

NTMA

THE RECORD



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In Hall 27, Stand C44 at EMO 2013, GF AgieCharmilles will showcase its latest milling, EDM, laser and automation solutions that meet the global manufacturing market's demand for precise, efficient and cost-effective part production. —p15

SECOND ANNUAL NATIONAL MANUFACTURING DAY SLATED FOR OCT. 4, 2013

After a successful initial celebration last year, the next Manufacturing Day has been scheduled for Fri., Oct. 4, 2013. —p18

AHAUS ANNOUNCES 2013 APPRENTICE SCHOLARSHIPS

Ahaus Tool & Engineering, Inc. has announced the offering of two apprentice scholarships for 2013. —p21

IRS ISSUES NEW RULES FOR ASSOCIATION FOUNDATIONS

Associations with related foundations that are considered to be "supporting organizations" under Internal Revenue Code Section 509(a)(3) should pay attention to a recent decision by the Internal Revenue Service. —p36



CONFLICT MINERALS OVERVIEW

BY THE FRANKLIN PARTNERSHIP

MANY DOWNSTREAM SUPPLIERS ARE RECEIVING LETTERS FROM CUSTOMERS REGARDING COMPLIANCE WITH THE "CONFLICT MINERALS RULE." —p12

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CHAIRMAN'S CORNER

ROBERT MOSEY / NTMA CHAIRMAN OF THE BOARD

NTMA's theme for 2013 is "Stewardship of the Manufacturing Industry". Our four main focuses are; Membership Value, Industry Advocacy, Workforce Development, and Governance. As I travel this year and visit many of our chapters, I will be reporting to you all of the great stewardship activities that are occurring across the United States.

My assignment in June was to visit the Skills USA contest in Kansas City. Since I was traveling all that way, it made sense to visit the Kansas City Chapter of the NTMA. After determining that there is only one Kansas City airport (not one in Kansas AND one in Missouri) I arrived at the airport and was greeted by Tom Goodpasture, President of Pride Manufacturing. Since it was nearly 10:00 pm, Tom quickly dropped me off at the hotel and told me that Kansas City Chapter President, John Jaixen, would be by in the morning to pick me up and begin the shop tours.

As promised, John picked me up and we headed to A&E Custom Manufacturing. John is President of A&E which is owned by longtime NTMA Member, Steve Hasty. John gave me a tour of the company where they manufacture a diverse array of fabricated assemblies. They provide these products to the several industries including transportation, construction, military, military, and food. I was very impressed by the diversity in the company's employee base. There were men and women of all ages and skill levels. There were entry level employees being men-



Chapter President John Jaixen, NTMA Chairman Bob Mosey, Owner Steve Hasty of A&E Custom Manufacturing

tored by journeymen, working side by side in an effort to ensure workforce succession. A great example of both Workforce Development and good Governance.

As we were completing the tour of A&E, Tom Goodpasture showed up and we headed to his company, Pride Manufacturing for a tour. At Pride, they manufacture parts from microscopic



Bob Mosey and Owner Tom Goodpasture of Pride Manufacturing

to fabricated frames that take up half of one his buildings. For those of you who are not aware, (I wasn't) Tom's company is a bit of a miracle story. In 2003 Pride was selected as a target for a tornado which proceeded to tear apart his building and relocate its contents over the neighboring area. Miraculously, with the help of NTMA friends and a local machinery dealer, Tom and his staff were able to maintain production while they rebuilt the building. They never missed a beat! When we speak of Membership Value, networking always rises to the top. Here is a great example of how powerful networking can be.

Tom has been very involved in the chapter over the years and is now very involved in an educational program with Metropolitan Community College-Business & Technology where 28 local companies, many NTMA members, come together and advise the school on what is needed in the industry. (Please see side bar letter from MCC regarding Industry Award). Workforce Development on steroids!

From Pride Manufacturing, Tom and I visited Chapter 2nd Vice President, Michael Bohning, at his company, Creative Blow Mold Tooling. Michael purchased the company in 2006 and is growing at a fast pace. At Creative, they design and build the molds for all types of containers from gas cans to orange juice. Sometimes we don't realize the technology that is involved in the manufacturing of what appears to be a simple plastic bottle. Like many of our members, a shortage of skilled labor is his number one issue. This is one of the main reasons he is involved with the local chapter and its Workforce Development efforts. Michael has a terrific, growing company and we are thankful to have him as an active member of the NTMA.

From Pride, Tom and I went to visit Michael



Chapter 2nd Vice President, Michael Bohning and Bob Mosey Creative Blow Mold Tooling

Hudson, owner of Heartland Fabrication & Machine. Michael has been very involved in the chapter including a stint as Chapter President. Michael and his wife, Christi, run a very cool company, actually two companies. Heartland manufactures all sorts of specialized components for the food industry as well as doing larger fabricated assemblies for the construction and architectural industries. I was most impressed with a new product that he is developing and selling to one of his largest customers as well as their

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THE RECORD

OPERATIONS & EDITORIAL

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Michael Hudson and Bob Mosey at Heartland Fabrication & Machine

competition. If you ever get the chance to meet Michael, you will see him as a fun loving, caring person. You will not be wrong, but underneath that very pleasant facade is a vicious entrepre-


neur. I would give anything to have 10% of that tenacity.

Michael and his wife Christi invited me to dinner that evening and shared with me a very personal and heartwarming story about how the chapter members have helped them through some very difficult times. This is a side of networking that we don't talk about very often. It is more than just business. It is all about the relationships that are built by coming together for a common cause. You can't put a dollar value on that! This is the kind of Stewardship that means the most to me.

After the Skills USA competition (more on that later) and on my way out of town, Chapter Executive Torree Pederson, took me by C&R Manufacturing where company owner and long-

CONTINUED ON — P6

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time NTMA member Ron Wosel gave me the grand tour. I don't want to give away any trade secrets here but Ron has a very special model for his company. When we get the OCEC report each year, there are those few companies that are considered "high performance". C&R is one of those! C&R was also one of the 2011 Modern Machine



Ron Wosel and Bob Mosey at C&R Manufacturing

Shop Top Shops. Yet somehow he has the time to play with high performance watercraft and snowmobiles. I think there is something to be learned from Ron! And speaking of good Governance, Ron is involving his daughter Andrea and son Brian in the business assuring succession to the next generation. Great work Ron!

From a chapter perspective, the Kansas City Chapter is doing great stewardship. Here is some detail on their efforts:

WORKFORCE DEVELOPMENT

Working with three local community colleges with machining programs to ensure industry needs are communicated and to help assess the students "work readiness". They work closely with Prep-KC to participate in "speed dating" at local high schools. This offers freshmen the chance to hear about and make contacts with manufacturers in the area. Their education committee recently started doing monthly tours at two of the local high schools offering computer integrated manufacturing classes. Many of the chapter board members serve in the local community college and tech program boards.

INDUSTRY ADVOCACY

Chapter leadership works closely with NTMA at the national level to support the legislative conference. Some of the members serve on state level boards for input regarding manufacturing. Rick Schwind recently testified in front of the House Small Business Committee.

MEMBERSHIP VALUE

Annually, Chapter Executive, Torree Pederson, reaches out to each member to ensure that they are receiving maximum value of their membership. They have worked hard to get more employee applications out to members through a number of different channels. This has been met with much excitement!

GOVERNANCE

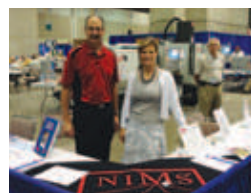
Torree and the board work hard to look at our governance and make sure that any change is perceived as a good thing and not something people should fear. They review their by-laws and complete a strategic plan at least every 2-3 years to ensure that they are headed in the right direction.

SKILLS IN KANSAS CITY

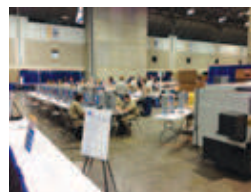
I've heard a lot about the Skills USA completion. None of that prepared me for the overwhelming scope of this event. Within an area of approximately 16 football fields, some 6,000 contestants (mostly young) participated in 100 industries from construction to aircraft mechanic, cosmetology to auto body repair, and everything in between. Of course the one most important to us was the NIMS sponsored machining contests. Within this competition there were several tracks including manual lathes and mills, CNC lathes and mills. Within those, the students were measured on shop math skills, programming, quality, even job interviews. This completion had two levels, High School and Post Secondary. Please see the article regarding the Skills USA contest results in the July issue of the Record.

I must congratulate the NIMS staff for an exemplary job of organizing our industry's portion of SKILLS USA. With the assistance of many volunteers, many from the KCNTMA, NIMS Executive Director, Jim Wall, put together a terrific program that went off seamlessly. A special thanks to KC NTMA's George Crossland who was instrumental in putting together the criteria for the contests as well as managing many of the volunteers.

I had the opportunity while at the contest to wander around and observe all of the various contests going on at the same time. Unbelievable! From all across the country were young people



Bob Mosey with Kansas City NTMA Chapter Executive Torree Pederson at Skills USA



competing with one another in all of the Industrial Arts that we sometimes think are dead

or not visible to our youth. Sometimes we worry about the future of our industry and in fact, the future of our country. I left the event with a feeling that our country's future was going to be just fine! My biggest disappointment was that there was no National media coverage of an event that means so much to the future employment of

our American population. This is not due to the lack of effort on the part of the Skills USA staff. Somehow this very positive workforce development effort is not deemed news worthy beyond the local news. Truly a missed opportunity.

MAZAK

In early July, Dave Tilstone and I made a trip to Kentucky to visit Brian Papke, President and Rick Ware, Vice President of the Mazak Corporation. As you are aware (I hope), Mazak is one of NTMA's major industrial partners and a Nation Associate Member. They bring value to us through their monetary support that allows us to provide needed services to our members as well as providing emerging technologies that our members need to build their businesses. Rick



President of Mazak, Brian Papke, Dave Tilstone NTMA President, Bob Mosey, and Rick Ware, Vice President of Mazak.

gave Dave and I the grand tour of their manufacturing plant where they build over 90% of the components needed to build their machines in this country. If you ever have the opportunity to visit the factory, I would highly recommend accepting the invitation. We really appreciate what Mazak brings to the table for our members and we look forward to a long and prosperous relationship.

Next month, there will be the infamous Kansas City/St. Louis Joint "meeting", a visit to Okuma, and my visit to attend the Arizona Chapter Regional Event.

In the mean time, keep up the good work in your own chapters and communities!

Peace,

ROBERT MOSEY / CHAIRMAN

Robert Mosey

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DISTINGUISHED BUSINESS/INDUSTRY AWARD NOMINATION 2013

PRECISION MACHINING CONSORTIUM - METROPOLITAN COMMUNITY COLLEGE

As the economy began to recover in 2011, manufacturing companies started calling the Metropolitan Community College-Business & Technology campus (MCC-BT) seeking skilled machining students. Unfortunately, our machining program, like many across the country, had struggled for some time with low enrollment and we didn't have many students that qualified. We decided it was time to re-think how to grow our enrollment in order to protect a high-cost program and address a strong workforce need.

We considered all options in determining the optimum way to restructure the program. Faculty reflected on the apprentice model in which they had learned their machining skills and which technical skills were absolutely essential for a student's success in the modern manufacturing industry. What emerged was a draft plan to develop a ten-week, full-day cohort program in which students would focus on either lathe or mill skills and then complete a six-week paid internship. We believed the paid internship component and the hope for a good job after a semester of intensive training were key to attracting and retaining students.

We invited 21 companies to discuss our proposed revisions – and for a candid conversation about the campus' ability to continue offering the machining program unless we addressed significant financial and completion challenges. We told them we needed their help and they responded in spades!

Over the course of several meetings, the companies agreed to establish a formal consor-



tium to guide the program restructuring, to pay a \$200/year membership fee to cover industry-related assessment and meeting costs and, most critically, to each provide a paid internship at least once a year and let us use their company name and logo in our promotional materials. They also signed a strong letter of support for the MoManufacturingWINs grant application.

In early March 2013 the first cohort of 24 students started the Computer Integrated Machining & Manufacturing (CIMM) program. Ten weeks later, 17 of them qualified for internships and were "hired" according to an intricate interview and match-up process the companies developed with college personnel. Most of the students have been offered jobs by their internship companies; those who haven't have opted to return to the college for additional training. There is another waiting list of students eager to participate in the second cohort and seven more companies and a bank have joined the Consortium. Given the success of this model, several of the partner companies are now working with the campus on a similar program for entry-level Industrial mechanics that will launch in August.

In appreciation for the significant role the Precision Machining Consortium partners have played in resurrecting an essential technical skills program which is integral to the economic health of the Kansas City region, Metropolitan Community College is proud

to nominate the following 28 companies and the Bank of Kansas City for the 2013 MCCA Distinguished Business/Industry Award:

ATK Small Caliber Systems
Baader-Johnson
Bank of Kansas City
Best Tool Manufacturing
Brunson Instruments
Clay & Bailey Mfg.
Computech Mfg.
Continental Tool & Mfg.
Creative Blow Mold Tooling
Dollins Tool
Fike Corporation
Gray Manufacturing
Great Western Mfg.
Huhtamaki
Kocher & Beck USA
Machine Laboratory
MeadWestVaco
Microtool
Mid-America Fittings
Pride Manufacturing
Probitas Manufacturing Technologies
Pro-Con
R & D Leverage
SOR
Triumph Structures
Ultra Source
Van-Am Tool & Engineering
Vector Tool & Engineering
Vista Manufacturing



IN MEMORIAM - MICHAEL V. CZERNIAK

Michael V. Czerniak, 81, of Toledo, Ohio passed away on Friday, August 23, 2013. He was born on November 23, 1931, in Toledo to Michael and Clara (Sobierowski) Czerniak. He married Dolores (Case) Czerniak on June 6, 1953, and they recently celebrated 60 years of marriage.

A 1950 graduate of Macomber High School, Mike started his career at Acklin Stamping later moving Metal Forming & Coining, Maumee Ohio in 1962 as a tool room supervisor and moved up in the company through the years. He was President/CEO of Metal Forming & Coining Corporation from 1979, until his retirement in 1997. He

remained active on the company's Board of Directors until his death. One of his proudest achievements of his career was the construction of a new 100,000 manufacturing facility for Metal Forming & Coining in 1996.

Throughout his career, Mike was active on many boards and organizations. His involvement included Maumee Rotary Foundation for over thirty years, Maumee Chamber Board, LMC Labor Management Committee. He was the past President of the Society of Manufacturing Engineers, past President of the National Tool and Machining Association, and was on the Advisory board of Northwest Ohio Center

for Labor Management. He was a past Board member of St Johns Jesuit High School, Central Catholic High School, Anne Grady Center and TASBA (Toledo Area Small Business Association) and was on the St. Luke's Hospital Foundation Board and a member of the Old Newsboys Goodfellows Association and the Elks Lodge. He was Chairman of St. Patrick's Historical Church Fund Raising for Restoration Board. Mike had a passion for fund raising and never refused a request to head up fund raising wherever needed.





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NEW ENGLAND NTMA CHAPTER LEADERSHIP RALLIES TO SUPPORT ATTENDANCE AT FALL CONFERENCE

MORE PARTNERSHIPS WITH NATIONAL NTMA UNDERWAY...

As a result of the discussions and priorities identified at the Inaugural Chapter Leadership Summit in May, 2013 in Indianapolis, the chapter leadership of the New England NTMA chapters accepted an invitation from national executive staff to discuss opportunities on how they could support the national fall conference.

All four chapters, Rhode Island, Boston, Western Mass and Connecticut, all met in Worcester, MA for lunch with executive staff of Dave Tilstone, Emily Lipovan and Jeff Walmsley. The strategy included the roll out of the first timer discount, per diem and a social activity only package. The feedback received from leadership was spot on with how to best market to members in this region and maximize attendance.

In addition, the dialogue continued on how National staff can further support the efforts going on in this region. Lipovan and Walmsley will be working with the four chapters and involving Kelly Schneider to develop customized strategies for member growth, marketing and fund development.



L to R – Jeff Walmsley NTMA, Susan Kasa Western MA, Daryl Hagopian CT NTMA, Michael Pasciuto Boston NTMA, Tim Martens Boston NTMA, Mark DeLorenzo CT NTMA, Cindy Zylkusi Norris Boston NTMA, Chuck Paul, Rhode Island NTMA, Angie Beavis Western MA NTMA, Emily Lipovan NTMA, Marty Aresault Boston NTMA.



WELCOMES NEW MEMBERS

ACU-TEC CNC, INC.

Rocky Mountain Chapter
Mr. David Martindale
559 Airport Blvd.
Aurora, CO 80011

C K TOOL

Northwestern Pennsylvania Chapter
Mr. Carl Krumpke
3214 W 22nd Street
Erie, PA 16506

DREAM WEAVER DESIGNS, LLC

General
Ms. Linda Miller
4901 Pan American Place NE
Albuquerque, NM 87109

EAST CENTRAL COLLEGE

Educational Institute
Mr. Curtis Elliott
1964 Prairie Dell RD
Union, MO 63084

ELMCO TWO INC.

Philadelphia Delaware Valley Chapter
Mr. John Kofoet
PO BOX 561
Pennsauken, NJ 08110

JAGUAR PRECISION MACHINE

General
Mr. Stuart Iverson
1614 2nd Street N.W.
Albuquerque, NM 87102

KENT MOLD & MFG. CO.

Akron Chapter, NTMA
Mr. Paul J Ferder
1190 West Main Street
Kent, OH 44240

MOTION CNC ,LLC

Florida West Coast Chapter
Mr. Steven McCutcheon
9665 113th Street Suite 8627
Seminole, FL 33775

YANKEE MACHINE PARTS, LLC

Rocky Mountain Chapter
Mr. Bill Hendrick
1705 E. 39th Avenue
Denver, CO 80205

DMG / MORI SEIKI OPENS DOORS TO ITS U.S. FACTORY AT MANUFACTURING DAYS EVENT

ATTENDEES TO EXPERIENCE THE LATEST IN ADVANCED MANUFACTURING TECHNOLOGIES AND APPLICATIONS AT MORI SEIKI MANUFACTURING NOVEMBER 12-15 IN DAVIS, CALIFORNIA



DMG / MORI SEIKI is pleased to announce registration is now open for its first Manufacturing Days event. The four-day, complimentary event centers around the company's new highly-automated factory, MORI SEIKI Manufacturing, and its neighboring research & development hub, Digital Technology Laboratory (DTL).

Similar in format to DMG / MORI SEIKI's annual Innovation Days event held in the spring, Manufacturing Days offers machine demonstrations, industry seminars, tours of both the U.S. factory and DTL facilities, and California-style wine and dine events.

"Our customers and partners can expect

the same caliber of information and hospitality at Manufacturing Days as they've experienced at Innovation Days," says Mark Mohr, President of DMG / MORI SEIKI USA. "However, Manufacturing Days is unique in that it's focused more on the latest applications in manufacturing."

Seminars include presentations from industry and DMG / MORI SEIKI experts. Topics include the latest in aerospace, automotive and medical machining, sustainability in manufacturing, and software and automation implementation.

Open since July of 2012, the U.S. Factory is a 200,000 square-foot facility sitting on 14.5

acres in Davis, California. The \$50 million facility is strategically located next to DTL to offer unparalleled collaboration between manufacturing and research and development. DMG / MORI SEIKI machines NHX4000, NHX5000, NHX5500 and the DuraVertical 5100 are currently produced at the factory with more planned. Manufacturing Days attendees will be able to tour this area and view these machines in production.

For registration, and for more information please visit mdays2013.com.



ST. LOUIS AND KANSAS CITY CHAPTERS HOLD ANNUAL JOINT SUMMER CONFERENCE

The St. Louis and Kansas City Chapters of the National Tooling & Machining Association (NTMA) held their annual joint summer conference at the Chateau on the Lake in Branson, Missouri, on July 26-27.

Sponsors of the conference included

Federated Insurance, CliftonLarsonAllen, Paulo Products and J&S Tool.

Friday afternoon started off with presentations from a team of experts on a wide range of topics. These included: Economist Chris Kuehl of Armada Corporate Intelligence on

economic trends impacting manufacturing; Erik Skie, CliftonLarsonAllen on strategies for manufacturers and Belinda Waggoner of hr-haven on workforce and HR issues.

A two-hour industry roundtable was then held. It was facilitated by a team from the Quality Coach consultants of Washington, Missouri. Topics covered during the roundtable included: employee compensation & benefits; how to handle the new healthcare law; industry best practices and workforce training/readiness.

Friday night featured a social mixer/dinner and a concert at the Dick Clark Theater.

The Saturday dinner featured presentations by NTMA National Chairman Bob Mosey and NTMA National President David Tilstone. They spoke about the different programs offered by the NTMA and the importance of technology in manufacturing. The audience at the dinner was brought up to speed on NTMA developments and encouraged to attend national meetings. More pictures from the event can be found on the chapter's website.



Herb Homeyer, Dave Tilstone, John Jaixen, and Bob Mosey

Conflict Minerals Overview

BY THE FRANKLIN PARTNERSHIP



Many downstream suppliers are receiving letters from customers regarding compliance with the "Conflict Minerals Rule." The following is a brief overview of the rule and some examples of information being requested of a few downstream suppliers to address their customers' compliance needs. The Franklin Partnership is not a law firm and this should not be construed as legal advice but rather a sample of approaches some suppliers are taking. Please note, the Original Equipment Manufacturers (OEMs) are still internally figuring out the best approaches to comply and we expect further guidance from them later this summer or early fall at which point we will update this document. (If you know Tantalum, Tin, Tungsten, nor Gold are NOT included in the materials used in your production process, you may state so to your customer and likely not have to take further steps on the Conflict Mineral Rule.) A Best Practices Guidance appears at the end of this document.

THE "CONFLICT MINERALS RULE"

The Conflict Minerals Rule requires companies who fall under the Securities and Exchange Commission (SEC) to file a report on whether their manufactured goods contain Tantalum (Ta), Tin (Sn), Tungsten (W), or Gold (Au), known as the 3Ts + G, considered "conflict minerals," from the Democratic Republic of the Congo (Congo) and adjoining countries (collectively, "Covered Countries"). Under the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank), the SEC issued a rule stating all companies under their jurisdiction (hereinafter "companies") must begin keeping track of conflict minerals in their manufactured product, including supply chain (hereinafter "suppliers"), starting January 1, 2013 with the first reports due May 31, 2014. While the final rule exempts any conflict minerals that are "outside the supply chain" prior to January 31, 2013, publicly traded companies began sending notices to their suppliers more than a year ago. Under the final SEC rule, companies whose conflict minerals are "necessary to the functionality or production of a product manufactured or contracted by that [company] to be manufactured," must file a new Specialized Disclosure report on a new form with the SEC, Form SD and conduct a "reasonable country of origin inquiry." If the

Conflict Minerals in the Company's goods are not Congo Conflict Free, or are Congo Conflict Undeterminable, the Company shall disclose in their Conflict Minerals Report the steps it has taken, or will take, to mitigate the risk that any Conflict Minerals included in its goods benefit armed groups in the Congo, including steps to improve Company's "due diligence." The SEC modified its initial proposal and in the final rule clarified that Companies may deem conflict minerals from recycled or scrap sources as "Congo conflict free" because they no longer directly or indirectly "finance or benefited armed groups in the Covered Countries."

STATUS

Downstream suppliers are part of a coalition which filed a lawsuit against the SEC seeking to vacate the Conflict Minerals rule. The SEC responded to the brief on March 1, 2013 and industry filed a reply brief on March 22nd. The DC Court ruled on April 26 they do not have jurisdiction to review the case and we are now waiting on the District Court to issue a ruling.

CONGRESSIONAL BACKGROUND

Congressional action on Conflict Minerals long precedes the provision included in the Dodd-Frank Wall Street Reform Act. For example, in 2005, then Senators Barack Obama (D-IL), Sam Brownback (R-KS), Mike DeWine (R-OH), and current Senator Dick Durbin (D-IL) introduced legislation which President George W. Bush signed into law in December 2006 (the Democratic Republic of the Congo Relief, Security, and Democracy Act of 2006, P.L. 109-456) to address the use of minerals and other mechanisms to finance ongoing conflicts in the Democratic Republic of the Congo and adjoining countries. Former Senator Brownback, now the Republican Governor of Kansas, introduced an amendment to the Dodd-Frank bill in 2010 to include the current SEC Conflict Minerals Rule requirement which became law. Congress intended to further the humanitarian goal of ending the "violent conflict in the Congo, which has been partially financed by the exploitation and trade of conflict minerals originating in



the Congo." The term "conflict mineral" is defined in Section 1502(e)(4) of the Act as (A) columbite-tantalite, also known as coltan (the metal ore from which tantalum is extracted); cassiterite (the metal ore from which tin is extracted); gold; wolframite (the metal ore from which tungsten is extracted); or their derivatives; or (B) any other mineral or its derivatives determined by the Secretary of State to be financing conflict in the Democratic Republic of the Congo or an adjoining country (Covered Countries include: Democratic Republic of the Congo, The Republic of the Congo, Central Africa Republic, South Sudan, Zambia, Angola, Tanzania, Burundi, Rwanda, Uganda). Visit www.conflictfree-smelter.org for more information on the Conflict-Free Smelter program.

COMPLIANCE AND AUDITS BY THE SEC FILING COMPANY

Section 1502 of the Dodd-Frank Act added Section 13(p) to the Securities Exchange Act of 1934, instructing the SEC to issue rules requiring Companies with conflict minerals that are necessary to the functionality or production of a product manufactured by that Company to disclose annually whether any of those minerals originated in the Democratic Republic of the Congo or an adjoining country. If a Company's conflict minerals originated in those countries, Section 13(p) requires the Company to submit a report to the SEC that includes a description of the measures it took to exercise due diligence on the conflict minerals' source and chain of custody". Regardless, a Company must also report "the country of origin of the conflict minerals, if known, the facilities used to process the conflict minerals, if known, and the efforts to determine the mine or location of origin with the greatest possible specificity." Necessary to the Production. In determining whether a conflict mineral is "necessary to the production" of a product, a Company should consider: (1) whether the conflict mineral is intentionally included in the product's production process, other than if it is included in a tool, machine, or equipment used to produce the product (such as computers or power lines); (2) whether the conflict mineral is included in the product; and (3) whether the conflict mineral is necessary to produce the product. Following industry comments, the SEC modified the rule so that, for a conflict mineral to be considered "necessary

to the production” of a product, the mineral must be both contained in the product and necessary to the product’s production. The SEC will not consider a conflict mineral “necessary to the production” of a product if the conflict mineral is used as a catalyst, or in a similar manner in another process, that is necessary to produce the product but is not contained in that product (tooling exemption). Reasonable Country of Origin Inquiry. The Company must conduct reasonable country of origin inquiries for conflict minerals included in their product and must disclose the measures taken to exercise due diligence, including an independent private sector audit of the report that is conducted in accordance with standards established by the Comptroller General of the United States. (We are hearing the non-partisan Government Accountability Office may issue auditing guidelines by the end of the year, simultaneously the Organisation for Economic Co-Operation and Development (OECD) is working on international compliance standards as Europe and others adopt similar rules.) The only due diligence guidance currently approved by the SEC is the OECD’s Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas.

AUDIT CERTIFICATION.

Section 13(p) also requires the Company submitting the SEC report to identify the auditor and to certify the audit. In addition, Section 13(p) requires the report to include a description of the products manufactured or contracted to be manufactured that are not “DRC conflict free,” the facilities used to process the conflict minerals, the country of origin of the conflict minerals, and the efforts to determine the mine or location of origin and post the information to their public website.

TEMPORARY EXEMPTION.

The SEC agreed with a number of industries including suppliers who filed comments asking the SEC to modify the final rule to



provide a temporary transition period for two years for all issuers and four years for smaller reporting companies who file SEC reports. During

this period, Companies may describe their products as “Congo conflict undeterminable” if they are unable to determine that their minerals meet the statutory definition of “Congo conflict free.”

IMPACT ON DOWNSTREAM SUPPLIERS AND APPROACHES TAKEN TO COMPLY

The SEC believes that manufacturing

Companies who contract the manufacture of certain components of their products should, for purposes of the Conflict Minerals Statutory Provision, be viewed as responsible for the conflict minerals in those products to the same extent as if they manufactured the components themselves. This is a critical interpretation by the SEC which holds the filing Company accountable for their suppliers’ activities. While a downstream supplier who does not file SEC reports (typically a privately held or small business) will not submit a Conflict Minerals Specialty Disclosure form directly to the federal government, they clearly will have to provide some information to their customers who are required to file the forms on behalf of themselves and their entire supply chain. The greatest challenge downstream suppliers will have is complying with the various requirements each of their customers who file with the SEC will impose upon them. The final SEC rule is vague in a number of areas including usage of phrases such as “due diligence”, “reasonable” country of origin inquiry, nor does the SEC allow for a de minimis exception, thereby interpreting Congressional intent to mean that the use of even small amounts of conflict minerals originating in the Covered Countries triggers the reporting requirement.

APPROACHES TAKEN TO COMPLY

Again, the challenge for a downstream supplier is each of their customers may have different compliance requirements of their supply chain. Because of vagueness in the final Conflict Minerals Rule, some of your customers may want to see at minimum that you have a compliance program in place with an employee overseeing the program. While some may interpret a supplier program as sufficient to meet their own compliance burdens and refer to such systems in place throughout their manufacturing supply chain, other customers are already requiring much more detailed information from their suppliers. At a minimum, if your customer has already notified you that they are subject to the SEC Conflict Mineral Rule, Companies are indicating they want to know their Supplier has a system in place and someone accountable within that business to comply with the rule. Towards the other end of the spectrum, Companies are asking the Supplier to identify the mine, smelter, and item sourced. We expect additional guidance from the OEMs on supply chain compliance by late summer or early fall.



POLYGON SHANK COUPLING SIZE 100 (COROMANT CAPTO® C10) ADDED TO ISO/DIS 26623 STANDARD

In 2008 the ISO/DIS 26623 standard was created for ‘Polygon taper interface with flange contact surface’ to secure the original design of Coromant Capto – this covered flange sizes 32 to 80 (C3 through to C8). In July 2013 the ISO committee agreed to add polygon shank size 100 (C10) to the existing standard.

Coromant Capto is developed to cover 3 distinct application areas:-

INTEGRATED SPINDLE FOR AUTOMATIC TOOL CHANGE

Providing stability and rigidity due to unrivalled bending stiffness and torque transmission

- Turn-Mill machines, Vertical Lathes and Machining Centers

QUICK CHANGE FOR MANUAL TOOL CHANGE

Providing increased machine utilization through shorter set up time

- Turning Centers, Flat Bed Lathes and Vertical Lathes

MODULAR ASSEMBLIES

Providing flexibility without loss of stability or accuracy

- Machining centers with HSK or steep taper (ISO, MAS-BT, CAT-V) spindle

Coromant Capto C10 adds a new dimension, with a spindle clamping force of 70kN and flange diameter of 100mm the bending stiffness is greater than HSK-A 100 and steep taper size 50 (on a par with HSK-A 125). The benefits are that longer tools can be used with less risk of vibration whilst maintaining the same spindle dimensions as for HSK-A 100. As components become more demanding and machines increase in multi-functional capability the demand to have stable machining with long assemblies will be adopted on Turn-Mill, Mill-Turn, Vertical Lathes as well as heavy duty Machining Centers.



The Future of Manufacturing Takes Shape Here

October 23-24, 2013, Dayton Airport Expo Center



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It's no secret that no matter how many people you have coming through the door at a trade show, it's a waste of your marketing dollars and of no benefit to your bottom line if you're not reaching the right people. AMTS brings you the quality attendees you've been looking for. Just take a look at a few of the companies in attendance last year!

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- Emerson
- GE Aviation
- General Dynamics
- Henny Penny
- Honda Engineering
- Honda Manufacturing of America
- Honeywell Aerospace
- ITW Hobart
- Johnson Electric
- Mitsubishi Electric
- Norgren
- OPW Fueling Components
- Owens Corning
- Robbins and Meyers
- Whirlpool / KitchenAid

Not only do the right companies attend... the decision makers attend. In 2012,

- Over 82% were a manufacturer or direct supplier to the manufacturing process
- Over 75% had some role in making purchasing decisions from recommending to making the final decision

WHAT'S NEW THIS YEAR AT AMTS?

- Packed with EVEN MORE equipment
- Unbeatable networking opportunities
- Revamped floor plan with our new Network Central lounge area, upscale concessions, full service cocktail bar, and gourmet coffee bar

Exciting seminars right on the show floor seen at Knowledge Center Stage
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When you spend your dollars to exhibit at AMTS, you can be assured that in addition to your own marketing efforts to get people to visit you at the show,

we're doing our part to promote AMTS and get both returning and new prospects through the doors. Here are just a few of the things we're doing this year to ensure we continue to get the word out to the right people:

- Bi-weekly eblasts to over 6,000 manufacturing contacts leading up to the show, with ongoing list building efforts to grow that reach
- Targeted direct mail and phone campaign to over 200 top manufacturing decision makers
- Social media outreach through Twitter, Facebook, and LinkedIn
- Listings on top online trade show directories
- Media outreach and public relations for local trade publications as well as general newspaper, radio, and TV exposure in

our market

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Exhibitor success at AMTS is very important to us. Did you know we offer many free tools to our exhibitors to help them promote themselves at the show?

Every exhibitor has access to an online marketing kit, with tools such as printed show passes and promo cards, customizable bill stuffers and invitations, a promo video for download to share with your social media audience or put on your website, press release template, social media post language, and much much more!

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PURE MICHIGAN®

GF AgieCharmilles to Meet Global Manufacturing Demands at EMO 2013

In Hall 27, Stand C44 at EMO 2013, GF AgieCharmilles will showcase its latest milling, EDM, laser and automation solutions that meet the global manufacturing market's demand for precise, efficient and cost-effective part production. The company will also spotlight its value-add support programs, applications expertise and technology success stories.

According to Gisbert Ledvon, director of business development for GF AgieCharmilles in North America, manufacturers from all industry segments attend EMO in search of solutions to solve their manufacturing challenges. "We make their search easy by offering everything they need to optimize their part-processing operations and move their businesses forward in today's competitive manufacturing world," he said.

GF AgieCharmilles will present its complete technology and services portfolio in its EMO Stand, which the company has strategically segmented so attendees can easily experience the full value it provides to growing market segments. The company's applications and process engineers will also be available to discuss a variety of specific manufacturing solutions.

In terms of milling technology, GF AgieCharmilles will showcase high-speed, high-efficiency and high-performance machines

that meet a wide variety of manufacturing needs, the HSM 200U LP with a Fanuc control and robot automation, HSM 400U LP, HSM 500 Graphite with WPT1+ automation, HEM 500U with a Heidenhain control and MIKRON handling system, and HPM 800U with a Siemens control.

While the CUT 200 mS with WPT1+ automation and CUT 2000 S with an IVU2 will represent the company in terms of advanced wire-cut EDM solutions, the FORM 20 and FORM 200 with Rotary Tool Changers will highlight the latest in die-sinking EDM technology. Other machines on display will include the Drill 300 for high-speed EDM drilling and LASER 600 5Ax for 5-axis texturing and engraving operations.

Throughout EMO, GF AgieCharmilles will host a series of live presentations that encourage current and prospective customers to look



FORM 20

At EMO 2013, GF AgieCharmilles will highlight the latest in die-sinking EDM technology with its FORM 20 machine.



HSM 200U LP

At EMO 2013, GF AgieCharmilles will showcase its high-speed HSM 200U LP milling machine with a Fanuc control and robot automation.

beyond their everyday operations and strive to better understand the how the market is evolving and what impact it has on their own customers.

"Whether EMO attendees are interested in cutting costs, exploring new business opportunities or seeking inspiration from real-world examples, our Stand aims to help them discover their true manufacturing potential through the best possible manufacturing technology and valuable industry insight," noted Ledvon.

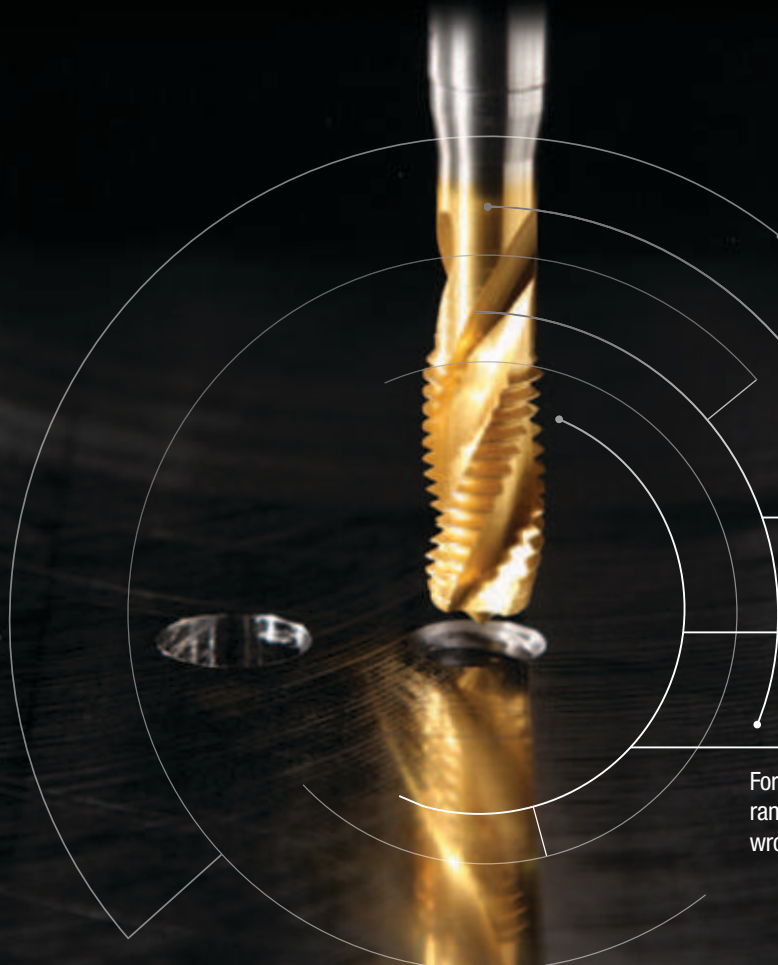




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SYSTEM INSIGHTS ANNOUNCED COMPLETION OF CRITICAL SOLUTION FOR ROBOT CNC INTEGRATION

System Insights (SI) announced the completion of a critical solution to integrate robots and machine tools. This extraordinary advancement moves toward “plug and play”, factory level interoperability between these two disparate technologies.

The solution was developed with a team of partner organizations and companies under a grant from the National Institute of Standards and Technology (NIST) led by the National Center for Defense Manufacturing and Machining (NCDMM). This application was successfully demonstrated and tested at the NIST Gaithersburg research facility.

According to Will Sobel, CEO of System Insights, “We utilized two power-

ful industry standards – ROS/Industrial and MTConnect - to create a cost-effective automation solution for shops looking to address labor cost issues and process consistency associated with managing their shop floor.”

In the most recent demonstration at NIST, the software enabled a robot conversant in ROS/Industrial to load and unload parts into a Mazak lathe using the MTConnect standard to coordinate the activities. This project marks the first time a read-only protocol has been utilized to integrate manufacturing equipment in a fully distributed manor.

Fred Proctor, leader of NIST’s Smart Manufacturing and Construction Control Systems Program, enthusiastically

reported, “The goal of this project and follow-up efforts is to make it as easy as possible to integrate factory robots and machine tools and also to reconfigure them in response to changes in orders or customer requirements.” Douglas Woods, President of The Association for Manufacturing Technology (AMT) which sponsors MTConnect commented, “This is a giant step forward in resolving manufacturing interoperability issues. To witness existing standards like MTConnect and ROS being leveraged in such a collaborative effort is exciting.”



YARDE METALS CELEBRATES GRAND OPENING OF ITS GREENSBORO, NORTH CAROLINA SERVICE CENTER

Yarde Metals, Inc. a leading worldwide metals service center, hosted a grand opening at its location in Greensboro, NC on Thursday, July 25th, 2013. The celebration, attended by customers, Yarde Metals branch employees and corporate management included a ribbon cutting ceremony, refreshments and tours. The 50,000 sq ft facility includes 2.0 million pounds of inventory, bar, sheet and plate processing equipment.

Yarde Metals new service center is modeled after the company’s corporate headquarters in Connecticut and includes an ‘open air’ office work space which is conducive to improved communication and team building as well as unique amenities such as a nap room, fitness center and game room. The state of the art facility incorporates many progressive technologies all geared toward improving efficiencies.

“We have been operating in North Carolina for over 10 years and in that time we managed to grow our business tremendously. As a result, we out grew our original space in High Point and made the necessary investments to build one of our signature branch designs here in Greensboro. The town/city has been great to work with and the proximity works for our employees as



Yarde Metals North Carolina Branch Manager Jeff Hester (4th from left), Yarde Metals President and COO, Matt Smith (5th from left) and Greg Yates, Yarde Metals Director of Sales South East (6th from left). Also shown Yarde Metals North Carolina employees and customers.

well as customers. We are very excited about our new resources in North Carolina and look forward to continued success in the South East.” said Matt Smith, President and COO. Yarde Metals provides daily deliveries throughout the Southeast.



Second Annual National Manufacturing Day Slated for Oct. 4, 2013



Factory Tours Urged to Raise Awareness of Skilled Career Options

After a successful initial celebration last year, the next Manufacturing Day has been scheduled for Fri., Oct. 4, 2013. Manufacturers, educational institutions and others are encouraged to host events that will highlight the importance of manufacturing to the nation's economy and draw attention to the many rewarding high-skill jobs in manufacturing fields.

The effort is co-produced by the Fabricators & Manufacturers Association, International (FMA), the National Association of Manufacturers (NAM), The Manufacturing Institute and the National Institute of Standards and Technology's (NIST) Hollings Manufacturing Extension Partnership (MEP). Industrial Strength Marketing, a Nashville area marketing agency specializing in marketing services for the manufacturing sector, has joined the effort as a guest producer for the 2013 event.

In its first year, more than 240 events were held in manufacturing facilities in 37 states and more than 7,000 people participated. This year's celebration will feature open houses, public tours, career workshops and other activities to increase public awareness of modern manufacturing. Events also will introduce manufacturers to business improvement resources and services delivered through the MEP's network of hundreds of affiliated centers across the country.

"Manufacturing Day is a great oppor-

tunity to shift Americans' perception that it is not our grandfather's manufacturing anymore and to showcase the tremendous career opportunities manufacturing has to offer," said NAM President and CEO Jay Timmons. "This day is an engaging way to attract young people and get them excited about pursuing a career in a technology-driven, innovative environment that will also provide a good-paying job. We encourage all manufacturers and manufacturing associations to get involved and share what we already know—manufacturing makes us strong."

"Manufacturing Day is a great opportunity to celebrate work and innovation of the 12 million men and women who make the United States the world's largest manufacturing economy," said Ed Youdell, president and CEO of the Fabricators & Manufacturers Association.

"Manufacturing Day provides a focused point in time each year when all manufacturers in America can collaborate to bring attention to this crucial sector of the economy and celebrate their accomplishments," said Jennifer McNelly, president of The Manufacturing Institute.

"This celebration of manufacturing is a chance for all of the great manufacturers who 'Make it in America' to show their value to their communities," said Roger Kilmer, director, Manufacturing Extension Partnership (MEP).

To learn more about Manufacturing

Day, log on to www.mfgday.com, where those wishing to host events will find resources to help them prepare. Visitors to the site also will find an interactive map showing where Manufacturing Day events are planned.

Associations and organizations that support the manufacturing industry are invited to join the program as sponsors or endorsers by calling 888-394-4362 or emailing info@mfgday.com.

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MANUFACTURING DAY HAS BEEN DESIGNED TO EXPAND KNOWLEDGE ABOUT AND IMPROVE GENERAL PUBLIC PERCEPTION OF MANUFACTURING CAREERS AND MANUFACTURING'S VALUE TO THE NORTH AMERICAN ECONOMY. IN ADDITION, MANUFACTURERS WILL LEARN ABOUT BUSINESS IMPROVEMENT RESOURCES AND SERVICES DELIVERED THROUGH MANUFACTURING EXTENSION PARTNERSHIPS.

HOST AN OPEN HOUSE

As a manufacturer it's your opportunity to:

- Tell your company's story
- Dispel outdated myths about manufacturing
- Inspire a new generation of manufacturers
- Connect with potential customers in your community
- Learn about manufacturing extension partnerships that can improve your efficiencies and work force skills and boost your profits
- Visit other manufacturers to initiate business relationships and learn what is being made in your community

The core element to Manufacturing Day is the schedule of manufacturer's open houses. Manufacturing Day producers will promote the open house schedule through general and trade media campaigns which will alert thousands of people to visit manufacturers and see that American manufacturing is a vibrant career path and employers need skilled workers. The event will also make it possible for manufacturers to visit other participating companies in their region that may be potential business partners – either as customers or suppliers.

ATTEND AN OPEN HOUSE

If you are employed in a non-manufacturing service industry such as accounting, business and MRO supplies, business services, education, media or if you are a student or a parent,*

Visit manufacturers on Oct. 4, 2013 and learn:

- What modern manufacturing facilities are really like these days
- What the companies located in your community make and who they sell to
- What kinds of jobs are available in manufacturing
- What skills and education are needed to qualify for today's manufacturing jobs

*Students under age 18 must be accompanied by an adult or participate with a school group.

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SANDVIK COROMANT EXPANDS GEAR MILLING FAMILY

The successful CoroMill® 176 range of full profile hobs for spur gears, helical gears and splines has now been extended to incorporate module 3-10 applications.

First introduced nearly 2 years ago, CoroMill 176 is an indexable insert hob that can reduce cutting time by up to 70 percent, largely through the application of cutting speeds up to four times higher than conventional high speed steel (HSS) cutters and a large number of effective inserts. The cutter offers a full-effective design compared to the half-effective designs on multi-segment hobs with tangentially mounted inserts. Furthermore, tool life is up to six times longer, which means machine downtime is also reduced in direct proportion.

Another advantage is that HSS tools necessitate the purchase of several tools, which must be monitored closely due to the need for re-sharpening and re-coating.

CoroMill 176 was initially launched in modules 4-6, however, it soon expanded to incorporate modules 4-8, and has now been announced to range from modules 3-10 (module is the pitch diameter divided by the number of teeth). Available for roughing, semi-finishing and finishing operations, this innovative assortment of tools offers a solution for both hobbing machines and on multi-task machines/five-axis machining centers. CoroMill 176 is available for arbor mounting as well as Coromant Capto integrated version.

Hobs can be supplied with standard carbide inserts for generating gear profiles in accordance with DIN3972-2, although Custom Made options are also available for specific profiles with, for example, addendum modification, protuberance, tip chamfer and tip relief. Insert grade GC1030 with multi-layer coating is offered for high levels of wear resistance and edge line toughness in ISO P (steel) gear milling operations. Numerous global installations have proven that this concept is very attractive to boost productivity and cut cost in gear and spline manufacturing.

The hob is registered in accordance with DIN3968 class B, but generates a gear quality extremely close to what can be expected from a class A hob. Insert changing is quick and easy, and yet features modern wedge-clamping technology for positional repeatability and the groundbreaking iLock interface for high precision and stability.



CoroMill 176, the indexable insert hob for spur gear and helical gear milling from Sandvik Coromant, reduces cutting time by 70 percent.



U.S. Adds 162,000 Jobs as Growth Remains Sluggish

The painfully long and slow recovery of the American economy stumbled last month as employers added a disappointing 162,000 jobs, the government reported on Friday, leaving uncertainty about the timing of the Federal Reserve's plans to begin tapering its extraordinary efforts to revive healthy growth after the financial crisis that hit the world five years ago.

The unemployment rate, which comes from a different survey, gave a more encouraging signal, edging down to 7.4 percent from 7.6 percent in June. But the improvement was only partly a result of more people getting jobs. More people also dropped out of the labor force. The unemployment rate refers only to people who are actively looking for work.

While the jobs report was lackluster, particularly compared to expectations that the economy might add closer to 200,000 jobs, many economists said the latest data was unlikely, on its own, to cause Federal Reserve officials to back away from plans to begin easing its stimulus policies. Ben S. Bernanke, chairman of the Fed, has said that the central bank would start reducing its monthly purchases of Treasuries and mortgage-backed securities "later this year." Many Wall Street analysts have interpreted that comment as pointing to action as early as the Fed's meeting in September.

"The payroll numbers were a little disappointing, but the Fed has said it's more interested in the unemployment rate than the payroll numbers," said Ian Shepherdson, chief economist at Pantheon Macroeconomics. He noted that the Fed's own forecasts put the unemployment rate around 7.2 to 7.3 percent at the end of this year, not far below the July level. Referring to inflation, he said, "If anything, today's numbers would harden my view if I were a hawk and persuade me to become more hawkish if I were wavering."

Not everyone agreed with that view, with several analysts suggesting the Fed might wait until December to take its first step. The mixed signals from July's jobs report will most likely focus even more attention on



A job seeker meets with a recruiter at the job fair. There are 11.5 million Americans looking for work who cannot find jobs.



A job fair in Emeryville, Calif. Employers added 162,000 jobs in July, the government says.

August's jobs snapshot, the last before the Fed's next meeting, scheduled for the middle of September.

"The committee needs to see more data on macroeconomic performance for the second half of 2013 before making a judgment on this matter," James Bullard, president of the Federal Reserve Bank of St. Louis and one of the members of the Fed committee that sets interest rates who is more dovish on inflation, said in a speech on Friday.

Other indicators also painted a somewhat darker picture of the economy and the job market than was evident from reports earlier this year, with both average hourly wages and the length of the private sector workweek shrinking modestly in July. The job gains reported on Friday were concentrated in retail, food services, financial activities and wholesale trade, according to the Labor Department. Manufacturing gained 6,000 jobs, the first improvement since February, although economists caution that the timing of auto plant shutdowns in the summer can distort the numbers.

July represented the 34th consecutive month of job creation, but the latest pace of employment gains is still far below what would be needed to absorb the backlog of unemployed workers anytime soon. At the roughly 192,000-a-month average rate of job growth so far this year, it would take more than seven years to close the so-called jobs gap left by the recession, according to the Hamilton Project at the Brookings Institution. There are now 11.5 million Americans looking for work who cannot find it. That figure nearly doubles when two other groups of "underemployed" workers are taken into account: people who want to work but have stopped looking, and people who are working part time because they cannot secure full-time jobs. The number of Americans in so-called involuntary part-time employment has barely budged in recent years, and the total for July 2013 was exactly the same as a year earlier.

For these unemployed and underemployed workers, the social safety net that has been supporting them has frayed as a result of federal, state and local budget cuts.

"I honestly didn't think it would be this hard," said Keith Aiken, 38, who moved into a homeless shelter in Greensboro, N.C., about a month ago. His employer of more than a decade, a group home for people with disabilities, shut down last August, and he has been looking for work ever since.

After state officials ended North Carolina's eligibility for

federal unemployment benefits last month, Mr. Aiken's benefits stopped and he was no longer able to pay his rent.

"Hopefully, something will come open pretty soon," he said, noting that he was looking into contract labor in Iraq or Afghanistan. "I like to think I'm down but not quite out yet."

The outlook for hiring is unclear, particularly since even the moderate rates of job growth in recent months do not seem justified by the weak gains in economic output. The nation's gross domestic product grew at an annual rate of 1.7 percent in the second quarter and 1.1 percent in the first quarter, much slower than would be predicted from recent hiring trends.

Economic output and job growth seem unlikely to stay decoupled for too long, some economists say, in which case output growth should start to pick up, or job growth should start to slow, or both.

"I think with the economy showing 1 percent growth on average over the last three quarters, you're locked into 150,000 jobs per month for the rest of this year," said Steven Ricchiuto, chief United States economist at Mizuho Securities.

One other possible explanation for the seemingly incongruous trends in job and output growth is the mix of jobs being created.

"It's a lot of temp services, retail, food services, health care," said Joshua Shapiro, chief United States economist at MFR Inc.

"With low-end jobs contributing more than half the growth, the income generated would be not that great, and you wouldn't be expecting it to drive strong consumer spending."



Ahaus Announces 2013 Apprentice Scholarships

Ahaus Tool & Engineering, Inc. has announced the offering of two apprentice scholarships for 2013.



After four months of co-op work through the Richmond High School Career Center at Ahaus, Nate Coffey and Jeremy Taylor have been offered full-time positions with Ahaus and scholarships to attend Ivy Tech Community College or Purdue College of Technology in Richmond.

The Ahaus Apprentice Scholarship, at an approximate value of \$8,000 per student, pays for classes and books related to achieving an associate degree in engineering technology or mechanical engineering technology from either institution.

The Ahaus Apprenticeship program is a nationally accredited education program for toolmakers and CNC machinists. The program includes 8,000 hours of on the job training in toolmaker training, manual and CNC machining and turning,

design/CAD and assembly operations while attending college. Upon completion of the program, the candidates will receive an Associate Degree of Applied Science and certification as a Toolmaker or Machinist approved by the United States Department of Labor.

"We are excited to have Nate and Jeremy join our team," said Jeff Sheridan, Vice President of Ahaus Tool & Engineering. "They have both demonstrated that they are dedicated, ethical workers with considerable drive and passion, and we are glad that they will now be putting those talents to work full-time while pursuing a college education."

Ahaus has been offering the apprenticeship program for more than 30 years. More than 50 apprentice scholarships have been issued since the program's inception.

Ahaus Tool & Engineering offers a range of products and services, including automation equipment, workholding technology, workholding fixtures, machining services, machining fixtures, heat exchanger equipment and power generation equipment.

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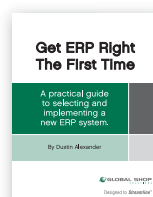
"The busier we got, the more we needed a powerful ERP system up and running. Out here, there's no time for down time."

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



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THE PROBLEM

• Yogi Berra once said “nobody goes to Coney Island anymore because it’s too crowded!” Today we face a similar, but far less amusing paradox with the skilled worker shortage in the U.S.

• On one hand, most of us are having a hard time finding the right people to work for us. Jobs are going unfilled.

• On the other hand, the unemployment rate for members of the National Guard is hovering about 20%.

• This means that there are more than 60,000 unemployed National Guard members looking for jobs right now. While this is devastating for them and their families, it may be a great opportunity for us to find the qualified people we’ve been looking for.

BENEFITS OF HIRING NATIONAL GUARD MEMBERS

• National Guard members are some of the best people we can find as employees. They have been screened and accepted into the Guard because of their good character and great abilities. Only one in four applicants makes it into the National Guard.

• National Guard members operate in an environment where character counts; their lives, and often ours, depend upon it. As a result, you’ll find that they have the character traits we look for: integrity, leadership, discipline, no tolerance for drugs, and high commitment to service, loyalty and teamwork.

• The National Guard provides 107 types of training, many of which correspond directly to the types of skills training we offer to our employees. Some National Guard members already have the occupational skills many of you need. Others don’t, but continual training is part of the National Guard culture so you’ll find that they are willing and able to learn new skills.

• Most members of the National Guard have handled responsibility far beyond their years. One young candidate who was interviewing for a job with a trucking and logistics company was told by the owner that the position was considered to be a high stress job. The

owner asked whether the candidate was “up to handling the stress”. The job was his when he told the owner, “I used to organize truck convoys in Afghanistan with bullets whizzing by. I think I can handle this.”

ADDRESSING EMPLOYER CONCERNS

• So why aren’t we hiring these talented people? Until now, companies like ours haven’t always been able to find these folks because we haven’t had a direct pipeline to them.

• Plus the differences between military and civilian speak can be confusing. Civilians don’t understand military job functions and skills and how these skills relate to our companies. And we don’t always have the time to figure it out.

• Frequent deployments have been another problem. But, National Guard deployments are winding down now. Their target is only one year of deployment for every five years stationed at home. Deployments are less of a problem in the coming years.

THE SOLUTION

• The good news is there’s a new national campaign that can give us access to this pool of skilled workers and the resources to connect with them. It’s called American Jobs for America’s Heroes and it’s a nonprofit alliance working directly with the National Guard.

• The campaign has two goals. One is to get as many companies as possible to post jobs with the National Guard Employment Network. And the other is to get jobs for members of the National Guard with great companies like yours.

• It’s exciting to know that there are absolutely no costs to employers or applicants. Just go to www.CenterForAmerica.org and register your business. You’ll get a call back from the campaign posting manager who will review your posting with you to learn more about your company and the requirements of the job. Then it will be distributed for you to more than 500 career counselors nationwide who are working directly with National Guard candidates.

• You don’t have to become experts

in translating military skills into civilian terms because the career counselors will do that with you and for you.

• The National Guard career counselors have the training and skills to match your jobs with the best applicants. These counselors continue to match your job with candidates for as long as it remains open and for as many jobs as you have to fill.

TESTIMONIAL

• One of the best comments I’ve heard about why you should do this came from Former Secretary of the Air Force Don Rice who said, “National Guard men and women are trained and disciplined to do the job right the first time, every time. Do yourself a favor and hire a National Guardsman...you won’t regret it.”

CONCLUSION

• Let me finish by encouraging you not to lose sight of this tremendous opportunity to fill your jobs with great people at no cost. Go to the Center for America website at www.CenterforAmerica.org. Everything you need to know is found there.

• And remember, the National Guard is always there when we need them, --sometimes for help in natural disasters, sometimes to guard our borders, sometimes to protect our national interests, -- and now, as the source of great employees.

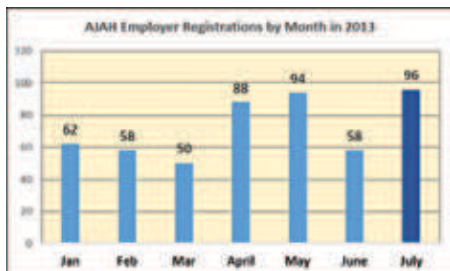
FOR MORE INFORMATION:

Steve Nowlan
President
Center for America
201-513-0379
SNowlan@CenterForAmerica.org



NEW COMPANY REGISTRATIONS:

In July, 96 new employers registered to post jobs in the campaign, setting a new monthly record. It does not appear that we have been affected as yet by a "summer slowdown". This brings the total registrations to 801, moving us closer to the year-end goal of 1,000.



RECENT ASSOCIATION CAMPAIGN PUBLICITY:

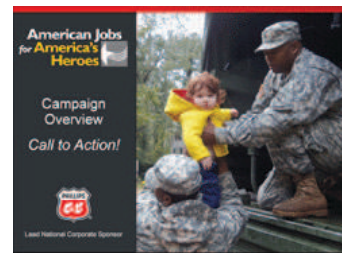
Many associations published articles about the campaign on their websites and in their newsletters in June and July. Some also published Facebook graphics we sent to them along with text about the campaign. We prepared a sample compilation of

these to make it easy for you to learn about the diversity of associations supporting the campaign. You may be surprised at some of the associations that are helping to spread the word!



AJAH CAMPAIGN POWERPOINT:

In collaboration with Phillips 66, we've developed a 7-slide PowerPoint presentation about the campaign. If you would like a copy to use or modify, please email Steve Nowlan, SNowlan@CenterForAmerica.org.



ASSOCIATION MEETING PRESENTATIONS:

We're making a major effort to encourage associations show the campaign video and distribute flyers at their fall meetings. If you are aware of key association meetings scheduled for September and onwards, please let me know. We can follow-up with the association to ask them to put the video on their agenda.









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Blaxx™ stands for a reliable system which captivates the user with its absolute precision and stands out through its extremely high productivity. The Blaxx™ F5041 and F5141 shoulder mills are therefore based on a newly developed, incredibly robust tool body, which is fitted with the most efficient of Walter Valenite indexable inserts, powered by Tiger-tec® Silver.

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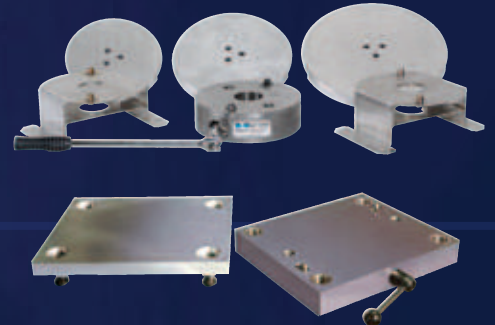
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NTMA Fall Gala 50/50 Raffle

In support of the National Robotics League

Help us grow the National Robotics League and possibly your bank account by buying a ticket in our 50/50 raffle. Half of what we collect will go to support this great program, and the other half will support a great holiday season for the lucky winner. Last year's winner took home \$7500!



To purchase your tickets, fill out the form below and return to Kristen Reitz via e-mail at kreitz@ntma.org or fax at 216-264-2840. We'll contact you upon receipt of this form to collect payment information.

Name: _____

Company: _____

Phone Number: _____

E-mail Address: _____

of Tickets: _____

Total: (\$100 per ticket) _____

Thanks for supporting the Future of Manufacturing!!



Note: You do not need to be present, or even an NTMA member to win. We'll announce the winner at the Fall Conference Gala as well as on the NRL Facebook page. If the winner isn't present, we'll contact him or her after the conference and send a check with their winnings.



National Robotics League GONRL.ORG 800.248.6862



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7 Easy Ways to Manage Your Inventory

Wouldn't it be nice to know you have the right products, in the correct quantities, where you can find them, when you need them? There is an answer. Grainger KeepStock solutions—the key to helping you take costs out of managing your inventory. Our selection of inventory management solutions can help you **identify items, reorder faster, order inventory on the go, track inventory, control consumption, organize onsite or outsource your management.** Call your Grainger Representative to learn more.

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IHS CONFLICT MINERALS CONTENT SERVICES

HELPING RESPONSIBLE MANUFACTURERS MAINTAIN COMPLIANCE WITH REGULATIONS THROUGHOUT THEIR SUPPLY CHAINS.

The clock is ticking. Don't let your critical conflict minerals initiative suffer from a narrow focus on suppliers, electronic parts or empty software that still lack the very data you need. Only IHS offers complete insight into the manufacturers, products and components you need to demonstrate due diligence, support SEC filings and prepare conflict minerals disclosures. IHS also helps pinpoint costly sole source, obsolescence or supply chain risks to deliver a complete solution, identify better alternatives and achieve greater return on your compliance investments.

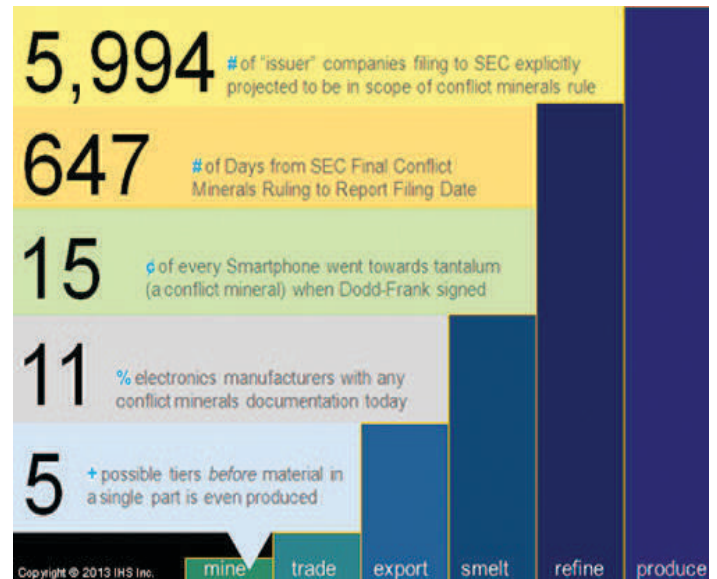
- Overview
- Solutions
- IHS Product Compliance
- What Are Conflict Minerals?
- Downloads

IHS helps responsible manufacturers and their suppliers comply with Dodd-Frank conflict minerals regulation, respond to customer inquiries and demonstrate socially responsible supply chain practices. We offer the largest industry-leading electronics database, award-winning expertise and necessary professional services to identify the origins of tin, tantalum, tungsten and gold used in your products quickly, efficiently and cost-effectively.



CONSIDERED BY SOME TO BE THE #1 SUSTAINABILITY SOLUTION PROVIDER IN THE MARKET, IHS CONTINUES TO DEMONSTRATE INNOVATION AND THOUGHT LEADERSHIP IN SUPPLY CHAIN AREAS SUCH AS CONFLICT MATERIALS"

Editor, Supply & Demand Chain Executive



COUNCIL FORMED TO HELP NTMA MEMBERS MAKE SMART ENERGY DECISIONS

Several leading energy companies announced the formation of the Energy Research Council (ERC), a consortium that will gather market intelligence from manufacturers, trade association members, and middle-market businesses that buy electricity, natural gas, and related energy services. The ERC's mission is to educate manufacturers and middle-market companies concerning effective energy acquisition and management practices.



Providing facts-based best practices to NTMA members, the ERC conducts quarterly research to understand the energy needs and practices of middle-market companies. The ERC's pilot survey of 1,245 middle-market companies in deregulated electricity markets found that only 15% of respondents continue to use their local utility company for electricity supply. And, more than one quarter (28%) of survey respondents are very or extremely interested in participating in a Demand Response program.

The goal of the research is to examine the types of products and services buyers are interested in procuring. The knowledge gained will be used to improve products and services offered to customers.



"The Energy Research Council creates a link between manufacturers and the energy industry for the

exchange of information and education. Trade associations, their members, and the energy industry benefit through this sharing of information and best practices," said ERC President James Moore, Ph.D.

Results from the quarterly research will drive an array of initiatives, including articles, webinars, white papers, social media, digital publications, and educational events with an expected distribution to more than 100,000 middle-market decision makers. To earn rewards for participating in future online surveys, visit www.energyresearchcouncil.com/join-our-panel.html. For more information about the ERC, visit www.energyresearchcouncil.com or contact James Moore at 410-749-5519 or jmoore@energyresearchcouncil.com.





Do your employees know what to do if an emergency occurred while on the job? Do they know what actions to take if a co-worker was seriously injured, a fire ignited, or a structure collapsed? Have you prepared and trained the on how to react?

Emergencies and disasters are a reality of everyday life. Local and international news programs document such occurrences every day throughout the world. Too many lives are lost and property is damaged because no one was prepared to properly react when immediate decisions and actions counted.

Your company should have an emergency action plan. It should be reviewed periodically so employees are aware of what steps to follow if there are an emergency involving employees, property damage or injury to members of the public. Employee should know the course of action to take in likely emergencies that could occur on the jobsite. This will improve your safety aware-

BEING PREPARED FOR EMERGENCIES

ness in everything you do.

Safety awareness may be gained through the company's regular safety meetings, safety training or daily and weekly jobsite tool box talks. This awareness will increase your ability to respond appropriately if there is a need sometime in the future. This is particularly important for roofing operations.

YOU SHOULD BE ABLE TO ANSWER THE FOLLOWING:

- How and who do you notify in an emergency?
- Does everyone know the chain of command and who is in charge in case of an emergency?
- Are you prepared to react responsibly?
- What should be done if there are injured persons?
- What should be done if there is property damage?
- What do about securing the scene of the accident?

You come to work every day prepared for the task at hand and knowledgeable on how to handle production problems in the work-

place. Being mentally aware is also your best preparation for a potential emergency. Analyze beforehand what to do if someone and if that injury is life threatening. Know how to protect yourself, your co-workers and the company in case of an emergency. Chances are, during a crisis, you won't have much time to plan the best possible action- so make those decisions ahead of time.

1. Review your policies and procedures.
2. Perform a variety of mock emergency types
3. Perform all communications and action steps in the order you have established
4. Review / analyze the outcome with ALL involved and make necessary changes and modifications to your policies, program and training/ operation manuals.

US-Reports, Risk Services offers emergency preparedness assistance and consultation.



OCTOBER 1ST HEALTHCARE DEADLINE ON THE HORIZON

Despite the delay of the employer mandate, implementation of the new healthcare law marches forward. Next up: an October 1st deadline for the government to ensure that the new health insurance exchanges set up under the law are ready for enrollment in all 50 states.

The government intends these Health Benefits Exchanges to be a one stop shopping place for consumers to find, compare, and select health insurance plans. Depending on their income, individuals may qualify for premium tax credits and cost sharing subsidies. Part of what the government must do by October 1st is make sure it's ready to process and deliver the subsidies that are meant to help pay for insurance; its other priority is to make sure that the online portals are set up for consumers to compare insurance plans and enroll in coverage.

To help small manufacturers understand what the coming healthcare deadlines mean for them, One Voice held a healthcare webinar in July that a number of NTMA members were able to participate in. The One Voice Health Care Webinar covered the impact of the law on small and large employers

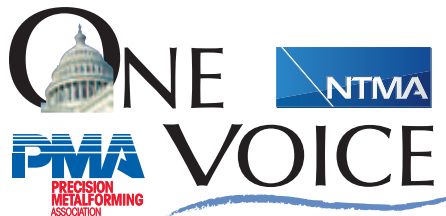
providing coverage and on those who contribute below the minimum requirements.

The timing of the webinar came just after the Administration's delay of the employer mandate had only added to the confusion for many businesses about what exactly needs to be done under the law. One Voice's lobbyists, The Franklin Partnership, have been very active on healthcare issues, and among their efforts have been working in conjunction with the Small Business Coalition for Affordable Healthcare led by the National Federation of Independent Business (NFIB). The Franklin Partnership invited Kevin Kuhlman, legislative affairs manager for the Small Business Coalition for Affordable Healthcare, to lead the detailed webinar discussion.

If you missed the webinar, you can access an archived copy of the entire webinar

or just the presentation itself by contacting Kristen Reitz at NTMA at kreitz@ntma.org. Also, as a quick guide to the legislation for all small and medium sized businesses, the Franklin Partnership in January put together a memo on "Small Business Health Care - 3 FAQs" that you can access here: <http://www.metalworkingadvocate.org/resources>. The new healthcare law is still unfolding, but your Washington team stands ready to help you digest it!

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 Policy Resolution Group at 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.



WITTENSTEIN CYBER® BUSINESS UNIT LAUNCHES ITS NEW DYNAMIC LINE OF MINIATURE SERVO MOTORS



“cyber® dynamic line” is the name of a new motor family in an attractive, elegant design that enlarges the WITTENSTEIN cyber® motor portfolio of powerful synchronous motors.

The motors are offered in four sizes with a 17, 22, 32 or 40 mm diameter and are suitable for performance ranges between 25 and 335 watts. All cyber® dy-



cyber® dynamic motors.
More power in a smaller package

amic motors unite the compact, robust standard encoder type with 1024 increments and an open BiSS interface in a rugged, one-piece stainless steel housing with easy-to-clean surfaces. They feature a plug connector at the rear, which avoids the huge costs that are often incurred in the event of a fault if they are connected with a cable end. There is no longer any need to replace the whole motor if the cable is damaged and a motor failure does not automatically mean rewiring.

This synchronous motor series creates multiple new opportunities for machine design with a set of advanced and innovative features. Amongst other things, the cyber® dynamic line is ideal for applications involving high acceleration or short motions with frequent changes of speed, as is typically the case with pick & place systems.

Thanks to the cyber® dynamic line's high dynamic factor, which is unmatched

in this size class, the machines in which these motors are installed achieve higher throughputs and cycle rates. The excellent ratio of high torques to low motor weight means there is less mass to be accelerated and stopped in moving axes - machine throughput is raised still further. The optimized torque / weight ratio of the cyber® dynamic line and the high efficiency resulting from its optimal use of energy are moreover ideal for battery powered and mobile devices because the operating cycles between two charging processes are now considerably longer - with positive repercussions for availability.

The high torque constant is another advantage of all cyber® dynamic motors. It paves the way for smaller cable cross-sections and more compact servo controllers - saving space, weight and money. The high torque at low speeds not only gives these brushless DC motors a higher degree of control stiffness; it also makes them quieter and more durable, so that they can also be used as direct drives.

WITTENSTEIN has provided custom servo motor solutions in North America for over 15 years. Our growth has led to the launch of the newly established WITTENSTEIN cyber® motor business unit. We are driven by the mission to ensure precise solutions for Semi-Conductor, Printing, Energy, Automation, Packaging and other industries.

Customized motors and drives from WITTENSTEIN are compact and reliable, providing highly precise and highly dynamic motion control.

Our team of expert consultants can help with your application needs for high performance, high power density and lowest torque ripple.

Clean room certified products from WITTENSTEIN provide durable electromechanical solutions for the most demanding environmental conditions including ultra-high vacuum and extreme temperatures.



SOUTHEAST COMMUNITY COLLEGE HOLDS RIBBON CUTTING

Southeast Community College (Nebraska) dedicated new and remodeled space in its machining program during a ceremony in August.



SCC's Precision Machining and Automation Technology program has a lot going on right now. It has new space, newly-remodeled space, a new name, a change in focus areas, and it has moved the Lincoln program to the Milford Campus.

A ribbon-cutting and dedication ceremony was on Aug. 13 in the Eicher Technical Center on the Milford Campus. The campus is located at 600 State St. in Milford, a community approximately 22 miles west of Lincoln and four miles south.

Nebraska Gov. Dave Heineman was scheduled to speak during the event. Scott Volk, vice president of MetalQuest and a member of the program's advisory committee, also was a guest speaker. A tour of the new space followed the event.

The program name was changed from Machine Tool Technology to Precision Machining and Automation Technology, and focus areas were revised to two: tool maker and computer numerical control and automation. All of the changes will officially take effect in the Summer Quarter, which begins July 10.

The \$1.2 million project included 5,000 square feet of new space, 10,000 square feet of renovated space and some new equipment, including a robotics cell. Nearly 60 students are expected to start the program in July.



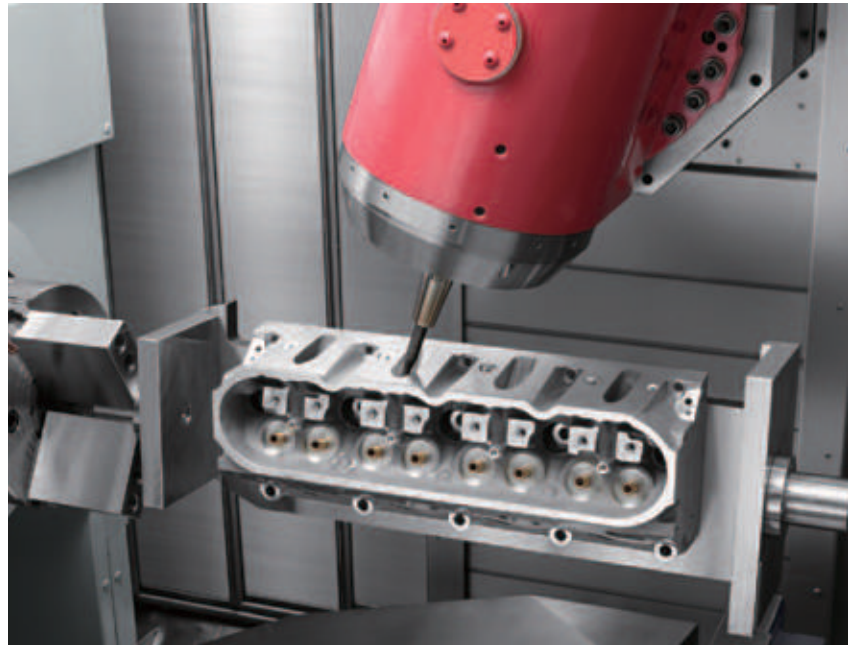


Manufacturing Days

Where advanced manufacturing begins.

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Nov. 12-15

MORI SEIKI Manufacturing and
Digital Technology Laboratory (DTL)

Davis, California

mdays2013.com

- » Inside look at American machine manufacturing
- » The latest in aerospace, automotive and medical machining
- » Software and automation advances
- » Factory and DTL tours
- » Expert seminars from leading manufacturing companies
- » Wine and dine, California-style



DMG / MORI SEIKI is leading
the charge for advanced
manufacturing techniques
with its new U.S. factory.



DMG / MORI SEIKI Opens Doors to its U.S. Factory at Manufacturing Days Event

Attendees to experience the latest in advanced manufacturing technologies and applications at MORI SEIKI Manufacturing November 12-15 in Davis, California.

DMG / MORI SEIKI is pleased to announce registration is now open for its first Manufacturing Days event. The four-day, complimentary event centers around the company's new highly-automated factory, MORI SEIKI Manufacturing, and its neighboring research & development hub, Digital Technology Laboratory (DTL).

Similar in format to DMG / MORI SEIKI's annual Innovation Days event held in the spring, Manufacturing Days offers machine demonstrations, industry seminars, tours of both the U.S. factory and DTL facilities, and California-style wine and dine events.

"Our customers and partners can expect the same caliber of information and hospitality at Manufacturing Days as they've experienced at Innovation Days," says Mark Mohr, President of DMG / MORI SEIKI USA. "However, Manufacturing Days is unique in that it's focused more on the latest applications in manufacturing."

Seminars include presentations from industry and DMG / MORI SEIKI experts. Topics include the latest in aerospace, automotive and medical machining, sustainability in manufacturing, and software and automation implementation.

Open since July of 2012, the U.S. factory is a 200,000 square-foot facility sitting on 14.5 acres in Davis, California. The \$50 million facility is strategically located next to DTL to offer unparalleled collaboration between manufacturing and research and development. DMG / MORI SEIKI machines NHX4000, NHX5000, NHX5500 and the DuraVertical 5100 are currently produced at the factory with more planned. Manufacturing Days attendees will be able to tour this area and view these machines in production.

For schedule information and to register, visit mdays2013.com

NTMA



THE OMNI PARKER HOUSE WELCOMES ATTENDEES OF NTMA FALL CONFERENCE.

Block Dates: October 15th - 20th, 2013

Group Rate: From \$250 per night

Cutoff Date: September 16, 2013 to receive special rate

The group rate is made available until the "Book By" date.

Reservations made after the cutoff date are subject to availability and prevailing hotel rates.

TENTATIVE SCHEDULE OF EVENTS

WEDNESDAY, OCTOBER 16

7:30am - 9:00am	NTMA Continental Breakfast
7:45am - 8:30am	First Timers Breakfast
9:00am - 10:45am	NTMA General Membership Assembly/ Awards & Updates/Keynote Speaker
11:00am - 12:30pm	Robotics Team Meeting
11:00am - 12:30pm	Education Team Meeting
11:00am - 12:30pm	Next Generation Team Meeting
11:00am - 12:30pm	NTMF Board of Directors Meeting
1:00pm - 2:30pm	Manufacturing Technology Team Meeting
1:00pm - 2:30pm	Nominating Team Meeting
2:30pm - 4:00pm	Government Affairs Team Meeting
2:30pm - 4:00pm	Workforce Development Team Meeting
2:30pm - 4:00pm	NTMA Chapter Executives Meeting
2:30pm - 5:00pm	NTMA Insurance Board Meeting
1:30pm - 4:30pm	Optional Activity - Boston Duck Tour www.bostonducktours.com
5:00pm - 7:00pm	Tech Suite Welcome Reception

THURSDAY, OCTOBER 17

7:00am - 8:30am	NTMA Continental Breakfast w/ Franklin Partnership
8:00am - 10:00am	NTMA Membership Value Meeting
8:00am - 5:00pm	Okuma Technology Suite
8:00am - 5:00pm	Precision Fluids Technology Suite
8:00am - 5:00pm	Mazak Technology Suite
9:00am - 11:30am	Spouses Program
9:00am - 11:00am	Kennametal/Pioneer Tool Business Track
10:30am - 12:00pm	NTMA Chapter Leadership Development Seminar - Workforce & Economic Development - How to Become a Regional Player
12:00pm - 1:30pm	NTMA Luncheon for Past Chairmen & Wives
12:00pm - 1:00pm	Business/Sales Development with Dan Bagley
12:00pm - 1:00pm	Chapter Executives Roundtable
1:00pm - 3:00pm	Industry Advocacy Team Meeting
1:00pm - 3:00pm	Kennametal/Pioneer Tool Business Track
1:30pm - 4:30pm	Optional Activity - Freedom Trail Tour
2:30pm - 5:00pm	Plant Tours
3:00pm - 5:00pm	Chapter Leadership Development Track - CultureShoc
7:00pm - 10:30pm	New England Aquarium

FALL CONFERENCE

October 16th - 19th,

Boston, MA

Omni Parker House

60 School Street, Boston, Massachusetts 02108

Phone: (617) 227-8600, Fax: (617) 742-5729

Keynote Speaker

Headlining as our keynote speaker will be Robert O'Neill, team leader, Naval Special Warfare Development Group. In his speech, O'Neill shares what he learned dur-



ing his more than 400 combat missions across four theaters of war. Join us as one of the legends of our nation's military shares his views on the ingredients to a successful mission: the right people, preparedness, decision making under pressure, and, above all, a commitment to never quit.

FRIDAY, OCTOBER 18

6:30am - 8:00am	Budget & Finance Team Meeting
7:00am - 8:00am	Continental Breakfast
8:00am - 9:00am	NRL & NTMA-U Update

INDUSTRY ROUNDTABLES

9:30am - 11:30am	NTMA Tools, Dies & Molds Round Table NTMA Precision Machining Round Table I NTMA Precision Machining Round Table II NTMA Precision Machining Round Table III Specialty Machines
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LUNCH BREAKOUT SESSIONS

11:30am - 12:30pm	Lunch
12:30pm - 1:15pm	Healthcare Reform/Clifton Allen Presentation
1:30pm - 2:15pm	Roundtable regarding Health Care Reform
1:30pm - 2:15pm	CLiftonLarsonAllen-JobBOSS, Epicor and Profit Key Panel
12:30pm - 1:15pm	International Business - Hannover Messe /EMO Speaker
12:30pm - 1:15pm	Additive Manufacturing Breakout
1:30pm - 2:15pm	International Business Panel/Roundtable
1:30pm - 2:15pm	Emerging Technologies Panel/Roundtable
2:30pm - 4:30pm	Workshop with Scott Klososky
6:30pm - 10:30pm	Auction/Fundraiser

SATURDAY, OCTOBER 19

7:00am - 8:00am	Continental Breakfast
8:00am - 9:00am	NTMA Team Leaders Meeting
10:00am - 12:00pm	NTMA Board of Trustees Meeting
12:00pm - 5:00pm	Free time to explore Boston

SUNDAY, OCTOBER 20

9:00am - 11:00am	Executive Team wrap up Meeting
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WHY SPONSOR?

The NTMA is about strategic alliances that maximize the added value benefits for our members. Your opportunity to meet our CEO's, Owners, and Officers of Target Accounts can be accessed in an intimate setting by investing in sponsorships at the Fall Conference.



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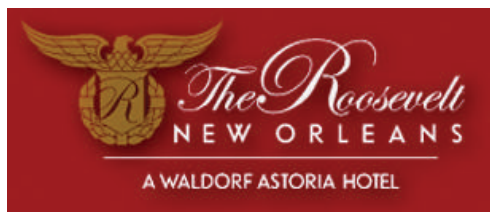
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If you have never attended a national event hosted by the NTMA, as a National Associate Member, a personalized custom tour and orientation is waiting for you in Boston at the Omni Parker Hotel. This one day experience will allow us to begin our partnership and maximize your strategic alliance with the NTMA. Please contact me immediately so that I can arrange the details.



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Tom Sheridan, Royal Products

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- Podium recognition

NOTE: Additional Branding opportunities of hospitality station and other materials are available at the request and expense of the sponsor

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Food and Beverage included in price

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- Logo prominently displayed on sponsors signage at Gala Dinner
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- Podium recognition at the General Assembly

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POWDER COATING 2013 TO BE HELD IN ST. LOUIS, MO OCTOBER 8-10, 2013

The Powder Coating Institute (PCI®) is proud to be hosting the world's ONLY conference/trade show dedicated to promoting powder coating as the coating method of choice. Held in October, the Powder Coating 2013 Show in St. Louis, MO will focus on new technologies and innovations in powder coating. Attendees can expect to gain knowledge that will positively and immediately affect their businesses – with more than 48 hours to choose from.

"The Powder Coating and Quality Control technical track features several great industry leaders," says Dave Lurie, PCI® Executive Director. "Topics in this track will include everything from improving fundamental processes to detailed case studies."

All session slots have been filled with industry leaders ready to share their vast knowledge in powder coating processes, technologies, case studies and innovations. Attendees at all levels in their careers will benefit from these sessions. **TECHNICAL TRACK #1: POWDER COATING AND QUALITY CONTROL, TOPICS INCLUDE:**

1. Building Blocks of a Powder Coating System

Speakers: Greg Dawson (Nordson Corporation), John Sudges (Midwest Finishing Systems, Inc.) & Bill Owens (Axalta Coating Systems)

2. EPSI D12 Red Polyester Tape Advances
Speaker: Todd Schuh (E.P.S.I.)

3. Improving Fundamental Processes (Masking, Hooks and Racks)
Speaker: Bruce Bryan (Mighty Hook, Inc.)

4. Introduction to Powder Coatings
Speakers: Ron Cudzillo (George Koch Sons, LLC), Steve Houston (TCI Powder) and Phil Flasher

5. Medium to Small Systems
Speakers: Ken Kreeger (Nordson Corporation) & Nick Liberto (Powder Coating Consultants, Division of Ninan, Inc.)

5. Powder Coating 101 (presented in Spanish)
Speakers: Stefano DiMarco (GEMA USA), Konrad Mierendorff (Bulk Chemicals) & David Ortiz (Axalta Coating Systems)

6. Smart Buying Powder Coatings: The P-Scout Report
Speakers: Chris Reding (DSM Powder

Coating Resins, Inc.)

7. Will Burt Company Upgrades for "Best of Both Worlds" Results

Speaker: Frank Mohar (Nordson Corporation)

8. XXL Booths in the Ace Market

Speaker: Jeff Hale (GEMA USA)

In the Advance Program of the Powder Coating 2013 Conference, you will find details regarding schedule and all Education Tracks, which include:

- Powder Coatings and Quality Control
- Preparing the Surface for Powder Coating
- Innovations in Powder Coatings
- Optimizing Your Powder Coating Operation

To register or get further details regarding sessions and speakers, visit www.powdercoatingshow.com.



DMG / MORI SEIKI HOSTS ANNUAL SUSTAINABILITY IN MANUFACTURING SUMMIT AT U.S. HEADQUARTERS



DMG / MORI SEIKI USA served as the host for the annual Sustainable Manufacturing Partnership (SMP) meeting held earlier this summer. The SMP is a collaboration among leading manufacturing companies and the Laboratory for Manufacturing and Sustainability (LMAS). The goal of the SMP and LMAS is to research, develop, evaluate and implement sustainable manufacturing solutions. The meeting was attended by manufacturers from the central United States and researchers from the Berkeley, Calif.-based LMAS. Manufacturing and sustainability representatives from companies such as General Motors, Autodesk, John Deere and Caterpillar attended to learn more about what sustainable manufacturing is and how to communicate its benefits both internally and externally.

Despite being competitors, attendees addressed key issues and challenges with one another and ways to overcome them. Issues such as energy and water use, materials used in facilities, and waste and recycling challenges were discussed.

"We see major opportunities for manufacturers surrounding sustainability efforts," said Professor David Dornfeld, lab director and chair of University of California, Berkeley's mechanical engineering department. "Using less energy with machine tools, taking up less space, manufacturing for the environmentally aware consumer and complying with government regulations will help the bottom line and return on investment that the industry is always striving for."

Attendees were invited to DMG / MORI SEIKI's showroom for laboratory demonstrations that included some of the processes DMG / MORI SEIKI currently uses. One of the day's demonstrations was on a DMG / MORI SEIKI NT4200 machine showing a new grind-hardening process; this technique has the potential to reduce carbon footprint on surface-hardening processes by as much as 85 percent.

Dr. Greg Hyatt, Chief Technology Officer at DMG/ MORI SEIKI says the company focuses on sustainability is both a matter of nature

and nurture.

"Due to some of the catastrophic events that have happened overseas (the 2011 Japan earthquake and tsunami) and resulting loss of power generation equipment, we're making remarkable reductions in our Japanese factory's power consumption. We are taking these cost reduction and environmental improvements and applying them to our machines here in the United States," says Hyatt. "Also, we want to continue to support the academic research that U.C. Berkeley and LMAS are doing surrounding new techniques for reducing carbon footprints."

If you are interested in learning more about the LMAS, you can attend Professor David Dornfeld's seminar on sustainable manufacturing at DMG / MORI SEIKI's Manufacturing Days event, to be held November 12-15 in Davis, Calif. Professor Dornfeld is scheduled to speak on Wednesday, November 13th. Registration is now open at Mdays2013.com.



PARAMOUNT INDUSTRIES: A 3D SYSTEMS COMPANY, AN ADDITIVE MANUFACTURING SUCCESS STORY

ARTICLE PUBLISHED BY DVIRC.

Langhorne, Pennsylvania-based Paramount Industries debuted in 1966 as a foundry pattern and modelmaker to become a “thoroughbred” product development, design, and manufacturing firm. The company has always embraced a market-driven business model, and from the earliest days of Additive Manufacturing (more commonly known as 3D printing) in the 1980s, Paramount has not only seen the promise in the technology but also pursued and helped shape it with a driving passion.

Thanks to that drive—and a little luck—Paramount has become a leader in the 3D printing space, producing a range of items for the aerospace, defense, and medical industries. Their success was even enough to draw the attention of additive manufacturing powerhouse 3D Systems, who purchased Paramount in 2012. 3D Systems made this strategic move in part to expand their capabilities through the acquisition of a player with an established industrial presence.

The story of Paramount’s rise to prominence, however, is one that many leaders of small and medium-sized manufacturers will relate to. Indeed, they have shown just what is possible with a strong belief in new technology and the ability to accept a healthy amount of risk.

THE EARLY DAYS

Jim Williams, who would go on to one day become Paramount’s President, joined the company as an apprentice patternmaker. He was just 18, and Paramount had been in business for less than a month.

“Everything I’ve done has been from a foundry/moldmaking/industrial-consumer mod-

elmaking background,” he says. Just a few years into his apprenticeship came the first test of his commitment to the enterprise.

“My boss and his partner had the company on its knees. They told me and another guy working for Paramount they needed us to kick in some funding or we were going under,” Williams remembers. “I was newly married, and we took what my wife saved for furniture and invested it in Paramount. That helped us pull through the financial crisis and get along until we figured out what we were doing. “My first real exposure to 3D printing technology was in 1987 or 1988. It was at a 3D Systems-sponsored event at Drexel University. In fact, Chuck Hull, who to this day is CTO and a member of 3D Systems’ board of directors, invented stereolithography in 1983 and filed the first patent in 1986. He called it 3D printing. The name 3D printing has fast become a household word.



For all its early promise, however, 3D printing was not an immediate hit with Williams, his employees, or their customers. Put simply, it lacked the quality that manufacturers and end users were looking for. In fact, Paramount’s first forays into the technology resulted in some critical missteps.

In 1992, when AT&T (which was still doing business as Western Electric at the time) introduced one of the first “world phones” to send and receive signals from satellites, they approached Paramount to

bid on a modelmaking project. “We thought we would be slick and use 3D printing as a way to make models and save money,” Williams says. “We went through the bidding process, and they were not interested in that technology. They wanted higher quality.”

It didn’t take long for the customer to see the light, but Paramount remained gun shy; when AT&T asked for a bid on a different project six months later, Williams decided not to pitch 3D—only to learn that the contract went to someone who did.

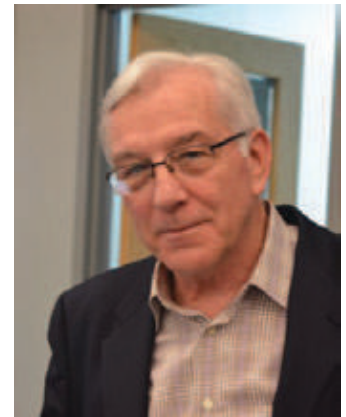
“We were in a quandary,” he says. “We knew it was not manufacturing-level quality, and that’s what we always strived to deliver. We could see that this was going to be a real technology, though.”

THE EUREKA MOMENT

“In 1994, Paramount’s tooling manager and I decided to go to the International Machine Tool Show (IMTS)

in Chicago,” Williams says. “An exhibitor named DTM Corporation from Austin, Texas, had an injection molding press on the floor, along with a Selective Laser Sintering (SLS) system [a metal and polymer-powder based 3D printing process]. They had built a metal matrix injection mold with the SLS, and they were running it on the press right there at the show. I said ‘That’s the one. That’s perfect, because we’re mold and tool makers,’ and that’s the direction we went.”

When Paramount compared



the new technology with their existing CNC machining systems, Williams says the difference was night and day. “We saw it could be a differentiator we could leverage, but it was a struggle. We were pioneers in this metal technology, so there was no one to say ‘you can’t do that.’ We had to learn it the hard way on our own. All the while, we were inventing processing techniques and best practices for this new, advanced manufacturing technology.”

Because he was not averse to taking risks, Williams found himself at the forefront of the rapid tooling phenomenon in the late 1990s.

“I did a lot of speaking and authored articles on it. Paramount got a bit of a reputation as a leader in rapid tooling. It kept our name visible in the rapid prototyping and tooling community, and Paramount got marketing out of it. That was good enough for me.”

When the recession hit in the early 2000s, Paramount was struggling much like many other manufacturers. Revenue had fallen to pre-1990 levels, and they were seeing traditional customers disappear completely. Naturally, Williams and his team looked to new technology for an answer.

That answer came in the form of a new stereolithography (SLA) material. The material was a ceramic-reinforced epoxy that proved suitable for rapid tooling due to its elevated processing temperature. This rapid

tooling process caught the attention of a major unmanned air system (UAS) manufacturer. This chance introduction opened the door for multiple years of business applying polymeric SLS to manufacture flight-critical hardware for unmanned aerial vehicles (UAVs). Manufacturers could now have parts made overnight that were robust enough for use in flight and met the aerospace industry's rigorous quality standards, AS9100.

"From 2004 on, we went from 0% revenue from aerospace and defense to 60% from aerospace," Williams says. "It was extremely good timing being involved with UAV manufacturing over the last decade, and it was a perfect fit for Paramount's capabilities."

Northrop Grumman, meanwhile, was looking at direct digital manufacturing (DDM) using SLS process to manufacture non-structural parts (e.g. cold-air ducts, small clips, and brackets) for the F-35 Joint Strike Fighter. They had qualified a sintered nylon for the center body portion of the F-35, but because the parts would be located near the engine, it was decided nylon wouldn't withstand the heat.

The U.S. Air Force Research Lab agreed to help fund a new material and process that would perform in elevated temperatures outside the range of SLS materials in use at that time. The R&D work would be funded through a Small Business Innovation Research Phase I contract (SBIR1) with an initial \$100K and six-month period of performance.

"When I learned about the SBIR Phase I opportunity, I said 'let's do it,'" Williams says. "We won the SBIR1 along with three other companies, which meant we had to show that we were the best choice to be invited to compete for SBIR2."

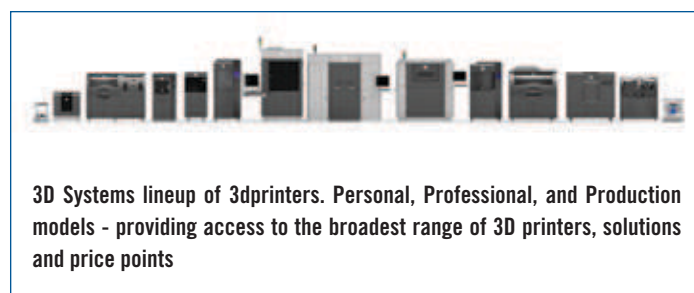
In just four months,

Paramount developed a high-temperature laser sintering machine capable of operating at 400oC. That success led to a follow-on AFRL critical SBIR Phase II contract worth \$2.6MM. Additional AFRL contract research contracts ensued for various other DoD initiatives totaling more than \$4MM. In April 2012, Paramount Industries was acquired by 3D Systems.

"When 3D Systems came knocking, I said 'there's my

not."

Having acquired Paramount, today 3D Systems is the only manufacturer of 3D printed, high-temperature SLS parts on the Joint Strike Fighter. With the recent acquisition of Phenix Technologies, 3D Systems continues to stay on the forefront of innovation, looking currently at printed metal parts in materials such as aluminum, titanium, stainless steel, etc. 3D printing technologies are energy efficient and



ticket," Williams says. "I knew it would help in several respects. For three or four years I was developing plans for an exit strategy and a succession plan. In fact, I turned to the DVIRC to access their expertise and mentoring. The process was initiated with an assessment of Paramount's key personnel, followed by the development of a business plan.

"My business plan was nearly complete when I started to identify possible target buyers. It was during this time that 3D Systems started their global initiative to acquire several parts manufacturers like Paramount. 3D first contacted me in late 2009, but at that time I felt our value proposition was still evolving. It took a year from my first meeting with 3D Systems' CEO in 2011 to close the deal. 3D Systems saw value that most companies wouldn't. They realized the value of our commitment to quality, our reputation, and our relationships in the aerospace and defense communities. I knew they would understand our value on a level that other suitors may

impactful in ways that are life changing. Like aerospace, medical—specifically orthopedic and dental—is ideal for additive manufacturing. Patient-specific devices that begin with CT scanning are proving superior to traditional implant manufacturing processes by enabling an exact reproduction of a patient's implant.

"The tools used to facilitate the surgical implant are instruments (drill guides and alignment fixtures) manufactured using selective laser-sintered polymer," Williams says. "The supply chain for replacing a bone or joint is rapidly becoming Additive Manufacturing. 3D Systems sells the machines, the powders, and the devices themselves to manufacturers. We sell the OEM the equipment, the powder, and the software so they can automate their process."

Asked about what has sustained Paramount across the sweep of nearly five decades, Williams is quick to answer. "What made Paramount unique was going out and taking risks. I was a risk-taker when it came to

technology and new processes I didn't blush if I saw something that I thought could add value for our customer, differentiate us from our competition, and lean-up our processes." Risk became a strategic way of doing business.

And as for what's just over the horizon for 3D printing, Williams sees a few more years before any significant breakthroughs occur. He believes the next quantum leap will relate to size (e.g. being able to make much larger parts). Another breakthrough application could be embedded sensors.

"You could have functionalized materials," he says. "Imagine if you had a material that could have a sensor (maybe an antenna) built inside a wing. Printing the wing, antenna, and electrically conductive cables would do away with the wiring. Or you could grow an integral antenna all at one time, printing metallic materials and polymers together.

"You could also print something with an RFID chip in it. The introduction of counterfeit aerospace parts into the supply chain is a growing concern. How do you know a given part is made according to the manufacturer's specifications if you can't be sure it's genuine? 3D printing would let you print the proof of identification right into it."

Whatever path 3D printing takes in the coming years, it is clear 3D Systems will be at the forefront of cutting-edge technology, leveraging innovation and an entrepreneurial spirit to maintain world-class leadership in 3D printing.

To learn more about how DVIRC can help your business benefit from the new manufacturing and supply chain opportunities associated with 3D printing, contact us today.



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MAJOR CONTRACT

THE U.S. NAVY HAS AWARDED NORTHROP GRUMMAN CORPORATION (NOC) A \$617 MILLION CONTRACT FOR FIVE FULL-RATE PRODUCTION LOT 1 E-2D ADVANCED HAWKEYE AIRCRAFT.

ARTICLE COURTESY "SPEEDNEWS" "WINDSHIELD"



The U.S. Navy has awarded Northrop Grumman Corporation (NOC) a \$617 million contract for five full-rate production Lot 1 E-2D Advanced Hawkeye aircraft.

"Moving from low-rate production into full-rate production is a significant milestone for the E-2D Advanced Hawkeye program," said Bart LaGrone, vice president, E-2/C-2 programs, Northrop Grumman Aerospace Systems. "We look forward to manufacturing and delivering a mature and effective airborne early warning, battle management, command and control system."

"Attaining E-2D full-rate production is the culmination of years of hard work," said Capt. John S. Lemmon, program manager, E-2/C-2 Airborne Tactical Data System Program Office (PMA-231). "The E-2D team continues to work together with one vision

and goal – deliver a solid product to the fleet."

On Aug. 3, 2007, the first E-2D Advanced Hawkeye took to the skies over St. Augustine, Fla. Since then,



E-2D Advanced Hawkeye

Northrop Grumman has delivered 10 new production E-2Ds to the U.S. Navy, on cost and on schedule. An additional 10 aircraft are in various stages of manufacturing and predelivery flight testing at the company's St. Augustine

Aircraft Integration Center. Initial operational capability with the Navy remains on track for 2015.

The E-2D program continues to find ways to reduce costs and provide best value to the customer through improving aircraft delivery processes, standardizing repair methods and looking for opportunities to improve spares timing to increase the overall program affordability.

"We've got the right people and processes in place to make a seamless transition into full-rate production," LaGrone said. "With the Navy's E-2D program of record at 75 aircraft, full-rate production enables the production of the remaining 55 aircraft over the next 10 years and provides the opportunity for a cost-effective, multiyear procurement."



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Mark your calendars, and plan to join us in Cleveland, May 16-17 for the 2014 NRL National Competition. The event will be held in the Lou Higgins Center at Baldwin Wallace College, a venue that offers easy airport access, free parking and plenty of space for up to 100 teams, 500+ spectators, two arenas, as well as exhibit space for sponsors to interact with students and spectators.

The move to Cleveland also means the teams from many of our most active regions will spend considerably less time on the bus, and everyone can expect to pay less than \$100 per room for overnight accommodations.

Stay tuned for more information about this event. We have some cool things planned for you and can hardly wait to see you there!

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about recent events, favorite parts or tools, as well as build tips are welcome. Remember, if you are a High School or College rising senior, there's

nothing better than a few published articles on your resume to rise out of the slush heap!

E-mail Kevin Barry, the Servo Combat Zone editor for more information @

legendaryrobotics@gmail.com

Rules Update

Over the summer, the NRL rules committee will be reviewing and updating our technical regulations and competition rules, and we want to make sure we address the concerns of everyone in the league. To that end, if you have a rules change request please email Maureen Carruthers at

mcarruthers@ntma.org and let her know which rule(s) you'd like us to consider changing, and your rationale for the change.



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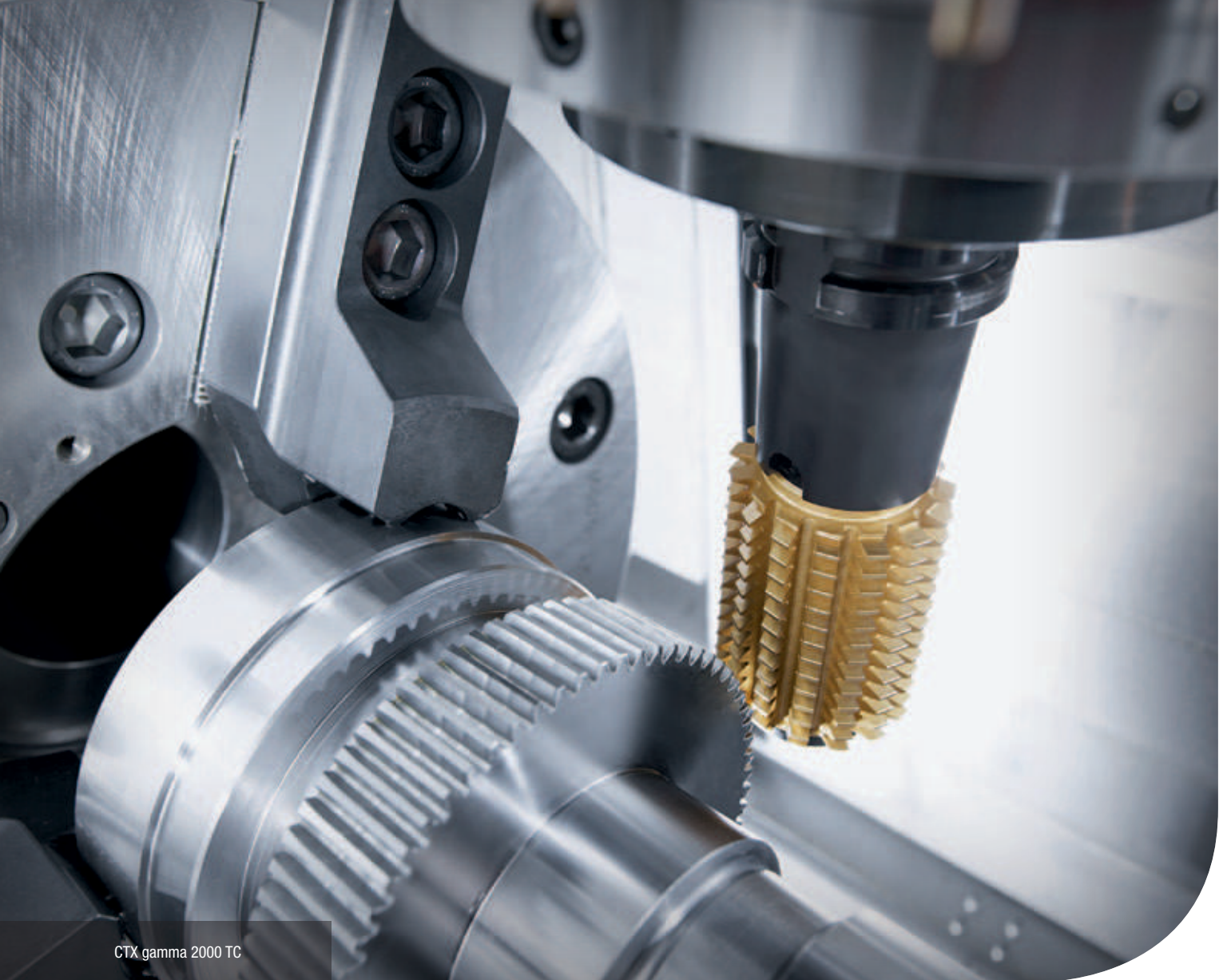
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SUPERIOR DIE SET CORPORATION CELEBRATES 90 YEARS OF MANUFACTURING EXCELLENCE

ONE FAMILY LEADS AN INDUSTRY WITH FOUR GENERATIONS OF VISION AND INNOVATION

On September 12, 2013, Superior Die Set Corporation will begin a weeklong celebration to commemorate 90 years of manufacturing excellence. Founded in 1923 by Kasimir Janiszewski, Superior Die Set Corporation is a manufacturer of die sets, mold bases, pins/bushings, three platen presses, cut-and-ground machined plate, fabrications and forging products.

HISTORY

Kasimir J. Janiszewski, a blacksmith and eventual tool and die maker, left his native Poland in 1910 at the age of 23 with twenty-five dollars to his name to build a better life in America and to help his mother and father back home in Poland. With entrepreneurial spirit, hard work and perseverance, Kasimir founded Superior Die Set Corporation thirteen years later and created one of the nation's oldest family-owned and run corporations. Today, they employ over 500 people worldwide, including a wholly owned subsidiary in Poland.

Leadership at Superior has been passed on through four generations. In the 1960's, Kasimir's sons Alphonse, Casimir H. and Edward led the company. In 1968, Casimir H., or "Casey," became President, serving the company for 55 years. Today he still serves as Chairman at 89 years young. In fact, on September 12th, Casey will celebrate both his 90th birthday and 90 years in business and will be present to partake in the festivities.

In the mid-1980's Casey's sons, Casimir J. (also nicknamed "Casey") and Frank J. became executives of the company, and in 1991 they were named CEO and President and Executive Vice President respectively. Casey's sons, Nicholas and Steven, have also joined the company with the roles of Customer and Product Support Manager and Regional Sales Manager. Franks son Jacob, serves the company as Production Scheduler. The later three are fourth generation family members to assume roles within the company.

Superior Die Set Corporation has several manufacturing facilities, warehouses



and distribution facilities, with the capability to serve a global market. They also produce plate products, weldments and a variety of metalworking services and have a forging division for the repair and replacement of forging equipment. Their Poland-based subsidiary FCPK Bytów produces plates and components for the mold and stamping industry. The Bytów plant manufactures components for molds and dies. The Kielce plant produces plates for molds and stamping dies up to two by five meters and fifteen tons. Both facilities serve buyers worldwide.

FCPK Bytów was founded twenty years ago. FCPK Bytów General Director Tom Sobierajski, Sales Director, Piotr Matuszewski and Financial Director, Krystyna Zielinska will join three generations of today's current Janiszewski leadership to partake in the weeklong celebration.

Superior has survived the great depression, offshore manufacturing in the early 2000's and the recession in 2008. This past year Superior added dozens of jobs worldwide and invested millions of dollars in new equipment. Expansion is planned for later this year. Customers, suppliers and the media will be able to tour Superior's Oak Creek facilities on September 12th or 13th to view firsthand their state-of-the-art manufacturing plant which includes a sophisticated ERP computer system. The ERP computer system allows Superior to be completely paperless on the shop floor while maintaining over 2500 work orders per day. Additionally, the system reschedules the entire plant three times a day, providing faster speed and flexibility.

The system has helped Oldenburg Metal Tech in Port Washington, WI according to Operations Manager, Jeff Decker. "I have worked with Superior for fifteen years and they always bend over backwards to deliver die sets in a timely manner so we can meet our customers needs. I attribute

much of our success and growth to the great working relationship we have. They make my job easy. In the past four years we've grown

75%." Oldenburg Metal Tech manufactures progressive stamping dies for the automotive, healthcare, appliances, and lawn and garden industries.

In addition to Superior Die Set Corporation in Oak Creek, the Janiszewski family also owns Greendale Precision Services (GPS). In 1974, GPS started manufacturing precision punches for the metal stamping industry. Over the years, they added mold and medical components to the mix. The center of their precision services includes climate controlled 4 axis grinders and hard turning which are supported by CNC Swiss, CNC center less and CNC turning. GPS products are used in the automotive, off-road, aerospace, furniture and medical industries.

When I asked what they attributed their longevity and success to, and why they had not sold out to equity firm or another company, Frank Janiszewski stated, "Manufacturing is in our blood. We have never contemplated selling our business due to our strong family roots and loyalty to previous, present and future generations. Further, we are committed to our employees, our great customer base and our supportive vendors. Our goals and vision for the future are to build a stronger company and develop new innovative manufacturing techniques to allow us to serve our valued customers with both better products and greater productivity."

For more information on Superior Die Set Corporation and their 90th anniversary, please contact Jean McNamara, Thalman Marketing Services at 414-322-0684 or jthalman@wi.rr.com or Mark Ullstrup, VP of Sales and Marketing at 800-349-9811 or vpsales@superiordieset.com.



NTMA SOUTHWESTERN REGIONAL CONFERENCE

REPRINTED FROM MANUFACTURING NEWS

The Southwestern chapters of the National Tooling and Machining Association (NTMA) recently held its inaugural conference in Phoenix, Arizona. The event began with an overview of the general economy and the outlook for manufacturing by keynote speaker John Duca, Vice President and Senior Policy Advisor at the Federal Reserve Bank of Dallas. Obamacare Regulations was the topic for another keynote speaker LeeAnn Gassway, Regional Vice President, State Advocacy, AHIP. Breakout sessions were in three categories: Technology, Management and Education Panel. Conference attendees were able to choose which breakout sessions to attend.



Opening Session of the inaugural NTMA Southwestern Regional Conference in Phoenix, Arizona.

TECHNOLOGY TOPICS:

- Why Automate with Robots
- Installing High Tech Into the Cost Conscious Shop
- Additive Manufacturing
- Optimizing Machining in Aerospace Frame Materials

MANAGEMENT TOPICS:

- Social Security Realities
- Multiple Employer Trusts and Retirement Options
- Exiting Your Business, Protecting Your Wealth
- The Good, the Bad and the Ugly in Employment Law

EDUCATION/PANEL TOPICS:

- Entry Level Training Programs
- Apprenticeship Training Panel Discussion
- NTMA-U Online Precision Machinist Training
- NIMS National Skills Standards

Industry Roundtables also provided an exchange of ideas and solutions over a wide subject area with all attendees participating in the discussion. Planning is already underway for a second Southwestern Conference to be held in Dallas in August

2014. "Our inaugural NTMA Southwestern Regional Conference exceeded all of our highest plans and expectations. The attendance was outstanding and the reviews were very positive. Our focus on providing the most benefit to our members and interested attendees at a reasonable price in the shortest amount of time was fully achieved. We are excited in anticipation of our next event in the beautiful Dallas, Texas area," said Dante Fierros, President



NTMA Southwestern Conference keynote speaker, John Duca, Vice President and Senior Policy Advisor at the Federal Reserve Bank of Dallas, gave an overview of the general economy and the outlook for manufacturing.



NIMS National Skills Standards breakout session speaker, Dave Morgan, Director of Business Development, National Institute for Metalworking Skills (NIMS).



NTMA-U Online Precision Machinist Training breakout speaker, Ken McCreight, Vice President, National Tooling and Machining Association (NTMA).



Terry Burch representing the North Texas Chapter

Dante Fierros and Lisa Ellard during the opening reception



The Crew from San Diego NTMA!



Todd Ellard, North Texas NTMA, Master of Ceremonies for opening reception



One of several break out sessions at the NTMA Southwestern Conference.

of the Arizona Tooling and Machining Association(ATMA). Dante Fierros President of Nichols Precision LLC. "It was great to attend an event that was not only heavy on content and presentations, both locally and regionally, but with an emphasis on being economically feasible for companies to send multiple attendees. We are looking forward to hosting next year's event in the Dallas area," said Todd Ellard, President of the North Texas Chapter of the NTMA. Todd Ellard is Owner and Vice President Sales and Engineering of Manda Machine Co., Inc.



Roundtable discussion where a wide subject area covered ideas and solutions with conference attendee participation.

NTMA EXECUTIVE STAFF TOURS BOSTON NTMA MEMBER COMPANIES

TOUR IS WICKED AWESOME

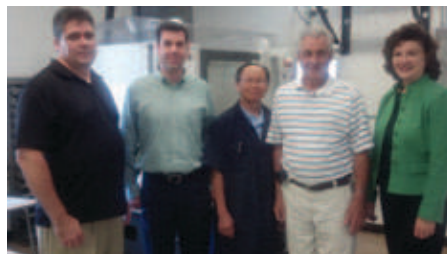
As a part of national's member retention strategy and improving our partnerships with our local chapters, Managing Director Emily Lipovan and Director of Membership and Business Development Jeff Walmsley hit the road in July and pressed the flesh with several Boston NTMA members. A huge thank you goes out to Cindy Zylkusi Norris, Boston NTMA Chapter Executive, for organizing and scheduling our visits; a true professional.



Karin Carlson President of Metal Products and Marty Aresnault Boston NTMA President.

Our first visit brought up to Metal Products, Inc, established in 1935 and meeting with Karin J. Carlson, President. During our visit and tour of her company, the Boston NTMA Chapter recognized her efforts in safety, too. Our second stop on the tour took us to United Tool & Die Co., Inc. Design & Engineering where we met up with Scott Fallavollita, President. Scott is also one of newest board mem-

bers for the Boston NTMA. Touring his facility in Wilmington was educational and our conversations focused on efficiencies, growth and the need for skilled labor. The final stop for the day was to Boston NTMA Board member, Edward Fitzgerald at Fitz Machine in Wakefield. Our evening then ended with a night



Michael Pasciuto, Jeff Walmsley, Sangeng Oum Instructor/Teacher, Mr. Cosmo Pasciuto, founder of Custom Group and Emily Lipovan at Custom Roll Group and their training center.



Jeff Walmsley Director of Membership NTMA, Scott Fallavollita, President of United Tool & Die, Emily Lipovan Managing Director, Marty Aresnault, Boston NTMA President



Michael and Cosmo Pasciuto with students currently enrolled at training center



Emily Lipovan, Edward Fitzgerald, Owner Fitz Machine, Jeff Walmsley and Marty Aresnault

out with the board of Boston NTMA at Fenway Park and a little taste of Boston traffic. Our last stop on the tour was visiting Custom Roll Group in Woburn. Here we met with Cosmo, Michael and Carl Pasciuto. We toured all three companies which included their growing training center. What a way to end our visits.



GF AGIECHARMILLES UNVEILS STREAMLINED NEW WEBSITE



Advanced machine tool builder GF AgieCharmilles debuted a completely new U.S. website that offers increased user-friendliness and reflects the visual identity of parent company Georg Fischer. The new site features an improved user experience that allows manufacturers to quickly access an extensive index of all the latest information on the company's products, technologies and applications. The new website is located at www.gf.com/us.

Improvements include a streamlined layout, with easy-to-use navigation that or-

ganizes machines by both type and attributes such as speed, precision and cost effectiveness. According to Gisbert Ledvon, director of business development for GF AgieCharmilles, "This redesign and streamlining of our website makes it easier for our customers to find the right information about our cutting-edge, high-performance products, and does it within a sleek, beautiful layout. It shows that we continue to lead in technology, and it will enable us to communicate with our customers in new and better ways."

An expanded products section now includes a focus on solutions, highlighting the various areas where GF AgieCharmilles products are put into real world use. This section focuses on applications within the automotive, medical and dental, aerospace and aeronautics, and information and com-

munications technology industries. Within these subsections, a customer unfamiliar with the company can explore how GF AgieCharmilles' deep engineering knowledge and superior application expertise in high-speed milling, EDM and laser texturing benefit individual industries around the world.

The updated website also has dedicated pages for customer-centric support, with easy access to operations, machine and business support, as well as Uptime+. GF AgieCharmilles' comprehensive suite of customer services, Uptime+ encompasses resources for training, preventive maintenance, machine warranty and the first-of-its-kind loyalty program, Privilege Club, which rewards customers with valuable exclusive benefits.

"This fresh design brings all the crucial elements of the GF AgieCharmilles site front and center, offering current customers and new visitors a quick and informative experience," said Ledvon.



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PLAN AHEAD FOR YOUR ONLINE HEREAFTER

ASSET PROTECTION LAWYER OFFERS 3 STEPS TO TAKE NOW

Now, you really can live forever, but that's not necessarily a good thing.

Many of your online accounts – from automatic bill payments to eBay – may remain active after you pass away, unless you take steps to ensure they don't, says attorney Hillel Presser, author of "Financial Self-Defense (Revised Edition)," www.assetprotectionattorneys.com.



Hillel Presser, author of "Financial Self-Defense (Revised Edition)"

"It's important to make sure your online bank and shopping accounts, even your social media, can be closed out, or that your loved ones are authorized to access them," Presser says. "You may ask, 'Why would I care if I'm gone?' I can tell you from experience: because it can create real headaches, and more heartache, for your family."

Bank and shopping accounts will be vulnerable to identity theft, which would affect your estate if someone opens credit cards in your

Automatic bill pay, for example, can theoretically keep tapping your bank account long after you're gone or, at least, until your money is.

"It's important to make sure your online bank and shopping accounts, even your social media, can be closed out, or that your loved ones are authorized to access them," Presser says. "You may ask, 'Why would I

name. You might have valuable intellectual property, like domain names. They may need access to your health records, particularly if you died under questionable circumstances, he says.

There's the sentimental stuff – photos and emails -- that your family may want as a remembrance of you, and the libraries of music and ebooks, which may represent a considerable investment on your part.

"The problem is, even if you provide a family member with all of your accounts, log-ins and passwords, they may not be legally allowed to access them," Presser says. "In many cases, they may be violating the accounts' terms of service or violating federal privacy and computer fraud laws. Some states have laws governing online materials, but they're different and which of your accounts are covered depends on where the provider is located."

WHAT CAN YOU DO TO ENSURE YOUR FAMILY ISN'T LEFT WITH A VIRTUAL NIGHTMARE AFTER YOUR PASSING? PRESSER OFFERS THESE TIPS:

- Create a list of all of your accounts, including log-in names, passwords, and answers to any security questions. Obviously, your list will need to be securely stored. Since you'll need to update it regularly as you add accounts or change passwords, it will be easiest if you keep the list on your computer in a password-protected folder. Some versions of Windows allow you to create protected folders, but you may need to get third-party software to do this, such as free *AxCrypt*. Remember to create a backup of your list, whether it's on a jump drive or printed out on paper. Store the backup in a secure place such as a safe deposit box. Do not put password information in your will, which is a public document.

- If you have a Google account, set up the new inactive account manager. In May 2013, Google became the first site to give users an option for choosing what becomes of their content if they should become debilitated or die. Under the profile button, click "Account," scroll down to "Account Management," and you'll find instructions for "Control what happens to your account when you stop using Google." You can select how long the account should be inactive before your plans are set into motion; choose to whom you want to offer content, such as YouTube videos, Gmail, Google+ posts, Blogger and Picasa web albums, or whether it should simply be deleted.

- Appoint a digital executor. Perhaps the simplest way to ensure your online life is taken care of is to appoint a digital executor – a tech-savvy person who will be willing and able to carry out your wishes. Authorize the person to access your inventory of log-in information and spell out what you want done with each account, whether it's providing access to loved ones or business partners, or deleting it.

The digital world has grown and transformed so rapidly, the law hasn't kept up, which makes managing your digital afterlife challenging, Presser says.

"Until there are more consistent laws and procedures governing this area, it's best to plan ahead, leave clear instructions and be sure you have a list of accounts where your estate lawyer or a loved one can find it and access it," he says. "It will make a world of difference to your survivors."

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CRITERION TOOL CELEBRATES 60TH ANNIVERSARY

Criterion Tool celebrated its 60th anniversary in business with an open house and luncheon on Saturday, July 27, 2013. The event celebrated 60 years of producing precision-machined parts in Northeastern Ohio. The highlight of the day was when current President, Tanya DiSalvo, surprised her father, Dennis Ondercin, with a tribute and celebration of his official retirement from the company.

Criterion Tool is a precision machine shop that supports the no failure industries. Specifically, Criterion Tool serves the medical device, aerospace, defense, electronics and photonics industries. As a female owned third generation family business, the particular industries that we serve require extensive certification. Criterion is ISO 9001:2008 certified, Food & Drug Administration (FDA) and International Traffic in Arms Regulations (ITAR) registered as well as ISO 13485 & Defense Acquisition Regulations System (DFARS) compliant.



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CYCLE TIMES ON ALL JOBS MOVED
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**"THE MACHINE'S RAPID ACCELERATION/
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**"WITH THE MAKINO MACHINING
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The core display categories at HANNOVER MESSE are inspired by global megatrends and drivers of growth such as energy and environmental engineering, mobility and urbanization. All these themes are addressed in the 7 leading trade shows in the 2013 line-up.

If you are interested in attending this show, please contact Emily Lipovan at elipovan@ntma.org



2014 TRADESHOW LINEUP

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ENERGY

The energy industry worldwide is facing the need for change.

At the trade fair Energy trade visitors from across the globe can discover how, with the right mix and control, state-of-the-art technology and solutions can meet this challenge. This is the only trade fair for the energy sector which covers the entire value chain – from energy generation, supply and storage through to transmission and distribution to smart grids. All at one venue.



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This leading trade fair is now firmly established as the No.1 business platform for hybrid and electric mobility technologies. The entire industry comes to Hanover to meet its customers worldwide. This is where the key contracts are signed, projects launched and joint ventures further developed.



INDUSTRIAL GREENTEC

Leading Trade Fair for Environmental Technology Following its successful launch, the Leading Trade Fair for Environmental Technology is being further expanded. Themes such as sustainable production,

techniques for safeguarding air and water quality and the recycling industry attract a lot of interest from visitors and the media.

Green technologies, developed by industry for industry, form the core of the exhibition.

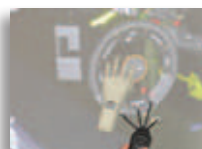


INDUSTRIAL AUTOMATION

The international profile of the event and the broad spectrum of topics and trends covered by Industrial Automation offers exhibitors new opportunities to tap into global markets and thus helps secure your

business success.

In 2014 Industrial Automation will again take up the themes that interest trade visitors from various sectors: the networking of automation and IT, process automation, energy and materials efficiency, robotics and systems integration, as well as smart systems offering solutions in assembly and handling.



DIGITAL FACTORY

Leading Trade Fair for Integrated Processes and IT Solutions.

From the very start the integration of all processes in the industrial value chain has been the core topic of Digital Factory, the Leading Trade Fair for Integrated Processes and IT Solutions.

This focus was reflected by the HANNOVER MESSE slogan in 2013 – Integrated Industry. Embedded software is the most important driver of innovative products, while IT solutions such as those showcased at Digital Factory are the key tools for developing and manufacturing these products.



INDUSTRIAL SUPPLY

Boasting highly specialized expertise and adaptability, industrial suppliers play an important role in their customers' ongoing drive for innovation.

The components and assemblies supplied by these specialist subcontractors are vital for the manufacture of all downstream end products. This symbiotic relationship makes today's industrial suppliers the forerunners of what we now call "Integrated Industry". Exhibitors at Industrial Supply will show how the growing demands of customers can be met through intelligent components and assemblies and collaborative partnerships. Attended by decision-makers from all your user sectors and over 50 nations, this show is the ideal place for you to market your solutions for materials, components, systems and processes.



RESEARCH & TECHNOLOGY

Leading Trade Fair for R&D and Technology Transfer. Industry worldwide faces enormous challenges.

In order to deal with complex issues such as the continuing integration of industrial processes, the transition to renewable energy, the efficient use of resources, sustainability, mobility, lightweight construction and the development of alternative resources and new materials, industry needs science. At the same time, R&D professionals need effective partners in industry and government in order to market their innovations successfully.

SANDVIK COROMANT COVERS ALL BASES AT GEAR EXPO



Sandvik Coromant, the world's leading producer of cutting tools for the metal cutting industry, will focus on the ongoing shift in gear manufacturing technology during Gear Expo 2013, Sept. 17-19 in Indianapolis. For an operation that has been reasonably consistent for about a century, there have been a lot of exciting technological advancements in recent years. Whether you're running a traditional, dedicated machine for large batches, doing smaller, one-off batches and prototypes on your multitask machine, or anything in between, stop by booth 335 to check out the next generation of gear milling solutions.

One focus area will be CoroMill® 176, an innovative indexable insert cutter for productive gear wheel hobbing. CoroMill 176 is a more cost-efficient alternative to regrindable high speed steel (HSS) hobs and is designed for gears in the module range 3 to 10. Its ability to reach higher cutting speeds combined with user-friendly insert changing will reduce cycle times to a fraction versus high speed steel tooling, making it the high productivity gear milling choice for large volume gear facilities.

The new CoroMill® 172 full form disc cutter is another area of emphasis. It offers a versatile and timesaving solution for milling of high-quality gear profiles, splines and racks.



Thanks to the new indexable carbide insert technology and a powerful iLock interface, the component can be machined in flexible non-dedicated machines, such as multi-task machines and machining centers, as well as in hobbing and gashing machines. This makes the CoroMill 172 a truly flexible choice that has application on a wide array of operations

and has shown particular value in the production of splines.

And the InvoMilling™ (patent pending) process, a revolutionary technology, is a unique approach to milling spur and helical gears using indexable insert cutters. InvoMilling opens up new, cost-efficient ways to produce geared components without dedicated hobbing machines. Since complete components can now be machined with just one set-up in a single 5-axis machine, overall production lead-times can be reduced dramatically as waiting for expensive hob cutters is not required. One InvoMilling cutter is capable of producing multiple module or DP sizes. Also, eliminating a hobbing operation dramatically shortens the value stream and overall work in process. And the new generation of indexable carbide insert gear cutters will increase cutting data and lower the cost per machined gear wheel.

Sandvik Coromant's comprehensive line of gear milling application solutions, from hobs with indexable inserts to roughing cutters and disc cutters, provides the flexibility your shop requires to cover the changing needs of the day.



NTMA WAGE AND FRINGE BENEFIT SURVEY

BENCHMARKING TOOLS TO HELP MAINTAIN YOUR TOTAL COMPENSATION PACKAGE

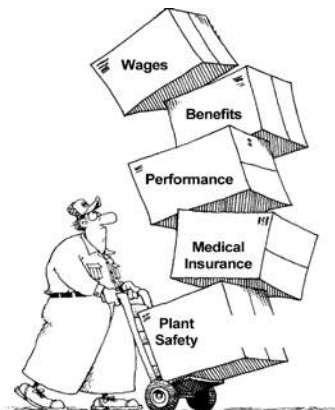
ARE YOU OVERPAYING OR UNDERPAYING YOUR EMPLOYEES?

HOW WILL OBAMACARE INFLUENCE THE EMPLOYEE BENEFITS BEING OFFERED?

FIND OUT BY TAKING PART IN THE NTMA WAGE AND FRINGE BENEFIT SURVEY.

Maintaining a competitive and effective compensation program helps you get and keep top-notch employees. Do you know what employees with similar experience earn at other companies? Is your benefits package competitive? NTMA can help you determine how you compare to the market—in your chapter, in your industry segment (Tools & Dies, Molds, General Precision Machining, Aerospace Machining & Fabrication, Special

Machines, Production Operations) and at similar size companies. The NTMA Wage and Fringe Benefits Survey reports include job-specific compensation data, thus providing your company the ability to make



reliable and impartial financial decisions regarding wages and benefits.

PARTICIPATING FIRMS WILL RECEIVE INFORMATION ON TOPICS SUCH AS:

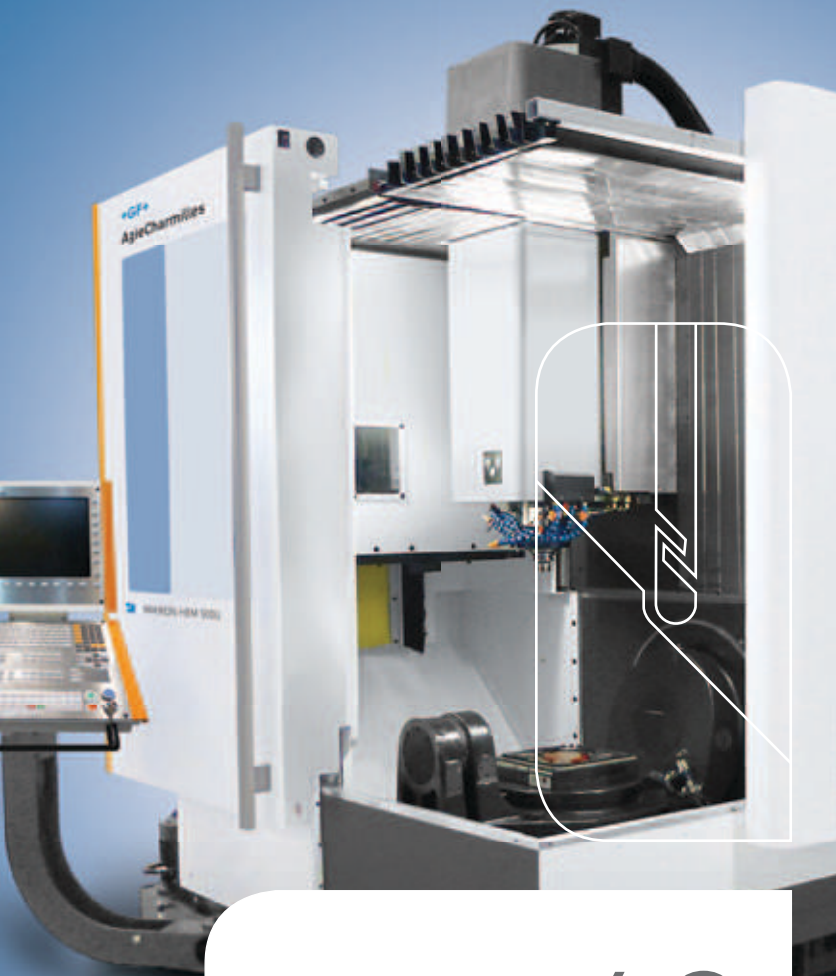
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- Manual Machining Operations
- CNC Operations Wages
- Support Function Wages
- Benefit Programs including:
 - Health Care Plans
 - Retirement Income Plans
 - Paid Vacation & Holidays
- Schedule

Questionnaires will be mailed to all NTMA members in early September. They are due back by the November 1st. Don't miss this opportunity!





To access the GF AgieCharmilles mobile website, download a QR code app and scan this image.



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Manufacturers are becoming increasingly dependent upon the use of high-tech equipment that involves multiple, integrated systems. It is critical that these companies are able to recruit and employ individuals who know how to operate, troubleshoot and maintain this high-tech equipment.



Starting Fall 2013

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- Quality practices and inspection
- Print reading / modeling
- Common measurement systems and precision measurement tools
- Level 2 Internship*

THIRD SEMESTER – MANUFACTURING

- Manufacturing processes and production
- Prepare equipment for the production process
- Coordinate work flow
- Lean manufacturing / Six Sigma
- Programming
- Team production
- Level 3 Internship*

FOURTH SEMESTER – MAINTENANCE

- Maintenance awareness
- Preventative maintenance and routine repair
- Maintaining production schedules
- Potential maintenance issues with basic production systems
- Level 4 Internship*

*Eight week paid internship designed to facilitate learning in the manufacturing environment. Course competencies are developed and approved as a cooperative learning contract between employer, student and course instructor.

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WHY EVERYONE NEEDS AN 'INCAPACITY PLAN'

3 EXPERTS SHARE TIPS FOR PROTECTING YOURSELF & YOUR ASSETS

Dementia has become the No. 1 cause of disability globally, according to the World Health Organization.

Stroke, which can also profoundly impair judgment and decision-making, stands at No. 2.

"This year, 7.7 million new cases of dementia will be diagnosed, and 15 million people will suffer a stroke," says CPA Jim Kohles, chairman of RINA accountancy corporation, (www.rina.com). "By

the time dementia symptoms become apparent, their competence may already be affected. Strokes, as we know, can be tragically sudden."

While many people carefully plan for retirement and what will become of their estate after death, too few provide for that middle ground – incapacity, adds attorney John Hartog of Hartog & Baer Trust and Estate Law, (www.hartogbaer.com).

"We should plan for incapacity, and if it never comes into play that's wonderful," says wealth management advisor Haitham "Hutch" Ashoo, CEO of Pillar Wealth Management, (www.pillarwm.com).

Incapacity planning ensures you're able to speak for yourself in all decisions, from your medical care to financial affairs.

Here are three steps everyone should take, from the accounting, legal and financial perspectives.

GET DISABILITY INSURANCE

"The likelihood of something happening that affects your ability to work is high, so you really should carry disability insurance," says accountant Jim Kohles.

How you pay for it can have different tax impacts. If you purchase it through your business, whether as owner or employee, you can take a tax deduction on the premiums. But that means any claims paid will be taxable. If you pay with post-tax dollars, any benefits are not taxable.

"The difference in saving taxes on \$200 a month in premiums versus \$5,000 a month in benefits is significant," Kohles says.

Kohles also cautions that more new policies now are capped at 10 years of payments – not lifetime. So be sure you understand the terms.

HAVE LEGAL DOCUMENTS THAT CLEARLY STATE YOUR WISHES

These include a durable power of attorney for financial affairs and an advanced health care directive for medical decisions, says attorney Hartog.

Name the people – the "agents" -- who will be responsible for implementing those decisions, and draw up a document that delineates their responsibilities and powers. Choose people in whom you have a great deal of faith and trust. "People need to remember

they're going to be vulnerable – you don't want to pick someone if you have a quiver of doubt about them," he says. One safeguard is to name an agent, and a second person to whom the agent must report. "Just the idea that you have to report keeps people honest," Hartog says.

In some states, the government provides forms so people can prepare these documents themselves, although Hartog suggests at least consulting with an attorney.

IF YOU'RE THE "NON-FINANCIAL" SPOUSE, BECOME FAMILIAR WITH THE FINANCIAL PLAN

"Typically, one spouse is in charge of the finances, and the other takes a back seat, or even a no seat," says wealth management advisor Ashoo. "The non-involved person needs to understand how the finances are arranged and planned, and he or she needs to be very comfortable with the family's advisors." This will prevent a nightmare during an already stressful time should the involved spouse suddenly become incapacitated.

Both spouses should attend meetings with the family's advisors, even if one spouse doesn't fully understand or isn't interested in all the details. "If something happens, they will know who to call and what to do," Ashoo says. "They'll avoid a nightmare. That's the peace of mind I want for my clients."

All three experts stress the importance of having these provisions in place long before you think you'll need them.

"Younger people have a higher chance of becoming disabled before they die, and they're usually the people who haven't planned for that at all," says Kohles.



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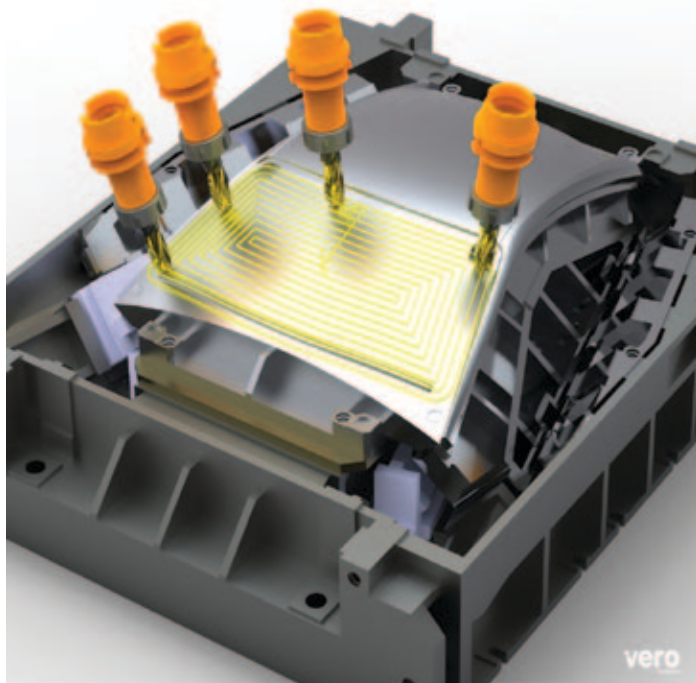
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GF AGIECHARMILLES TO DEMO HIGH-PERFORMANCE, HIGH-VALUE TECHNOLOGY AT CMTS 2013

At the Canadian Manufacturing Technology Show, GF AgieCharmilles will showcase advancements in manufacturing technology that meet the industry's need for precise, efficient and cost-effective part production. The company will spotlight the unique interference-free five-axis milling of its high-performance HPM 450U machining center and industry-leading efficiency of its FORM 20 sinker EDM in Elliott Matsuura's exhibit space, booths 4238, 4250, 4438 and 4450.

HPM 450U MILLING MACHINE

The HPM 450U high-performance milling solution features a new torque rotary/tilt table that streamlines five-axis operations. The machining center easily adapts to suit a variety of customer requirements, offering impressive cutting capabilities from simple drilling to complex five-sided and simultaneous five-axis machining processes.

With a sturdy, compact design and large work envelope, the HPM 450U has maximum X-Y traverse paths that measure 600 mm and 437 mm respectively, with a Z-axis that provides 450 mm clearance between the table surface and spindle nose. It has a fast rotary table speed of 140 rpm and an ample tilting range of -120/+45.

The machine's Step-Tec spindle is available in a 12,000-rpm version with an ISO 40 taper for conventional tooling technologies and programs or in a 20,000-rpm version with an HSK-A63 taper for machining a wide variety of materials. Both versions offer a vector control for full torque in lower speed ranges, a highly stable ceramic hybrid spindle bearing and spindle casing cooling using a controlled internal coolant system that maintains consistent temperatures throughout the entire work process.

Thanks to its various tool magazine sizes, the HPM 450U accommodates everything from single-piece production to the mass production of complex workpieces. An internal tool changer, which integrates into the machine's base, has a storage capacity of up to 60 tools. An external circular magazine increases that capacity to 220 tools. Coupling the external magazine with an optional automatic pallet-changing magazine creates a flexible manufacturing cell capable of unmanned, lights-out production.

The latest generation Heidenhain iTNC 530 digital control system makes the HPM 450U a user-friendly machining center. The system includes an Ethernet connection for fast CAM data flow, simple dialog-controlled programming as well as parallel programming and free definable sub-programming.

FORM 20 SINKER EDM

The FORM 20 has one of the industry's best cost-to-performance ratios and smallest footprints in the sinker EDM category. It is also an ideal solution for manufacturers looking to maximize their die-sinking EDM operations while minimizing their environmental footprint.

Having the lowest energy consumption of all the EDM ma-

chines on the market today, the FORM 20 provides exceptional performance using just 3.7 kW/h at full power. With every machine pulse, the 70-amp proprietary Intelligent Power Generator optimizes the EDM process and dramatically reduces electrode wear as well as provides extremely uniform surface finishes. The machine reliably generates surface finishes of Ra 0.1 micron and radii down to 0.018 mm.

In addition to its unique power generator, the FORM 20 is one of the first machines to implement the company's recently developed AC Form HMI (human machine interface). Revolutionary in its simplic-



GF AgieCharmilles will showcase the unique interference-free five-axis milling of its high-performance HPM 450U machining center in Elliott Matsuura's exhibit space at CMTS 2013.

ity, this new CNC provides the most user friendly, easiest to learn and most flexible control developed for a die-sinking EDM.

While the FORM 20 is compact, it still provides ample axis travels of 350 mm x 250 mm x 250 mm. Within its space-saving footprint, the machine includes a four-position integrated linear tool changer. It also incorporates a rigid and compact mechanical structure for reliable, stable operation.

The Canadian Manufacturing Technology Show will take place Sept. 30 - Oct. 3 at The International Centre in Mississauga, Ontario, Canada.



DMG / MORI SEIKI TO DEMONSTRATE FULL GEAR MACHINING TECHNOLOGY PORTFOLIO AT GEAR EXPO 2013

DMG / MORI SEIKI MACHINES DMU65 FD, NT1000 AND NLX2500SY ON DISPLAY AND IN ACTION

In anticipation of September's Gear Expo, DMG / MORI SEIKI announces it will demonstrate its full gear machining technology portfolio, with a focus on gearMILL software and the InvoMilling™ process, at the gear industry event. Organized by the American Gear Manufacturers Association (AGMA), Gear Expo is a biennial event and the world's only conference and expo designed exclusively for the gear industry. It is held Sept. 17-19, 2013 in Indianapolis, Ind.



The InvoMilling™ process will be demonstrated on the NT series multitasking machines and NLX Series (three-axis lathe) machines. The five-axis gear-machining capability will be demonstrated on the DMU series machines and NT machines. In addition to newly developed processes, traditional gear-machining processes such as hobbing, gashing and broaching will be on display on NLX (three-axis lathe) machines. A variety of gears, such as spiral bevels, spur, helical and internal gears, will be machined on these platforms.

"The demonstrations center around the flexibility of the machines to offer the customer a choice of gear machining process based on day-to-day scenarios," says Nitin Chaphalkar, Manager of Advanced Solution Development. The demonstrations will emphasize benefits of multi-tasking machines such as simple change overs between parts, yielding increased throughput in small and medium batch production.

In addition to the demonstrations, Nitin Chaphalkar will conduct two presentations at the solutions center portion of the event.

On Tuesday, Sept. 17 at 10:30 a.m., Chaphalkar will discuss bevel and spiral bevel gear-manufacturing technologies and gear grinding. The presentation will discuss applications for these methods and the software necessary. It will cover gear grinding and methods of surface heat-treating the gear teeth in the multitasking machine. The second presentation on Thursday, Sept. 19 at 10:30 a.m. will focus on universal gear milling machines and new methods for manufacturing gears, including InvoMilling™. Chaphalkar will talk about using the multitasking machines for machining gears not only with conventional processes including hobbing, shaping and five-axis machining, but also with new processes such as InvoMilling™.

InvoMilling™ is a registered trademark of Sandvik Coromant.

InvoMilling™ is a registered trademark of Sandvik Coromant.



THE ADVANTAGES OF USING A 3PL FREIGHT PARTNER

In the multifaceted world of transportation and logistics, the business of moving freight can be a confusing and costly venture. Which carrier is the best for your desired shipping route? Which carrier is the most cost-effective, and offers the customer service level that you need? Are you getting a good discounted rate? Many companies turn to a third-party logistics provider (3PL) to help navigate the maze of carriers, rates, routes, and freight classifications. Creating and maintaining a good relationship with a reputable 3PL freight partner can result in increased efficiencies throughout your entire operations department, saving your company significant staff time and money.

HOW DOES A 3PL FREIGHT PARTNER WORK?

Most 3PL freight partners have formed direct relationships with a multitude of regional and national carriers. By aggregating the freight volume of many small-to-medium sized businesses, they are able to negotiate better discount rates and terms than some businesses may be able to establish on their own. In addition to providing deep discounts off of the carriers' base rates, a 3PL freight partner can provide additional value-added services, sometimes at no additional cost, that are designed to lower your overall logistics expenses. Some of these operational features may include:

- Routing management: Once you've determined the origin and destination of your shipment(s), many 3PL freight partners will conduct a routing analysis for each shipment, and then advise you as to whom they consider to be the best carrier for that particular route. This is based on the carrier's cost-effectiveness,

customer service, and the ability to meet your shipping needs.

For retailers, whose primary freight costs involve shipments coming in from suppliers, the 3PL freight partner may offer to contact your vendor with specific routing instructions, letting them know what carriers to use, and providing all of the pertinent bill-of-lading information. For suppliers, whose primary freight costs are attributed to outbound shipping, a 3PL freight partner can assist with bills of lading and freight scheduling.

- Auditing of freight bills: With most 3PL freight partners, the freight invoice from the carrier goes directly to the 3PL, who then bills the client company. The 3PL freight partner will typically use its resources and expertise to audit every invoice for correct class and discount amount before putting the amount on the invoice that you will receive. Industry averages show that 5-10% of freight invoices have errors in favor of the carrier; so even if you choose not to work with a 3PL freight partner, it is important to audit every freight invoice you receive from the carrier.

- Consolidated invoices: Many 3PL freight partners are able to offer consolidated invoices, either on a weekly or monthly basis, which include details typically found on any bill of lading. This means paying only one bill weekly or monthly for freight, instead of having to pay an invoice for each shipment. Some 3PL freight partners will also offer extended payment terms over the usual net 15-day terms that most carriers require.



Your Shipping Connection

CHARACTERISTICS OF A GOOD 3PL FREIGHT PARTNER

There are many companies, both national and regional, to choose from once you've decided to work with a 3PL freight partner. Most 3PL freight partners will work with your organization to analyze your transportation needs, and present you with a no-obligation cost comparison to help you compare their program with your current freight program before making a decision. Make sure that the cost comparisons are based on the rates of carriers that are well known and have a good reputation for on-time delivery and customer service.

More important features to look for in a good 3PL freight partner include access to a dedicated account representative who can answer all of your questions, from invoicing to tracking, as well as IT capabilities that can further streamline the shipping and billing processes. Also, be sure to ask if their value-added services, such as the consolidated invoicing or auditing, carry any additional costs.

The advantages of using a 3PL freight partner are clear, and it is important to choose the right one. As a dependable and reputable 3PL freight partner, PartnerShip is your shipping connection to substantial discounts and customized solutions for your business. For more information on PartnerShip's freight program call 800-599-2902 or email select@PartnerShip.com.



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ing company's mobile plans and features with their current wireless carriers. Their negotiating team of industry veterans can analyze your monthly invoice and provide you with a comprehensive savings assessment, detailing the exact areas you can reduce costs. You will be able to walk away knowing exactly how much you can potentially save or gain the piece of mind that you have the best deals in place.

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Members can also have their employee handbook reviewed at no charge! To access this service contact NTMA at (800) 248-6862 or a referral

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



REGISTRATION IS NOW UNDERWAY !!!

NEW NTMA-U BEGINS FALL COURSES BEGIN ON SEPTEMBER 9TH 2013



Does NTMA-U really work? Ask Adam Prante (Sattler Industries) NTMA-U student, and Skills USA National Champion who now plans to compete in the Skills USA Internationals next year.

There are 142 confirmed, and registered returning and new students for Fall Semester. We expect to top 150 before the Semester begins. NTMA-U retention rate is at about 91% which is extremely high for On-Line Courses.

Evelyn Velasquez – Okuma, and George Russell – York Tech College, attended an NTMA-U Demonstration this past Monday. Both were extremely impressed at the depth and quality of our course content. After the Demo, Evelyn stated, and George agreed that "NTMA-U is by far, the most advanced, highest quality, and most comprehensive On-Line Training program that she had seen".

Alice Overton – NTMA-U registrar is

contacting each company that have already enrolled into NTMA-U, to be sure that they are satisfied with the training their employees have received.

Jan Crumpton – Grayson College, recruited 62 people to attend the NTMA-U event in Dallas last week. Everyone in attendance was extremely impressed with NTMA-U.



CALENDAR OF EVENTS

EMO HANOVER 2013
September 16-21, 2013
Hanover, Germany

MFG. DAY
October 4, 2013
Across America

FALL CONFERENCE - BOSTON
Omni Hotel
October 16-19, 2013
Boston, MA

TEAM LEADERS MEETING
January 17-18, 2014
Tampa, Florida

CHAPTER LEADERSHIP SUMMITT
January 16-17, 2014
Tampa, Florida

THE MFG
March 5-8 2014
Arizona Biltmore

HANNOVER MESSE TRADE SHOW
April 7-11, 2014
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- First timers defined as “Not attending a National Conference in the last 3 years”
- Per diem options available for New England Chapter members for \$475 per day

(CONTACT ERIN PETERMAN FOR MORE INFORMATION: EPETERMAN@NTMA.ORG)