DECEMBER 2018

THE RECORD

PUBLISHED BY THE NATIONAL TOOLING AND MACHINING ASSOCIATION

2019

S NTMA 2018:

A look at how far we've come...

A look at the year ahead.

2018

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A12019 Additive Manufacturing Workshop

January 16, 2019
DETROIT, MICHIGAN USA

CO-LOCATED WITH



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The Additive Manufacturing Workshop for Automotive

Get an exclusive look at how big automotive OEMs are integrating 3D printing into their production lines. This half day workshop, opens up the North American International Auto Show and includes access to the full NAIAS exhibit hall.

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LOOK FOR THIS SYMBOL THROUGHOUT THE ISSUE FOR STORIES RELATED TO THIS MONTH'S FEATURED TOPIC.

FEATURE

NEW NTMA SCHOLARSHIP NAMED IN HONOR OF ROGER J. SUSTAR

In celebration of NTMA's 75th Anniversary, the National Tooling & Machining Foundation is creating a named scholarship fund in honor of Roger J Sustar of Fredon Corporation. The new scholarship will benefit high school seniors that participate in the National Robotics League and are pursuing a post-secondary educational pathway toward a career in manufacturing.

Roger J. Sustar is the perfect example of the impact that one person can make by being a champion in closing the skills gap, and we are proud to name this scholarship fund in his honor. Through the Alliance for Working Together Foundation, Mr. Sustar has been a force in northeastern Ohio in building a consortium of manufacturing companies and community leaders to engage thousands of students in programs and activities that promote rewarding careers in manufacturing.

The NRL attracts smart, capable students who love to build things and solve problems. These are exactly the type of people who we hope will make up the next generation of manufacturing leaders. The Manufacturing's Next Generation Scholarship

SEE "SCHOLARSHIP" PAGE 5

NTMA

WELCOMES New Members

BOURN & KOCH. INC.

Rock River Valley Chapter Todd Wells 2500 Kishwaukee Street Rockford, IL 61104

DFF CORP

Western Massachusetts
Chapter
Bob Martel
59 Gen Creighton W Abrams Dr
Agawam, MA 01001

GIBBS DIE CASTING CORPORATION

General Laura Epley 369 Community Dr Henderson, KY 42420

MEYER ENTERPRISES

North Texas Chapter Allen Meyer 2700 Old Alton Road Denton, TX 76210

OFFI TOOL & DIE

Northwestern Pennsylvania Chapter Rick Offi 11267 Baco Rd Meadville, PA 16335

PAINTER TOOL, INC.

Pittsburgh Chapter David Painter 1173 Iris Drive North Huntingdon, PA 15642

SPECIALIZED WELDING

Pittsburgh Chapter Amy Ramer 205 Mamont Dr Export, PA 15632

NTM



CHAPTER LEADERSHIP SUMMIT 2019

January 30 - Feb 1, 2019 Nashville, TN





PRESIDENT'S UPDATE

DEAN BARTLES / NTMA PRESIDENT

I want to thank you for letting me spend the last part of your 75th anniversary year with you, what a grand adventure. This month we are going to recap what happened in 2018, and open the curtains a little on 2019.

2018 is the year of our members' voices being heard by the staff of the national office. We heard you when you said that you felt there were too many events. We eliminated some of the ancillary events and focused our time and energy on the ones you like. Our events are a living being, one that can be crafted and changed to fit your needs to deliver compelling content. We heard you when you said that you don't see or hear from national enough. Kelly LaMarca, James Mayer, and I will be extensively traveling each month in 2019, attending chapter events and touring your shops. We have worked a plan to ensure that each chapter is visited at least once during each year, and the personal communication from the membership team will fill in the months where there isn't a physical presence. Finally, we have heard that you want more defined value for your membership. I have constructed a team internally that has



begun to define the value of membership. This team will provide a value proposition as well as marketing collateral that promotes this value.

When I think of what 2019 has in store, I am reminded of a quote from Brad Paisley, the country artist. He says "Tomorrow is the first blank page of a 365 page book. Write a good one." Although there are only 258 business days in 2019, I assure you that our team is working for you 365 days. Our team is passionate. I need to remind some of them to stop working when I know they are at home with their families. We have spent a lot of time ensuring that we have the right people, in the right roles, reporting to the right managers.

In 2019, everything is designed to communicate and show the value of your membership in the NTMA. The events we

have planned are intended to excite and stimulate you, stay tuned for the calendar. The content created by the Workforce Development Team is crafted to help you attract and retain good employees in your shop. The outreach from the membership team will be at an all-time high. The business development team is negotiating with affinity partners to drive down the costs of operating your business, and bringing on new National Associates that can help drive the total cost of ownership down to make your processes more efficient. Your national staff is prepared to make 2019 and our 76th year as an association an extremely beneficial year to our members! We covet your support and your ideas and your feedback!

DEAN BARTLES / NTMA PRESIDENT





THE RECORD

OPERATIONS & EDITORIAL

Dean Bartles, President Molly West, Editor

NTMA EXECUTIVE COMMITTEE

Mark Vaughn, Chairman
Vaughn Manufacturing Co., Inc. - Nashville, TN

Mark Lashinske, Vice Chairman

Modern Industries Inc. - Phoenix, AZ

Samuel Griffith, Board Member
National Jet Company - Cumberland, Maryland

Herb Homeyer, Board Member Homeyer Precision Manufacturing – St. Louis, MO

Alan Ortner, Board Member Sirois Tool Co., Inc. – Berlin, CT

Tom Sothard, Board Member

Gillen Young, Board Member Custom Tool, Cookeville, TN

ADVERTISING INQUIRIES

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

Layout by Z Graphics dave@DaveZgraphics.com



NATIONAL TOOLING & MACHINING ASSOCIATION

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Volume 39 / No 12



FEATURE

"SCHOLARSHIP" CONTINUED

Fund in honor of Roger J. Sustar will offer NRL students a powerful reason to choose a manufacturing focused education. Your generosity will enable us to ensure that these students talented stay in the pipeline. We will award this scholarship annually. It can be used



SEE "SCHOLARSHIP" PAGE 7



WHAT ARE MEMBERS SAYING ABOUT NTMA EVENTS IN 2018?

In 2018, NTMA offered events from Florida to California. We featured topics from manufacturing excellence to sales techniques, international business to the future of our industry. We hope you had the opportunity to attend one of our signature conferences or round-tables. Here's what members like you are saying about their experiences.

"THE MOST VALUABLE ASPECT OF THE EVENT WAS THE ROUNDTABLE DISCUSSIONS-- WHERE LEARNING IS HAPPENING."

Attendee at the 2018 Big Hairy Audacious Growth Conference

"'THE 'SOCIAL MEDIA AND ITS USE' PRESENTATION BY CAITLIN ANDREWS WAS VERY INFORMATIVE AND A GREAT PRESENTATION. SHE GETS IT!"

John Lohse, Betar, 2018 Big Hairy Audacious Growth Conference





2019 NATIONAL EVENTS

MANUFACTURING AMERICA'S FUTURE

January 30th - February 1st

Chapter Leadership Summit Nashville, TN

February 20th

Top Shops Seminar (1)
Dallas, TX

March 6th - 9th

The MFG Meeting

Tucson, AZ

March 31st - April 7th

International Tech Tour Munich and Milan

April 8th - 10th

Legislative Conference Washington, D.C

April 29th - May 1st

Emerging Leaders Conference Louisville, KY

May 17th - 18th

NRL Competition California, PA

May 22nd

Top Shops Seminar (2) Phoenix, AZ

I HOCHIA

August 21st

Top Shops Seminar (3) Hartford, CT

September 16th - 21st

EM0

Hannover, Germany

October 15th - 18th

Fall Conference Austin, TX "I THOUGHT THE QUALITY OF THE SPEAKERS AND PRESENTERS AT THIS MEETING WERE VERY GOOD. NICE VARIETY OF PERSPECTIVES. ALSO ENJOYED THE SMALL GROUP WORK SESSIONS/INTERACTIVE FORMAT DURING THE HR SOLUTIONS SESSION WITH BRANDON DEMPSEY."

Andrea Wosel, C & R Manufacturing, 2018 Fall Conference

"THE MOST VALUABLE ASPECT OF THE EVENT WAS MEETING BUSINESS OWNERS AND UNDERSTANDING THEIR PAIN POINTS THAT I CAN ALSO RELATE TO."

Attendee at the 2018 Emerging Leaders Conference

"THE MOST VALUABLE ASPECT OF THE EVENT WAS HEARING OTHERS TROUBLES AND BEING ABLE TO SELF-REFLECT ON MY OWN ISSUES."

Doug Kuhn, Kuhn Tool & Die, 2018 Emerging Leaders Conference





"SCHOLARSHIP" CONTINUED

for tuition, books or lab/course fees related to attaining a technical or engineering education. Eligible students are high school seniors that currently participate in the NRL program and will be pursuing degrees in advanced manufacturing and related fields at two- and four-year colleges.

For more information about how you can contribute, please contact Bill Padnos at: 216-264-2828 or bpadnos@ntma.org.







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



Check out the Royal Quick-Grip™ Video at: colletchucks.com



10-SECOND COLLET CHANGES

PLUS....



▼ Ultra-Precision Accuracy



- Chuck and collets guaranteed to 0.0002" TIR or better
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V

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

LIMITED TIME OFFER: CHOOSE BIG KAISER & RAISE FUNDS FOR THE NRL!

SUBMITTED BY GILLIAN COMPBELL, BIG KAISER

Choose best-in-class cutting tools, tool holders and workholding products from BIG KAISER and support the National Robotics League at the same time. From November 1 to December 31, 2018, BIG KAISER will donate 2 percent of every order from an NTMA member company directly to the NRL.

"This is a way for us to support our customers and members in the NTMA, and to promote workforce development and STEM programs through the National Robotics League," explains Chris Kaiser, President/CEO of BIG KAISER.

THERE IS NO ORDER MINIMUM OR MAXIMUM, AND ONLY TWO REQUIREMENTS:

- 1. When you place your order through your local distributor, request "drop-ship from BIG KAISER."
- 2. Reference "BK-NRL" as a line item on your order so that every dollar counts toward the donation to NRI.

"We have helped many NTMA members reduce set ups and cycle times, improve part finishes, and reduce costs through longer tool life. We hope this year-end offer will encourage those who haven't tried our products yet," says Mr. Kaiser. BIG KAISER offer nine products lines of precision tooling, workholding, and tool management systems aimed at reducing both the overall process time and the cost per part.

Popular products include face mill holders, end mill holders, collet chucks, angle heads and tapping adaptors. The world-leading KAISER Boring System, high performance Sphinx Drills and Unilock Workholding systems are also available, as are CAT, BT, HSK and Capto systems.

If your machine is equipped with a BIG-PLUS spindle, remember that BIG KAISER is the official licensed provider of BIG-PLUS tool holders in North America. Don't accept any substitute "dual contact" products on your valuable machines!

View or download the latest product guide, or find your local distributor, at https://us.bigkaiser.com. Be sure to place your order before December 31, 2018 to benefit the NRL!

For more information, contact BIG KAISER, Hoffman Estates, IL at 224-770-2999, e-mail bigkaiser@us.bigkaiser.com or visit www.us.bigkaiser.com.

NTMA











GROB SYSTEMS, INC. Bluffton, Ohio, USA

www.grobgroup.com info@us.grobgroup.com

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.





SAVE THE DATE!

APRIL 2-4, 2019

See you in Cleveland!

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PRODUCTION Machining

Modern Machine Shop PF PRODUCTS FINISHING

CO-PRESENTED BY:

Heartland



Take the payments, leave the hassle.

Keep your business moving forward toward a bigger and better future with payment processing ser-vices to fit your needs.



Suite of Payment Services

Protection like no other.

Here's what confidence looks like: the most secure credit card processing method in the business backed by the most comprehensive breach warranty in the industry.

No hidden fees....ever.

All rates and fees are clearly identified on an easy-to-read statement. We never hide fees, so you know exactly what you're being priced. Now that's being transparent.

Solutions that fit like a glove.

You're unique and so are your business needs. Our locally-based Relationship Managers are experts in getting to know you, so you always get the exact services that are vital to your business.

Problems are outta here.

When you have an issue, you need immediate access to a real person who never disconnects until your questions and problems are solved. Our U.S.-based service center is awaiting your call.

Get paid faster.

Forget waiting 30-days for your mobile payments to deposit. We fund our merchants' mobile payments as if they are processing transactions in their store. We know the only thing better than making money is making money faster.

Integrate point-of-sale seamlessly.

Get the customized, versatile, comprehensive point-of-sale systems that grows with your business while also working easily with your other applications like payroll, marketing and loyalty programs.

Find those loyal to your business.

You can identify and connect with customers who will become your loyal brand base by using our cus-tomized gift card and rewards/loyalty programs. With us, you can increase repeat sales and reduce payment fees.



Contact us today to learn more Randy Pumputis - Program Director Randall.Pumputis@e-hps.com 585-622-2993





As manufacturing technologies continue to evolve, staying competitive is a constant challenge. That's what makes automation so appealing. Increased productivity, higher ROI, and decreased lead times are just a few of the benefits of automating—there are many more. At Okuma, we recognize the strategic opportunity that automation represents, which is why every Okuma machine is automation friendly. Let us help you find the solutions you need, so you can unlevel the playing field in your favor.



www.okuma.com

Okuma. Welcome to open possibilities.

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ARIZONA CNC EQUIPMENT www.arizonacnc.com

EMEC MACHINE TOOLS, INC. www.emecmt.com

HEMAQ www.hemaq.com

GOSIGER www.gosiger.com

MORRIS GROUP, INC. www.morrisgroupinc.com

HARTWIG www.hartwiginc.com

THOMAS SKINNER & SON www.thomasskinner.com

HOW TO USE A NATIONAL ASSOCIATE IN YOUR SHOP

By James Mayer, Business Development Manager, NTMA

In the last two months, we have discussed who the National Associates are and what value they receive as a National Associate Member (NAM). This month we will explore the various ways that you can engage the NAMs and utilize them in your shops to realize the value that they bring to the association. From Heidenhain, Gisbert Ledvon shared, "We can provide unbiased advice about 5-axis machining and training possibilities for operations and programmers independent to the machine brand. We also can provide educational seminars at chapter meetings keeping members who cannot make it to the big NTMA meetings up to date on technology trends." With the various areas that our NAMs can provide value, we may not always understand the best and most appropriate way to go about engaging with them.

In the software space of the NAM program, there are many providers. It's also an area many members are interested in engaging with NAMs. From machine monitoring to ERP systems, CAD/CAM software to performance management, it is the second largest segment of National Associate Members. Graham Immerman from MachineMetrics said, "The best way to engage with our company is to let us help provide you visibility to what is happening on your shop floor. We can help you build a roadmap to continuous improvement by creating a starting point and continuing to uncover opportunities to improve your business." MachineMetrics, along with other software providers that are NAMs, can bring value to you as members by helping you understand the issues that you have in your shop that you may not even realize. Many times, our members have profitable businesses, yet their machines are running at 25-30 percent of capacity. Jobs are getting out the door, so scheduling may not be an immediate concern.

As the liaison between the NAMs and you the members, it is my job to bring value to both groups. In 2019, I plan to travel and spend time with many of our members in various markets. I am currently building a process in which I can come to your shop and have a discussion with you and your management team about perceived bottlenecks in your processes, not only on the manufacturing side, but in your supply chain and office operations. From there I will engage the appropriate National Associate(s) to identify and provide solutions to help you optimize your business.

The National Associates are here to bring value to your company. Chris Kaiser of Big KAISER shared this thought with me, "We want to be a resource to members who are trying to solve problems or improve productivity in their machining operations. It doesn't cost anything to ask us for advice and take advantage of our specialized experience in tooling, workholding and tool measurement systems." The simple fact is that the National Associates may work for a workholding manufacturer, software company or heat treater, but they have experience with a multitude of issues that you come across every day, and they are more than willing to help you solve them.

If you want to discuss our National Associate Members, need contact information for them, or provide suggestions about who you would like to see as a National Associate, please do not hesitate to reach out to James Mayer: 216.264.2847 or jmayer@ntma.org.







"At Okuma, we realize that choosing the right partner and technology for a manufacturing operation is a critical decision. That's why we've made it part of our company's DNA to do more than just sell products; it is our goal to create customers for life. Our entire organization is focused on meeting customers where they are in their journey and partnering with them to create right-sized solutions for their operations both today and beyond. We do this by offering a broad product line of machine tools and systems; local, regional and global support by the best distribution network in the industry; and access to an extensive network of vetted partner technologies that integrate seamlessly into any operation. We believe that this expansive offering, coupled with the passion that we have for our customers and the industry, sets Okuma apart from other builders in the machine tool industry."

Jim King, COO of Okuma

"Siemens is honored to provide NTMA members with guidance on latest technology direction to help Job Shops improve their efficiency and productivity by reducing cost and saving time in product design and the manufacturing process. No matter if this is related to basic or advanced 5-axis machining technology, automation integration, digitalization, cyber security or energy management, contact the dedicated expert team at Siemens to specifically serve Job Shops in the US at: www. linkedin.com/in/wolfgang-neitzke."

Wolfgang Neitzke, Business Manager at Siemens

"Most Midaco customers are able to unlock untapped machining capacity with their new or existing machine tools when incorporating Midaco pallet systems. Many tasks that are currently internal processes, such as part loading and set up changeover, are currently carried while the spindle sits idle cutting into productivity and profits. That idle spindle time drastically drops when all part loading is done outside the machine tool while the machine is cutting. We are also seeing an increased need for CNC machine door automation whether a shop is adding their first collaborative robot or just trying to ease the work load on their employees. Automating the opening and closing of machine doors eliminates a redundant manual task. We are experts in this field and have a full line of Pallet Changers systems, Automatic Door Systems and Robot Access Doors. If your challenges involve increasing the productivity of a CNC, we can help."

Mike Munao, Sales Manager for Midaco Corporation

"Adding an OMAX abrasive waterjet to your machine floor increases versatility, eliminates secondary machining, and speeds up production times. With the smartest software and the most efficient pumps, OMAX machines will grow your business by leveraging the benefits of waterjet technology."

Stephen Bruner, Vice President of Marketing for OMAX

"Shoptech has over 8,000 shops across North America using an E2 product. Members looking for a shop management software package seeking help with job costing, job tracking, scheduling, and many other issues will find great value in our software E2 SHOP or E2 MFG. We would welcome a discovery call to see which product might be right for your shop and how Shoptech can help."

Derrick Lambdin, Marketing Manager at Shoptech Software

NATIONAL TOOLING & MACHINING ASSOCIATION

IMPACT REPORT 2018 facts and figures

EVENTS ACROSS THE COUNTRY& BEYOND:

OVER 655 PARTICIPANTS

- Software Bootcamp
 - Sales & Marketing Conference
 - Emerging Leaders Conference
 - Japan Tour
 - Chapter Leadership Summit
 - MFG Meeting
 - · Emerging Leaders Conference
 - Fall Conference
 - Legislative Conference
 - . National Robotics Competition





AFFINITY PROGRAMS

In NTMA's continued efforts to provide back office solutions to members, NTMA has expanded its partnership with CBIZ to provide a new 401K program designed to limit risk and fees while providing members and their employees a diverse menu of investment options.

ADVOCACY

The Franklin Partnership and the OneVoice initiative continued to be the strong voice of manufacturing in Washington, DC through advocacy for fair and transparent regulation. They provided critical information on the new tariffs imposed by the Trump administration in the spring and kept members in the know on the policy agendas of candidates across the country running up to the mid-term elections.



BENCHMARKING

Members participated in and utilized NTMA sponsored benchmarking reports to gain key insight on how to grow and manage their businesses.

OPERATING COSTS AND EXECUTIVE COMPENSATION SURVEY (OCEC)

WAGE AND FRINGE BENEFITS REPORT

BUSINESS CONDITIONS REPORT

The new interactive dashboard included in 2018 increased participation and the ways members can utilize and manipulate critical data.

WORKFORCE DEVELOPMENT

NTMA members, Chapters, educational institutions, associations and the Government access NTMA-U directly or through portals.

NTMA has trained more than 2,300 students!

More than 100 have completed the full program - 700+ hours of content.



In 2018, we began refreshing the courses to improve their production quality, and meet the needs of today's learners.

HELPING OUR MEMBERS STAY GLOBALLY COMPETITIVE:

Successful international trip to JAPAN

for the Japan Tour

Tech Tours at IMTS

connecting members to international partners





We are grateful for the continued strong leadership of:

Mark Vaughn – 2018 Chairman

To help members of the U.S. precision custom manufacturing industry achieve profitable growth and business success in a global economy through advocacy, advice, education, networking, information, programs and services.



OUR VISION:

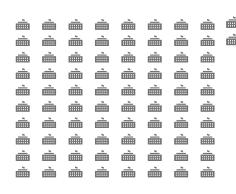
To become the premier center of industry knowledge, leading U.S. precision custom manufacturing in continuing world leadership.

NEW STAFF MEMBER:



In 2018, James Mayer was named National Account Manager at NTMA. He is responsible for identifying companies that can add value to precision manufacturers including associate member sales, sponsorships, and advertising.

James has worked in industrial distribution for the last 15 years, bringing industry experience. James is passionate about manufacturing and helping this industry thrive. He earned a BIS from Arizona State University with a focus in Business and Political Science, and an MBA from Ohio University.



82

The number of new companies that joined the NTMA in 2018. Congratulations to the Pittsburgh Chapter and San Francisco Bay Area tied for adding the most new members: 7.

Special thanks to Herb Homeyer for his 6 YEARS of service on the NTMA Executive Committee

NATIONAL ROBOTICS LEAGUE:

Engaging Manufacturing's Next Generation through Full Contact Innovation



In 2018:

74 TEAMS attended the national competition

7 DIFFERENT STATES & Puerto Rico

The NRL League includes

18 REGIONAL PROGRAMS... and 18 POTENTIAL EXPANSION LOCATIONS!!!

NEW & NOTEWORTHY

EMERGING LEADERS

The NTMA Emerging Leaders continue to grow and diversify and held two unique and engaging events:

Emerging Leaders Conference in Pittsburgh

and the

Emerging Leaders Roundtable in Nashville



April 29 - May 1, 2019

GARDNER MEDIA PARTNERSHIP

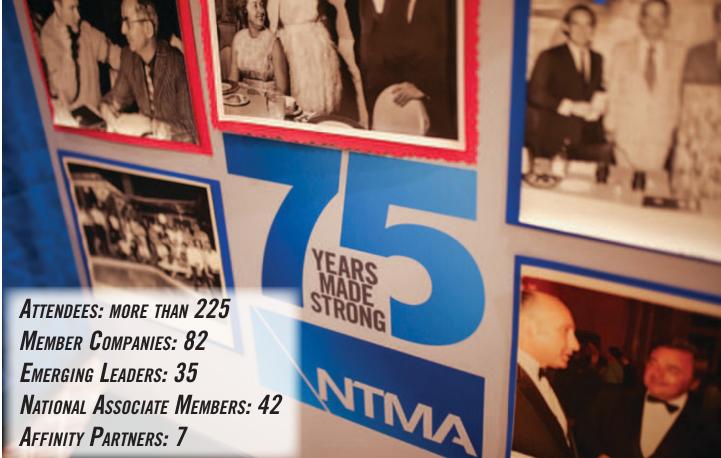
NTMA continues to grow its partnership with Gardner Media and Modern Machine Shop Magazine. NTMA and its members participated in the "How to be a Top Shop" Seminars at IMTS in September.

NTMA is planning another series of "How to be a Top Shop" seminars for 2019, running up to the Top Shop Conference in September in Cincinnati.



Fall Conference 2018: Celebr







THANK YOU!

THANK YOU to the Rocky Mountain Chapter for the warm welcome to their city and Mike Hirsh and the rest of his team at Hirsh Precision for welcoming everyone to his shop for an amazing tour











ating 75 Years in Denver, CO

75TH ANNIVERSARY: A diamond anniversary is something to celebrate... and we did!













Fall Conference 20





LIFETIME ACHIEVEMENT AWARD:







HONOR AWARD:

Herb Homeyer, Homeyer Precision Manufacturing

EMERGING LEADERS AWARD:

Strategic Partner Award - CliftonLarsonAllen

TEAM LEADERS AWARDS:

Recognizing those who have completed their terms of service

- John Belzer
- Governance & Compliance Team, 2017-2018 John Watkins
- Government Affairs Team, 2015-2018
- Gillen Young (pictured left) Manufacturing Technology Team, 2018

6S AWARDS:

- AccuRounds, Inc.
- Boston Centerless, Inc.
- Hirsh Precision Products. Inc.
- JD Machine
- Major Tool & Machine, Inc.
- Rosenberger North America (pictured right)



WILLIAM E. HARDMAN AWARD: Mr. Robert Bonura

DISTINGUISHED SERVICE AWARD:

Noel Ginsburg





CHAPTER AWARDS:

STAR CHAPERS

- 1. Akron Chapter
- 2. Arizona Chapter
- 3. Boston Chapter
- 4. Cleveland Chapter
- 5. Connecticut Chapter
- 6. Indiana Chapter
- 7. Kansas City Chapter
- 8. Los Angeles Chapter
- 9. Michiana Chapter
- 10. North Texas Chapter
- 11. Northern Utah Chapter
- 12. Northwestern Pennsylvania Chapter
- 13. Pittsburgh Chapter
- 14. Rocky Mountain Chapter
- 15. Rock River Valley Chapter
- 16. St. Louis Chapter
- 17. Tri-State Tooling & Manufacturing Association Chapte
- 18. Western Massachusetts Chapter



MOST IMPROVED CHAPTER

Arizona Chapter



18: Event Highlights

CORNHOLE TOURNAMENT: All in good fun - for a great cause: Manufacturing Education through the NRL.





Thursday evening brought Casino Night to Wynkoop Brewery to benefit the NTMA Government Affairs Administration Fund (GAAF).









Fall Conference 20°

EMERGING LEADERS SESSION:

Our Emerging Leaders are shaping tomorrow's industry today.



CHAPTER EXECUTIVE LUNCH: It was a session for brainstorming, problem solving and sharing--

NTMA chapter execs are making things happen at the local level.



BOARD OF TRUSTEES MEETING: The annual Board of Trustees meeting is always an important part of Fall Conference.





CLOSING KEYNOTE: Words of wisdom from our speaker, Deborah Elam.





18: Event Highlights

VERSARY GALA: It was a grand gala for a major milestone. The NTMA 75th Anniversary Gala welcomed guests to the blue carpet. The evening not only included all of the elegance of a ball, but also the opportunity to recognize those members who have been instrumental in making the NTMA strong.





Fall Conference 20



REGICEPTION

It was a reception and registration wrapped in one! Attendees registered for Fall Conference sessions and events while networking with all the NTMA attendees.



Fall Conference 2018: Companies

COMPANIES IN ATTENDANCE RECEIVING AWARDS FOR THEIR ANNIVERSARIES



FOUNDING DELEGATES COMPLETING 75 YEARS OF MEMBERSHIP

Bachman Machine Company St Louis, MO



Jergens, Inc. Cleveland, OH



Ehrhardt Tool & Machine, LLC Granite City, IL



Hobson & Motzer, Inc. Durham. CT



Superior Die Set Corporation Oak Creek, WI





18: Event Highlights

FIRST TIMERS RECEPTION: The NTMA greeted many members who were attending Fall Conference for the very first time — we look forward to seeing you next year! first time — we look forward to seeing you next year!







Making Noteworthy Anniversaries

Criterion Tool & Die, Inc. **Brook Park, OH** 60 Years



75 YEARS

Bachman Machine Company Ehrhardt Tool & Machine LLC Hobson & Motzer, Inc. Jergens, Inc. Superior Die Set Corporation

65 YEARS

General Tool Company West Hartford Tool & Die Company

60 YEARS

Criterion Tool & Die, Inc.

50 YEARS

A. E. Machine Works, Inc. American Tool & Die, Inc. F.H. Peterson Machine Corp. Hamilton Mold & Machine, inc. M & H Engineering Company, Inc. Right Tool & Die, Inc. Roberts Tool Company, Inc. Schaefer Technologies, Inc.

45 YEARS
Ahaus Tool & Engineering, Inc. Bra-Vor Tool & Die Co., Inc. C & S Machine & Manufacturing Corp. Complexus Medical Custom Tool & Design, Inc.

M & H Engineering Company, Inc. Danvers, MA 50 Years



Delltronics, Inc. Diemaster Tool & Mold, Inc. Five Star Tool Company, Inc. Kentucky Machine and Tool Company Layke Tool & Manufacturing, Inc. Micro Tool & Manufacturing, Inc. **RJS** Corporation Starn Tool & Manufacturing Company Superior Die Tool Machine Co. United Tool & Engineering, Inc.

40 YEARS

American Machine & Gundrilling Co., Inc. Automation Tool & Die, Inc. Cardinal Machine Company, Inc. Covent Technologies, Inc. Custom Group, Inc. Dynamic Machine & Fabrication Corp. Dysinger Incorporated Ephrata Precision Parts, Inc. Exact Tool & Die. Inc. Fairview Machine Company, Inc. Faith Tool & Manufacturing, Inc. RMI Springfield Tool & Die, Inc. Trotwood Corporation/Stryver Mfg.

35 YEARS

Allied Tool & Die. Inc.

Custom Group, Inc. Woburn, MA 40 Years



Argo Tool Corporation Farzati Manufacturing Corp. FK Instrument Co. Inc. Fox Valley Tool & Die, Inc. Fre-Mar Industries, Inc. Industrial Precision Products. Inc. McNeal Enterprises, Inc. Micro Precision Company Micro Punch and Die Co. New England Die Co., Inc. Precision Resource California Division Quality Centerless Grinding Corp. Syst-A-Matic Tool & Design Thiel Tool & Engineering Co., Inc. Van Am Tool & Engineering, Inc.

30 YEARS

Advance Manufacturing Corp. Advanced Machining Corporation Blandford Machine & Tool Co. Continental Precision, Inc. Die-Mension Corporation **DPI** Incorporated Fay & Quartermaine Machining Corp G.B.F. Enterprises, Inc. J & F Machine Inc. **Lampin Corporation** Littlecrest Machine Shop, Inc. Machine Incorporated Path Technologies, Inc.

Rosenberger North America Pennasauken Township, NJ 25 Years



Rochester Manufacturing Summit Machine Company Youngers & Sons Manufacturing Co., Inc.

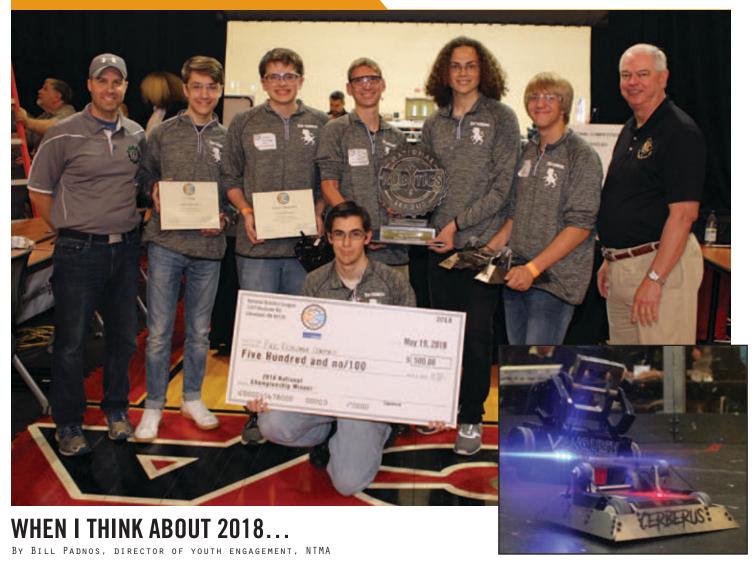
25 YEARS

Bohler-Uddeholm North America **CACO PACIFIC Corporation** Costa Machine, Inc. Dan McEachern Company Gene's Gundrilling Inc. Giordano, Inc. t/a Dial Machine Company Hi-Tech Machining & Engineering LLC Hydromat, Inc. Indiana Tool & Die Company, LLC J & J Tool Co., Inc. Jaco Engineering Jewett Machine Mfg. Co., Inc. Lewis Machine and Tool Company Markham Machine Co. Inc. Meridian Industrial Group MVO USA, Inc. National Jet Company, Inc. Nemes Machine Co. Richard's Grinding, Inc. Rockhill Machining Industries Inc. Rosenberger North America RRR Development Co., Inc. RTR Slotting & Machine, Inc. Tools, Inc. Weiss-Aug Co., Inc.





FEATURE NATIONAL TOOLING AND MACHINING ASSOCIATION



When I think about 2018, it is very easy for my mind to wander to the NRL National Competition where a record 72 teams faced off in two days of fierce competition. Never before have I witnessed the amount of carnage inside the arenas as the students engaged in full contact innovation to determine who had the best bot. At various times during the competition, we had to stop the battles to fix the damage to the arenas that the bots inflicted on them.

In the end, the team from Pine Richland High School in the Pittsburgh area won first place and the Grand Champion awards. Not only did we see the best collection of bots battle in the arena, the teams also produced the highest quality ever of their engineering documentation. We had a record number of schools with perfect or near-perfect scores on their documentation binders. The students are not just building bots to battle, but understand the importance of documenting their work and displaying the project management skills that they have learned throughout the

vear

However, I would like to focus this Year in Review article on saluting the hard work and determination of champions in Houston, Denver, Philadelphia, Sacramento and Nashville that are dedicating their valuable time to starting NRL programs in their communities. These champions have been

working to recruit schools, manufacturing companies and community leaders to join with them in engaging manufacturing's next generation. I am so proud to be able to support their efforts and look forward to seeing the fruits of the labor in spring of 2019.

I also want to recognize the companies that understand how valuable the NRL is to the future of manufacturing. Aerotek has been a force in helping to start new NRL programs throughout the country. alliantgroup has

taken the charge to lead the Houston NRL program and is sponsoring the first ever NRL Innovation Award. Mastercam is at the forefront in providing their software to the schools while Paulo is always willing to educate students about heat treating. I cannot forget the generosity of Big KAISER and their support of our program through their yearly NRL



promo along with the annual support that we receive from Grainger. In addition, I need to give a huge thank you to Tormach for their willingness to support my dream of raffling off a CNC machine to donate to a local school. Congrats to John Belzer for winning the raffle and being a hero to a local school in Southern California.

The NTMF provided us with the financial resources to continue our NRL expansion program and support local regional programs. The foundation made it possible for us to engage with manufacturing communities across the country and spread the word about the NRL program. We were also able to connect

with other manufacturing and non-profit organizations to create partnerships and provide more opportunities for youth to connect to careers in industry. The National Network granted the NRL with the necessary funds to contract with the Entertainment Technology Center at Carnegie Mellon University to create an augmented video game so middle school students could have a taste of what the NRL program is all about. Check back here next year for more information about the game.

Most of all, I want to acknowledge the hundreds of NTMA member companies that are supporting the NRL program by being

> an industry advisor, competition volunteer or serving in a leadership role. Without your direct engagement, we would not have an NRL program and students in the workforce pipeline. Steve Tamasi of Boston Centerless serves as the chairman of the NTMA Workforce Development Board. He has such a passion for the NRL program and ensuring that there is a future manufacturing workforce. Steve's drive resulted in the best and most productive strategic planning session by a board of directors that I



have ever been a part of in my 20-plus years of non-project work.

I apologize to anyone that I might have missed during this recap. There was too much to report about the NRL program and my first year as the full time Director of Youth Engagement for NTMA. I cannot wait for 2019 and all of the amazing things to come for the NRL program. Each year, this program is growing and connecting more students to careers in manufacturing. Who can't get excited about that?

NTMA

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A BANNER YEAR FOR WORKFORCE DEVELOPMENT AT THE NTMA

By Stacey Schroeder, director of workforce development, NTMA

There was a frenzy of activity this year in terms of work-force development. I am proud of so many achievements and decisions this year, and they are all thanks to you, our members! We received approval to being the much-anticipated NTMA-U Refresh project – starting with the Basic Math course in Series 1. We launched a pre-apprenticeship program, with new hands-on activities. We deepened our partnership with NCATC, the Center for America, and many other groups that focus on growing our future workforce. I also had the opportunity to visit member shops and educational institutions around the country, to see innovative practices and meet engaged leaders first-hand.

The NTMA-U Refresh project is a big deal. The NTMA-U program spans the core competencies for machining and tool and die occupations, and is over 700 hours of content. Building the program was a labor of love earlier this decade, with input, feedback and guidance from members around the country. As you know, technology,

processes and needs never stop changing. So, it was time to start re-investing in NTMA-U to improve its production quality. The Basic Math course covers arithmetic, fractions, decimals, conversions, geometry and trigonometry. The Education Team provided invaluable feedback on new narrator choices, new course layouts and templates and the alpha versions of

the new programmed sections. I personally developed a 91-page storyboard for the course with updated narration and images, all with the goal of improving the clarity and quality of the course, along with clearer alignment with NIMS competencies. Our vendor, Cinécraft, is delivering on-time and on-budget. We plan to launch the new version of the Basic Math course early in 2019 through our main portal – and we'll roll it out to chapter, mem-

ber and other portals on an agreed-upon timeline. Thank you to everyone involved! If you'd like to contribute towards the funds required for the next courses, please contact me at sschroeder@ntma.org.

The pre-apprenticeship program is incredibly popular already! This program was developed in large part by Scott Covert, the Training Coordinator at Penn United Technologies, Inc. and our Education Team leader. It includes access to five NTMA-U courses – basic math, basic

blueprint reading, precision machining technology, quality / SPC / inspection and a new mini-CNC course. It also includes all the relevant textbook pages and new hands-on activities using blueprint blocks and a piece designed for precision measuring exercises. The package comes with either the prints to machine or 3D print the components, or the physical parts themselves. We also are working with Grainger, our main affinity program partner to provide a 3-piece kit for students – a fractional and decimal scale, calipers and a micrometer, at an affordable price. Five GoToMeetings were held in November to introduce the program, and you can contact me for information at any time! This program is designed to be used

at companies and at schools to introduce people of all ages to our amazing industries – and start them on a great path towards a career with great pay and exciting opportunities.

We also presented at the 30th annual NCATC conference to a group of educators in the community college / technical college sector about the NRL program, NTMA-U courses and our new initiatives. We led workforce development business

solutions sessions at the Fall Conference that were extremely well-received, along with an IGNITE! Session on team engagement, and more. We had 20 people attend our Education Team meeting live in Denver – they got to preview the basic math course refresh, and get their hands on the parts that go along with

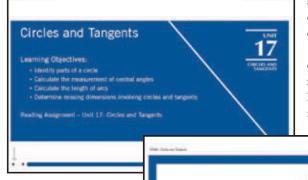
the pre-apprenticeship program. I also got the opportunity to visit shops from Ohio to Pennsylvania to Colorado and more – and I have shared, and will continue to share best practices with all of you.

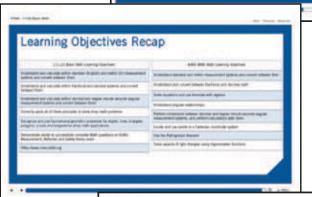
I am so thankful for you – our engaged, thoughtful and persistent members! You understand that manufacturing is the growth engine of the US economy, and you're working with your local schools, community

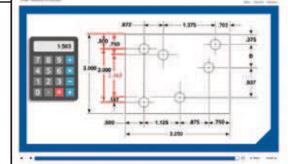
organizations, chapters and your national NTMA team to drive the right programs and awareness about our amazing industries!

Thank you for a great 2018 – and I can't wait to see what 2019 brings.

NTMA







CHAPTER NEWS NATIONAL TOOLING AND MACHINING ASSOCIATION

NW PA CHAPTER APPRENTICES

SUBMITTED BY TAMI ADAMS, CHAPTER EXECUTIVE, NORTHWESTERN PENNSYLVANIA CHAPTER



In celebration of National Apprenticeship Week in November, the Northwestern

Pennsylvania Chapter recognized member companies who have active apprenticeship programs. Their dedication to training paves the way for the future of our trade!

The **NWPA** Chapter Group Apprenticeship Program* has grown from four to 15 in 2018 with 13 tool maker apprentices and two CNC machinist apprentices. The NWPA Chapter NTMA Group Apprenticeship Program includes tool maker (die or mold) or machinist (CNC) apprenticeships. The Programs were approved by the Pennsylvania Apprenticeship and Training Council in September 2016. This allows the NWPA Chapter to serve as the sponsor for the program and liaison to the state. Member companies may sign an Employer Acceptance Agreement committing to employ the apprentice and provide the on the job training requirements.

Partners in the NWPA Chapter Program include: Coinco Inc., Custom Tool & Design Inc., Marlan Tool, Inc., Shorts Tool & Manufacturing Inc., CK

Tool & Die, Inc., Offi Tool & Die, Starn Tool & Manufacturing Company, NuTec Tooling Systems, Leech Industries, Inc., Area Tool and Manufacturing Inc. Many thanks to these companies as well as all member companies who have maintained their own apprenticeship and training programs. We appreciate your devotion to actively building our future workforce.

A special thank you also goes out to members of the

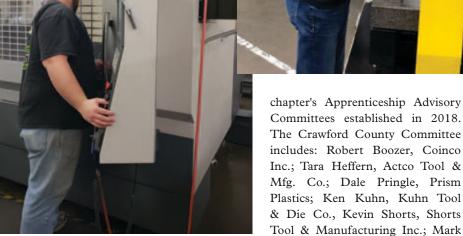


Shelby Anthony (above) and Trent Zolna (left) at Starn Tool & **Manufacturing**

Sippy, Highpoint Tool & Machine; Chip Kelyman, Maloney Tool & Plastics; Randy Jones, Marlan Tool, Robbie Riordan, Inc.; Greenleaf Corporation; and Greg Wasko, Starn Tool & Manufacturing Company. The Erie County Committee includes Bruce Valentine, CK Tool & Die, Inc.; Ryan Katen, Micro Mold Company Inc.; Mallory, Custom Tim Tool & Design, Inc.; Ed Lerch, Reddog Industries; Harold Haibach, PHB Corporation; and Chris Schreck, Samtec Tool

For more information about the NWPA Chapter Group Apprenticeship Program, please contact Tami Adams at tadams@nwpa-ntma.com or (814)720-0094.

Ethan Bates, Area Tool & Manufacturing Inc.



NTMA

THE RECORD



The Board of Trustees, Executive Committee,
and staff of the National Tooling and
Machining Association would like to wish you
and yours a wonderful holiday season.

We thank you for your membership as well as your contributions of time and talent in 2018.

Our gift to you in the new year: a renewed commitment to serving our members and building strong businesses and a strong industry - together.