NTMA CELEBRATES OUR DIAMOND ANNIVERSARY

This year’s Fall Conference makes history... be part of it.

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2018 EVENTS

LEARNING
✓ Software Bootcamp • Cleveland, OH • May 10—11
Big Hairy Audacious Growth Conference • St. Louis, MO • June 6—8
Emerging Leaders Roundtable • Nashville, TN • August 22

GLOBAL
Japan Tour • Japan • April 22—28 ✓

NETWORKING
✓ Chapter Leadership Summit • New Orleans, LA • January 28—30
✓ MFG Meeting • Miami, FL • March 7—10
✓ Emerging Leaders Conference • Pittsburgh, PA • April 30—May 2
Fall Conference • Denver, CO • October 23—26

ADVOCACY
Legislative Conference • Washington, DC • April 16—18 ✓
NRL Competition • California, PA • May 18—19 ✓
In 2018, the National Tooling and Machining Association is celebrating our 75th Anniversary. We’ll share stories, information and the history of the organization throughout the year. Do you have something that you would like to share? Please contact Kelly LaMarca at klamarca@ntma.org with any stories, photos or ideas. We look forward to celebrating our diamond anniversary together!

There is an old saying that reads, “The world is run by those that show up.” This also applies to NTMA. It is rapidly approaching that time of the year when plans for the coming year are taking shape, as well as selecting those who will serve as officers and committee persons.

This is an excellent time for you to help shape NTMA into the type of organization that will best serve its members. If you’ve had ideas in the past about “how things should be done,” now is the time to step forward. For our association to remain the industry leader, we need a constant flow of fresh, new faces and ideas flowing into our Executive Committee.

Although the officers for the coming year have been selected, there are still openings on several committees. NTMA needs strong, tough leaders, just as our businesses do. There’s plenty of support and camaraderie among involved members.

Interested? Call Kelly LaMarca at 216-264-2837 or email her at klamarca@ntma.org to find out where you can serve.
The NTMA Fall Conference is always our premier member-focused event. This year it will be extra special as we celebrate 75 years of history and our future prosperity as a stronger member-focused association. Many of our most loyal members will help us celebrate, hand out awards, recognize those who have supported and given themselves to our industry as well as what the future holds for NTMA. We want to celebrate our longevity, but more important to us is to show our sincere appreciation for our founding members and longest-tenured members.

In a way, it’s a birthday party on steroids. The 2018 Fall Conference will be held in Denver, Colorado from October 23-26. You’ll see a good portion of this edition of the Record devoted to our Fall Conference with some unique and important additions to the program.

One of the key events is the 75th Anniversary Awards Gala on Wednesday evening. Founding member companies and other special guests will be there to hand out the awards as part of our celebration. We will also emphasize some of the highlights over the past 75 years including our workforce development efforts and members’ contributions, and recognize those who helped NTMA through good and challenging times.

We will kick off the Fall Conference with our special guest and featured speaker, Peter Zeihan. Peter will review for us “The Future of Manufacturing” from the geopolitical perspective. As many of you know, the transparency of global supply chains affects you and your competitors. In many cases, these competitors are located outside the U.S. Between technology and a competitive worldwide market, our industry (and your business) have never had to adapt to change so quickly.

Because the NTMA was established to help fill the skills gap, a special General Session will be devoted to Workforce Development including a new Pre-Apprenticeship Program and the very important upgrades to NTMA-U. It was 75 years ago that our founding members took the challenge of addressing the lack of skilled labor through education. NTMA-U has continued to evolve and better serve NTMA members. You’ll learn what changes will be made to improve the learning experience and help members better train their workforces.

Keeping with the theme of learning, but from industry experts and NTMA members, the very popular Ignite Sessions will return to the conference. There are four Ignite Sessions spread out over two days with more time allocated to each session and topic.

We will also have a General Session on Diversity and Inclusion. Consistent with industry and association efforts to attract the best talent, learn why it’s an important part of your strategy and how you and your company can attract and retain some of the brightest individuals. Our conference wouldn’t be complete if we didn’t have our always popular roundtables, so this year we’ll devote time to Aerospace, Tools, Die and Mold, Medical and two for Precision Machining.

In support of our advocacy efforts that helped us get the tax reform bill passed and the R&D tax credit permanent, a Casino Night is planned to help raise money for GAAF. We’ll have an update on the first day of the conference on mid-term elections from our lobbyists, Franklin Partnership, and our public relations firm, Bracewell, and this will reinforce why supporting the GAAF is so important.

We are expecting a record turn out to help us celebrate our 75th Anniversary and I personally invite you to join the festivities and celebrations. There is much more information on the Fall Conference in this edition of The Record so please take time to review the materials and share it with your team. I promise you, you’ll learn and network with the very best in industry and have fun doing so. See you there!

Dave Tilstone / NTMA President
NTMA NEWS

NTMA WELCOMES NEW NATIONAL ASSOCIATE: EMAG

Contributed by Matt Gilmore, NTMA, Director of Membership and Business Development

NTMA is pleased to announce that EMAG LLC has joined the NTMA as a National Associate Member. EMAG looks forward to contributing to the manufacturing successes of our members around the country.

EMAG is a German machine tool builder with its North American headquarters located in Farmington Hills, Mich. EMAG LLC has been incorporated in the United States since 1995, but EMAG GmbH just celebrated its 150-year anniversary in 2017. EMAG is the absolute market leader in inverted vertical spindle lathes with an 83 percent market share over the last five years (per USMTO).

The self-loading nature of the EMAG machine offers shops an alternative to traditional manual loading of horizontal lathes. EMAG’s proven solution offers a significant increase in productivity and at the same time reducing manpower burden. It is an excellent “transitional” machine for the shop that needs to be more productive, but might have reservations of going to full-blown robotic loading.

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Volume 39 / No 5
Emerging Leaders Converge at Three Rivers
Emerging Leaders Conference in Pittsburgh a success!

From April 30 through May 2, NTMA’s emerging leaders gathered in Pittsburgh, PA to share ideas, network and learn at our 4th Annual Emerging Leaders Conference. The group had a full agenda at the Kimpton Hotel Monaco.

Guest speakers talked about some of the thorniest HR concerns impacting manufacturing facilities today—like how to address cell phones on the shop floor and annual reviews. The leaders also addressed how to find a mentor and how to create mentoring programs in their own companies. Quick chats covered topics like: how to retain good talent, communication styles & tips, best ways to manage the increasing demands of a lean workforce and more.

In one session, attendees had the opportunity to do some introspective planning and find their own “passion loop” for personal and professional growth. Another session offered tools for conference goers to take a look at their business from the outside-in to make decisions to improve profitability and performance.

In the robotics hub of Pittsburgh, experts provided our NTMA emerging leaders with insight about how to position themselves and their companies to become manufacturers and supply chain partners with the robotics industry.

Left: Robotics presentation panelists
Below: Campfire chat
A special thank you to CliftonLarsonAllen, Okuma, Paulo and the Pittsburgh Chapter of the NTMA for their support and sponsorship of the event.

Emerging Leaders! Don’t miss our next event on Wednesday, August 22nd in Nashville! For details see page 8.
REGISTER NOW!
Emerging Leaders Roundtable: Personal Development and Leadership

August 22, 2018
Holston House Nashville
118 7th Ave. N
Nashville, TN 37203

Pricing:
$225 for NTMA members
$500 for non-members

Topics:
Building Your Brand
Career Pathing: What Step is Next
Moderated Roundtable Discussion
Personal Development Plan Workshop

Don't miss the tour at Paulo!

For more information and to register, contact:
Kristen Hrusch • khrusch@ntma.org
216-264-2845

NTMA - Emerging Leaders Group
#NTMAEL2018
TECH TOUR TAKES A GLOBAL APPROACH TO LEARNING
Submitted by Dana Super, BIG KAISER

More than 20 NTMA members gathered in Japan at the end of April to learn about the latest manufacturing technologies and discover new solutions to apply in their own shops. The 8th annual NTMA Technology Tour was hosted by Okuma, BIG Daishowa (BIG KAISER), and Blaser Swisslube.

During the weeklong trip, sponsors demonstrated advanced technologies and revealed their own manufacturing processes. Guests took in Okuma Dream Site 1, Okuma Dream Site 2, the Okuma headquarters and Kani Plant, plus BIG Daishowa facilities in Osaka and on Awaji Island. The experience helps visitors evaluate technology products and the return on those investments. It is also valuable to see how facilities in other parts of the world are organized and operate to take away some new ideas.

“Knowledge has a shelf life,” explained Wade Anderson, Product Sales Manager for Okuma. “We can’t just stay with what we know in terms of technology, as time and technology will pass you by. Trips like this give us the opportunity to network and learn.”

See “JAPAN” Page 11

10-SECOND COLLET CHANGES
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The National Tooling & Machining Foundation had a very busy Spring 2018 meeting of their board of directors, said the Foundation’s Executive Director Jon Kozesky. The Foundation approved a total of $125,000 in funding to expand manufacturing education and awareness throughout the United States.

Each year the NTMF funds two student scholarship programs. The Brock Babb Memorial Scholarship is in support of students advancing their education and pursuing careers in manufacturing. The scholarship is named in honor and memory of Sergeant Brock A. Babb who gave his life defending our country and our freedom, the son of one of our long-time members Terry Babb, Apex Tool & Manufacturing, Inc. in Evansville, Indiana. This year, the NTMF awarded 13 students each with a $2,500 Brock Babb Memorial Scholarship.

The Edwin Vobeda Memorial Scholarship is an annual scholarship created through a charitable donation from the Edwin F. and Mildred Vobeda Charitable Remainder Trust in support of students residing in the Central Time Zone advancing their education to pursue a career in the tool and die industry. This year the NTMF awarded four students each with a $2,500 Edwin Vobeda Memorial Scholarship.

“In partnership with the NTMA Education Team, the NTMF feels confident that these top tier student applicants are well deserving of this funding, will work tirelessly to expand our industry, and will undoubtedly be the NTMA leaders of tomorrow,” said Kozesky.

Lastly, the NTMA had submitted a new grant request to the NTMF to aid each of the individual 34 chapters in their purchase or renewal of an NTMA-U portal in 2018-2019. The purpose of the grant was to help chapters build sustainable NTMA-U training programs in their chapter through an additional year of support. This will be the second year in a row that the NTMF board of directors has approved a $82,500 grant, payable in $2,500 grants to individual chapters, to make this reduced portal cost opportunity possible. All chapters are eligible to receive a $2,500 grant for NTMA-U portal purchases and renewals from April 1, 2018 – March 31, 2019. “The feedback we are receiving from the NTMA concludes that NTMA-U is quickly becoming a leading factor as to why new, larger companies are joining the NTMA,” said NTMF Chairman Paul Bonin. “Expanding access to this unparalleled educational opportunity will strengthen our member companies, our association, and our industry as a whole.”

NTMA is excited to announce that James Mayer has joined the team as the National Account Manager, where he will identify, establish and nurture relationships with National Associate Member partners that can add value to the NTMA membership. He will develop sponsorship, advertising and promotional opportunities and link industry partners with NTMA members companies. James has worked in industrial distribution for the last 15 years where he established a strong connection with the Arizona Chapter of NTMA. James is passionate about manufacturing and helping the industry thrive.

He earned a BIS from Arizona State University with a focus in Business and Political Science, and an MBA from Ohio University. James is an avid hiker, who loves going to the gym with his wife and kids in Phoenix.

In this role, James will report to Matt Gilmore, Director of Membership and Business Development.

CONTACT INFORMATION:
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The final tour stop was BIG Daishowa on the island of Awaji just outside of Osaka. Here, NTMA visited three factories as well as the technical center to see cutting demonstrations, including a comparison of collect chucks for end milling, a BIG PLUS comparison to HSK, the Sphinx deep-hole coolant drill and their new Smart Damper system for boring and milling to reduce chatter.

“Most people don’t realize the depth and breadth of what we offer,” said Jack Burley, VP of Sales and Engineering for BIG KAISER. “There are many original developments of BIG Daishowa, like the right-angle head which allows machining of internal features that cannot be created any other way. We know not only how to produce very precise tools, but have a full line of measuring systems as well.”

During the BIG Daishowa visit, the general manager of Blaser Swisslube, Carsten Witthuser, explained the impact coolant can have on productivity and cost. Although coolant is only 0.5 percent of the cost to produce parts, Mr. Witthuser demonstrated how this LiquidTool® can have a dramatic effect on tool life and productivity as well as machine uptime and a healthy shop environment.

Tours and seminars were interspersed with sightseeing, group dinners, and an introduction to Japanese culture.

“My son and I had an incredible experience, met some great people, and toured some awesome facilities ... hopefully everybody else got as much from it as we did,” Scott Harms, President of MetalQuest Unlimited, Inc.
Our country is going through demographic changes. In 2016, more than half of babies born in the U.S. were minorities. That’s amazing, and quite a change from the not-too-distant past. There are also more women than men pursuing higher education. Change is the only constant in the world. But, these changes take time to ripple outwards.

When I started my career in manufacturing over ten years ago, I certainly wasn’t the only woman at that particular multinational glass manufacturer, nor the only woman at my plant in a small town outside of Columbus, Ohio. But I was the only woman in my department, and a young one at that. I had been raised by very practical, hands-on parents, who never brought up the concept of gender and what I should or shouldn’t do. I was encouraged to get dirty, turn wrenches, fix cars, install drywall and various and sundry other male-dominated activities. I value that experience, and quickly learned how rare it was as I entered the job market with an engineering degree, great grades and lots of research experience. I was floored that I had to show a picture of a car I had restored to the interview team to clinch the deal to get that first job as a manufacturing engineer. Sometimes I wonder if that would have happened if I wasn’t a young woman, but a young man instead.

During my tenure there, and at a handful of other manufacturing companies, I’ve had a diverse set of experiences in regards to how my gender, age and other characteristics are viewed by others. Many times I had excellent male mentors who treated me like a daughter or younger sister – helping me understand company culture, giving me insight on the fine line that women need to walk (assertive but not too assertive), and providing me with connections and opportunities to prove myself. More rarely, I had female bosses or influencers that treated me as a threat – through deliberate, repeated attempts to undermine decisions or credibility, feedback on personal attributes disguised as performance-related feedback and other unhelpful tactics. I’ve been held to different standards, had to endure questions that are not asked of men, but have also been given opportunities to mentor others, to lead discussions and to speak publicly because I had leaders that wanted to show that the face of manufacturing is changing.

As a minority in manufacturing, especially in smaller companies, I feel internal pressure to do what I can to carry as I climb. I don’t mean pulling people along that are not qualified just because they look like me – I mean being a shining example for those that follow in my footsteps, and taking the time to coach, mentor and advise those coming up the ranks. If you are ‘different’ from the norm in your shop or your community, I would like to ask you to reflect on what you’re doing to help others that are different to get the opportunity to make an impact in our industry. Are you actively making the time to regularly talk with them? Are you talking to them not just about projects and deadlines at work, but about goals, things they’ve experienced, questions they have, and lessons you’ve learned that might help them navigate situations? Are you engaging with students at your local schools that are outside the ‘norm’ for your area? People, especially young people, resonate best with role models that look like them. Being part of a minority group means that you might be the first, or the only, and it sometimes means that you’re under the microscope more often than others. It’s not right or wrong, just something to be aware of, and to use as an opportunity to lead by example.

If you do represent the majority group in our industry, take some time to identify those in your company that are different from the norm, and encourage them to share openly with you on what your company could do to be more diverse and inclusive. I would also encourage them to bring along others that are different. It could be through mentoring programs, diverse interview teams, NRL industry advising, school board participation, panel discussions at NTMA national or Chapter meetings – the possibilities are endless. Manufacturing is the backbone of the American economy, and it can and should be a welcoming environment for any that have the desire, passion and aptitude to succeed.

If you have specific best practices you’d like to share, please feel free to contact me at sschroeder@ntma.org.

I’ve spent thousands of hours as an Air Force fighter pilot on missions supporting our nation and our allies across the globe. Undeniably, it is exciting and challenging to be flying at 40,000 feet defending the skies over our friendly forces and citizens on the ground, at times in some of the most heavily defended airspace we could encounter.

Yet, nearly every minute in the air, I was keenly aware that the difference between life and death, or the success of that day’s mission, was the competence, dedication, and teamwork of the men and women in our military supporting me whose expertise and adaptability during complex missions kept me safe and enabled our success.

We have the most sophisticated military in the world because all the members of our team are highly trained in their primary roles.
Peter Zeihan is a strategist, thinker, futurist, speaker—and he’s coming to the Fall Conference for an in-depth analysis of what the future of manufacturing holds.

The world of manufacturing is an endlessly specialized venture, with most manufacturers sourcing components from scores of facilities across a dozen or more countries. But what if the ability to sail components from site to site became compromised? What if capital availability proves insufficient to update industrial bases as technology evolves? What if intermediate and end markets become less desirable – or less accessible? All that and more is about to happen, which signals the end of manufacturing as we know it. The successful manufacturers of the future will be those who can command access to raw materials, capital, labor and markets—all in the same location.

Zeihan’s worldview marries the realities of geography and populations to a deep understanding of how global politics impact markets and economic trends, helping industry leaders navigate today’s complex mix of geopolitical risks and opportunities. With a keen eye toward what will drive tomorrow’s headlines, his irreverent approach transforms topics that are normally dense and heavy into accessible, relevant takeaways for audiences of all types.

In his career, Zeihan has ranged from working for the US State Department in Australia, to the D.C. think tank community, to helping develop the analytical models for Stratfor, one of the world’s premier private intelligence companies. Mr. Zeihan founded his own firm—Zeihan on Geopolitics—in 2012 in order to provide a select group of clients with direct, custom analytical products. Today those clients represent a vast array of sectors including energy majors, financial institutions, business associations, agricultural interests, universities and the U.S. military.

And with an eye to the future—we’re taking a serious look at workforce development:

**MAJOR GENERAL (RET) GARRY DEAN**

Logged more than 4,000 hours flying F-15s and other fighters. In his last assignment, he was the principal staff officer and advisor to the Chief, National Guard Bureau, responsible for the performance of the 1,100 member National Guard Bureau staff. Previously, General Dean served as Deputy Chief of Staff for Operations, Allied Joint Forces Command in Naples, Italy. Prior to the NATO assignment, he served as Commander, 1st Air Force, Continental NORAD Region, and AF Forces Northern, responsible for planning and executing the Air Defense of the Continental United States, the Missile Defense of the National Capital Region, and the USAF response to natural disasters in the homeland.

"VETERANS" CONTINUED

and other supporting skills, just as I was in my role as an Air Dominance fighter pilot. Everyone performed their jobs with excellence to keep me and my fellow pilots flying safely. The logisticians acquired mission-critical spare parts just in time to ensure they were ready when needed to replace worn parts without impacting the flight schedule. Before and after every flight, the crew chiefs and technicians checked and maintained the aircraft’s jet engines, hydraulics, and specialized avionics to their peak performance. The meteorologists briefed us on weather conditions. When we flew together with squadrons from allied nations, liaison officers coordinated our combined missions.

Air battle managers and air traffic controllers guided us back to our home base and a safe landing, through complex airspace and terrain, often at night and in bad weather. Base operations teams kept the runways free of snow and ice, and emergency crews with medical and firefighting equipment were always at the ready.

The list of support personnel that kept me safe in the air is endless. But I can assure you that from the cooks in the base dining hall, to the weapons loaders who ensured my aircraft weapons were 100 percent ready if needed, these military professionals are all masters of their specialties and innovative in continuous improvement to be their best. These men and women held my life in their hands every day.

The competence, dedication and resiliency of our veterans and service members from all our military branches to get the job done is why I encourage you to do all you can to recruit them to join your organization. They are dedicated, proven performers you can trust to achieve superior results, just as I did flying at 40,000 feet defending the skies over those on the ground who depended on our success.

For more information about hiring veterans for your business, please contact Steve Nowlan at the Center for America SNowlan@CenterForAmerica.org or 201-513-0379.
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To learn more, visit: okuma.com/IMTS
A record 72 teams registered to test their robotic creations at the NRL 2018 National Competition. Schools from Arizona, Northern Utah, Kansas and Missouri joined teams from Ohio and Pennsylvania at the Convocation Center on the campus of California University of Pennsylvania for two days of exciting battles and plenty of destruction.

On the first day of the competition, the students displayed their project management, teamwork and presentation skills during the team interviews. Industry experts volunteered their time to review and score the team engineering notebooks in addition to inspecting the bots to ensure that they are safe and within the NRL technical regulations.

Once the inspections and interviews were done, the students and their teachers were able to breathe and celebrate during our Team Party on Friday night. This welcomed break was very short because the first round of battles started that evening. For two and a half hours, teams battled to stay in the winner’s bracket.

On Saturday morning, competition resumed. Throughout the day, the bots caused damage to themselves, their opponents and the arenas. After each match, the students showed off their amazing teamwork as they worked at their pit table to get their bot back together and in battling condition. The action was fast and furious and the quality and innovation of the bots were the best that we have ever seen. In the end, two old foes – Pine Richland High School and Hempfield Area High School – battled to see who was supreme. After a fierce start to the match, Pine Richland was able to survive and knock out Hempfield for the victory and the first place trophy. In addition to winning the first place trophy, Pine Richland High School took home the Grand Champion Award innovated by Inventionland as the overall winner of the competition. Not only did they outlast all of the other bots in the arena, Pine Richland also tied for the Best Engineering Documentation Award and won the Best Engineered Bot Award.

This is the second time in three years that Pine Richland took home the NRL Grand Champion Award.

Stay tuned for more information about the NRL 2019 National Competition. In the meantime, if you are looking for a way to engage manufacturing’s next generation in your community, contact Bill Padnos at bpadnos@ntma.org for how to start an NRL program at your local school.
The Rocky Mountain Chapter welcomes the 2018 Fall Conference to Denver. The Colorado manufacturing economy is diverse. There are nearly 6,000 manufacturers across a variety of business sectors such as electronics, energy, aerospace, biomedical and food and beverage. Some of the largest manufacturing employers in Colorado are: Lockheed Martin Space Systems (space), United Launch Alliance (space), Sierra Nevada (space), Vestas (clean energy), Anadarko (energy), Ball Corp. (aerospace/space), Woodward (energy/aerospace), Gates Corp. (power transmission) and CoorsTek (engineered ceramics).

Our Chapter Mission: to help members of the U.S. precision custom manufacturing industry achieve profitable growth and business success in a global economy through advocacy, networking, education programs and services.

What drives the Colorado Manufacturing Economy?

The Colorado manufacturing economy is diverse. There are nearly 6,000 manufacturers across a variety of business sectors such as electronics, energy, aerospace, biomedical and food and beverage. Some of the largest manufacturing employers in Colorado are: Lockheed Martin Space Systems (space), United Launch Alliance (space), Sierra Nevada (space), Vestas (clean energy), Anadarko (energy), Ball Corp. (aerospace/space), Woodward (energy/aerospace), Gates Corp. (power transmission) and CoorsTek (engineered ceramics).

Places to Visit in the Denver Area:

Red Rocks Amphitheatre is a rock structure near Morrison, Colorado, 10 miles west of Denver, where concerts are given in the open-air amphitheater. There is a large, tilted, disc-shaped rock behind the stage, a huge vertical rock angled outwards from stage right, several large outcrops angled outwards from stage left and a seating area for up to 9,525 people in-between. At its height, the amphitheater sits at 6,450 feet, and the surrounding Red Rocks Park covers 868 acres.

The Denver Mint is a branch of the United States Mint that struck its first coins on February 1, 1906. The mint is still operating and producing coins for circulation, as well as mint sets and commemorative coins. Coins produced at the Denver Mint bear a D mint mark. The Denver Mint is the single largest producer of coins in the world. They produce up to 16 billion coins a year.

The Denver Museum of Nature & Science is a municipal natural history and science museum in Denver, Colorado. It is a resource for informal science education in the Rocky Mountain region. A variety of exhibitions, programs, and activities help museum visitors learn about the natural history of Colorado, Earth, and the universe. The 716,000-square-foot building houses more than one million objects in its collections including natural history and anthropological materials, as well as archival and library resources.
WE'LL SEE YOU IN DENVER!

The Rocky Mountain Chapter welcomes the 2018 Fall Conference to Denver.

Places to Visit in the Denver area:

- The Coors Brewing Company is a regional division of the world’s third-largest brewing company, the Molson Coors Brewing Company. Coors operates a brewery in Golden, Colorado, (10 miles west of Denver) that is the largest single brewery facility in the world.

- The Denver Botanic Gardens is a public botanical garden located in the Cheesman Park neighborhood of Denver, Colorado. The 23-acre park contains a conservatory, a variety of theme gardens and a sunken amphitheater, which hosts various concerts in the summer.

- The 16th Street Mall is to Denver what Rodeo Drive is to Los Angeles. This mile-long pedestrian thoroughfare, which stretches across the southern end of the LoDo district and bypasses Larimer Square, is lined with a variety of stores, restaurants and entertainment venues.

Fun Facts about Colorado:

- The highest paved road in North America is the road to Mt. Evans. Twenty-five miles directly west of Denver, the road climbs up to 14,258 ft. above sea level.

- Colorado contains 75 percent of the land area of the U.S. with altitudes over 10,000 feet.

- The 13th step of the state capital building in Denver is exactly one mile high above sea level.

- Denver’s bright blue sky really is bluer than many other cities’. Because of Denver’s elevation, the air has less water vapor than it would at a lower altitude, making for a gorgeous sky!

- Denver brews more beer than any other city in the nation, with over 200 different beers brewed daily.

- Nederland, CO – Hosts yearly the Frozen Dead Guy Days featuring coffin races & frozen turkey bowling.

Our chapter mission:

To help members of the U.S. precision custom manufacturing industry achieve profitable growth and business success in a global economy through advocacy, networking, education programs and services.
Join Us on the Blue Carpet at the Diamond Anniversary Gala

The Grandest NTMA Event in our History

Seventy-five years is certainly something to celebrate! Of course, we are celebrating 75 years of the National Tooling and Machining Association, but what that really means is that we are celebrating YOU. We are celebrating 75 years of companies who start small and grow large. We are celebrating 75 years of companies who adapt and develop with the changes that come with time. We are celebrating 75 years of companies that recognize that we are stronger when we support each other. We are celebrating 75 years of men and women who believe that through networking, education and advocacy we are building our industry into a legacy for generations to come. We hope you’ll join us for an event worthy of this kind of dedication and commitment. Please plan to attend our Diamond Anniversary Gala—an NTMA gathering unlike any you’ve attended before.

It will be an anniversary celebration to remember on Wednesday, October 23, 2018 at the Fall Conference in Denver, Colorado.

We invite you, our guests of honor, to walk the blue carpet at this black tie optional event. As we celebrate the NTMA and you, you’ll enjoy an elegant meal and dancing to a live band.

Join us in recognizing our past chairs, as we acknowledge those who have provided great leadership through the years. Our founding delegates, those companies who have been part of NTMA from the very beginning days, will be in attendance to present service awards to the NTMA members who are making monumental impacts on the future of our industry. We’ll be awarding NTMA members with the Honor Award, William E. Hardman Award, Distinguished Service Award and LA Sommer Award. The NTMA will also proudly present the 6S Awards and announce this year’s Star Chapters, Most Improved Chapter and Chapter of the Year.

It will be an evening to recognize excellence, honor our history and inspire future success. It will be an evening to acknowledge you—and your contributions to the precision metalworking industry. Make plans to attend our Diamond Anniversary Gala and be prepared for an evening to remember.
Caitlin Andrews is a director in the Policy Resolution Group at Bracewell LLP. Through the design and implementation of comprehensive, multi-platform strategic communications campaigns, Caitlin helps individuals, companies, and associations tell their own stories better. Her work includes message development and delivery, reputation management and crisis communications. Caitlin frequently conducts seminar sessions and one-on-one trainings geared toward defining and amplifying brands in-person, in the media and online. Caitlin holds a M.A. in Communication from The Johns Hopkins University and a B.A. in Public Relations and Political Science from Marquette University.

John Guzik is a founding partner of the Franklin Partnership with over 20 years of Capitol Hill and campaign experience. Previously, John served as Chief of Staff for Ways and Means Chairman Dave Camp. He was the top legislative strategist working on tax, trade, health care, transportation and agriculture issues. John also works closely with the Senate Finance Committee on health care, tax, trade and many other issues important to his clients.

For nearly ten years, Omar Nashashibi has worked with clients, members of Congress, agency officials, public policy foundations, non-profits and media in Washington, D.C. A founding partner of The Franklin Partnership, Mr. Nashashibi works with members of Congress on behalf of his clients on a variety of issues from trade to federal funding opportunities to telecommunications.

Paul Nathanson's focus is on reputation management, message development and implementation, public policy analysis, media relations and strategic counseling services for a range of U.S. and international clients. He assists clients in formulating arguments in persuasive ways and ensures that clients' views are heard and understood by their target audiences, including Members of Congress, policymakers, the news media and the public.

Strategist, thinker, futurist, speaker, Zeihan's worldview marries the realities of geography and populations to a deep understanding of how global politics impact markets and economic trends, helping industry leaders navigate today's complex mix of geopolitical risks and opportunities. With a keen eye toward what will drive tomorrow's headlines, his irreverent approach transforms topics that are normally dense and heavy into accessible, relevant takeaways for audiences of all types.

In his career, Zeihan has ranged from working for the US State Department in Australia, to the DC think tank community, to helping develop the analytical models for Stratfor, one of the world's premier private intelligence companies. Mr. Zeihan founded his own firm — Zeihan on Geopolitics — in 2012 in order to provide a select group of clients with direct, custom analytical products.

Brandon is a serial entrepreneur and driving force behind his marketing firm goBRANDgo!, specializing in outsourced marketing services for privately held $10-100 million growth oriented companies. Brandon is a featured thought leader in numerous online and print outlets, such as Forbes, Inc. and Huffington Post. When he isn't working, he spends his time training for Ironman triathlons and motorcycling through countries around the world. Brandon lives in St. Louis with his wife Adriene, their daughter, and two dogs.

Deborah Elam has retired from her dual role at General Electric as Chief Diversity Officer, as well as President of the GE Foundation. Most recently, Deb launched Corporate Playbook, a business consulting firm in which she serves as President and CEO. The firm coaches organizations to elevate diversity, inclusion and philanthropy. Its specializations include executive development, strategic solutions, and the empowerment of women to shatter the glass ceiling.

Hear it from the Experts
We've assembled top professionals in their industries who care about the future of manufacturing to present the information you care about... here's who you'll hear from at the 2018 Fall Conference.
2008 – Moved headquarters back to Cleveland, Ohio

1983 – National Tooling and Machining Foundation (NTMF) created

1980 – Name changed to the National Tooling & Machining Association

1980

1985

1990

1995

2000

2005

2010

2015

2017

1980

1985

1990

1995

2000

2005

2010

2015

2017

Sources:
https://en.wikipedia.org/wiki/Timeline_of_United_States_history_(1990%E2%80%93present)
BACHMAN MACHINE CO.
St. Louis, Missouri

Bachman Machine Company, St. Louis, Missouri is celebrating its 90th anniversary. It is proud to be one of the founding member companies of NTMA. The family-owned firm has three departments for production metal stamping, tool and die, and production machining. The company is ISO/TS 16949 and ISO 9001 certified. Three generations of the Bachman family have worked at the company with some of the fourth generation just starting. A crew of 70 employees operates in an 83,000-sq.-ft. facility.

A subsidiary, Plastics Molding Company, provides plastic injection molding and is located next door.

The Tool & Die Design & Manufacturing department has design engineers and designs and builds dies (up to 48" x 144") and has been doing this since 1927. Industries served include: automotive, appliance, electrical construction, industrial, consumer, aerospace, defense, lawn/garden and medical. The Production Metal Stamping department has extensive expertise and a wide range of presses. It is committed to quality and has annual DPM’s comfortably in the world-class range. It can handle ferrous and non-ferrous metals, and simple to complex metal stampings (including deep-draw) while utilizing twelve punch presses ranging from 60 to 1000 tons.

The Production Machining department’s equipment and crew are best suited for tight tolerance, multi-sided work pieces, yet stills provide machining up to 20,000 RPM and maintains extremely tight tolerance variations. Bachman Machine Company’s CNC production machining division is a full service supplier of the highest quality for low, medium, and high-volume production.

EHRHARDT ENGINEERED SOLUTIONS
Granite City, Illinois

In the modest confines of an old horse stable in downtown St. Louis, Willis Ehrhardt established the company more than 80 years ago with the vision of being the first precision tool shop west of the Mississippi River. That same progressive thinking led the business to become a founding member of the National Tooling and Machining Association (NTMA) of which it has remained for over 70 years. From 1937 to 1970, Ehrhardt built a reputation as a premium tool & die house renowned for quality & performance. Recognizing the need for continued growth & investment, Ehrhardt sold the business in 1970 to Alco Industries. Over the next 44 years, the company flourished, expanding beyond its core base of tooling to the manufacture of nuclear components and other high accuracy component parts. It was also during this period that the organization expanded into the new and burgeoning automation space, incorporating controls engineering into an already strong mechanical team. Successes followed from the supply of single work stations to complete process lines to the likes of Fortune 50 producers in various markets including HVAC, appliance and industrial. In 2014, Ehrhardt was acquired by Dunes Point Capital, poising it for continuous growth by remaining on the leading edge of technology needed to meet industry demands for automation and special machines, fully integrated solutions, dependable tooling and precision manufacturing long into the future.

The company continually works with four area technical schools and the NTMA to promote career opportunities at Bachman and in the industry.
Hobson & Motzer was founded in 1912 and has been a supporter of NTMA, which has significant Connecticut roots, from the beginning. The company has had nearly continuous service on the CTMA Board of Directors for 50 years, including four past Presidents: Alfred E. Motzer, Frank W. Dworak, Jr., the late Donald F. Zak and Bruce Dworak.

Working with the association through networking and education has helped the company gain knowledge that allowed it to chart a course of consistent growth & development for generations.

SUPERIOR DIE SET CORPORATION
Oak Creek, Wisconsin

Founded in 1923 by Kasimir Janiszewski, we are a manufacturer of die sets, mold bases, pins/bushings, three platen presses, cut-and-ground machined plate, fabrications and forging products. Still operated by the Janiszewski family – now in the 4th generation – Superior Die Set has multiple manufacturing facilities, warehouses and distribution centers with the capability to serve a global market.

Headquartered in Wisconsin, our almost 500 world-wide employees are committed to the success of our customers, industry and local communities.

Being a part of the NTMA has enhanced Superior’s own growth with capabilities now including large scale welding and machining, dual edge milling and water-jet cutting.
NTMA MEMBER CELEBRATES ITS HISTORY: RUCO PRODUCTS, INC.

Ruco Products, Inc. celebrated its 50th Anniversary this year, however, the family’s manufacturing legacy dates back over 100 years to Richard “Dick” Rupert, who started in business in 1915 at the age of 20 years old. Dick’s first company, Rupert Machine Works, was established in Kansas City, Missouri on Cleveland Boulevard and primarily produced repair and replacement parts for oil pipeline pumps.

By 1940, a new manufacturing technology in plastic resins was just emerging; Plastic Injection Molding. In 1941, Dick transitioned the die cast business into a plastic injection molding business named the Injection Molding Company. Some of the key items produced were an injection molded casing for proximity fuses that were sold to the U.S. military during WWII and also one of the first plastic squeeze bottles ever made.

After the war, in 1947, Dick changed the name of the business to Rupert Manufacturing Company and moved it to Kansas City, Missouri. The proliferation of injection molded products during the 1950s and early 1960s aided Rupert Manufacturing in growth for the next seventeen years. During this time, Dick spun off a couple of satellite businesses like the Stratolite Company which specialized in quality injection molded and assembled cigarette lighters. He, along with his son R.D “Corky” Rupert and his dedicated design team, also developed and patented one of the original designs for reflectors and lenses; reflectors making light bounce and lenses being a protective cover. The product line was named Stratolite and was immensely successful selling worldwide with “Corky” covering every state in the union with the exception of Alaska. In 1956, the company was moved to Blue Springs, Missouri where it continued to grow and prosper.

In 1965, Dick’s son, R. D. “Corky” Rupert, started his own enterprise. The Tor-Shell Company located in Blue Springs, Missouri, specialized in plastic injection molded guitar picks of all shapes and sizes. Then in July 1967, Corky along with his father, started Ruco Products, Inc.; it was incorporated and established at its current location in Blue Springs. During the 1970’s, one of Ruco’s first large customer accounts was Intec Medical, that specialized in inhalation therapy equipment and devices. Ruco and Intec grew significantly out of the mutually beneficial business relationship with Gale V. Howard (family member) being the major driver behind the relationship with Intec.

Ruco’s first “Big” machine was a Van Dorn 200 Ton. Since that day Ruco has added 15 injection molding machines and has expanded the facility 5 times. As the company grew, a full-service machine shop was established where many molds were designed, machined and assembled for production. Gale Howard, Corky’s brother in law, was instrumental as the skilled machinist and tool designer behind the success of the tool shop.

Today with 14 machines, much of the injection molding process is performed by modern, computer-controlled Arbarg’s, Van Dorn’s and Sumitomo machines. Process controls are more consistent contributing to the quality of the final product.

Brenda Rupert, President, started working full time for her father Corky in 1977. For the next 18 years, Brenda learned every aspect of the injection molding business. In 1995, Brenda took over the reins and became President of Ruco Products, Inc., and her sister, Jill Rupert Kowalki, became Secretary/Treasurer.
FOR ME, THIS ISN’T JUST A JOB. IT’S MY PASSION.

A Monette trumpet requires over 200 man-hours, and contains 150 individual parts per horn with approximately 85% of them involving some type of machining. With that much riding on a shop’s manufacturing processes, David G. Monette Corp. only entrusts their Mazaks to deliver the most technologically advanced trumpets in the world.
Northwestern PA Chapter of NTMA hosted the Manufacturing Advanced Expo on May 10 in Erie, PA with more than 180 attendees.

“The purpose of the event was to showcase the latest shop floor automation, robotics and manufacturing technology to regional manufacturers so they can see the equipment or applications first-hand and speak directly to company representatives in a smaller scale setting versus a much larger national show,” said Tami Adams, executive director of the Northwestern PA Chapter.

The expo featured 40 exhibits, including collaborative robots, machine safety and energy saving solutions, as well as concurrent education sessions that were full-to-capacity the entire day. The Northwest Industrial Resource Center (NWIRC) was a partner in hosting, and NEFF Industrial Automation Distributors was the premier sponsor and instrumental in attracting many of the exhibitors to participate with the event.

“This event gets the conversation started about technology that a manufacturing company may be thinking about or perhaps didn’t know much about, then follow-up onsite visits can be planned with representatives to review specific needs for their operation,” said John Bridgen, sales team leader for NEFF.
LA CHAPTER SEEKS NOMINATIONS

Submitted by Kaity VanAmersfort, executive director, LA Chapter NTMA

Know a great example of excellence in our industry? Why not nominate a fellow company or even yourself for the Annual LA/NTMA Manufacturer of the Year Award? Inspired by companies that stand out in this industry, the LA/NTMA created this prestigious award to celebrate companies that are excelling in processes, product development and application pertaining to precision tooling and machining in the Los Angeles Chapter. This award is given out once a year to a member of the Los Angeles Chapter of the NTMA. In 2017, Axxis Corporation was awarded.

If you are interested in nominating yourself or a fellow LA/

NTMA Member, please reach out to Kaity Van Amersfort, Chapter Executive for the LA/NTMA at info@lantma.org or 949-369-7309.

MEMBER NEWS

NTMA MEMBER CELEBRATES ITS HISTORY: DELLTRONICS

Delltronics is a family run business and NTMA has been a part of that story for many years. Delltronics was started in 1957 by Donald K Tautz. He was a graduate of Cal-Tech in Pasadena California. After spending a couple of years in the Army, Don returned to Denver to work with his father and start Delltronics. Delltronics started as a manual job shop, making parts for companies such as Binks Mfg., Coors, Kodak, Electromedics, Lockheed Martin and many other

SEE “DELLTRONICS” PAGE 31
BUILD YOUR MACHINING BUSINESS

Modern Machine Shop Top Shops Workshop is the place to build your business. The event connects the leaders in machining and metalworking – the top shops, the top suppliers, the top innovators.

REGISTER TODAY!

TopShopsEvent.com
JD Machine was founded in 1979 by J. Don Wardle, and his wife MaryAnn. It isn’t quite 75 years old, but has seen a lot of change during the past 39 years. From two employees to 175, there has been a lot of growth. The company has been through three buildings, and they are working on expanding the current building by half the size.

Matt Wardle has worked at JD since he was 12, sweeping floors and helping his parents after school. He took over for his Dad (JD/J.Don) in 1992 when the company had 12 employees and has since grown it to the current size. J. Don is now a buyer (at nearly 89 years old!) and still comes to work every day. He takes an Uber from his assisted living home, and enjoys working with his son and grandchildren.

JD Machine was built on a relationship with just one customer, but has since grown to more than 60 in a variety of industries.
GEN³SYS® XT PRO

When you need more from your tooling, get a PRO.

- Up to 40% more tool life
  with the new design for steel penetration

- Increase your penetration rates
  with the new insert technology

- Simplify your tooling selection
  with new geometry and coating combinations designed for specific materials

- Increased heat resistance
  with new AM420 coating on steel inserts

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  with new AM440 coating on cast iron inserts

Test results drilling in 4150 steel

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Call us to find the best solution for your most challenging holemaking applications.
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“Ruco” continued

With Brenda and Jill at the helm, Ruco officially became a Missouri Certified Women’s Business Enterprise (WBE) in 2014; and Ruco is proud to be the 1st WBE injection molding business in Missouri.

Brenda put her stamp on the business when she, along with her dedicated and supportive team, negotiated a deal with Teledyne/Isco out of Lincoln, Nebraska to do custom injection molding and a separate specialized manufacturing process for one of their major product lines. T/I’s business alone nearly doubled the annual sales of Ruco and for eight years was a very successful side addition to the Ruco injection molding manufacturing process.

Ruco has specialized in some everyday products that many people have used or at least seen in their life. For example, Ruco made literally millions of Sun Tea lids and produced the plastic cases for security tags in department stores that were attached to merchandise. Many products for many different industries continue to be a major part of Ruco’s business to this day. Ruco takes immense pride in establishing long term customers that are satisfied and happy with Ruco’s quality and service.

“Delltronics” continued

companies based out of Colorado and the rest of the U.S.

In the late 80s, the current owner, Patrick Bernal Jr., Don’s son-in-law, started working for Delltronics. Shortly after starting, he convinced Don that CNC machining was the future and Delltronics moved into the computer age. Pat and Pam Bernal purchased the business from Don in 2010 even though Don continued to come to the shop until his death in late 2016. Delltronics continues to be a job shop that includes CNC milling and turning, gear work and Swiss turning.

The company has been a part of the NTMA for 45 years, and both Don and Pat have been board members of the Rocky Mountain Chapter NTMA at different times. The Bernals look forward to continuing the family business with both sons working at Delltronics and being a part of the NTMA for the next 45 years!
Mark Your Calendars Now!

Save the date for the 75th Anniversary NTMA Fall Conference

Join us as we celebrate our diamond anniversary and recognize the people and companies who have shaped our organization and our industry. Built on tradition and pointed towards excellence—this is an event you won’t want to miss.

We’ll see you in Denver, Colorado October 23-26, 2018.