2019 NATIONAL EVENTS

For more information visit: www.ntma.org/upcoming-events

BACK BY POPULAR DEMAND: TOP SHOPS SEMINARS
February 20 Dallas, TX | May 22 Phoenix, AZ | August 21 Hartford, CT

Tap into your company’s full potential and learn how your shop can become a Top Shop. Expand your knowledge in multiple facets of your shop. Topics will focus on Shop Floor Management, Shop Technology, Human Resources and Financial Analytics.

CHAPTER LEADERSHIP SUMMIT
January 30 - February 1 Nashville, TN

Connect, Learn, Lead. Chapter Leadership Summit is all about maximizing your NTMA membership at the local level. Learn ways to engage your chapter and build your regional coalition for stronger companies and a stronger industry.

THE MFG MEETING
March 6 - 9 Tucson, AZ

NTMA partners with the Association for Manufacturing Technology (AMT) for this interactive 4-day discussion of technological advances, innovative strategies and real-life case studies. It’s the perfect platform for manufacturers to gain and share industry knowledge.

EUROPEAN TECH TOUR
March 31 - April 6 Munich to Milan

Take this opportunity to learn and observe global best practices that can be applied in your own company. We’ve scheduled strategic stops and tours to highlight some of Europe’s most successful manufacturing companies.

LEGISLATIVE CONFERENCE
April 8 - 10 Washington, D.C.

There’s power in our collective voice. Join NTMA member companies from across the country as we converge in Washington to meet with legislators and policy makers.

EMERGING LEADERS CONFERENCE
April 29 - May 1 Louisville, KY

To insure the future successes of our businesses and our industry, we have to build the future today. NTMA gathers the best and brightest up-and-coming industry leaders to network, share knowledge and brainstorm about tomorrow’s manufacturing industry.

NATIONAL ROBOTICS LEAGUE COMPETITION
May 17 - 18 California, PA

Crunching metal, flying sparks-- it’s a gladiator-style competition between robots designed and built by students. Come witness tomorrow’s workforce in action today. It’s a battle of epic proportions that truly is a win for both students and industry.

FALL CONFERENCE
October 15 - 18 Austin, TX

NTMA’s signature event is not to be missed! Our annual conference pulls together all that is great about NTMA into three days packed with networking, advocacy and learning. You’ll enjoy nationally acclaimed speakers, roundtable discussions, social events and sessions designed to educate and inspire—consider it an opportunity to recharge both personally and professionally.

IN PARTNERSHIP WITH:

For more information visit: www.ntma.org/upcoming-events
NTMA NEWS

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

NTMA WELCOMES NEW MEMBERS

BENZ INCORPORATED
National Associate Member
Ms. Klaudia Sanders
1095 6th Street Ct. SE
Hickory, NC 28602

LABORATORY TESTING, INC.
National Associate Member
Mr. Brad McVaugh
2331 Topaz Drive
Hatfield, PA 19440

BEVERAGE MACHINE & FABRICATORS, INC.
Cleveland Chapter
Mr. John D. Geiger
13301 Lakewood Heights Blvd.
Cleveland, OH 44107

MARKFORGED, INC.
National Associate Member
Katherine Scarpellini
480 Pleasant Street
Watertown, MA 02472-2463

CARROLL CUSTOM MACHINING, LLC
General
Mr. George Jarrard
1029 Stone Rd
Westminster, MD 21158

R & D TOOL & ENGINEERING
Kansas City Chapter
Mr. Mike Stiles
1009 SE Browning Ave
Lees Summit, MO 64081

COMPLEX FABRICATORS, INC.
Northern Utah Chapter
Mr. Richard Ballantyne
1620 South Awl Circle
Salt Lake City, UT 84104

NTMA SAYS GOODBYE TO MANUFACTURING PIONEER, LEADER

Arthur V. Stange, age 75, of Toledo’s Shoreland Community, passed away Sunday, Jan. 6, 2019. He was born Jan. 27, 1943 in Alpena, MI, to Carl and Viola (Kingsbury) Stange. Art grew up as a “Coast Guard Kid” often moving to new cities where his father had been stationed. He graduated from Woodward High School in 1961 where he gained the nickname “Hot Rod” from his love of wrenching on and driving cars.

An accomplished tool and die maker, Art joined Abbott Tool Inc. in 1973, working alongside Bob Abbott. Together, they operated the company until Bob’s retirement. Following Bob’s retirement, longtime friend and foreman at Abbott, Leonard Livecchi became Art’s new business partner until he retired and moved to Maine in 2013. They put quite a few young men thru their apprenticeships at the shop. Some of them stayed and some of them moved on to better themselves or start their own shops.

Art enjoyed boating on Lake Erie and traveling with his wife, Dianne. Art is survived by his son, Karle (Amy Dye) Stange; brothers, Bob (Julie) Stange and Denny (Sandy) Stange; sister-in-law, Luanne (Thom) Swigart; brother-in-law, Larry Schenck; many nieces and nephews; and best friend, Jim Emerson.

He will be remembered as a generous and loving man who was dedicated to his family. Those who knew him knew if they ever needed anything they just needed to ask and he would gladly help and never ask for anything in return.

A Celebration of Life will be held in the spring.

Memorial donations may be given to the American Cancer Society or American Diabetes Association.
What a start to 2019! With the first quarter of the year ending, I think it is important to look at what occurred in the first three months of the year. At the end of January and running into the beginning of February, we held the Chapter Leadership Summit in Nashville, TN, which was one of the best attended CLS to date! We had 27 of 31 chapters represented, and those chapter leaders shared best practices with each other, and spoke with our national staff about issues the chapters would like help addressing. We also had our first of three Top Shops Seminars, this one in Dallas, TX. The feedback from our partner Modern Machines Shop was that this was the most engaged group they have seen yet. We look to build on that momentum at the Phoenix event. This month we held the MFG Meeting in Tucson, AZ with the European Tech Tour the first week in April.

With Advocacy as an NTMA pillar, it is important to explore the resources available to members, as well as understand the impact government has on the precision manufacturing industry. In this issue of The Record, we’ll cover both topics, as we will hear from The Franklin Partnership and Bracewell. I heard Omar and Caitlin speak to the group in Nashville for the Chapter Leadership Summit, and it seems that every time I hear them present, I learn something new. I hope you enjoy reading about the value that they bring to each and every one of you.

I look forward to connecting with you as I continue my travels to our chapters.

Have a great month!

Dean Bartles / NTMA President

NTMA WELCOMES NEW NATIONAL ASSOCIATE: BENZ

BENZ is a leading manufacturer and provider of live tools, right angle heads, spindles and custom tooling for machine tool technology worldwide. With a staff of more than 300 employees and representation by branch offices and trade partners worldwide BENZ strives to engineer solutions for even the most complex jobs in machining.

BENZ’s portfolio includes development and production of innovative tooling systems for lathes and machining centers used in the metal, wood and composite industry. Live tooling, static tooling, right angle heads, multi spindles, turret systems – BENZ offers a wide range of products. In order to provide customers with timely service, BENZ stocks, sells and repairs all of their tooling in the U.S. with Express Service, Rapid Repair Kits and On-site Service after the sale.
Do you have a great training program?

Are you using innovative methods to attract and maintain top talent to your shop?

We’d like to feature your company in an upcoming issue of The Record!

Please email Molly West (mwest@ntma.org) with the details of what’s working at your company and how you’re making a difference in the future of manufacturing.

One Voice will schedule meetings for all attendees, who will have the chance to meet with lawmakers and top aides to discuss how tariffs and a lack of qualified workers affect their business. The federal government plays an outsized role in manufacturing and the Legislative Conference is how we can educate our elected officials about the issues most important to our industry.

Join together to speak with One Voice, April 9-10 in Washington, D.C.
There’s no doubt that decisions that are made in Washington affect us in our shops from San Bernadino, Cal. to York, Maine, but Washington, D.C. can seem a world away when manufacturers are dealing with the day-to-day of running a business. Once a year, the NTMA offers the chance for you to step out of your shop and into the nation’s capitol with the NTMA/PMA One Voice Legislative Conference. Join us April 9-10, 2019 and share your needs, ideas and concerns with your elected officials.

Intimidated by the process? Not sure where to start? One Voice makes it easy. We will schedule meetings for all attendees to meet with lawmakers and top aides to discuss things like tariffs and the struggle to find qualified candidates.

“It’s important that your voice be heard. Help influence the legislation happening at a federal level. It impacts our industry. It impacts individual business. It impacts you.”

“‘I was able to meet face-to-face with the representatives from my state. It was interesting how our industry’s needs do not change between the political parties. All politicians can embrace education and job growth regardless of other priorities. What I did take away is that to truly make an impact in their eyes, having bodies in their office is necessary. One or two people from a state has an effect, but five or six people from multiple companies will make a true impression.’”

“I highly recommend attending the Legislative Fly-In, especially as a first-time attendee! You get to experience the hustle and bustle on The Hill firsthand and have face-to-face meetings with your local legislators. The feeling of personal achievement when the bill or measure you are lobbying your congressmen/women for passes is unmatched. The hosts, NTMA’s Franklin Partnership professionals, prepare tips and guidelines and make the whole experience smooth and easy.”

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WHO: Young professionals looking to advance their careers and companies through learning, engaging and networking.

WHEN: April 29 – May 1, 2019*
*Conference starts 2pm 4/29 and ends 12pm 5/1

WHERE: Marriott Downtown Louisville
280 West Jefferson Street
Louisville, KY 40202

Room rate: $189 + tax per night
Cut-off date: Friday, April 5, 2019
Reservations: 502-627-5045

COST:
Members:
First Company Attendee: $325
Additional Company Attendees: $250
Non-members: $500

To register, contact Brittany Belko at bbelko@ntma.org or 216-264-2848
Registration deadline is Monday, April 22nd

Time Management - Brandon Dempsey, Partner
gobrandgo!

Machine Metrics Data - Eric Fogg, COO

Performance Metrics Data - Erik Skie, Principal

Advocacy & the Importance of Being Involved
- Omar Nashashibi, Founding Partner

Moderated Roundtable Discussion

Do you have a hot button issue that you want peer feedback on? Do you ever wonder how others handle a problem you are facing? If so, this is your chance to discuss those items and more with your industry peers.

Campfire Chats

Your chance to sit down in a small group setting and discuss:
- Attracting good talent to your company
- Promoting a positive and inspiring environment among employees
- Negotiation tactics
- Performance review ideas and tips
- New technologies implemented on the shop floor

Networking Night Out

Plant Tour

Welcome Reception

Plant tour always a highlight of any NTMA event, this year’s plant tour will be at Louisville Slugger!

Start your conference experience off on the right foot by mixing and mingling with other conference attendees while enjoying hors d’oeuvres and drinks.

When in Louisville, a bourbon experience is a must! Join us for an evening at Patrick O’Shea’s where you will have the chance to enjoy bourbon tasting, participate in an old-fashioned making demonstration and fill up on delicious food and drinks.
The recently completed NTMA Business Conditions Report covers the second half of 2018, a projection for the first half of 2019, and is a geographical “snapshot” of business trends and conditions in the special tooling and machining industry. This report, based on information from 70 NTMA member companies, indicates that overall business conditions during the six month period ending December 31, 2018 were Very Good to Excellent for 48 percent of respondents, down from 62 percent at the end of June 2018. Looking ahead, 58 percent are projecting that the next six months will bring a moderate-to-substantial increase in business conditions. The greatest optimism was expressed equally by members in the Central Southwest Region (AR, LA, OK, TX, NV, CO) and New England (ME, VT, RI, NH, MA, CT) and by those serving the molds sector.

Average work week per employee decreased to 45 hours. Future work on the books decreased, as well as, to 15 weeks. Average Sales Per Employee, however, came in higher at $134,092.

Top Business Priorities have been reordered as follows:

#1: Increase Productivity (no change)
#2: Increase Sales (#3 in June)
#3: Finding Skilled Employees (#2 in June)
#4: Finding New Customers (#5 in June)
#5: Cost Reductions (#4 in June)
#6: Leadership Staffing (no change)

The full report is available to members only and can be downloaded from our website at www.ntma.org. After logging in, click on Resources>Reports>Business Conditions Report.

THE 2019 SCHOLARSHIP SEASON IS HERE!

The National Tooling and Machining Foundation is a 501(c)3 nonprofit organization designed to fund manufacturing education – building skills while increasing awareness. All contributions to the foundation are fully tax-deductible.

In 2018, the National Tooling and Machining Foundation awarded $2,500 scholarships to 17 students across the country, for a total of $42,500. This was double the amount of scholarships awarded in 2017. This $2,500 in scholarship money makes an impact for students. These scholarships can mean the difference between a student taking classes, or dropping out for a semester – or for good.

We need your help getting more qualified applicants for the Brock Babb and Edwin Vobeda Scholarships for 2019. Do you know a deserving, dedicated student in your shop, your NRL team, your community, your chapter or your family that is pursuing their post-secondary education in manufacturing or a related field?

Students who apply for either scholarship must have a letter of recommendation from an NTMA member in good standing. Please check out our website (www.ntma.org) for more information on each scholarship, as well as downloadable applications.

Please share the scholarship information below with your employees, interns, co-ops, and educators and others in your community to help connect people with financial assistance for their educational pursuits in the machining, tool and die, and other related industries.

BROCK BABB MEMORIAL SCHOLARSHIP

The Brock Babb Memorial Scholarship is an annual scholarship 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. Babb is the son of one of our longtime members Terry Babb, Apex Tool & Manufacturing, Inc. in Evansville, IN.

EDWIN VOBEDA 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.

Applications are available for download at: http://www.ntma.org/initiatives/foundation/.

Please contact Bill Padnos at bpadnos@ntma.org with any questions.
Odds are that you are reading this article sitting down. I am going to ask for you to do me a favor and stand up. Once you are up, please raise your hands as far as you can go. Now, look at your feet. Are you flat footed or on your tippy toes?

Most of all us, will be flat footed. We do not think about going on our tippy toes unless we need to reach for something that needs that little extra boost. However, the question is “Why didn’t we go all the way the first time?” What stopped us from truly reaching as high as we can the first time?

For the past three years, I have been serving as the director of youth engagement for NTMA. While my main responsibility is engaging manufacturing’s next generation through full contact innovation, I tried to learn as much as I can about all that NTMA has to offer with training and education. I have a passion for connecting our youth to careers in manufacturing because I can see all of the benefits to the students and to the industry.

Now that I am in my new role as workforce development manager, I have come to realize that I did not have a full picture of all that NTMA has to offer to its membership. I was flat-footed instead of reaching into the programs to gain a better understanding of how our members can truly access great resources and tools from the association.

I have known about the NTMA Mechanical Aptitude Test from my days at New Century Careers in Pittsburgh. Any potential enrollee in their free Manufacturing 2000 training program needed to pass the test in order to be allowed in the class. I saw the test as a requirement for enrollment, not what it really was – an opportunity for an individual to learn that they have the ability within themselves to work in manufacturing. A majority of the applicants were looking for a better life and an opportunity for a real career.

The NTMA Mechanical Aptitude Test is really a gateway for individuals to prove to themselves that they can enter the pipeline to a career in manufacturing. We need to manufacture 2.4 million new workers by 2028. Resumes show what a person has done in the past, the Mechanical Aptitude Test shows what that individual is capable of achieving. That is a power tool to find a diamond in the rough that no one has discovered before.

When I found out that I would be the new liaison to the Education Team, I took advantage of the opportunity to meet in-person with Scott Covert, the team chairman. It helps that Penn United is only about 30 minutes from my home office and that I already had a connection with Scott through my time working with the NTMA Pittsburgh Chapter. I knew about NTMA-U and had participated in a webinar to learn more about the Pre-Apprenticeship program. However, I did not have a true picture of the power of these learning tools until my visit to Penn United.

Scott and I talked about the online training programs and he talked about how flexible they are. In all my years with NTMA, no one describe NTMA-U as flexible. I knew about the convenience of taking online courses, especially if going to a community college or training center is not feasible due to your location or other responsibilities. I knew that NTMA-U is priced at a rate that is accessible to all. I never knew that the program was flexible. Scott showed me how he uses Penn United’s NTMA-U portal to select the lessons within the courses that best suit the training needs of the specific employee. He dived into NTMA-U and created training plans for multiple disciplines.

I had no idea about the power that NTMA-U provides to each member company. You have the flexibility to select the actual lessons that you want for your employees to learn more about. They do not need to sit through an entire course if it does not fit your needs. Take a closer look at NTMA-U and see how it supports the training and educational needs of all of your employees.

I really look forward to next month when I will share the whole story about my time at Penn United and meeting with the Butler High School students enrolled in the NTMA Pre-Apprenticeship program. These nine students came to being in the program from different backgrounds. A couple of them are in the program because they are on the school’s NRL team and others came because they have family members working in the industry. The rest of the students were looking for a better future. One girl from an economically disadvantaged family knew that she was not able to afford to go to college.

SEE "WORKFORCE DEVELOPMENT" NEXT PAGE
She just wanted to graduate high school with as little effort as possible and then assume her role working at Target. Her superintendent saw her just sitting outside in the hallway instead of being in class and directed her to look into Penn United’s Pre-Apprenticeship program at the school. Because of that push, a girl who thought her future was a dead-end job wearing red and khaki each day, instead became a potential employee at Penn United. She is now excited about being in the Pre-Apprenticeship program and the grades in all of her classes have improved.

Please join me over the next year in really reaching for sky to learn more about what NTMA has to offer when it comes to workforce development. Finding new skilled workers and training incumbent ones is the number one issue facing our membership and the entire industry. We are very fortunate that NTMA has the tools and resources available to support these efforts, we just need to do a better job of understanding what they really can do to ensure the future of our industry.

Make 2019 the year you optimize quality, throughput, and profits!
Royal’s broad range of precision workholding, automation, and mist control products are designed to help manufacturers squeeze every last drop of performance out of their CNC machine tools. Don’t leave your hard-earned money on the table – check us out today at:

www.royalproducts.com
What’s the value of a chapter? Twenty-seven chapters were represented at Chapter Leadership Summit (CLS) Jan. 30 - Feb. 1 in Nashville. The goal of CLS: showcase the power of NTMA chapters and get to the heart of what matters most at the local and national levels.

CLS kicked off with our annual awards presentation. NTMA recognizes chapters for their hard work promoting NTMA affinity and national programs. Please see the list below and help us congratulate the 2019 winners.

Peggy Hoffman was back by popular demand! Peggy gave a phenomenal presentation on “Building a Stronger Chapter.” She focused on what it takes to strengthen and build chapters by focusing on communications, events and education. She shared how engaged members translate to recruitment of new members. One of the most popular sessions is the Solutions Circle. In this activity, each chapter leader wrote down an issue their chapter is facing. Each issue gets a turn at the table for the group to help brainstorm ideas and provide advice on each problem. At the end of this session, each group left with a table of ideas and solutions!

Chapter leaders often ask, “what exactly does Franklin Partnership & Bracewell do for us besides provide an advocacy update?” Caitlin Sickles and Omar Nashashibi did a fantastic job answering that question. If your chapter wants a better understanding of the impact of tariffs, any recent or pending government regulations, social media for manufacturers, or building your brand, Franklin Partnership & the Policy Resolution Group at Bracewell (PRG) would love to visit your chapter this year!

The Connectivity Zones are always a big hit, and this year was no different. For this reason, this year there were two separate connectivity zones. The first zone focused on our affinity programs. Each group rotated around the room learning about programs and understanding how to best share them with members. The second connectivity zone led by NTMA staff highlighted training programs, youth engagement, our value proposition and finally ended with membership retention and recruitment.

True to CLS tradition, the evening team-building event was spectacular! Everyone jumped on a bus and headed downtown to the Goo Goo Cluster Factory. For those of you who don’t know what a Goo-Goo Cluster is, they are round mounds of caramel, marshmallow nougat, fresh roasted peanuts and real milk chocolate. Each team had to strategize a team name and pitch, then decide which ingredients were necessary to make their Goo Goo Cluster taste the best. As table numbers were called, each team’s leader selected three dry ingredients and their choice of caramel, marshmallow nougat or chocolate. Entries were judged on presentation and taste!

Overall, CLS was a huge success. I had the opportunity to meet new chapter leaders, heard from some amazing speakers, participated in a lot of group discussions and definitely left there feeling like I learned a great deal from everyone that attended. While my overall evaluation may be a little biased, who better to judge the success of the event, than an actual attendee?

“The 2019 Chapter Leadership Summit in Nashville was much more than I expected! The hotel was beautiful, networking was incredible, updates and conversations with NTMA staff were very helpful, team building event was so much fun, the speakers were great and I can’t wait to share everything that I learned with my local chapter! I took away so much in just two days... definitely time well spent! Looking forward to next year!!”

Angie Beavis
Chapter Executive
Western Massachusetts Chapter
CLS AWARDS

APPI Award
(Chapter with the most new members enrolled in 2018)
North Texas Chapter

PartnerShip Award
(Chapter with the highest savings)
Tennessee Chapter

Heartland Payroll Award
(Chapter with the most new members enrolled in 2018)
Los Angeles Chapter

National Robotics League Award
(Chapter with the most teams to attend the NRL Competition in 2018)
Pittsburgh Chapter

New Member Award
(Chapter with the most new members in 2018)
Pittsburgh Chapter

Grainger Sales Volume Award
(Chapter with the highest sales volume in 2018)
Western Massachusetts Chapter

Staples Award
(Chapter with the most new members enrolled in 2018)
Boston Chapter (not pictured)

Grainger Growth Award
(Chapter with the highest growth in 2018)
Pittsburgh Chapter

CLS SPONSORS & SUPPORTING CHAPTERS

NTMA NEWS
NATIONAL TOOLING AND MACHINING ASSOCIATION

Kaity Van Amersfort
Jon Kozesky
NJ Goulet III
In his 1952 book, "The Old Man and The Sea", great American novelist Earnest Hemingway wrote, "It is better to be lucky. But I would rather be exact. Then when luck comes, you are ready."

Those words, applied then to a fisherman's quest for a great catch, apply also to manufacturers' pursuit of accomplishments in business. So often, success comes down to preparedness – to the ability to see around corners and make the right decisions at the right time.

NTMA members have the support of the association and its partners and service providers to get the best information available to make smart, strategic business decisions. So, the message of this article is one that may sound strange at first: When in doubt, call Washington.

Readers of The Record probably think of the NTMA team in Washington as shoe-leather lobbyists advocating for manufacturing interests and public relations pros pitching positive industry stories. And we definitely do those things! But there are a number of additional services that NTMA members can access through your relationships with the government relations team at The Franklin Partnership and the strategic communications team at the Policy Resolution Group at Bracewell.

In all of our work, our two firms collaborate to not only translate the will of Washington to manufacturers, but also communicate the interests of manufacturers to policymakers, members of the media, and other important stakeholders. Our strategy is to bolster NTMA members across the board, making sure members' voices are heard at the start of the policymaking process and continuing to provide strategic support and feedback throughout implementation.

The truth is that keeping up with, understanding, and complying with the legislation and regulation that impact a manufacturing business can be complicated. That's especially true when you have a business to run! While we work in Washington, we understand Main Street manufacturing companies, too. So, whether NTMA members are struggling...
to answer government questionnaires, implement new OSHA workplace guidelines, or start Instagram accounts to reach new workers, NTMA’s Washington team is available to assist.

For many years, tax reform was a top priority for NTMA’s Washington team. NTMA played a leading role on the Hill and in the media advocating for the major tax cut law signed by President Trump in December 2017. This law provided certainty to NTMA members, with nearly every company seeing their taxes lowered by at least 10 percent. Now, our team continues to work on tax issues, advocating for the industry and helping members take advantage of opportunities through tax incentives, as well as economic development grants and loans.

While tax reform offered some certainty for manufacturers, the future is still far from clear. Now, we are working with NTMA to tackle the issues that pose the biggest challenges to the industry today.

One of the biggest causes for concern is the ongoing tariffs on imported steel and aluminum. Thousands of U.S. manufacturing businesses who depend on steel have already been subject to price hikes, delivery delays and the outright unavailability of steel products. NTMA is advocating for the termination of the tariffs through its leadership in the Coalition of American Metal Manufacturers and Users. In this capacity, NTMA has a strong voice on Capitol Hill and NTMA members have participated in high-profile media coverage. While we work to eliminate the tariffs, we also are helping members cope with current conditions. Visit www.metalworkingadvocate.org or ask an NTMA representative for our latest “Tariff Exposure Analysis,” a useful matrix designed to help NTMA members identify which products may be at risk and make impact mitigation plans.

Another issue of critical importance is workforce development. The annual One Voice member survey always shows the recruitment of skilled workers to be a core concern for manufacturers. NTMA strongly supported a new law signed by President Trump which significantly increases spending on job-training programs. At the same time, we are working with members right now to take action in their own communities. We provide accurate local data on industry opportunities and wages and work with members to create promotional items for everything from robotics competitions to career fairs. And, we know that recruiting that Gen-Z workforce is all about reaching them where they are – and that’s online. We offer seminar sessions on messages about manufacturing that work with younger audiences and trainings on the social media tools to make connections.

The future is bright for manufacturing. There are challenges, but NTMA members are well equipped for the road ahead. NTMA’s Washington team is eager to help members maximize their preparedness and enhance the skills and tools they bring to the many opportunities ahead.

Caitlin Sickles is a principal in the Policy Resolution Group at Bracewell LLP, the Washington, D.C.-based strategic communications firm retained by the National Tooling and Machining Association.
SAVE THE DATE!

Modern Machine Shop TOP SHOPS

2019 CONFERENCE
SEPTEMBER 9-11, 2019 | CINCINNATI, OH

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.

Gardner Business Media Metalworking Group

TopShopsEvent.com

IN PARTNERSHIP WITH:
STATE OF MANUFACTURING, THE UNION, AND WASHINGTON

By Omar Nashashibi
The Franklin Partnership, LLP

Many have often said of Washington, D.C. that it is a city surrounded by reality with the politicians and policymakers disconnected from the rest of the country. Despite the political dysfunction in the nation’s capital, manufacturers continue to prove resilient as the Institute for Supply Management’s Manufacturing PMI index registered at 56.6 percent in January 2019 (any figure over 50 percent indicates manufacturing growth).

While not good news for employers, another good indicator of expected continued growth is the struggle by manufacturers to hire qualified workers – federal government data shows 428,000 manufacturing job openings in December 2018, up from 326,000 in December 2016 and 99,000 during the worst summer months of the Great Recession in 2009. Few would doubt that the general state of manufacturing today is…strong.

The economy continues to move forward, albeit at a slower pace than in 2018, though the unemployment rate remains at historic lows under President Trump. So why with all the positive economic news, do 57 percent of Americans believe the U.S. is heading in the wrong direction, with only 35 percent saying we are on the right track? Political affiliation alone cannot account for the averaged out 22 point spread between right direction and wrong direction and one of the most respected polls, Wall Street Journal/NBC News, found a whopping 35 percent gap. The State of the Union is…clearly concerning.

As to the state of Washington, D.C., it is…broken, no explanation necessary. Any conscious American voter recognizes that the political stench emanating from the Washington swamp is clearly infecting the nation. The barriers erected to insulate Washington from reality have instead been replaced by microphones and social media accounts spreading blame and division. Politics long ago shifted from the art of “doing” to a battle of “winning,” with...
many pointing to the rise in the late 1980s of former Speaker Newt Gingrich (R-GA) fighting four decades of House Democrats mistreating Republicans who suffered in the minority.

When will the broken state of Washington, and concerning state of our union, begin to create a drag on the strong state of manufacturing? Some would argue political dysfunction in Washington has already begun to negatively affect the domestic industrial base.

The most visible disruption occurred when nine of the 15 federal cabinet Departments and Agencies shut their doors for 35 days earlier this year. Manufacturers seeking small business loans, environmental permits or exclusions from paying steel tariffs had to put their plans for production and growth on hold for over a month while politicians quibbled.

On the other hand, Washington is finally responding to the calls from manufacturers for help developing a skilled workforce. One of the few bipartisan bills signed into law by President Trump thus far increased spending on job-training programs – an effort strongly supported by NTMA. However, as proven by a recent survey of NTMA members, more than three-quarters of businesses currently have job openings, due in large part to a lack of available skilled workers.

While the new focus in Washington on training is not wholly too little too late, many manufacturers continue to turn towards automation to fill the job vacancy void. However, more automation also increases the need for skilled industrial machine technicians, where a shortage also exists. This is a case of Washington inaction causing manufacturers to react.

The greatest concern many industry observers have are the long-term consequences of tariffs on imported steel, aluminum, and other inputs. Rather than watch-imposed tariffs starting at 5 percent, but in many cases hitting 25 percent. Exports of U.S. soybeans fell 40 percent in the first part of 2019, causing alarm over whether farmers will purchase additional farm equipment for this year’s harvest or will demand for metal components and tooling fall with the demand for U.S. soybeans, and with it demand for new equipment. Brazil and others are now filling the void left by lower U.S. soybean exports due to the tariffs, which prompts the question, what are the long-term effects to the downstream industrial base supplying to agribusinesses, medical device manufacturers and others who have tariffs on their products?

Similarly, many expect U.S. automotive OEMs to internally review their long-term facility investments in the context of tariffs and the new NAFTA. The President is currently considering whether to impose a 25 percent tariff on imported vehicles and parts, an act that would increase the average price of an auto by $7,000. Wages are certainly not increasing at those levels for the typical American consumer and most agree vehicle demand has likely reached its peak. The new NAFTA, combined with tariffs on imports, provide a significant incentive for OEMs to relocate or to plan further expansion in Mexico and other regions of the world, sending a ripple effect throughout Tier II and III supply chains.

If the current states of manufacturing, the union, and Washington are strong, concerning, and broken, respectively, then the cumulative effect is confusion and uncertainty. Manufacturers thrive on certainty. The major tax cut law signed by President Trump in December 2017 provided certainty to NTMA members by lowering taxes by at least 10 percent for virtually every company, and in many cases even more. However, with one hand Washington gave predictability, but with the other is now delivering uncertainty for the future heading into a divisive 2020 White House campaign already underway.

Omar Nashashibi is a founding partner at The Franklin Partnership, LLP, a bi-partisan government relations firm retained by the National Tooling and Machining Association in Washington, D.C.
Penn United Technologies has been a member of the NTMA’s Pittsburgh Chapter for decades and has been a leader in the chapter when it comes to government affairs. As many may remember, for years Dave Frengel of Penn United led the charge as the Pittsburgh Chapter’s director of government affairs. Dave actually had an office and apartment in Washington, D.C. and was very involved in helping to establish policies for the manufacturing industry. While there, he served on the President’s Manufacturing Advisory Council. Dave retired a few years ago, and Bill Jones, CEO of Penn United, is a representative on the Coalition for a Prosperous America (CPA) board. Bill has continued Dave’s leadership role in this association and has been very instrumental in some of the new policies for manufacturers throughout our industry.

Bill Jones was invited by his congressman, Glen Thompson, to join him at the President’s recent State of the Union address. Bill was truly moved by the gravitas and grandeur of the event.
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WEBER COUNTY YOUTH BUILD A PRECISELY BRIGHT FUTURE

Precision Machining – Highly Valued and Compensated

Submitted by Brett Holmes, LeanWerks

Three Weber County, Utah high school seniors took top honors for precision machining at the annual SkillsUSA challenge held at the Ogden Weber Technical College (OWTC) on Jan. 29, 2019. The competition is a four-hour challenge that includes a written exam and building two precision parts, one on a lathe and one a mill. Aaron Pluim (first place), Madison Meaney (second place), and Luis Prado (third place) showcased skills and knowledge that not only got them on the podium, but also earned them job offers on the spot.

Meaney is currently a home-schooled high school senior who has completed her Machining I certificate at the OWTC and is well on her way to completing her...
Some commodities have an added layer of mystery (and math) when it comes to their class: the density of the overall shipment. Let's sharpen some pencils and get down with density-based freight classifications.

**WHAT IS DENSITY?**

First things first, density is a method of measurement that relates the weight of your shipment to its dimensions, or pound per cubic foot. Typically, the higher the density, the lower the classification and vice versa. A good example of a high-density shipment would be a pallet of bricks. Lower density shipments, or those that take up lots of space but are lightweight, are items such as ping-pong balls.

**WHY ARE SOME SHIPMENTS DENSITY-BASED AND WHAT ARE THEY?**

Commodities that are solid, heavy, and take up minimal space are very desirable to pretty much any freight carrier. Using density as a factor in determining freight class and pricing is becoming the new standard, especially as freight demand increases and capacity decreases. Thanks to variables such as a shortage of drivers and strict trucking legislation, carriers are trying to weed out difficult or unprofitable shipments in order to make space for more standardized loads. Time and effort are money in this industry, and carriers are taking control of who they want to ship for.

**HOW DO YOU CALCULATE THE DENSITY OF A SHIPMENT?**

Density is calculated by measuring the height, width, and the depth of the shipment, including skids and packaging. This is multiplied to determine cubic inches. If you have multiple pieces, multiply for each piece and add them together. Then, divide the total cubic inches by 1,728, or the total cubic inches in a foot. The result is the total cubic feet of the shipment's pieces. Divide the weight (in lbs.) of the shipment by the total cubic feet. The result is pounds per cubic foot, or density.

**WHAT IS MY FREIGHT CLASS?**

To help you better understand density-based shipments, we will look at a shipment of steel machinery parts, in a crate measuring 42 x 46 x 42 inches and weighing 500 lbs. By using the search function in ClassIT for "machinery parts", we can see a broad grouping for 114000, or the Machinery Group:

Through this group, we are directed through sub-articles, where we can find the 133300 group "Machinery or Machines, NOI, or Machinery or Machine Parts, NOI". From there, we can view associated subgroups that refer to density and packaging:

You may also notice the "NOI" designation for this particular breakdown. "NOI" refers to "not otherwise indicated" and was implemented by the NMFTA for commodities that do not easily fit into existing classifications. Using NOI can be risky, since most products do have a specific freight class. Since "NOI" designations tend to draw attention from carrier inspection teams, it’s critical that they are used properly, and that means density must be calculated to determine the subgroup.

In this example, and using the formula listed above, we can determine density using its dimensions and weight:

1. Multiply the length, width, and height (42 x 46 x42) to get the total cubic inches (81,444).
2. Divide the total cubic inches by 1,728 to get the total cubic feet (47).
3. Divide the weight of the shipment (500 lbs.) by the total cubic feet (47). This will give you a density of 10.65.

SEE "DENSITY" NEXT PAGE
"DENSITY" CONTINUED

Looking at the chart, we see that because of our crated packaging type, the top 4 subgroups are applicable. 10.65 falls under the subgroup 3, or class 92.5. In this class example, it is important that dimensions and weight are accurately measured in order to calculate the true density (and appropriate class) for the shipment. It’s also crucial to note once more that packaging makes a huge impact. See how high the classes jump if the product is palletized or in packages other than secure crates or boxes.

Density plays a huge part in helping shippers and carriers determine an appropriate freight class and final shipment pricing. Thanks to the ongoing carrier capacity crunch, tighter restrictions on the trucking industry, and higher small package rates, LTL services are in higher demand than ever before. National freight carriers are in the driver’s seat, and doing what they can to limit troublesome shipments – including those with a low density and high freight class. Knowing just where your shipment falls relative to class and density is one way to take control back of your freight spend.

The freight specialists at PartnerShip can guide the way so you aren’t stuck staring at your calculator, and a high freight bill. Call 800-599-2902 to speak with a representative, or get a quote today.

"YOUTH" CONTINUED

Machining II certificate. “I want to become an engineer and work as a machinist while I earn my degree,” Madison said. With Utah’s unemployment rate at 3.1 percent, and more than 100 unfilled machinists job openings in Utah just on Indeed.com, that shouldn’t be a problem for Madison.

Aaron Pluim is a senior at Ogden High School and Luis Prado is a senior at Freemont High. They, along with Madison and two other competitors in the SkillsUSA precision machining challenge were offered jobs at LeanWerks immediately following the competition. “These kids have an extremely bright future and LeanWerks would love to be a part of that, whether they want to make a career of machining, engineering, or manufacturing support operations like purchasing or sales,” said Reid Leland, president of LeanWerks.

Bret Holmes, coordinator of the machining program at OWTC, not only teaches precision machining to his students, but constantly works to recruit new prospects to the program to meet an ever growing demand for machinists from local employers. “I have kids and adults who get started in the program and never finish because they get a good job, often times within weeks of starting the program, Holmes said. It’s better if they finish and get their certificate, but that just shows you how great the demand is for machinists”.

“Machining is an honorable trade with a proud tradition in American history as the tradecraft that makes the most critical and precise parts for our country’s industrial and technological progress,” explained Leland. “Becoming a machinist not only allows a person to be fulfilled in this meaningful tradition, but also to earn a great wage”.

NTMA reports indicate machinists wages range from an average of $14.50 per hour for first-year machinists to as high as $80 per hour of those at the highest levels of programming and die making.

Aaron, Madison, and Luis have won their trophies, but more importantly, they have created a future full of opportunity and great potential.

LeanWerks is a precision manufacturing and engineering company in Ogden, Utah providing critical components and assemblies to aerospace, defense, and energy markets throughout the United States and internationally.
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