

**NTMA**

# THE RECORD

> SERVING THE NEEDS OF  
MANUFACTURING COMPANIES  
FOR 72 YEARS

## MEET OUR NATIONAL ASSOCIATE MEMBER: CIMCOOL

From introducing the first water-soluble metalworking fluid at IMTS in the 1940's, to numerous technology patents related to metalworking fluids, CIMCOOL is recognized as a leader in the metalworking fluids and cleaners industry. — p. 9

## TOOLMAKING IS REALLY THE OLDEST PROFESSION, AND IT NEEDS YOUR SUPPORT

Think of the first inventions of mankind: Clothes to endure the elements, hunting weapons for food. People needed tools to make them. The oldest profession on Earth? Toolmaking. — pp. 10

## GLOBALIZATION, BREXIT AND THE RISE OF LOCALIZATION

With the passing of Brexit, the British voted for local control of immigration, regulations and the economy — in turn, rejecting globalization. — p. 11

## FALL CONFERENCE EVENT SCHEDULE

See the full conference schedule and get a first look at the topics and presenters for this year's Emerging Leaders' Sessions, Knowledge Bars and Technology Day Sessions! — pp. 18-22



## IMTS 2016

MAP YOUR WAY THROUGH OUR NATIONAL ASSOCIATE MEMBER IMTS BOOTHS AND GET A FIRST LOOK AT THE TECHNOLOGIES AND INNOVATIONS THEY WILL BE HIGHLIGHTING. — PP14-16



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**MANUFACTURING AMERICA'S FUTURE**



**WELCOMES  
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**MULTISOURCE - BOULDER**  
Rocky Mountain Chapter  
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1363 Horizon Ave  
Lafayette, CO 80026

**JENA TOOL CORPORATION**  
General Member  
Mr. Shaun Lowry  
5219 Springboro Pike  
Dayton, OH 45439

**SOURCING SOLUTIONS MFG., LLC**  
St. Louis Chapter  
Mr. Mike Miller  
1856 Larkin Williams Rd  
Fenton, MO 63026

**MCNEAL ENTERPRISES, INC.**  
San Francisco Bay Area  
Chapter  
Ms. De Anna Mirzadegan  
2031 Ringwood Avenue  
San Jose, CA 95131

**WOLFE ENGINEERING, INC.**  
San Francisco Bay Area  
Chapter  
Mr. Michael Pearl  
3040 N 1St St  
San Jose, CA 95134

## NTMA WELCOMES NEW NATIONAL ASSOCIATE MEMBER SIEMENS

Siemens Digital Factory offers a comprehensive portfolio of seamlessly integrated hardware, software and technology-based services in order to support manufacturing companies worldwide in enhancing the flexibility and efficiency of their manufacturing processes and reducing the time to market of their products.

## EXHIBITING AT TRADE SHOWS

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Whether you're a frequent trade show exhibitor, an occasional exhibitor, or a show organizer, you inevitably begin with a long list of "to-do's" when planning your exhibit or event. You've probably spent months carefully considering your booth design, literature, show floor strategy, and giveaways. But one thing is for certain, your plans all hinge on your show and conference materials arriving at your event – on time and in good condition! Here are some quick tips to consider:

- Use a transportation partner that has a dedicated trade show shipping department – Trade show shipping is a unique line of business in the freight transportation world, so pick a partner that specializes in getting to know the logistics of your event.

SEE "PARTNERSHIP" PAGE 5





## PRESIDENT'S UPDATE

DAVE TILSTONE / NTMA PRESIDENT

### FOCUSED ON HELPING MEMBERS GROW

The manufacturing sector is again showing signs of growth after several stagnant months that negatively affected many of our members. As I travel to chapter events and to member shops, I'm encouraged by all the initiatives underway to stimulate business growth, from hiring sales and marketing professionals to looking at new markets. Here at NTMA, we are constantly trying to find ways to help members grow their businesses. We have offered many different programs and events over the past several years, including regional NTMA Sales and Marketing Workshops, Purchasing Fairs, International Tech Tours to Europe and Japan and most recently a week at the Farnborough Airshow in Britain.

Purchasing Fairs used to be very popular events for NTMA members. Recently, however, we have experienced a dramatic drop in participation. Instead, we are trying something different this year; we are joining forces with PMA at their Sourcing Solutions event September 29th, as well as their Sales Seminar September 28th, in Indianapolis. All NTMA members are invited to attend and will be offered a special "member" rate for the seminar and Sourcing Solutions events. A special discount is being offered if you attend both. For those of you who don't know about the format, you get face-to-face meeting time with buyers who are interested in outsourcing. It's a highly efficient way to introduce and discuss your company and services with several buyers in one day. After registering, you will receive a profile of each of the buyers attending, and likewise the

buyers get an overview of all the suppliers. If you or your sales people haven't attended before, I strongly recommend you consider Sourcing Solutions. For those of you who have attended before and have contacted us about upcoming Purchasing Fairs, this is the event for 2016! Some NTMA members have realized \$2-5 million in new business from previous Purchasing Fairs and Supply Chain Network Fairs.

**The Farnborough Air and Trade Show** was held in Farnborough, England from July 11th to the 18th. A trip was orga-

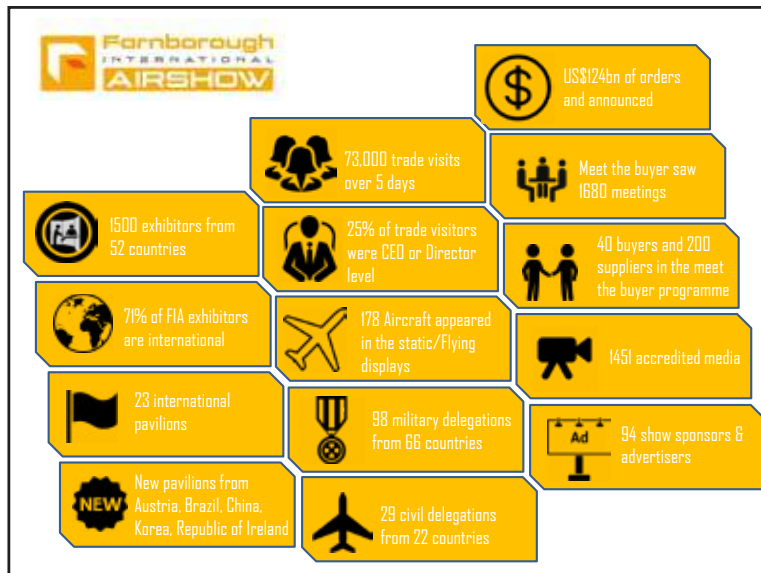
particular interest were exhibit booths that were sponsored by US states such as Ohio, Alabama etc. that highlighted their efforts to attract aerospace businesses but offer booth space to manufacturers; a tradeshow within a tradeshow concept. I met with the organizers of these shared booths and concluded that if there was sufficient interest, NTMA could sponsor a booth and have NTMA member companies display their products and services. It would offer an economic alternative to NTMA companies who would be interested in showcasing

their businesses without all the cost and overhead of a separate booth. I plan on looking into this in more detail so please stay tuned. We also met with other associations whose members are primes, tier 1 or tier 2 suppliers. Their supplier events might offer opportunities for NTMA members to network with them and offer a supply chain solution for their member companies. Another interesting concept that they offered was to organize "Meet the Buyer" meetings with companies. Tradeshow attendees can have meetings arranged for a nominal fee through the

tradeshow organizers. When you arrive at the show, a prearranged schedule of meetings is provided to you. A great way to meet new prospective customers!

DAVE TILSTONE / NTMA PRESIDENT

*Dave Tilstone*



nized – where we were hosted by the president of Makino, Don Lane at their hospitality chalet and met with Kennametal's Global Aerospace Manager – to determine if NTMA members would benefit from attending a tradeshow specifically focused on the aerospace industry and their suppliers. The event was held at the Farnborough airport and consisted of four large exhibition halls. The exhibitors included Boeing and Airbus, as well as many of the defense contractors such as Lockheed Martin with many of their tier 1 and tier 2 suppliers. Of



# THE RECORD

## OPERATIONS & EDITORIAL

Dave Tilstone, President

Nikki Hunt, Writer and Publicist

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To advertise in *The Record*, or for information on publishing your corporate newsletter or sales literature, contact NTMA at (216) 264-2847 or [tbryson@ntma.org](mailto:tbryson@ntma.org) for advertising, [nhunt@ntma.org](mailto:nhunt@ntma.org) for editorial content.

Design & layout by Z Graphics  
[david.zablo@gmail.com](mailto:david.zablo@gmail.com)



## NATIONAL TOOLING & MACHINING ASSOCIATION

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## "PARTNERSHIP" CONTINUED

• Who's watching your shipment? – The success of your business can hinge on your success at a large trade show or event, so pick the partner that's going to track your shipment from the time it leaves your dock to the time it gets to the show.

• Money isn't everything, but... – You don't want to end up spending all of your hard-earned profits from the show on freight, but you want to make sure that you don't jump at the lowest offer if it's a carrier that you've never heard of. "Bob's Trucking" may be offering you the lowest shipping rate, but make sure you won't be charged additional fees that you didn't

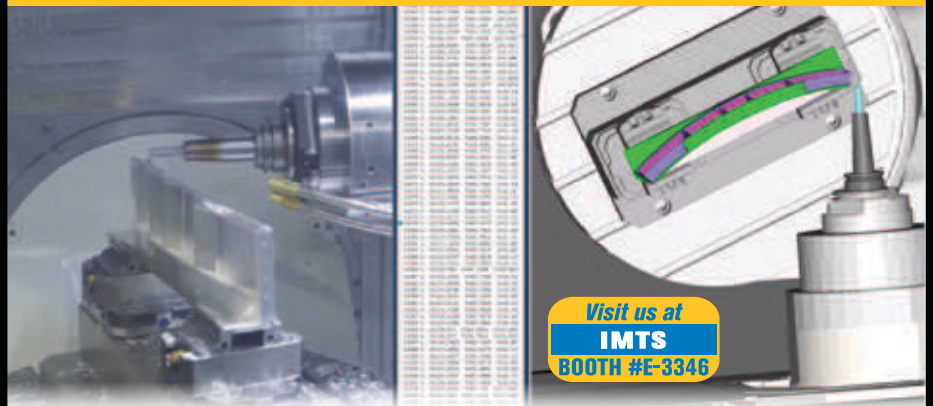
know about, such as "wait time" and "lift gate" fees.

Trade show shipping doesn't have to be confusing or difficult. Click here to download an electronic white paper that has some good tips on trade show shipping.

This tip is brought to you by PartnerShip®, the company that manages the NTMA Shipping Program. For more information or to enroll, email [sales@PartnerShip.com](mailto:sales@PartnerShip.com) or call 800-599-2902.



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# NEW 2017 NATIONAL INTERACTIVE MEMBERSHIP DIRECTORY



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1,000+  
page visits  
a month

## *What does the 1st Quarter data tell us?*

This is the first year NTMA has offered our members an interactive online membership directory giving advertisers the opportunity to change out their ad and receive monthly updates through E-Trends. In order to be able to provide our members with tangible data, Bluebird, NTMA's Marketing Consultant, added Google Analytics to the directory to track this data. Here's a look at our most recent 2016 data. For advertising opportunities in the 2017 directory, please contact Kelly LaMarca at [klamarca@ntma.com](mailto:klamarca@ntma.com)

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update which was  
announced in E-Trends  
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## CULTURECORNER: 3 STRATEGIES TO KEEP YOUR CULTURE INTACT AS YOU GROW



Running a company is like exercising: When you get to 50, it's not going to be like it was at 15. You will need to put in more work to achieve the same result.

Except here, we're talking about employee head count, not age.

It's not necessarily anything you're doing wrong. It's just that communication becomes more difficult as messages have to travel to more people – and through more people – to reach the whole company.

To prevent cultural disconnect, you must take steps to build scalability into your culture before you need it. Here are a few strategies to help you scale your culture with your business.

### FIND YOUR RELAY STATIONS

Your car is equipped with a device called a radio. The cool thing about radio is, over-the-air signals still travel in pretty much the same way they did in radio's infancy, almost a century ago. A transmitter antenna originates the signal, and repeater stations rebroadcast the signal in order to strengthen it, increasing the signal's broadcast radius.

You, as the head of the company, are like a transmitter antenna. And your front-line employees are the people living in the countryside, miles away from your antenna. You're not going to be able to communicate with those people without some help. You need "relay stations" – the people in your company who can act as champions for your culture by embodying it and living it each day.

How do you find your cultural champions? Simply put, you hire them. Use the interview process to share with job candidates the core values and guiding principles that are essential to your company. Then figure out whether the candidate sitting across from you feels

the same way. If you can't picture the potential hire as a future culture champion, it's probably not the right fit.

### AVOID AMBIGUITY

Ambiguity is interpreted by your people as a lack of structure and a lack of support, and that is a leading cause of premature culture death in a growing company.

Have you ever seen two outfielders converge on a fly ball in a baseball game? One guy says he has it, then at the last second, he defers to the other guy, and they end up staring at each other's foreheads as the ball hits the grass between them.

Isn't that frustrating to watch? Now imagine it's two of your employees, and they're not sure who is responsible for a given task. And they're not even sure who to go to for clarity. If that sounds like a demotivating dose of anti-culture spray, you're right.

When you get the right people in the door, you must give them the right leadership, the right expectations and the right accountability – in writing, so that there is always a document for employees to reference as your company grows. The best strategy to avoiding ambiguity is to build alignment.

### MEET WITH PURPOSE

Meetings are an important part of any growing company. But they have to take place with a frequency that is effective for your company – not too much, not too little. Maintaining the right meeting pulse as you grow is essential for collaborating, communicating, instilling confidence in employees and delegating decisions to the right people.

Have you even driven without directions and missed your freeway interchange? Maybe you even don't realize

you're headed the wrong way until you see the "Welcome to Tennessee" sign.

Dammit, if you had consulted with the person assigned to map duty, this all could have been avoided.

There are always people on staff who think meetings are a steaming pile of fertilizer. And they really are fertilizer – just not that kind. Meetings, conducted properly and at the right intervals, are essential to growing and strengthening your culture as your business expands. To find the sweet spot, you may need to adjust your meeting frequency up or down over time.

No matter how flat and streamlined you try to keep things as your company grows, you will add layers. You'll need to form departments. Your org chart/accountability chart will divide and subdivide. And as you add more layers, departments and even satellite offices, you increase the risk of compromising your culture.

Just remember, growing your culture ultimately depends on good communication – specifically around accountability, responsibility and motivation. If you can share and enforce those three values with regularity, you'll be able to grow your business and your culture in unison.

Pete Honsberger is the director of client services at CultureShoc. If you need assistance on how to build better teams contact him at [pete@cultureshock.com](mailto:pete@cultureshock.com).





# Meet Our National Associate Members:



## with Business Manager Larry Bonnell

### WHO IS CIMCOOL?

"CIMCOOL is the leading technology supplier of metalworking fluids and cleaners globally. From introducing the first water-soluble metalworking fluid at the International Machine Tool Show in Chicago during the 1940's, to numerous technology patents related to metalworking fluids, CIMCOOL is recognized as the company that advances the industry. CIMCOOL offers products under several brands to choose from including CIMCOOL, OAK SIGNATURE, STARCHEM, OAK, PRODUCTO and SC CHEMICAL products. As a global company, CIMCOOL has R&D centers and manufacturing locations throughout the world. This insures that product technology and quality are the same no matter where customers are located. CIMCOOL FLUID TECHNOLOGY is a proud member of the MILACRON Company and is publicly traded on the NYSE as MCRN."

### WHEN DID CIMCOOL BECOME AN NTMA NATIONAL ASSOCIATE MEMBER? "FEBRUARY 2014."

What drew CIMCOOL to become an NTMA National Associate? "As a leader in metalworking fluids and cleaners, we felt it was critical to make sure that NTMA member companies heard our story and were aware of what we could do to help them not only with existing metalworking issues, but also with developing new technologies that will be needed in the future.

Our best results come from products that are designed for applications and alloys that may not even be needed in the marketplace for several years. We believe that NTMA members working together can solve problems, and that creates a healthy manufacturing environment."

### WHAT PRODUCTS OR SERVICES CAN CIMCOOL OFFER SPECIFICALLY TO NTMA MEMBERS?

"Our entire product line is designed for all metalworking manufacturing industries. Just recently, we did a training program on machining with titanium alloys, and learned from several members about major problems they were having. Through our training contacts, several companies conducted tests and found that their problems went away when using our newly developed fluids with InSol™ Technology. We also just introduced our new CIMPULSE™ fluids. NTMA members can buy one fluid, stock one fluid and manage one fluid for over 90% of their metalworking fluid needs. CIMPULSE fluids also are clean, multi-metal capable and do not contain DCHA or other materials that would create concerns. There is no other company that offers as many products with as many aerospace approvals as CIMCOOL. Coupled with our complete product focus for metalworking customers such as sump cleaners, RPs and parts cleaners, CIMCOOL offers a one-stop supplier for all NTMA members. Lastly, we have on-site

technical services personnel to provide in-plant assistance on a global basis.

### WHAT INDUSTRY INITIATIVES DOES CIMCOOL SUPPORT AND HOW?

"CIMCOOL supports several industry initiatives including ILMA, STLE and USDA-BIOPREFERRED. In many cases, a CIMCOOL employee is the chair of many committees and leading industry groups. Our employees have been President of ILMA and President of STLE and were instrumental in providing leadership on major decisions affecting metalworking industry.

### WHERE CAN NTMA MEMBERS MEET CIMCOOL IN 2016?

"You may meet us at this year's NTMA Fall conference in Charlotte, or during our many visits and presentations at local NTMA Chapter meetings. We are also exhibiting at this year's IMTS show in Chicago at booth NC-270. Also, CIMCOOL sales and technical representatives are always available to schedule informational meetings at corporate locations globally, or at individual manufacturing facilities."

### WHAT NEW IDEAS IS CIMCOOL SHARING WITH NTMA MEMBERS THIS YEAR?

"Our CIMPULSE fluids have been a huge success and are a major focus for us to share with the market. Over 30% of our fluids sold each year did not even exist 5 years ago. This alone provides NTMA members needing

to upgrade technology and practices information that they need to be working with CIMCOOL."

### WHAT HAS CIMCOOL LEARNED FROM NTMA MEMBERS?

"CIMCOOL continues to listen closely to NTMA members, and currently offers safe, environmentally friendly technologies that assist in minimizing the number of fluids and cleaners needed for plants and shops to operate. We developed the Cimpulse product line that is capable of handling over 90% of application requirements from small to large manufacturers with 3-4 products only. This makes the ordering process and inventory management extremely easy for all NTMA companies.

### ONE LAST THING...

"CIMCOOL works with every customer on an individual basis to make sure that they get the best technology and the best service. Each customer has immediate access to anyone in our organization that can help them and our customer is the most important reason we exist. For over 70 years, CIMCOOL fluids have advanced the metalworking industry to deliver value and performance. NTMA and CIMCOOL are aligned in advancing manufacturing technology and performance, and we are proud to be associated with the organization!"





# TOOLMAKING IS REALLY THE OLDEST PROFESSION, AND IT NEEDS YOUR SUPPORT

BY CLARE GOLDSBERRY ORIGINALLY PRINTED IN PLASTICS TODAY

Those of you who have been in the plastics/moldmaking industry for more than a couple of decades probably know or have heard of Jobst Gellert, the founder of Mold-Masters. As I was going through my filing cabinet (yes, a real filing cabinet, not computer files), I came across an editorial written by Gellert in the December 1996 issue of *Modern Plastics International*. I saved this article because I thought it was so timely, but as I re-read it, I realized that it's even more timely for our industry today. Here it is: "Why We Must Promote the Oldest Profession."

"The oldest profession on Earth is not what you may think it is. As long as people have inhabited the Earth, this profession has existed. Think of the first inventions of mankind: Clothes to endure the elements, hunting weapons for food. People needed tools to make them. The oldest profession on Earth? Toolmaking.

The first toolmakers were indispensable. But young people no longer choose toolmaking in the numbers they did. Even those who see plastics as a career choose design or engineering over toolmaking.

You may argue we don't need as many skilled toolmakers adjusting spindle speeds and table feeds because CNC machines do that automatically. You wouldn't be entirely wrong, but you'd be missing the point: Toolmaking is more than the art of cutting and fitting—it's the science of creating something useful. It's understanding a need and manufacturing a solution.

I went through a toolmaking apprenticeship. I was taught to think in black and white: An idea works or it's garbage. It's been said that good toolmakers have fingers of gold. They create value-added products. If you look around you'll find many toolmakers own plastics companies. The skills they learned in their profession gave them the opportunity. Is that not a desirable career path?

What makes a toolmaker good? Invariably, it's the intangibles: The ability to see a workable solution to a manufacturing nightmare; to suggest improvements to a design; to know what works and what won't. It's not a question of intelligence, but of having the knowledge that comes from experience. This is the essence of toolmaking and why apprenticeships are vital.

Everyone talks about the importance of apprenticeships, but we should do more. In the United States, programs exist that contribute half of an apprentice's wages. The National Tooling and Machining Association and the Society of the Plastics Industry are creating guidelines for apprenticeship standards. But the effort should

come from companies.

For example, Tech Mold in Tempe, AZ, has had a successful program for several decades. The company understands that to reap the benefits of apprenticeship programs, it must incur some cost and risk (such as the occasional apprentice who leaves at the end of training). Tech Mold will tell you what it took to make the program successful: Patience and total commitment. Some of their best toolmakers are graduates.

Mold-Masters has an 8000-hour program that combines a four-day work week with a classroom day. We accept the cost because existing educational methods don't work.

Bring students to industry. Use the industry infrastructure of machines, bricks and mentors. Toolmakers remember how important it was to have a mentor, and most take pride in tutoring others.

It's a simple, workable concept. It's unfortunate, however, that in most countries there is little government assistance for companies that use their machines for training, or for toolmaking masters who share their knowledge. Maybe if there was greater assistance, we wouldn't be faced with a shrinking supply of toolmakers and companies wouldn't be so concerned about the cost of apprenticeship programs. But when you

think about it, the cost of not creating tomorrow's toolmakers is higher.

As someone who thinks in black and white, the question is simple: Are toolmakers needed? If you answer yes, do something to save the oldest profession. Promote toolmaking and apprenticeships at every opportunity. Create apprenticeship programs within your organization and remain committed to them.

Let's not wait for the government or industry organizations to decide what we need. We need designers and we need engineers. And, as proven by hundreds of thousands of years of history, we need toolmakers. Industry has the infrastructure and the mentors to produce them. All we need is the patience and commitment to bring this effort to fruition."

What Gellert said two decades ago holds true today, perhaps even more so. We're losing our long-time, experienced moldmakers, and when they retire, we will lose the "tribal knowledge" that is so important to the mentoring of which Gellert wrote. It's time that the industry take Gellert's advice and create a future for the industry and for the many young people who will find a great career in toolmaking... if they are given the opportunity.



**GRAINGER**  
FOR THE ONES WHO GET IT DONE

## GRAINGER METALWORKING PILOT PROGRAMS EXPANDING IN NEW MARKETS

Grainger and NTMA have been working closer together than ever in 2016 to help members hold down costs while utilizing the best tools available to make their products. The Grainger Metalworking program offers a unique opportunity to impact the bottom line while engaging with a partner that will be there when you need them most.

In early 2016, Grainger and NTMA launched their first metalworking pilot program in the Arizona chapter. This partnership was designed to provide NTMA members with access to the new Grainger Metalworking Specialists in their market and deliver greater value to the member companies. The partnership has become a year-long sponsorship opportunity where Grainger engages members at chapter meetings, events and in their shops. This access provides an opportunity for the

Metalworking Specialists to embed themselves in a shop, work with the member to understand their processes and products and then find the best ways to maximize efficiency and contain costs.

Grainger is growing their metalworking program, but does not have metalworking specialists in all markets. As they continue to roll the program out to new markets and regions, NTMA will coordinate with local chapters to help connect members with those specialists. NTMA and Grainger have recently established pilot programs in the Northern Utah and Los Angeles Chapters with plans to move next into the Midwest in Pittsburgh and Northwestern Pennsylvania.





# GLOBALIZATION, BREXIT AND THE RISE OF LOCALIZATION

With the passing of Brexit, the British voted for local control of immigration, regulations and the economy – in turn, rejecting globalization. The 2016 U.S. presidential race shows a similar backlash with U.S. manufacturing's wide support for reshoring and its rejection of the Trans-Pacific Partnership (TPP). Even before Brexit and the 2016 election race, international trade had plateaued. Globalization's peak is no surprise given the inherent economic inefficiencies and environmental damage associated with producing goods or rules far from the point of consumption.

In a statement made earlier this year at Davos, AT Kearney, a global management consulting firm, asked "Globalization is Dead: What Now?" And in "Brexit in America: A Warning Shot Against Globalization," Jeffrey R. Immelt, G.E.'s chief executive, offered an answer – "A localization strategy." Mr. Immelt said GE's goal is to achieve "a local capability inside a global footprint." Localization – production in the market where the product will be consumed – is a strategy increasingly

used by many large companies to shorten supply chains and reduce shipping costs.

On the reshoring front, Harry Moser, president of the Reshoring Initiative, said that offshoring has slowed considerably. "The bleeding of manufacturing jobs to offshore has already stopped," commented Moser. Data from the Reshoring Initiative shows that new reshoring, including Foreign Direct Investment, balanced new offshoring in 2015 as it did in 2014. In comparison, in 2000-2003 the United States lost net about 200,000 manufacturing jobs per year to offshoring. U.S. companies, retailers and consumers are, collectively, implementing localization, voting with their dollars.

Localization also yields a green benefit. It reduces world environmental impacts through reduced carbon emissions from producing in developed countries and from much shorter transport. According to Moser, "We have gone from globalization at any cost to our economy, long-term company sustainability and the world environment to recognizing that via localization,

a company often can embrace all of these benefits while maintaining or improving profitability."

The Reshoring Initiative is seeking collaboration and support for development of its Corporate Social Responsibility Estimator (CSRE). The new tool will quantify two key societal impacts of sourcing decisions: on the environment and on the domestic economy. By giving corporations a clearer and more accurate understanding of their decisions' impacts, we will accelerate the reshoring of manufacturing to the United States, yielding a better outcome for the U.S. economy, the planet and the participating companies.

The Reshoring Initiative wishes the British a successful Brexit and encourages U.S. consumers and companies to buy and produce more in-country. Both countries will find that avoiding globalization for its own sake brings economic strength and stability.



**Royal Quick Grip™ CNC Collet Chucks set a new standard featuring superior design, incredible accuracy, and easy, 10-second collet changes.**



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### Ultra-Precision Accuracy

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- Total system accuracy guaranteed to 0.0004" TIR or better



### Outstanding Grip Force

- Much greater than three-jaw chucks at high rpm
- Enables much more aggressive chip removal rates, resulting in shorter cycle times and increased throughput



### Widest Gripping Range

- Full 0.062" grip range – 50% greater than the competition
- Parallel clamping collet segments remain in contact with the workpiece over their entire length for maximum holding power and accuracy
- Compensates for oversized or undersized bar stock



### Most Compact Chucks in the Industry

- Ultra-compact lengths maximize z-axis capacity
- Super slim nose diameters provide outstanding tool clearance



# OBERG INDUSTRIES HONORS THE JAA GRADUATES OF 2016

Oberg Industries, a full-service contract manufacturer of precision metal components, tooling and stamped parts, congratulates those senior high school students who completed the second year of the company's Junior Apprentice Advantage (JAA), a pre-apprenticeship program.

Oberg is known for their acclaimed Registered Apprenticeship Training



2016 JAA Graduates and new Oberg Apprentices, Derek McIntyre, Haley Vakulick, and Makenzie Roberts.

Program which was established in the early 1950's to guarantee that the company would have a steady supply of highly skilled professionals. Due to a growing shortage of qualified candidates for advanced manufacturing openings, Oberg partnered with Highlands High School, part of the Highlands School District in nearby Natrona Heights, PA, to create a unique community program to bridge this skilled talent gap and formed the Junior Apprentice Advantage (JAA) program. JAA was designed to directly connect high school students to industry-specific training that mirrors the apprenticeship experience.

The JAA Program, offered to Highlands High School seniors, was first introduced for the 2014 -2015 school year and had five students who successfully completed the program. Ten students took part in the 2015-2016 JAA Program that has created a direct connection to the Oberg Apprenticeship through a specialized curriculum offered at both Highlands High School and Oberg Industries. Twice a

month, JAA students traveled to Oberg's manufacturing operations for lesson-specific enrichment and job shadowing experiences that allowed them to collaborate with Oberg's skilled craftspeople. While at Oberg, each JAA student actually practiced what they learned in the classroom and produced three required metal forming projects. Students found themselves in a very challenging and competitive program faced with advanced, applied subject matter, and continuous assessment as well as immersion into the Oberg workplace culture. As a result, three students were offered full-time employment as Apprentices in Oberg's Registered Apprenticeship Program.

Bryan Powell, Oberg's Senior HR Generalist and JAA Program Coordinator along with Joe O'Brien, Director of Human Resources for Oberg Industries, took part in the Highland's Senior Awards Day celebration and congratulated all ten JAA students by presenting them with a certificate of completion for their JAA

SEE "OBERG" NEXT PAGE

A large banner for GROB G-series machining centers. It features a blue background with a central image of three large industrial machines labeled G550, G350, and G750. Surrounding the machines are various icons in small white boxes: a car, a key, a wrench, an airplane, a gear, a stethoscope, a medical device, a camera, and a drill. At the bottom, a yellow bar contains the text "G-series" and "Precision at the highest level".

## G-series

Precision at the highest level



IMTS2016  
Visit GROB at Booth #S-8574

### A promising future with the G-series

GROB 5-axis universal machining centers stand out thanks to their absolute precision and reliability in the automotive, aerospace, medical and mechanical engineering as well as tool and mold industries. The proven 5-axis simultaneous technology with horizontal spindle position enables you to machine parts of various sizes and materials in a flexible and failure-free way while offering maximum stability of the machine. Fast chip-to-chip times and the innovative further development of our spindle technology guarantee a high economic efficiency and productivity.

The GROB G-series – for the most versatile machining possibilities.

GROB SYSTEMS, INC.  
Bluffton, Ohio, USA

[www.grobgroup.com](http://www.grobgroup.com)  
[info@us.grobgroup.com](mailto:info@us.grobgroup.com)





# PARTNERS IN THINC WELCOMES NEWEST MEMBER, TOMBSTONECITY

Okuma America Corporation announces that TombStoneCity, a leading supplier of CNC machine tool workholding solutions, has joined Partners in THINC. TombStoneCity's tombstones and workholding products enable users to maximize throughput and increase shop floor production while maintaining outstanding quality. At IMTS 2016, TombStoneCity workholding will be featured on Okuma's MA-600HII and MB-4000H machining centers.

TombStoneCity offers standard and custom made products in addition to providing engineering design and manufacturing support for custom workholding. Their product line includes tombstones, angle plates, sub plates, modular vise systems, and 5-axis vises.

"Partners in THINC is excited to have TombStoneCity as a partner. They provide exceptional workholding solutions that enhance automation and increase production for small shops to large manufacturers," says Jeff Estes, director, Partners in THINC.

"Our collaboration with Partners in THINC and Okuma allows end users to increase efficiency and production without sacrificing quality," says Steve Popky,

TombStoneCity. We are dedicated to supplying high quality workholding solutions that allow end users to utilize their machine tools to the fullest extent. We collaborate with top companies from the aerospace, automotive, agricultural, construction, and energy industries to provide our customers with the highest standards in product precision and performance.

Partners in THINC is a collaboration network of more than 40 industry leaders who come together to solve problems and explore new productivity ideas for real-world manufacturers. With the open architecture, PC-based OSP control as

its nucleus, Partners in THINC brings specialized equipment, expertise and a commitment to provide the best possible integrated solutions to the end-user. Members of Partners in THINC provide superior technologies that are integrated with Okuma's CNC machines and controls to deliver advanced manufacturing system solutions.

For more information on TombStoneCity, and other members of Partners in THINC, visit <http://www.okuma.com/partners-in-thinc>.



## "OBERG" CONTINUED

work and honored the top students with an offer of employment to work for Oberg Industries. "All of these students are pioneers in their own right. They broke from convention and saw opportunity beyond the traditional college degree. Each boldly accepted the challenge to look into the future and saw their personal and professional potential enhanced by JAA and the Oberg Apprenticeship opportunity. Whether hired by Oberg or pursue a career in advanced manufacturing with another manufacturer, or through additional education at a college or university, the fundamental skills obtained through JAA will always serve these students well," said Mr. Powell. "We are especially proud of this young lady and these two young men who will begin working for us later this summer as Oberg Apprentices."



## All-Stars.

Mikron Mill high performance and high speed milling machines. AgieCharmilles wire and die sinking EDMs. Additive manufacturing. LASER texturing machines. System 3R automation systems. Liechti 5-Axis aerospace machining centers. Microvolution micro manufacturing equipment. Step-Tec spindles.

GF Machining Solutions offers the industry's most comprehensive portfolio of complementary technologies. But that's just the beginning of our commitment to your success. Visit us at IMTS 2016 to discover our solutions — beyond machine tools.

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847-913-5300 | [www.gfms.com/us](http://www.gfms.com/us)

Visit us in

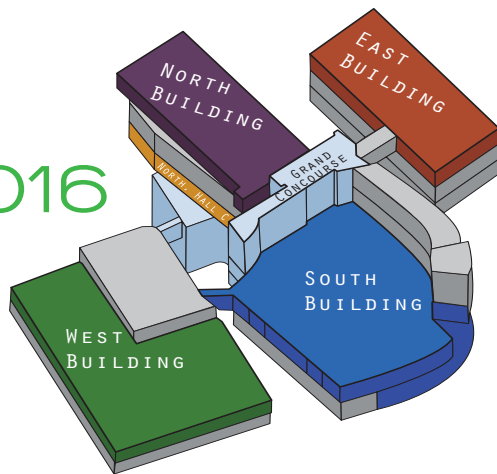
**BOOTH S-8754**  
**at IMTS 2016**



**Do more with the people you've got. Hire a machine.**

Milling | EDM | Laser Texturing | Automation | Uptime+





## EAST BUILDING

Booth E-3363



Refresh Your Memory, Inc (RYM), developer of FactoryWiz Monitoring & DNC software products, provides complete shop floor visibility through full machine/event monitoring and managed file transfers on your plant-wide network. RYM has over 33 years experience in this industry and is the leader in interoperable open API Monitoring & DNC products.

Booth E-5502



Carl Zeiss Industrial Metrology is a leader in CNC coordinate measuring machines and complete solutions for multidimensional metrology in the metrology lab and production. The company is a recognized partner to the automotive industry and its suppliers. 2,400 employees from manufacturing sites in four countries and more than 100 sales and service centers supply customers around the world.

Booth E-4502



The Motion Control business of Siemens Industry, Inc. serves its customers in the automotive, aerospace, medical and the fast-growing job shop/contract manufacturing industries with an extensive range of high-precision computer numerical controls (CNC), motors and drives — resulting in simplified, customizable machine tool solutions.

Our SINUMERIK CNC is the leading brand worldwide for machine tool builders and end-users alike. Beyond our hardware and software solutions, the range of Siemens application engineering, retrofit services, operator training and educational services is simply unmatched in the metalworking industry. For more information, visit [www.usa.siemens.com/cnc](http://www.usa.siemens.com/cnc)

## SOUTH BUILDING

Booth S-8500



Visit the Okuma booth to see 72 axes of control on 17 machines, all running live demos with in-machine cameras for easy viewing. Our full range of products—lathes, machining centers, grinders, and even a double column—will be on display, including 2 machines making their world debut.

Booth S-8919



As the global leader in automation for manufacturing, FANUC offers advanced CNC, Robotic and Factory Automation technologies that help maximize efficiency, quality and profitability. From small job shops to the world's largest production facilities, FANUC has a solution to meet your needs. Learn more at IMTS 2016.

Booth S-8300



5ME brings a proven suite of technologies, products, and value added services to industry, solely focused on increasing customers' manufacturing efficiency as a means of building profitable, competitive and sustainable businesses. The solution portfolio is comprised of two key elements:

**Cryogenic Machining Systems** - game changing metal cutting technology that uses LN2 in lieu of traditional coolants to significantly improve cutting performance.

**IoT Software Suite for Machine Monitoring and OEE Analytics** - a solution for collecting data from any industrial asset and improving productivity / profitability through insightful web based reports and analytics.

## SOUTH BUILDING

Booth S-8300



The Mazak booth S-8300 will showcase over 20 new machining and automation systems that will include the company's latest advancements in multi-tasking and 5-axis machine tools with enhanced single-setup, DONE IN ONE® part-processing capabilities. The company will also unveil the next generation of its HYBRID Multi-Tasking technology, along with new software and accessories that give such multi-tasking machines even more functionality and multiple-process power. Additionally, Mazak will feature a host of new high-level developments in full digital factory integration, smart technology and Industrial Internet of Things (IIoT) connectivity.

Booth S-8574



GROB 5-Axis universal machining centers stand out thanks to their absolute precision and reliability in the automotive, aerospace, medical and mechanical engineering as well as tool and mold industries. The proven 5-axis simultaneous technology with horizontal spindle position enables you to machine parts of various sizes and materials in a flexible and failure-free way.

## WEST BUILDING

Booth W-1600



BIG KAISER shows the latest in high-precision tooling systems, workholding and tool presetting to deliver extreme accuracy and repeatability. Let our experts help you find the products and processes to improve the efficiency of your applications and lower production costs. Be sure to ask about our Higher Performance Guarantee.

Booth W-1622



Royal Products will be displaying their broad range of precision workholding, tooling, automation, and air-quality products designed to help manufacturers squeeze every last drop of performance out of their machine tools. New products featured by Royal at this year's IMTS include a full range of ID Expanding Mandrels, Quick-Change Collet Chucks with up to 4" capacity, and a revolutionary mist collection system designed to tackle today's difficult high-pressure oil applications. Learn how a small investment in the right accessories can boost your profits on every job by eliminating out-of-tolerance parts, slashing setup times, and maximizing throughput.

# TRENDING TECHNOLOGIES

## TECHNOLOGIES



Mazak's new VARIAXIS i-800T Multi-Tasking Machine enhances milling operations and boosts productivity — especially for those manufacturers in the aerospace industry. With full 5-axis milling and turning capabilities along with integrated cryogenics technology, the machine delivers high processing efficiency and prevents detrimental white layers generated when machining tough materials such as titanium, nickel, Invar and other exotics.

S-8300

NTMA TECH TOUR HOST

## TECHNOLOGIES



Okuma's MU-8000V vertical machining center is excellent for 5-axis multi-sided machining. Standard ball-screw cooling and a highly rigid left-right, mobile trunnion table support high precision and cutting power. The low center of gravity in workpiece movement gives this machine the ability to machine difficult materials and a wide range of workpieces.

S-8500

NTMA TECH TOUR HOST



# TRENDING TECHNOLOGIES

## CRYOGENIC MACHINING

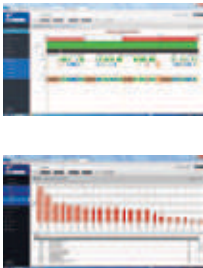


5ME's unique, multi-patented cryogenic machining process is a breakthrough technology that enables higher cutting speeds for increased material removal and longer tool life by transmitting liquid nitrogen at -321°F through the spindle and inside the tool body, directly to the cutting edge. This environmentally friendly metal-cutting technology increases throughput, part quality, tool life, and profitability while reducing energy consumption. It also facilitates a safer, healthier work environment for plant floor personnel.

S-8300

NTMA TECH TOUR HOST

## FREEDOM eLOG 4.0



5ME's Freedom 4.0 updates the popular Freedom eLOG software, with a focus on manufacturing efficiency that integrates seamlessly to provide full transparency into manufacturing processes. These include asset utilization, performance, quality and OEE, as well as machine health and process health. It enables finely tuned management of manufacturing operations, leading to increased productivity and profitability. The new software continues the tradition of leveraging MTConnect to provide real-time monitoring and analysis, machine diagnostics, and a comprehensive array of manufacturing metrics.

S-8500

NTMA TECH TOUR HOST

## TECHNOLOGIES



At IMTS FANUC will demonstrate new CNC, robotic and factory automation technologies that provide the ease-of-use and connectivity customers need to solve manufacturing challenges to increase efficiencies, improve uptime, overcome the skills gap, and stay competitive.

S-8919

NTMA TECH TOUR HOST

## TECHNOLOGIES



Visualize all your critical machine data in real-time via interactive charts, graphs, e-mails and texts from any web-enabled mobile device or PC, anywhere in the world. All data is stored locally at your facility giving you full control of collected records. Front-line managers receive the insight they need to streamline their work and

improve operations, while giving executives real-time visibility and reporting the metrics they desire. We invite you to join our corporate staff and local resellers for live FactoryWiz Monitoring & DNC demonstrations in booth # E-3363 at the Lakeside Software Pavilion. Bring your application requirements and we will show you how to engage employees, spot trends as they happen and maximize production efficiency. Visibility Drives Success!

E-3363

NTMA TECH TOUR HOST

## TECHNOLOGIES



BIG KAISER's new product highlights include a digital boring head that syncs to a smartphone or tablet app. It helps operators determine optimal cutting parameters and track historical adjustments. The Smart Damper boring bar line has a new solution for lathe applications, and is optimized for I.D. turning with common inserts.

W-1600

NTMA TECH TOUR HOST

## TECHNOLOGIES



GROB Systems builds 5-axis machining centers like no other. Pair a retractable spindle and swivel-rotary table to provide unmatched accessibility to the workpiece, even with long tools. Buy a machine with a smaller footprint than other brands, but the same workpiece capacity. See the new rotary pallet storage system, high-speed turning option, and next-generation G350. All are MTConnect® compliant via adapter.

S-8574

NTMA TECH TOUR HOST

## TECHNOLOGIES



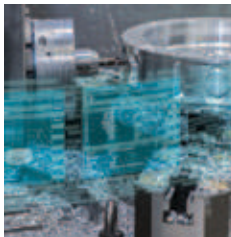
Workholding optimization is one of the most effective ways to reduce CNC setup times, increase throughput, and maximize profits. High-capacity collet chucks and internal expanding mandrels are two new workholding technologies being exhibited by Royal Products

(Booth W-1622). Hands-on displays highlight the significant advantages of these technologies over traditional workholding methods.

W-1622

NTMA TECH TOUR HOST

## TECHNOLOGIES



In the Siemens booth E-4502, visitors will witness the digital machine shop of the future. We will make a small series of parts, which are organized into three areas: preparation, production and optimization. Each area will highlight unique and powerful advantages of digitalization including:

- A data-driven environment connecting every aspect of production from the blueprint to the finished part
- The ability to drive revolutionary technologies such as additive and robotics

E-4502

NTMA TECH TOUR HOST

## TECHNOLOGIES



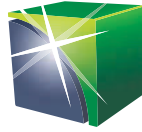
The ZEISS conference session at IMTS will cover lessons learned of how combinations of new technologies are enabling manufacturing companies to measure more and faster, with trustworthy results, and use that information to drive quality improvement. Attend on Tuesday, 9-13 at 3:15pm, room W193-A or visit the ZEISS booth, E-5502.

E-5502

NTMA TECH TOUR HOST

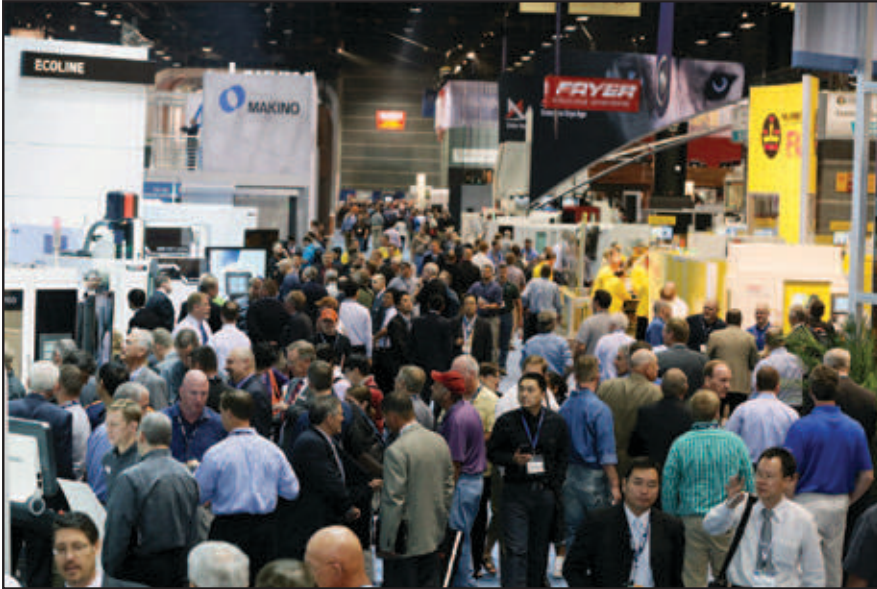


# Tech Tours!



## IMTS2016

### Overwhelmed? Feeling lost in the crowd?



**Let NTMA lead you to the world's top technology leaders!**

The IMTS NTMA Tech Tours are an NTMA member only benefit that are powered by the NTMA Manufacturing Technology Team. These Tech Tours allow you to skip the sales pitch and focus on the technology through lunch and learns, pre-show breakfasts, post show events, cocktail hours and more. These Tech Tours are a great way to enhance your IMTS Show experience and we encourage all NTMA members to take part in them.

**Who:** NTMA Members ONLY

**What:** Intimate, distraction free, C-Suite led tours with our top technology partners, guided by NTMA President and National staff

**Where:** IMTS  
(International Manufacturing Technology Show)  
McCormick Place, Chicago

**When:** NTMA Tech Tours  
September 13th -15th, 2016  
The IMTS Show runs from Monday, September 12th through Saturday, September 17th.

**Why:** Peer to peer networking  
Industry expert networking  
Exposure to a variety of manufacturing industry segments  
Chance to grow your network through 1 on 1 meetings  
Sneak peek at new technologies

*Dave Tilstone, NTMA President, has listed the following as just some of the few reasons to consider attending the NTMA Tech Tours at IMTS:*

- Make high level contacts with the executives that provide the booth tours.
- Meet and discuss technologies and opportunities with like minded business owners.
- Make the most of your time at the show with scheduled tours lasting 45 minutes to one hour. These tours highlight new technologies pertinent to members' businesses.
- See new technologies that may not be known or readily available through their local machine tool distributors.
- Participate in networking and educational sessions offered by National Associates.
- Learn about industry trends that may impact your business/strategy.



# SKILLS GAP? NOT AT FREDON

ALYSON SCOTT, PRESIDENT, AND ROGER  
SUSTAR, CEO, FREDON CORPORATION

Oftentimes, when describing the youth manufacturing programs we at Fredon and the Alliance for Working Together (AWT) Foundation are involved with, we are faced with the same question: “How much is this going to cost?”

Well, fellow manufacturers, if you are asking that question, you have completely missed the purpose of being involved in promoting manufacturing to our young people. The question you should be asking is, “How much is it going to cost me if I don’t get involved?” It will cost you the successful integration of the next generation of machinists, engineers, welders, inspectors, etc. You will be faced with the harsh reality that is the dreaded “skills gap.”

**DO WE HAVE A LITANY OF STATISTICS AND REPORTS TO SUPPORT THIS ALLEGATION? NO.**

**DO WE HAVE SIGNS LINING THE STREET THAT SAY, “MACHINISTS WANTED?” NO.**

Fredon Corporation has never been at risk of a skills gap. Why? Because more than 20 years ago we saw the value of offering youth manufacturing programs in our facility. We have put countless hours of our time – our top machinists’ time – and too many dollars to worry about into promoting careers in manufacturing. From the birth of our Cannons of Fredon program in 1992 to creating, organizing, facilitating and promoting our AWT RoboBots program (since 2010), we have talked the talk and walked the walk.



(Above) Past: Derek Woods, NRL Participant, Riverside High School

(Right) Current: Derek Woos, CNC Machinist, Fredon Corporation

We recognize that not every young person we work with will become a machinist (or other manufacturing-centric career seeker) and that’s okay with us! What many business owners don’t consider is this: The future growth of our industry is inarguably dependent on having a highly skilled workforce. Inarguably. But aren’t we also dependent on a well-educated consumer who knows the value behind the phrase “Made in America?”

Every dollar and every hour that is offered up to support the education and cultivation of our future employees is priceless. Do we see the return on our investment on our balance sheet? No. Do we see it in our bottom line? Absolutely!

The reward for our efforts is an amazing group of 100 employees – skilled machinists who produce precision machined products for our customers in the aerospace, defense, locomotive, nuclear energy and transportation industries. We are generationally diverse; we are made up of an equal amount of “Millennials” and “Baby Boomers.” More than 38 percent



of our employees are ages 40 and under. Skills gap? Not at Fredon.

## IT IS YOUR CALL RIGHT NOW.

The manufacturing skills gap has either filtered into your company already or it is starting to creep in. The only vaccination to protect your company against the skills gap is investing your time, talent and treasure in programs and activities that engage students in the manufacturing process. Lucky for you, the NTMA has already developed the skills gap vaccine – the National Robotics League.

For more information about the NRL and how to wipe the skills gap out of existence from your company, please contact Bill Padnos, NTMA Director of Youth Engagement at [bpadnos@ntma.org](mailto:bpadnos@ntma.org)



## SCHOLARSHIP ANNOUNCED FOR TRAINING CENTER STUDENTS

The Los Angeles Chapter of the National Tooling & Machining Association is pleased to inaugurate a scholarship award program to benefit students at the NTMA Training Center.

The scholarship commences this year with several graduating students to be awarded \$500. Assessment from the head training instructors from the five education modules will determine the award winner.

“We have always supported the Training Center in a number of ways throughout the years,” notes Board President Ben Belzer.

“But, this is the first time we have set up a structure to award a new professional for their overall excellence.”

Applicants will be evaluated on skill levels important for success in the manufacturing industries. A minimum grade point Average of 3.5, initiative, leadership, problem solving, and several other criteria will be part of the formal performance review. A written essay will also be required.

Members of the board of directors of the LA/NTMA form the Scholarship Committee and will review applications each

year. Interested students are encouraged to apply for the scholarship at the Campus Director’s office at either the Santa Fe Springs or Ontario locations.

The Los Angeles Chapter of the National Tooling and Machining Association welcomes manufacturing companies of all sizes as members to enjoy networking, technology updates, legislative support, mastermind sessions, and money saving member benefits. For more information, visit [lantma.org](http://lantma.org).





REGISTER TODAY!



KNOWLEDGE BARS



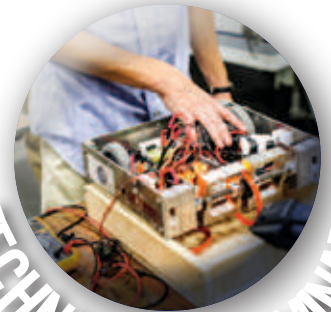
NETWORKING



KEYNOTE SPEAKER



REGISTRATION



TECHNOLOGY SEMINARS



BUSINESS DEVELOPMENT TRACKS



NASCAR HALL OF FAME

# 2016 FALL CONFERENCE

October 11-14, 2016

Charlotte, NC

Follow us on Twitter: #NTMAFC16

[www.ntma.org](http://www.ntma.org)



# 2016 NTMA Fall Conference Schedule of Events

## Tuesday, October 11

1:00p-5:00p **Regiception sponsored by BIG Kaiser**

5:00p-6:00p First Timer's Reception

## Wednesday, October 12

8:00a-5:00p **Registration**

8:00a-5:00p Conversation Lounge

8:00a-5:00p Exhibit Tables

7:30a-8:30a Budget/Finance Team Meeting & Breakfast\*

8:00a-8:30a Continental Breakfast

8:30a-10:30a **General Assembly sponsored by Grainger**

10:45a-11:15a **Knowledge Bars**

11:30a-1:00p Lunch Break

GAT Team Meeting Lunch\*\*

NTMF Board Meeting Lunch\*

Emerging Leaders Lunch\*\*

Chapter Executives Lunch\*

1:00p-2:00p The Franklin Partership Update

1:00p-3:00p Emerging Leaders Session

2:15p-2:45p **Knowledge Bars**

3:00p-5:00p **Industry Roundtables**

Precision Machining I

Precision Machining II

Aerospace & Automotive

Medical

Tools, Dies & Molds

5:00p-6:00p PAC Reception

## Thursday, October 13

6:30a NTMA First Annual 5K

8:00a-1:00p **Registration**

8:00a-5:00p Conversation Lounge

8:00a-5:00p Exhibit Tables

8:00a-9:00a Nominating Team Meeting & Breakfast\*

8:30a-9:00a **WOW Breakfast sponsored by Paulo**

9:00a-10:00a Economic Update

10:15a-11:30a **Business Development Tracks**

Human Resources

Sales and Marketing

Financial Managers

Workforce Development

10:15a-11:30a Chapter Executives Session

## Thursday, October 13 (continued)

11:45a-1:00p **Business Development Tracks**

Earlier Tracks Repeat

11:45a-1:00p Chapter Executives Session

1:00p-5:00p **Information Center**

1:00p-4:00p **Optional Activity: Bike through Charlotte**

1:00p-1:30p Lunch

1:45p-4:30p **Tech Day 1**

1:45p-2:30p Tech Session 1

2:45p-3:30p Tech Session 2

3:45p-4:30p Tech Session 3

2:30p-4:30p Emerging Leaders Session

4:30p-5:30p **Knowledge Bars**

5:00p-6:00p NRL Team Meeting

7:00p-10:00p Kennametal Event: Nascar Hall of Fame

## Friday, October 14

8:00a-12:00p **Information Center**

8:00a-3:00p Conversation Lounge

8:00a-1:00p Exhibit Tables

8:30a-10:00a **Board of Trustees Meeting & Breakfast**

9:00a-10:00a Continental Breakfast

10:00a-12:00p **Optional Activity: Escape Room**

10:15a-12:00p **Tech Day 2**

10:15a-11:00a Tech Session 4

11:15a-12:00p Tech Session 5

12:00p-1:30p Lunch

Past Chair & Spouses Lunch\*

Tech Team Roundtable Lunch\*\*

1:30p-2:45p **Business Development Tracks**

Open HR Roundtable

Are you running your business or is your business running you?

3:00p-4:30p Closing Keynote

6:00p-7:00p Cocktail Hour

7:00p-10:00p Cheers to Charlotte

**Meetings Marked \* are open to Team Members only**

**Meetings Marked \*\* have limited lunches available and are first come first served**

**\*Schedule Subject to Change\***



# Emerging Leaders' Sessions



**Wednesday, October 12 11:30a-1:00p - Roundtable & Lunch**

**Wednesday, October 12 1:00p-3:00p - Leadership Transitioning**

Many emerging leaders struggle because they focus so much on their own abilities to get the job done. As a leader, your job is to think bigger and guide others to achieve the company vision. Your success is now measured by the outcomes you produce for your organization as you help your team work more efficiently and effectively. Accept that challenge, start thinking about your work differently and get ready to learn new ideas and a new skill set.

**Thursday, October 13 2:30p-4:30p - Culture of Engagement: Motivating and Retaining Employees**

We invite all leaders to join and discuss how to retain top talent, motivate performance, understand turnover and build magnetic cultures. Takeaways include innovative ideas that can increase employee retention, productivity, customer satisfaction and ultimately drive bottom line results.

## Knowledge Bars

### Tool Holding Technology for Improved Productivity and Tool Life

High performance milling centers are purchased with the intention of increasing throughput and workpiece quality.

This presentation will outline the current advantages and disadvantages of each type of tool holder, offer suggestions for applying each technology for optimum output and quality, plus take a deep dive into the effects of runout on tool life.

**BIG KAISER**

**Jack Burley**

VP Sales & Engineering  
BIG KAISER Precision Tooling Inc.



### Spindle care, detection of problems

Join us as we discuss how the latest smart machine technology helps to maximize the performance and live time of these high speed and performance spindles.

### EDM: Where it was, where it's going

Discuss latest trends in generator technology, process monitoring and productivity improvements of this "Nontraditional Technology."

**+GF+**

**Gisbert Ledvon**

Director of Business  
Development  
GF Machining Solutions



### Preventive & Predictive Maintenance – Improving the health of your machines and your business

Much like alerts of needed oil and brake component changes on our vehicles, machines alert us of oil and coolant levels as well as needed wear part replacements based on hours of operation.

This session will discuss what information is available and how it can be used. Connecting your machine to your personnel and maintenance team is a vital task to reduce your cost of machine downtime due to maintenance related issues.

**LOKUMA**

**Jeff Estes**

Director of Partners in  
THINC





# Technology Day Sessions

## Increase Your Profitability and Competitiveness with the Liquid Tool



Productivity, economic efficiency and machining quality are factors that critically depend on the choice and quality of the metalworking fluid. Marc will show how you can leverage these elements using the Blaser Liquid Tool to increase your competitiveness in the market. Profitability is the responsibility of the owner and the top management. The Liquid Tool is the fact- and data-driven solution to guarantee higher value and profitability for your organization.



**Marc Blaser**  
CEO  
Blaser Swisslube

## Driving Efficiency with Real-Time Manufacturing Monitoring and Analytics

Learn how machine monitoring, shop floor dashboards, and data transparency can save your business money, increase competitiveness, and improve employee morale.



**Eric Fogg**  
Co-Founder and COO  
MachineMetrics



## Best Practices for CMM Efficiency & Effectiveness

Recent advances in measurement technology and quality data management software, coupled with high performance computers, have enabled instant creation of measurement solutions in R&D/ Manufacturing/Production & Quality. This presentation will provide lessons learned of how combinations of these technologies have enabled manufacturing companies to measure faster, with trustworthy results, and communicate that information precisely and clearly to both internal and external customers.



**Karthik Sukumar**  
Field Application Engineer  
ZEISS Industrial Metrology



## Protected Flow Manufacturing

Walk through how Protected Flow Manufacturing can help you deliver to your customers on-time, in less time, every time. Learn how this Shop Floor Execution and Planning methodology – a Super Simplified Scheduler – eliminates the need for traditional MRP and Finite Scheduling.



**Mark Lilly**  
Director of Sales  
& Marketing  
LillyWorks



## Watch our Website and Social Media for the Yet to be Announced Speaker and Topic Presented by Mazak!



For questions or more information, please contact: Kristen Hrusch at [khrusch@ntma.org](mailto:khrusch@ntma.org) – 216-264-2845 or Brittany Belko at [bbelko@ntma.org](mailto:bbelko@ntma.org) – 216-264-2848 • To register: visit [www.ntma.org/upcomingevents](http://www.ntma.org/upcomingevents)



# SPONSORSHIP OPPORTUNITIES



**1300**

Member  
Companies

**36**

Chapters  
Across the US

**\$2.17 trillion**

Contributed to the US Economy by Manufacturers in 2014



## WHY SPONSOR?

1

Increase & Build Brand Loyalty

2

Position As An Industry Leader

3

Drive Sales

4

Create Awareness & Visibility

5

Capture Needs Of Your Customers

6

Ability To Narrowcast

## HOW



IN Person



IN Print



Electronic

**300** C-level decision makers  
at the Fall Conference

**2k** Record  
Readers

**60** Emerging Leaders & growing  
@ Emerging Leader Conference

**100** Ways to get  
ENGAGED

### How Can I Help You?

I know what it takes to create successful partnerships, and have been providing NTMA partnership strategy and representation to our TOP INDUSTRY LEADERS for over 5 years. I invite you to join our community.

Contact Tiffany Bryson today • [tbryson@ntma.org](mailto:tbryson@ntma.org)







## 6S EXCELLENCE AWARD

The NTMA Technology Team is committed to improving the perception of American manufacturing by promoting and recognizing excellence in member shops. The 6S Excellence Award is specifically designed to honor shops that display excellence in organization and efficiency.

### HOW IT WORKS:

Companies apply for the award by submitting a self-assessment based on criteria that demonstrates best in class practice in the six S categories:

- SORT – Clear clutter
- SET-IN-ORDER – Have a place for everything and is everything in its place.
- SHINE – Clean work areas and equipment
- STANDARDIZE – Establish consistent schedules and methods of performing the cleaning and organization work areas.
- SUSTAIN – Audit and monitor the schedules and stick to the rules
- SAFETY – Are the areas safe?

Recipients of the 6S Award will be presented with a certificate of excellence at the NTMA Fall Conference. The award is renewable every year. A trophy is presented after receiving the award for 5 consecutive years.

### SPONSORSHIP OPPORTUNITY:

- Award naming rights
- Conference exposure via introductions, etc.
- Promotional exposure: web, print, blogs, emails that promote and support the award.

To apply, contact Pam Wightman at [pwightman@ntma.org](mailto:pwightman@ntma.org) or by phone (216) 286-2824. The deadline for applications is September 15th.



### HEADING TO IMTS THIS YEAR?

WE'D LIKE TO INVITE YOU TO JOIN US FOR BREAKFAST AT OUR BOOTH

September 13th & 15th, 2016  
8:00am - 9:00am  
BIG KAISER Booth, West Hall #W-1600  
Register @ [bigkaiser.com/ntmarsvp](http://bigkaiser.com/ntmarsvp)

EXPERIENCE BETTER RESULTS WITH ACCELERATED CYCLE TIME AND

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**"Higher Performance. Guaranteed."** has long been a statement we hang our hat on. At IMTS 2016, BIG KAISER is making our most ambitious effort yet to prove that our tooling outperforms and delivers lasting value. We are challenging the metalworking world to "Test Us". Our tooling stands up to the hardest tests, day in and day out, and we'd love the opportunity to prove it.

**Stop by our booth at IMTS 2016 or visit [BIGKAISER.com/TestUs](http://BIGKAISER.com/TestUs) to request your no-risk trial today!**



IMTS2016

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# SOLUTIONS PRODUCTIVITY **OPEN → FOR BUSINESS** RELIABILITY POSSIBILITIES

## DECREASED DOWNTIME

Breakdowns and crashes don't occur often, but when they do, Okuma and our local service partners will have you up and running quickly. With Okuma's Mechanical and CNC Exchange programs, we'll take malfunctioning components and immediately send you a high-quality recertified part, allowing you to get up and running faster. Increased run-time means you can open new possibilities and endless opportunities to support your customers.



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TO YOUR IMTS SHOW PLANNER**



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RECERTIFIED  
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# OKUMA PARTNERS WITH CPCC TO TRAIN EMPLOYEES



Okuma America Corporation is partnering with Central Piedmont Community College (CPCC) to provide customized machine tool training for Okuma employees. The program is funded through North Carolina's NCWorks Customized Training Program and is implemented through the North Carolina Community College System.

Okuma recently expanded its mechanical repair and exchange service departments in Charlotte and is receiving \$63,310 in CNC training from CPCC to train new hires and current employees. The training programs include leadership, process improvement, SolidWorks, computer operations, electrical assembly and wiring, and enterprise resource

planning.

The training grant supports economic development efforts of the state of North Carolina by providing education, training and support services for eligible businesses, assisting them in their efforts to be productive and profitable within the state.

"This unique training program provides Okuma's current and future workforce with the skills necessary to be successful in their careers," said Brittany Russell, Okuma America, training program manager. "Our partnership with CPCC is yet another way for us to help ensure the future success and growth of manufacturing in the Charlotte area."

"CPCC is delighted and

honored to work with Okuma America as the company expands its operations in Mecklenburg County," said Allison Bowers, CPCC director, economic recruitment. "The college, through our Corporate Learning Center, will work hard to deliver the customized training Okuma associates need now and in the future."

Okuma and CPCC share a long standing relationship dating back to the early 1980s. For more information on Okuma machine tools visit <http://www.okuma.com/cnc-machine-tool-lineup>.



## MAZAK ANNOUNCES NEW ORGANIZATIONAL CHANGES

Manufacturing technology leader Mazak Corporation has announced that Brian Papke, long-time company president, has accepted a new position as Chairman, and Daniel Janka, former executive vice president, has been named company president. As of July 1, Janka assumed the normal operating functions of Mazak's North American operations, including Mazak's iSMART Factory and North American Headquarters in Kentucky along with the company's eight Technology Centers located throughout North America.

With these new appointments, Mazak positions itself for continued future growth and further strengthens its Rock Solid industry reputation. This next generation of leadership together with the entire Mazak team will continue the company's forward momentum and pioneering spirit in the manufacturing industry's new digital frontier. It will also further strengthen the company's industry dominance in multitasking, 5-axis and additive manufacturing technologies. This seamless leadership transition will also ensure customers continue to receive the machine

tool industry's most comprehensive service and support as well as the latest most advanced machine tool technology.

Papke personally selected Janka who joined Mazak in early 2016. Janka's experience in the machine tool industry and his extensive involvement with machine tool utilization software and 5-axis technology at past positions meshes well with Mazak's iSMART Factory and the company's commitment to MTConnect as well as the total Mazak iSMART manufacturing concept.

Papke has been with Mazak since 1987 and company president since 1989. Under his leadership, the Kentucky plant grew from one building to its current five-building, 800,000-sq-ft campus where the company now designs and builds some of the industry's most advanced manufacturing systems, including innovative full 5-axis and Multi-Tasking machines – and most recently, the introduction of Mazak's iSMART Factory Concept and the Mazak SmartBox that allow for the further integration of digital solutions in manufacturing.





MANUFACTURING AMERICA'S FUTURE

## 2016 NATIONAL EVENTS AND TECHNICAL SEMINARS

**September 12th-17th**  
IMTS, Chicago, IL

**September 28th**  
Sales & Marketing Workshop, Indianapolis, IN

**October 11th**  
Financial Managers Roundtable, Charlotte, NC


**October 11th-14th**  
Fall Conference, Charlotte, NC

**October 26th**  
Plant Managers Roundtable, Boston, MA


**November 2nd**  
Sales & Marketing Workshop, Philadelphia, PA

**November 16th**  
Plant Managers Roundtable, Denver, CO







# HUMAN



# INGENUITY



# MEETS



# AUTOMATION.

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# REDUCE ELECTRICITY COSTS ON SUMMER PEAK DEMAND DAYS

NTMA members can greatly benefit from reducing energy consumption on the five days of the year when the highest demand on the electricity grid occurs. Peak demand typically arises in afternoon hours during summer months. Usage can be reduced by dimming lighting, adjusting thermostat settings, shutting down equipment, using onsite power generators, or scheduling operations during nighttime hours.

## PEAK DEMAND

Many electricity utility companies notify local news outlets on days when peak demand is likely to occur, prompting the media to encourage consumers to reduce usage during peak demand hours. In some regions, manufacturers can subscribe to alerts that notify them to reduce consumption during specific peak demand timeframes. Utility websites and local news websites, as well as grid system websites, such as the PJM webpage, are good re-

sources to check for notifications.

Additionally, NTMA members can enroll in Demand Response programs to receive payments for agreeing to voluntarily reduce consumption when notified. Demand Response programs are beneficial because customers are alerted when the five peak demand days each year are likely to occur, enabling them to relieve the grid and receive payments.

## CAPACITY COSTS

Electricity utility companies measure and average each customer's energy demand in kilowatts on the five highest demand days of each year. That average, known as peak load contribution (PLC), can be reduced and managed through best practices. Electric utilities and suppliers use each customer's PLC, or "installed capacity tag," from the prior year to calculate monthly capacity costs, which appear as a line item on customer electricity bills. Your



peak load contribution in 2016 will determine your monthly capacity costs in 2017.

NTMA members should review their bills and be able to identify their PLCs at a glance. The PLC may be listed as "demand charge" or "billed load KW" on some customer bills. If you have any questions regarding your PLC or energy bill, contact the APPI Energy customer service team for a courtesy evaluation at 800-520-6685. Since 2001, NTMA has endorsed consulting firm APPI Energy as a Business Resource for members.



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A large image showing a metalworking process with a coolant spray. In the bottom left corner, there are two blue and white Blaser Swisslube barrels. The text 'liquidtool®' is prominently displayed in the center, with 'BOOSTS YOUR PRODUCTIVITY' underneath it. The background is a grayscale image of a metal part being machined with a coolant spray.

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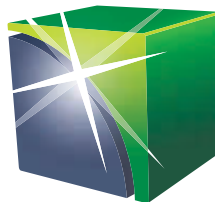


MANUFACTURING AMERICA'S FUTURE

# THE RECORD

**WE ARE**  
FIRST IN LINE TO TAKE  
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MANUFACTURING JOBS.  
AT IMTS 2016, WE'LL  
EXPLORE SOLUTIONS,  
MEET WITH EXPERTS, AND  
FIND WAYS TO RATCHET  
UP OUR ROUTINE.

# WE ARE



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Cassie Haupers  
Vice President, Swiss Precision Machining, Inc.

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