideas about the policies they want to enact. Despite pro-manufacturing rhetoric on both sides, Washington still has trouble getting things done these days. For example, lawmakers allowed the Research and Development Tax Credit to expire for the 14th time and failed to extend 100% expensing of capital equipment purchased in 2012. Both of these critical tax provisions enjoyed widespread support – President Obama supports both, as do Senate Democrats, as well as House Republicans. But in Washington's current climate, we have to do more to make things happen.

More elected officials are touring plants and talking about manufacturing jobs. Let's take advantage of this moment. There are close Congressional elections all around the country, and several of the states where NTMA has large membership will be pivotal in choosing our next President. Manufacturers everywhere should invite Members of Congress and political can-

CONTINUED ON -P5





CHAIRMAN'S CORNER

GRADY COPE / NTMA CHAIRMAN OF THE BOARD

I want to take this opportunity to thank everyone that has been so supportive this last year. It has been an honor and a privilege to serve as NTMA's Chairman and something that I will never forget. The experience has been nothing short of extraordinary while at the same time humbling.

Many of you not only opened your shops to me, but your homes, as well. I have been well taken care of in my travels and for that I'm grateful. The best part of the job was having the time to visit and meet the people making U.S. Manufacturing great once again. I can honestly say that our industry has embraced new technology and is using it in very innovative ways.

In visiting your shops, I have noticed that our customers are very lucky to have you. NTMA members tend to be over the top in customer service, engineering support, and providing the highest quality products to their customers. I'm not just saving this; I have seen it over and over as I have toured your shops. From what I have observed, NTMA members tend to push the envelope on innovation and the "make it happen, for the customer" mentality. I have seen machines modified or created in order to make a special part for a customer. I have seen tools used in ways that I doubt the maker ever intended them to be used. Members have even modified their buildings to accommodate parts; in fact one member cut a hole and put a hatch in his roof to allow the material to fit in his machine. Again this is that "make it happen for the customer" character that NTMA members possess.

As we move our industry forward, it is important to maintain and even capitalize on that "make it happen, for the customer" mentality. Let vour customer know how innovative you are on their behalf, commercialize those ideas, and most importantly acknowledge yourself and the employees that are causing this creativity. Our innovation not only drives our companies forward, it drives our customers forward, thus driving the world economy forward. So we have come full circle, once again.

When I started my Chairman year, my first priority was to let our nation know that without manufacturing, there can be no wealth and I will end my year with the thought that without manufacturing, there can be no innovation. Since innovation is the driving force behind new products, new processes, and productivity, we can again say without manufacturing there can be no wealth. Full circle. Where would we be as a nation without innovation, technology, and manufacturing? It would

probably have an even larger deficit when compared to the world's top performing economies. The good news is our message is getting out there.

Recently in the State of the Union Speech, the president mentioned the importance of U.S. manufacturing 16 times and before the Super Bowl he was being interviewed and again mentioned U.S. manufacturing and the shortage of skilled labor. This is a very positive step for us, since it is an acknowledgment that U.S. manufacturing is on our elected leaders' agendas. An excerpt from the President's State of the Union Speech has him telling the nation what we have always known, "Tonight, I want to speak about how we move forward, and lay out a blueprint for an economy that's built to last - an economy built on American manufacturing, American energy, skills for American workers, and a renewal of American values. This blueprint begins with American manufacturing." It's hard to argue with that!

In addition, I have started seeing pro-U.S. manufacturing commercials on TV. The commercials not only focus on the product, but how and where it is being produced and in most cases it is being described from the shop floor, by a manufacturing employee. A recent GE Appliance Park commercial has

the employees saying, "we are on the forefront of revitalizing manufacturing; we are proving that it can be done here and can be done well ... there is a bright future here and a chance to be on the ground floor of bringing back, not only the company, but the country." This is a great U.S. manufacturing public relations statement, broadcast during the Super Bowl. These are the little things that are turning the nation back to a manufacturing based economy!

Again I want to thank each of you for your support of NTMA and U.S manufacturing, and emphasize that what you say and do truly matters. We are making a difference and will continue to do so.

Please join me in congratulating Roger Atkins as your new Chairman for this next year. I have no doubt that with your help and participation, Roger will take our NTMA to the next level.

"The best way to predict the future is to invent It." - Steve Jobs

Sincerely,

GRADY COPE / CHAIRMAN

THE RECORD

OPERATIONS & EDITORIAL

Dave Tilstone, President Emily Lipovan, Managing Editor

NTMA EXECUTIVE TEAM

Grady Cope, Chairman

Reata Engineering & Machine Works –

Englewood, CO

Roger Atkins, Vice Chairman $MIC\ Group - Brenham, TX$

Theodore O. Toth, Jr., Secretary Toth Technologies – Pennsauken, N7

Robert Mosey, Treasurer Moseys' Production Machinists Inc. – Anaheim, CA

Ron Overton, Past Chairman of the Board Overton Industries – Mooresville, IN

ADVERTISING INQUIRIES

To advertise in *The Record*, or for information on publishing your corporate newsletter or sales literature, contact *MSI* at (216) 503-5066 or *elipovan@msi-groups.com*.



NATIONAL TOOLING & MACHINING ASSOCIATION

6363 Oak Tree Boulevard Independence, OH 44131 1-800-248-6862 www.ntma.org

© Copyright 2012 NTMA



didates to your facility, educate them about your business, and make them explain their manufacturing policy to you.

Let's seize the moment and make sure November's outcome reflects our priorities!

Manufacturers can make a difference in Washington, but only if they participate in the process. NTMA members can give unlimited corporate or individual contributions to the NTMA Government Affairs Administrative Fund which supports the work done by The Franklin Partnership and Bracewell & Giuliani LLP. Additionally, NTMA members can make limited personal donations to the Committee for a Strong Economy (CFASE) PAC which supports pro-manufacturing Congressional candidates. Also, please consider participating in the 2012 Legislative Conference and other Government Affairs activities.

NTMA



DESPERATELY SEEKING AMERICANS FOR FACTORY JOBS

BY PARIJA KAVILANZ@CNNMONEY



U.S. factories are creating many new jobs. But owners are hard pressed to find skilled American workers to fill them.

There is a "critical shortage of machinists," a common and crucial position in factories, said Rob Akers, vice president at the National Tooling and Machining Association. "Enrollment in this field is critical."

The problem comes at a terrible time. Domestic contract manufacturers – known as "job shops" – are seeing a boom in business.

In the case of Win-Tech, a Kennesaw, Ga., manufacturer, orders are coming in fast and furious from its customers in the defense and aerospace industries.

But the company's owner Dennis Winslow is more concerned than elated.

DUMPING CHINA FOR AMERICAN JOB SHOPS

Winslow's been trying to add 12 more workers to his staff of 42 to meet the increased demand, but he's struggling.

"I'm facing a real conundrum," he said. "There are so many unemployed people in the country. But I can't find the skill sets that I need. I would hire tomorrow if I could."

For more than a year, Winslow has been looking for manual machinists, quality control inspectors and machinists trained to use computer-controlled systems.

He's advertised the jobs locally as well on popular online recruiting websites, such as Monster.com.

He said he may be forced to hire people who are not fully skilled, and then train them.

"I am coming to the conclusion that this [situation] has become the new normal," said Winslow. "Being a machinist once was considered a respectable trade. But young Americans just don't consider manufacturing to be a sexy vocation."

He noted that most people possessing the skill sets he needs today are baby boomers, many of whom work at his factory.

As the United States outsourced its manufacturing jobs over the last few decades, the country lost a significant chunk of its manufacturing talent pool, said Mitch Free, CEO of MFG.com, an online directory that matches businesses with domestic manufacturers.

"Now, as manufacturing is slowly coming back, we just don't have this talent quickly available," said Free, a machinist by training.

Every factory needs a machinist to operate it, whether it's to operate machines or to create machine parts. And machinists also create molds and casings to make plastic parts that are used in everyday products, such as computers and cell phones, said Free.

It takes about a year in trade school to become a machinist, followed by a few years of apprenticeship at a manufacturing facility, said Free.

Machinists make about \$60,000 a year. But with many logging overtime lately, Free said that income can get close to \$100,000 a year.

REVIVE MADE IN USA? EASIER SAID THAN DONE

"This is also a highly technical craft," he said. "It requires knowledge of computers, programming, even geometry. You can't hire someone off the street and turn them into a machinist."

Mark Engelbracht, owner of Omni Machine Works in Covington, Ga., is trying to hire just three new machinists. He, too, is having a hard time, a situation that will worsen as his older machinists retire.

"Finding more work isn't the problem for our business," he said. "Getting the worker is becoming a problem."

Omni Machine Works makes parts used by machines that manufacture consumer products, such as tires and phone plates. "But we're also a job shop. So we do a little bit of everything," he said.

Engelbracht has hired headhunters and temp agencies to fill the slots, but has had no luck. He's now thinking about starting an inhouse apprentice program to train hires himself.

"I've been trying to hire for a year," he said. "It's not that people aren't applying. But many are claiming to be machinists when they aren't exactly."





The new definition of heavy duty. That's KM4X." That's Different Thinking.

Kennametal redefines heavy duty with KM4X™ — the next generation of spindle interface.

In addition to its three-surface contact for improved stability and accuracy, KM4XTM provides optimized clamping force distribution and interference fit for higher stiffness. The result? A machine connection that delivers unmatched performance in heavy-duty conditions on even the most difficult-to-machine materials. Now that's Different Thinking. That's Kennametal.

To learn more about KM4X[™] and the latest machining technologies, contact your authorized Kennametal distributor, call 800.446.7738, or visit www.kennametal.com.

Extreme resistance to bending in heavy-duty applications. Extraordinary strength for high-torque milling.

Designed to excel when machining large components in titanium and other high-strength alloys.

Higher speeds or heavier loads — $KM4X^{TM}$ outperforms your expectations in any application, in any environment.

Easy to retrofit existing machines for increased through put without investing in new equipment.

KM4X[™] three-surface contact means stability and accuracy:

- Heavy-duty rigid configuration with evenly distributed clamping force.
- · Designed and balanced for high-speed spindle capability.
- Capable of performing in a wide range of operations.



EPA ISSUES HISTORIC AIR POLLUTION LIMITS, FEDERAL COURT ISSUES DELAY

BY KATHY KIERNAN, SENIOR VICE PRESIDENT OF AFFLIATED POWER PURCHASERS INTERNATIONAL LLC



A recent U.S. District Court ruling impacted far-reaching air pollution regulations that were slated to take effect on January 1, 2012. The Environmental Protection Agency (EPA) released strict rules in July 2011 that, for the first time ever, would limit toxic mercury pollution from coal-fired power plants nationwide.

As the January 1 implementation date approached, the U.S. District Court of Appeals granted a stay on December 30, 2011, pending further court review in April 2012. The state of Texas challenged the rule, along with Alabama, Florida, Georgia, Indiana, Kansas, Louisiana, Michigan, Mississippi, Nebraska, Ohio, Oklahoma, South Carolina, Virginia, and Wisconsin.

Specifically, the EPA's Cross-State Air Pollution Rule (CSAPR) restricts sulfur dioxide and nitrogen oxide emissions from power plants. Oil- and coal-fired power plants would be required to reduce emissions of 84 toxic

chemicals to levels no higher than those emitted by the cleanest 12% of plants. Many of our nation's oldest and dirtiest power plants would need to shut down, switch to natural gas, or install pollution control equipment. If fully implemented by 2016, the standards were projected to reduce mercury pollution from burning coal by 90%, acid gases by 88%, and sulfur dioxide by 41%.

"Before this rule, there were no national standards limiting the amount of mercury, arsenic, chromium, nickel, and acid gases that power plants across the country could release into the air," says EPA Administrator Lisa Jackson. Currently, about half of 1,200 burners nationwide have been running for decades without pollution controls, and the EPA reports power plants are responsible for half of the mercury and more than 75% of acid gas emissions in the U.S.

CSAPR protects the health of residents in states downwind from power plant emissions. In addition to contaminating water and fish, toxic chemicals are linked to cancer, IQ loss, lung disease, and heart disease. The EPA estimates CSAPR will prevent 11,000 premature deaths, 4,700 heart attacks, and 130,000 cases of childhood asthma.

Opponents to the rule argue that implementing restrictions in a short time period would eliminate jobs, raise energy costs, and adversely affect reliability of power. In some regions, power reliability could be threatened if too many plants close down at once or remain idle for installation of pollution control equipment. The largest power provider in Texas, Luminant, would have been forced to shut down two burners in north Texas on January 1 if the rule were enacted. Now, the company plans to continue operating both units.

Frank O'Donnell, president of Clean Air Watch, claims the EPA accommodated for reliability, allowing three years for power plant operators to comply with the standards. To ease concerns, the EPA also encourages states to provide an additional fourth year and case-by-case extensions.

Which states will see the most impact? The EPA reports 600 power plants in the United States operate a combined total of 1,100 coal-fired burners. Approximately 40% of these plants will need to shut down or make significant changes to adhere to CSAPR. The regions that will be most affected are the Midwest and the coal belt—Kentucky, Virginia, and West Virginia. Coal-burning power plants in Alabama, Florida, Georgia, Indiana, Ohio, Pennsylvania, and Texas are also targeted for being the largest sources of toxic pollutants.

Switch to natural gas – In central Pennsylvania, Sunbury Generation LP plans to replace five coal-burning units with two natural gas-fired turbines by 2015. In Michigan, CMS Energy Corporation cancelled development of a \$2 billion coal plant in Bay City, citing natural gas prices as the reason. That plant would have showcased the newest technology for controlling carbon dioxide emissions. More generators are forecasted to discontinue plans for coal, wind, and nuclear projects because of positive natural gas supply and price trends.

Between 2009 and 2010, natural gas use for power generation increased 24% in North Carolina, 15% in South Carolina, and 18% in Virginia. Nationwide, natural gas usage rose 7%, according to the U.S. Energy Information Administration. In the last decade, electricity generated by natural gas-fired plants increased by 50% across the U.S.

Building natural gas power plants is less expensive than building coal-fired plants, and gas-powered plants are easier to stop and restart in response to demand. A boom in natural gas production brings profit to landowners and a surge of job opportunities. Although natural gas power plants contribute to air pollution, the energy source is significantly cleaner than coal.

Energy prices - If stricter air pollution regulations take effect, will your energy costs

CONTINUED ON - P10



THE BEST MEDICAL TEAM IN THE INDUSTRY

WE ARE EXPERTS in our field and understand that high-speed spindle performance is essential for producing superior surface finishes on medical parts.

WE ARE AGILE with advanced Multi-Tasking and 5-axis machining talents that significantly speed up design-to-market delivery, so doctors can quickly meet the needs of their patients.

WE ARE COMPACT machining centers that provide big-time productivity, meaning shops don't have to give up valuable real estate in order to achieve high levels of production.

WE ARE RESULTS DRIVEN with new MAZATROL MATRIX 2 CNC controls that bring better cycle time, accuracy and surface finish to complex medical manufacturing.

WE ARE THE NEW VERTICAL CENTER NEXUS COMPACT AND INTEGREX i-150,

and our high-speed machining performance and innovative Multi-Tasking and 5-axis capabilities are perfectly suited for the highly competitive medical industry.

A PRESCRIPTION FOR SUCCESS:

MULTI-TASKING, 5-AXIS AND HIGH-SPEED MACHINING



NEW VERTICAL CENTER NEXUS COMPACT 12,000 rpm or 20,000 rpm spindle



INTEGREX i-150

Multi-Tasking, Done-In-One® Machining

WE ARE TRUE MEDICAL MACHINING MARVELS THAT SPECIALIZE IN COMPLEX, SHORT-RUN PARTS ON DEMAND. LET OUR COMPACT NATURE AND HIGH-QUALITY WORK GIVE YOU THE COMPETITIVE EDGE YOU NEED TO GROW YOUR BOTTOM LINE.

facebook twitter You Tube

WWW.MAZAKUSA.COM

Tel: 859-342-1700 Florence, Kentucky





rise? Currently, electricity prices are at an 8-year low, and natural gas prices are at a 9-year low. If you run a business in a state with a deregulated electricity or natural gas market, you may consider locking in a long term supply contract now to take advantage of today's historically low prices. You can negotiate a fixed-price supply contract today that begins when your current contract ends, even if the expiration date is a year or more in the future. Locking in now avoids possible future price increases and fluctuations.

Looking ahead - Amidst scare tactics, inflated cost projections, and

an intense election year, where do pollution regulations stand now? The U.S. District Court of Appeals will revisit CSAPR in April 2012. Other regulations are in the pipeline, including greenhouse gas legislation. Coal-burning power plants are likely to remain the primary source for electricity in the United States for the next few decades, but more natural gas and renewable energy sources will continue to come online.

NTMA

NTMA WELCOMES JEFF WALMSLEY

Jeff Walmsley, the new Director of Membership Sales & Retention for NTMA, was born in Euclid, Ohio and has spent the majority of his life in Northeast Ohio. He earned his bachelor's degree from Bowling Green State University and his MBA from Indiana Wesleyan University.

Jeff has spent the past 5 years with the Greater Akron Chamber of Commerce. His work within their membership department was integral in significantly growing their overall membership base. He especially places a high emphasis on retention efforts. Realizing that membership has a wide array of benefits that will affect each company differently, Jeff stresses the importance of customizing memberships to cater to an individual company's needs. He maintains that working to build a unique membership package with a company is not only essential for the member to receive maximum value, but also very rewarding as a nonprofit servant.

When it comes to both membership recruitment and retention, Jeff firmly believes in implementing proactive approaches. Jeff has expressed the importance of consistently investigating new methods to increase the value of membership and finding the appropriate prospective and current members that may be able to benefit. Furthermore, providing excellent customer service and genuinely working to ensure members are leveraging an NTMA membership to the best of their capabilities is a very high priority.

Having joined the NTMA from a regional organization, Jeff is especially looking forward to working directly with the local Chapters. The potential for collaboration on a national scale in terms of event planning, membership campaigns, affinity programs, etc. is tremendous. Jeff clearly sees that the NTMA is only as strong as its' individual Chapter components. He is eager to not only enhance the established Chapters but strive to create new Chapters throughout the country.

Jeff currently resides in Avon Lake, Ohio with his wife Erica and their two dogs, Chloe and Sloopy. While difficult to admit at times, Jeff is an avid Cleveland sports fan. He and his wife enjoy frequenting Cleveland restaurants, going to the movies,



playing golf and spending time with their families.

Jeff will be attending the upcoming MFG Event, in Orlando (March 8-12, www. themfgmeeting.com) and will be available to meet with NTMA members directly. If you wish to contact him: jwalmsley@ntma. org / 216-264-2858.

NTMA

ACCUROUNDS LAUNCHES NEW WEBSITE

Avon, MA, January 23, 2012 - AccuRounds, a manufacturer of precision machined components, is pleased to announce the launch of their new website. The redesigned site, www.accurounds.com, provides visitors with improved navigation and detailed information on the company's capabilities and services.

A few new features include industry pages, news and events, career postings and the ability to apply on-line. A white paper on AccuRounds' experience implementing Lean Manufacturing is also available on the website.

"Our new website was designed to provide our visitors with a more valuable experience, delivering pertinent information in an easy to navigate format," comments Michael Tamasi, CEO and President. "We hope that customers and prospective customers will find the website to be a good resource when looking for precision manufacturing solutions."

For more information, visit www.accurounds.com.



Makino

Next-Generation a51nx



Introducing the a51nx. It's a one-machine expansion program.

It expands the cutting envelope by 14%, boosts spindle torque 19%, and improves rigidity for higher metal-removal rates and reduced vibration. Its 1G linear axis acceleration and one-second 90-degree table indexing significantly reduce non-cut time. The reliability of the a51nx expands on the industry-leading performance of Makino's 1-Series. Most of all, the a51nx enables you to expand your ability to make lower-cost parts faster. See how at makino.com/a51nx.



PARTNERS IN THINC WELCOMES AEC AS A NEW PARTNER

Okuma America Corporation is pleased to announce that AEC (Automation Engineering Corporation), a leading provider in automated machinery and control systems, has joined Partners in THINC.

As an established company with more than 60 employees, many of which are registered Professional Engineers, AEC is able to offer a wide array of skills and technical expertise to every customer ensuring custom solutions to some of the most challenging equipment and automation demands.

When it comes to designing and manufacturing, AEC has no limitations. AEC understands their customers' needs and continuously strives to provide the world with the most functional, and productive solutions. AEC supplies many industries including: Automotive, Industrial, Greenhouse, Material Handling, Food & Beverage, and Pharmaceuticals, in which they tailor every project to produce quality, timely solutions that ultimately convert any impossible problem into a very real solution.

AEC's pipe handling system uses servo motors versus hydraulics to feed and remove the piping from the manufacturing processes. The servo drives allow for more precise and repeatable positioning while reducing the maintenance required to keep the systems operating to peak performance. AEC products can be seen and demonstrated at



the Okuma Tech Center in Houston and on YouTube at http://www. youtube.com/watch?v=SRyZxjlZF5Y.

For more information, visit www.okuma.com, www.partnersinthinc.com, and www.teamaec.com.





Working with DMG / Mori Seiki USA means that you'll have access to the most complete, high-quality line of machine tools in the world. We'll work with you to identify and create the perfect machining solutions for your application—so you'll never have to settle for a machine that isn't perfectly fit for the job. It's just one aspect of 360° Support—a fresh take on customer care from the world's largest supplier of machining solutions.







How can the right support make your business better? www.dmgmoriseikiusa.com





SWEARING IN OF 2012 ATMA BOARD OF DIRECTORS



Swearing in of 2012 ATMA Board of Directors



2012 ATMA President, Dante Fierros in his first address to the members



ATMA: Special Awards to 2011 ATMA Volunteers



Bruce Treichler of Zircon Precision gives a testimonial worth 10 Million dollars!



ATMA: Dave Tistone, NTMA President Presents to ATMA

www.bigkaiser.com

Boring Tools • Tool Holders • Cutting Tools • Presetting • Workholding • Accessories

Misconception #6 ONLY HIGH-PRECISION APPLICATIONS JUSTIFY THE INVESTMENT IN PREMIUM TOOLING

The Truth Is: The most successful manufacturers in the world invest in superior tooling because it is good for their bottom line. Whether you're running extreme-accuracy, high-efficiency applications or simply looking to carve out new efficiency and profits from a standing production run – BIG Kaiser delivers measurable performance advantages that drive down costs and maximize profits.

The new Kaiser EWD 2-54 high precision digital finish boring head features a large, high-contrast, easy to read digital display with .00005"/Ø resolution for absolute setting accuracy on the fly. A coated tool body, combined with a seal rating of IP 69K (highest possible), ensures complete protection in the most extreme environments.



Learn about more common misconceptions and productivity solutions at www.bigkaiser.com/truth or call 888-866-5776.

We'll improve your most demanding applications or we'll take back our products – Guaranteed.

MFG Meeting Booth #20, Westec Booth #2732 & Micro Manufacturing Conference Booth #B129



MAZAK NORTHFAST EVENT SUPPORTS GROWTH IN AEROSPACE, MEDICAL MANUFACTURING

EVENT GIVES MANUFACTURERS ACCESS TO INDUSTRY EXPERTS AND PRODUCTIVITY-IMPROVING TECHNOLOGY

Aerospace and medical manufacturing continues to surge in the Northeast United States. To support that growth, Mazak Corporation is hosting a special Discover More With Mazak event at its Northeast Technology Center in Windsor Locks, Conn., May 8, 9 and 10 from 9 a.m. to 8 p.m. daily. Local manufacturers, and those in town for the Mfg4 conference at the Connecticut Convention Center, are invited to discover how today's advanced manufacturing systems paired with expert guidance can meet the rapidly growing production needs of the aerospace, medical and other manufacturing sectors while boosting profitability.

Several productivity-improving Mazak machine tools will be on display during the event, Aerospace and medical manufacturing continues to surge in the Northeast United States. To support that growth, Mazak Corporation is hosting a special Discover More With Mazak event at its Northeast Technology Center in Windsor Locks, Conn., May 8, 9 and 10 from 9 a.m. to 8 p.m. daily. Local manufacturers, and those in town for the Mfg4 conference at the Connecticut Convention Center, are invited to discover how today's advanced manufacturing systems paired with expert guidance can meet the rapidly growing production needs of the aerospace, medical and other manufacturing sectors while boosting profitability.

Several productivity-improving Mazak machine tools will be on display during the event, ranging from world-renowned vertical machining centers to revolutionary Multi-Tasking systems.

On Tuesday, May 8, keynote speaker Richard Aboulafia of the Teal Group, a company that supplies independent aerospace and defense industry market analysis, will share his vast knowledge of the aviation and aerospace industries. Aboulafia also writes publicly about the aviation field, with numerous articles published in Aviation Week, Aerospace America and the Wall Street Journal.

On Wednesday, May 9, Sandvik Coromant, a Mazak VIP partner, will give its "Taking Flight" presentation on titanium milling using the Mazak HORIZONTAL CENTER NEXUS 6800 HM. The company will provide cutting tips, live tooling demonstrations and in-depth theory on how to effectively machine this tough material used in aerospace applications.

Neil Desrosiers, Mazak application engineer and MTConnect Technical Advisory Group member, will present on MTConnect at the Discover More With Mazak—Northeast event and discuss how this open communications protocol can increase a manufacturer's productivity and competitiveness. He will also present on MTConnect at the Mfg4 conference. Furthermore, Mazak and the Connecticut Center



"The busier we got, the more we needed a powerful ERP system up and running. Out here, there's no time for down time."

> Andy Bubulka, Manufacturing Plant Manager H-J Enterprises, St. Louis, MO



"That's why we went with Global Shop Solutions. They were in, they were out, and we were seeing major new efficiencies—right from the start. What a tremendous difference their ERP system, and their people, made in accelerating our workflow, lowering overall costs, and setting the stage for unconstrained growth. Very powerful. Only regret is that we didn't go with them years ago." Get ERP Right The First Time

For a **FREE** copy of "Get ERP Right The First Time™" call 1-800-364-5958 or visit www.GlobalShopSolutions.com.



MACHINERY'S HANDBOOK **29TH EDITION** 2,800 pages, Illustrated ISBN 978-0-8311-2900-2, \$94.95 Includes a new section on Micromachining plus many more updates and revisions. Also Available ... the 29th Edition CD-ROM ISBN 978-0-8311-2902-6, \$94.95 Just Published ... MACHINERY'S HANDBOOK Made Easy MADE EASY Edward T. Janecek 352 pages, Illustrated ISBN 978-0-8311-3448-8. \$29.95 This time-saving navigational tool for Machinery's Handbook will teach you how to quickly find exactly what you need from the Handbook's vast compilation of data, standards and text. To see sample pages, please go to this book on our website. VISIT US ONLINE AT WWW.INDUSTRIALPRESS.COM TO ORDER AND FOR A COMPLETE LIST OF TITLES. **INDUSTRIAL PRESS INC.** 989 Avenue of the Americas, New York, NY 10018 Phone: 212.889.6330 Fax: 212.545.8327 Toll-Free in U.S.: 888.528.7852 Email: info@industrialpress.com

INDUSTRIAL PRESS

PUBLISHERS OF MACHINERY'S HANDBOOK

New Edition ... Now Available!

Designed to Streamline™

for Advanced Technologies (CCAT) will provide live streaming MTConnect demonstrations from Mfg4 to the Mazak Northeast Technology Center to showcase how manufacturers can monitor their machines from anywhere.

Attendees will also have full access to the Northeast Technology Center's regional industry expertise and application engineering resources. Engineers and technicians will be on hand at the machining demonstrations to answer questions and discuss all aspects of the manufacturing process, including cutting tools, workholding, automation, material handling, quality assurance, chip handling, coolant, safety and software.

TECHNOLOGY IN ACTION

Designed to meet the needs of medical manufacturers, the new space-saving, high-speed VERTICAL CENTER NEXUS COMPACT will be showcased at the Discover More with Mazak—Northeast event equipped with a 20,000-rpm spindle. The 5-axis, 40- taper spindle Vertical Machining Center features a backlash-free NC rotary/tilt table as standard and provides fast cycle times and precision part surface contouring capability for small, complex medical parts.

Attending manufacturers looking to expand their operations through single-setup, multiple-process capability will see the Done-In-One part production power of the INTEGREX i-150, i-200ST and j-200 model machines.

To showcase multiple-surface, full 5-axis simultaneous machining paired with turning capabilities, Mazak will run part-cutting demonstrations on the VARIAXIS 630-5X II T and INTEGREX e1060/V8. Ideal for the aerospace and turbine industries, these Vertical Machining Centers efficiently and accurately process workpieces with complex geometries and contours in single part setups.

The QUICK TURN NEXUS 200 MY brings uncompromised performance, advanced technology and productivity to shops of all sizes by offering turning, milling and Y-axis capabilities in a single setup.

Attendees seeking to improve versatility and gain unsurpassed value across several applications, ranging from heavy-duty to high-speed machining, will see demonstrations of the VERTICAL CENTER SMART 430A. Featuring a space-saving footprint, the machine delivers high efficiency machining thanks to a powerful, 40-taper spindle with a maximum speed of 12,000 rpm, high-speed feedrates and

30-position tool magazine. The machine also incorporates Mazak's SMART CNC that maximizes ease-of-use and operator efficiency by offering both EIA/ISO programs and conversational programming.

For the tough-to-machine materials used in the aerospace industry, Mazak will highlight its HORIZONTAL CENTER NEXUS 6800 HM (Hard Metal Package) Machining Center at the event. The heavy-

duty machine features a high-torque spindle and an extremely rigid construction that provides machining stability with an overall weight more than two tons heavier than the standard machine configuration.

Discover More With Mazak—Northeast event registration information will be posted on www.mazakusa.com.

NTMA



NTMA MEMBER HIKES TO HELP OTHERS





Dear family, friends and business associates:

Once again I am starting to train for a hike with the Leukemia and Lymphoma Society. This year I will be returning to Yosemite to face another challenging hike. And as in the past I will also be fundraising to raise money to help in the battle against these devastating blood cancers.

I believe strongly in the work that LLS does and have personal connections with people who are battling both leukemia and lymphoma. I am hiking in honor of Casey, Bob, Terri, Ted, Nelda and Kurt and in memory of Mike who is no longer here in body but who's spirit lives on and continues to inspire so many of us.

Last year I raised \$7,640.00, a \$1,000.00 more than I raised in 2010, I hope to surpass that amount this year. So please join me on this amazing journey by making a tax-deductible donation to LLS at my fundraising website:

http://pages.teamintraining.org/sf/Yosemit12/kfusselman

Or by mailing a check made out to: Leukemia & Lymphoma Society or LLS and mailing it to me at:

Ken Fusselman Perry Tool & Research, Inc. 3415 Enterprise Ave Hayward, CA 94545

Donations must be in no later than April 30th, as soon as possible would be even better. Thank you in advance for your generosity and compassion for others.







See how we fit your application midaco-corp.com 847-593-8420











MANUFACTURING CREATES VALUE FOR EMPLOYEES AND COMMUNITIES

MEMBER IN THE NEWS

On Januay 24th's, State of the Union Address, President Obama discussed improving employment through initiatives that would include trying to create more manufacturing jobs. The Enquirer asked area manufacturing executives for their views on how to make this vision for manufacturing a reality.

The State of the Union speech was accurate. The blueprint for economic growth begins with American manufacturing.

The perception that manufacturing in America is declining is misguided. The United States is still the world's largest manufacturing economy, producing 21 percent of global manufactured value. U.S. manufacturing produces \$1.6 trillion of value each year, which is 11.2 percent of U.S. GDP, supports one in six private sector jobs — or 18.6 million jobs in the United States — and performs half of all R&D in this country.

U.S. factories utilize advanced technology from robotics, high tech laser systems, and complex computer driven machinery.

The modern factory is clean and safe. Manufacturing jobs offer higher pay and more benefits than other sectors. The image of manufacturing needs to reflect this in order to attract young people.

Our industry has experienced severe stress prior to the current recovery, and sig-



nificant challenges remain to ensure growth. The President and Congress could assist in overcoming this by developing stable and sensible policies in the areas of education, taxes, energy, healthcare and fair trade.

More emphasis is needed on providing vocational and skills training in order to implement the demands of new technology.

There are great programs in this region, but more are needed. Employers and school systems should do their part by encouraging manufacturing and technical skills as part of the curricula, and inviting companies to visit students. Increasing funding and incentives in this area is a requirement for growth.

Policy makers need a better understanding of how smaller companies are structured. The great majority of small manufacturing firms are classified as pass through entities for tax purposes. We pay income tax on profits left in the company for reinvestment.

Tax incentives to reinvest in our companies are required. Expansion of the capital equipment investment tax program is needed. Small manufactures take every opportunity to upgrade technology, because we are in an extremely competitive and international market.

Uncertainty needs to be removed from the business environment. We need stable policies that commit to predictable and

CONTINUED ON - P18



competitive electricity and other energy. Costs continue to increase in health care, regulatory requirements and other insurance because the market does not know the implications of current policies.

Our customers, and all U.S. manufacturers, are under intense price pressure from abroad. Simpler regulations, a sustainable and internationally competitive energy policy, and addressing foreign countries that subsidize manufactured products or manipulate currencies are issues our government can affect.

Our region benefits from a diverse economy and a solid core of skilled people. We can make manufacturing a growth engine with the right manufacturing policies.

Americans who work in manufacturing are the most productive and innovative in the world. I have visited competitors internationally and believe passionately that if the playing field is level, our companies just won't compete globally, we will win.

Mike Schmitt is president of The Metalworking Group, a contract manufacturer and invested \$1 million in new technology last year.

From the Cincinnati Enquirer, January 26, 2012

NTMA

SWM MANUFACTURERS WANT TO HIRE, CAN'T FIND QUALIFIED EMPLOYEES

By Ryan Klund - RKLUND@ABC57.com

An industry in Southwest Michigan is ready to hire employees but is having trouble finding qualified employees.

The Berrien Tooling Coalition met Tuesday morning for a roundtable meeting at Lake Michigan College's M-Tech facility on Klock Road in Benton Harbor.

When asked, representatives from 18 of the 20 companies attending agreed that finding skilled workers is a problem. "Between the people in that room I bet we'd hire another 80 kids in the next three months," said Mike Levi, Chief Financial Officer for Eagle Technologies in Bridgman.

Eagle Technologies builds manufacturing machines. Levi said the company just hired six employees and would hire six more immediately if those people were available. "There's a definite shortage of talent," he said.

The Berrien Tooling Coalition began



meeting during the recession in 2008 when 'tool and dye' businesses were laying off employees. Now, with a rebounding economy, the coalition meets with representatives from LMC to properly train a workforce that is desperately needed.

"I've already got like three job offers," said Tammy Calaberese, a manufacturing

CONTINUED ON - P19



Optimize Your Workplace with Metalworking Fluid Technology

Precision Fluids keeps machines running cleaner, better, longer; reducing costs and improving productivity with innovative fluid solutions:

- Metalworking fluids
- Stamping/Drawing Compounds
- Rust Preventatives
- Bi/Tri-Metal Cleaners

March 2012: Tip of the Month

Latest coolant technology combined with best practice fluid handling and monitoring should lead to machine sumps with absolutely no foul smelling odors.



713-896-0606 | www.precisionfluids.com

student at LMC who still has a year left in college. Calaberese was laid off from her previous machining job and feels the demand for her advanced manufacturing training.

Levi said there aren't enough people interested in manufacturing. "(Local manufacturers) would hire 50 to 80 more people right now but there aren't 50 to 80 in that classroom."

Levi said a new generation of prospective employees aren't exposed to manufacturing with shop classes in high school and get negative feedback from their parents. "Mom and Dad are encouraging their kids not to be a part of manufacturing," he said.

The Berrien Tooling Coalition now discusses ways to recruit young people into the industry. Levi said part of the strategy is showing them that new-age manufacturing is computer based and no longer is the dirty job it once was.

Originally printed at http://www.abc57.com/home/top-stories/SWM-Manufacturers-want-to-hire-cant-find-qualified-employees-139332703.html.



KENNAMETAL TO ACQUIRE DELORO STELLITE

TRANSACTION WILL EXTEND KENNAMETAL'S RANGE OF WEAR SOLUTIONS

Kennametal Inc. (NYSE: KMT) announced today that it has signed a definitive agreement to purchase the Deloro Stellite Group from Duke Street Capital for approximately €277 million. The acquisition, which is expected to close in 60 to 90 days, remains subject to customary regulatory approval and negotiated conditions of closing.

UK-based Deloro Stellite, with approximately €220 million in annual sales, is a global manufacturer and provider of alloy-based critical wear solutions for extreme environments involving high temperature, corrosion and abrasion. The company employs approximately 1,300 people across seven primary operating facilities globally, including locations in the U.S., Canada, Germany, Italy, India and China. Through proprietary metal alloys and materials expertise as well as specialized engineering design and fabrication capabilities, Deloro Stellite delivers value-added, tailored wear solutions for customers in Kennametal's current end markets of oil/gas, power generation, transportation, and aerospace.

"Deloro Stellite has a long-standing history of providing exceptional value to customers in demanding environments and we are pleased they have agreed to join the Kennametal team," commented Carlos Cardoso, Kennametal Chairman, President and CEO. "The addition of this world-class surface technology and materials science expertise will enhance the range of productivity solutions provided to our customers in extreme wear environments."

This acquisition is in alignment with Kennametal's growth strategy and positions the company to further achieve geographic and end market balance. The transaction is expected to be accretive to earnings in the fiscal year ending June 30, 2013. Kennametal plans

CONTINUED ON - P20

Full Line Catalog

Dillon Manufacturing has combined their complete chuck jaw product line into one 38-page catalog. This catalog ensures that customers will receive information on soft jaws, hard jaws, and full grip jaws for Serrated, T&G, Acme and Square Key type chucks. Also included is information for ordering collet pads and collet pad jaws, monoblock jaws and special soft and hard jaws.

ISO 9000 Certified QMS

DillonManufacturing, Inc.

2115 Progress Drive | Springfield, Ohio 45505 | www.dillonmfg.com

Phone: 1-800-428-1133 | Fax: 1-800-634-6480 | Email: sales4@dillonmfg.com

PlanoMachine.com

AS9100C/API-Q1/ISO 9001:2008

PRECISION CNC MACHINING

World Class Manufacturing since 1967

70 person shop with over 1400 years of machining experience.

Let us quote your next project

See complete capabilities at www.planomachine.com

Email: joe@planomachine.com









Plano Machine & Instrument, Inc.

2720 S. I-35, Gainesville, Texas 76240 (60 miles north of Dallas at exit 494)

Phone: 940-665-2814

Fax: 940-665-5130



Work No - Run lights out

Fastest 2 axis to Simultaneous 5-Axis CAM Software for the toughest parts. Dynamic Stock Models for the highest efficiency and safety.

Best Finishes.

Auto-5 for automatic 5-axis milling.

PLAN Job management solution

- Plan Smarter, Manage Better

Job Management & ERP solutions for Custom Manufacturers and Job Shops. Designed around the job and not the accountant, so anyone in your company can use it.

Easy to Learn & Easy to Use

Work Smarter
Work Faster

Plan your Work Work your Plan





www.sescoi.com info@sescoi.com 248-351-9300



to fund the acquisition through existing credit facilities and operating cash flow, and remains committed to maintaining its investment grade ratings.

Kennametal conducts acquisitions according to a disciplined process that is part of the company's management operating system known as the Kennametal Value Business System (KVBS). The Valence Group provided investment advisory services for Kennametal on the transaction. For more information visit www. kennametal.com.

NTMA

GF AGIECHARMILLES HSM 600U LP TAKES PRECISION TO THE NEXT LEVEL

NEW ADDITION TO FAMILY OF TRUE 5-AXIS SIMULTANEOUS HIGH-SPEED MACHINES

To build on the success of its compact 5-axis MIKRON HSM 400U LP high-speed milling center, GF AgieCharmilles is upping the ante with a larger-size machine platform called the MIKRON HSM 600U LP, creating a family of linear motor full 5-axis simultaneous machining solutions that set a benchmark for speed.

GF AgieCharmilles developed the "U" version of its MIKRON

CONTINUED ON - P21



The MIKRON HSM 600U LP high-speed milling center from GF AgieCharmilles is ideal for prototype production, die making and fully automated, low-volume series production where accuracy and surface finish are critical.

HSM LP (linear performance) milling centers to machine work-pieces in a true 5-axis simultaneous high-speed fashion via linear motor technology in the main machine axes and optimized direct-drive motors for the B and C axes, resulting in high precision and superior part surface finishes. Furthermore, the machine's 36,000-RPM vector spindle also assists in providing excellent surface finish and part detail, while significantly reducing machining time for semi-finishing and finishing operations.

With 31.49" X-axis and 23.62"Y-axis travels, the HSM 600U LP accommodates larger workpieces and brings added value to a wide range of applications, including hard metal machining, through its rigid and robust design. The machine's portal and base are made of polymer granite, which provides excellent vibration damping that is approximately 10 times greater than cast iron. Such damping is essential when working with high feedrates and high acceleration. Additionally, the worktable, X-, Y- and Z-axis slides are made of high strength cast iron and reinforced by longitudinal ribs and wide sections.

The milling center is also ideal for prototype production, die making and fully automated, low-volume series production where accuracy and surface finish are critical. The HSM 600U LP's superior 32.81 ft/sec2 acceleration enables it to reach high-programmed feedrates of 196 ft/min in the simultaneous operation of serial production as well as achieve unbeatable precision on high-end molds; thereby reducing the number of machines necessary to perform jobs precisely, quickly and cost effectively.

Because high levels of heat develop in drive groups over prolonged periods of high-axis feedrates, the HSM 600U LP employs a sophisticated thermal management system. Each of the linear axes as well as the round-swivel unit features a cooling unit to systematically draw the heat out of the machine, creating geometric stability and high repeatability of movement guidance.

To avoid inconsistent loading of small tools and 3D geometry errors due to the inaccurate measurement of those tools, the HSM 600U LP features Intelligent Tool Measurement (ITM). The ITM records the complete tool tip up to a diameter of 0.47" on image sensors. Special software cleans and measures the recorded tool geometry for repeatability in the micrometer range.

The HSM 600U LP also achieves peak performance through its Operator Support System (OSS) smart machine module. The OSS gives the machine operator ultimate control in influencing the unit production costs of the workpiece. Additionally, the operator can overwrite the drive and control parameters to focus on a particular task, including highly productive speed management, outstanding surface quality or true-to-contour tracking.

Lastly, the HSM 600U LP possesses the capability for 24/7 unattended machining using its optional MIKRON pallet magazines with System 3R and Erowa interfaces. These fully integrated pallet magazines can be loaded without interrupting cutting operations already in progress.

For more information on the company's products and services, contact Gisbert Ledvon, GF AgieCharmilles, 560 Bond St., Lincolnshire, IL 60069-4224, Tel: 1-800-CTC-1EDM. Gisbert. Ledvon@us.gfac.com, Fax: 847-913-5340, or visit http://www.gfac.com/us.





NTMA/PMA One Voice Legislative Conference

May 8-9, 2012 Washington, D.C.

Discuss the issues that matter most to you and your company directly with those who hold power in Washington at the fourth-annual One Voice Legislative Conference.

Visit
www.metalworkingadvocate.org
for complete conference details
and
registration information.

Could your employees and communication technologies work better together?

Email · IM · Presence · Web Conferencing · Voicemail



Apptix Unified Communications

Empower your company to grow quicker, move faster and do more.



866-428-0139 www.apptix.com/uc · sales@apptix.com

Save over 20% by signing up with NTMA's partner Apptix, use code: ntma2011

DID YOU KNOW?

GUIDE TO MEMBER SEVICES

NTMA MAKES AVAILABLE TO MEMBERS LEGAL COUNSELING IN ALL KEY AREAS OF LABOR RELATIONS?

Members have a unique opportunity at national conferences to participate in industry roundtable discussions with other members from within their industry sector. Professional speakers and industry experts also provide informative seminars on team building, lean manufacturing, marketing, the global business climate, how to measure your company's success, how to double your company's sales, firing a customer and many others.

INCLUDING:

- Employee Handbook Reviews
- Employee Layoffs Or Termination
- Sexual Harassment
- Age Discrimination
- ADA Compliance
- Union Organizing
- Decertification
- And Numerous Other Labor Relation Issues!

MEMBER TESTIMONIAL

"We had a labor union attempt to organize our small shop a few years ago and we thought they were breaking the law and we confronted them over it. We contacted NTMA's team and they confirmed that we were right and told us what to do. As soon as they the organizers showed up the next day, we followed what we had been told to do and they left our property. They knew they were breaking the law and they knew we were informed, thanks to the NTMA.

OH Member

NTMA's Labor Counsel has 45 years' experience focused exclusively on labor and employment issues, providing NTMA members with unparalleled expertise and an unmatched track record. Free-of-charge, up to a maximum of one hour per month.

For more information, please contact NTMA toll-free at 800-248-NTMA.

NTMA

CONGRESSMAN BILIRAKIS JOINS MANUFACTURING CAUCUS, TOURS LOCAL PLANT

In January, Congressman Gus Bilirakis (FL-09), joined the Congressional Manufacturing Caucus, and is currently the sole Florida representative in the caucus.

With more than 300,000 manufacturing jobs across the state of Florida, Congressman Bilirakis understands the important role manufacturing will play when it comes to improving the local and national economy.

He also met with a local manufacturer, Tampa-based Southern Manufacturing Technologies, to discuss how the federal government can help increase manufacturing and create much-needed manufacturing jobs here in America.

CALENDAR OF EVENTS

THE MFG MEETING

Hyatt Regency Grand Cypress Orlando, Florida March 7-11, 2012

NRL COMPETITION

May 5-6, 2012 Indianapolis, IN

NTMA/PMA LEGISLATIVE CONFERENCE

Westin Washington, D.C. City Center Hotel Washington, D.C. May 8-9, 2012

NTMA CONTRACT MANUFACTURING PURCHASING FAIR

co-located with amerimold Suburban Collection Showplace Novi, MI June 13-14, 2012

PURCHASING FAIR

October 22-23, 2012 Nashville, TN

FALL CONFERENCE

October 24-28, 2012 Nashville, TN



Roy Sweatman, (left) owner of Southern Manufacturing Technologies, Inc., and Congressman Gus Bilirakis (right), discuss creating jobs in America.



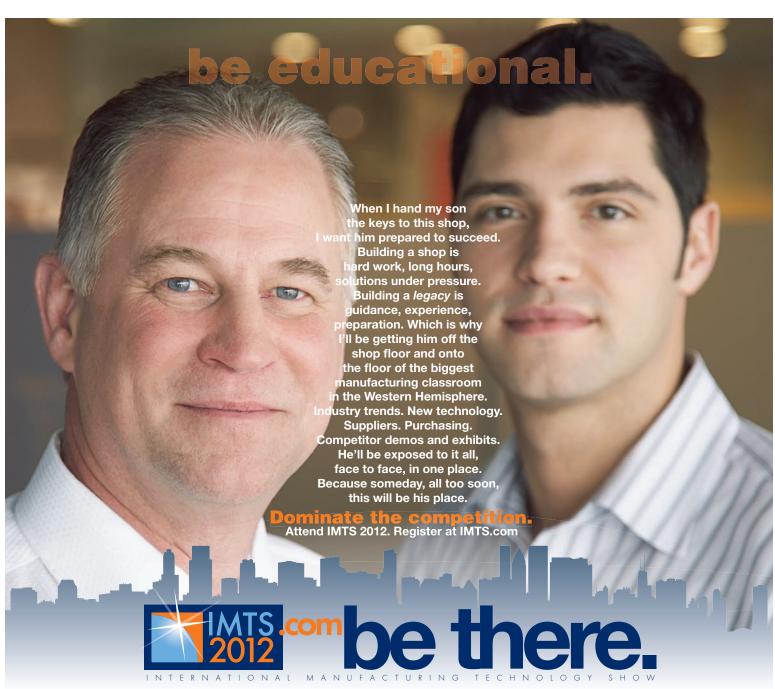


THE RECORD

PRESORTED FIRST-CLASS MAIL US POSTAGE PAID Willoughby, OH PERMIT NO. 58

NATIONAL TOOLING & MACHINING ASSOCIATION

6363 Oak Tree Boulevard Independence, OH 44131



Sept. 10-15 2012 · McCormick Place · Chicago