

THE RECORD

Published by the National Tooling and Machining Association

INSIDE THIS ISSUE

MachineMetrics - Shop Floor
Communication Redefined - pp 10-11

The Unbending Strength of the R&D
Tax Credit for the Metalwork
Manufacturing Industry - pp 12-13

and so much more...

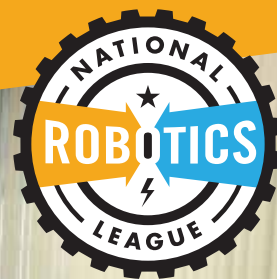
THE BENEFITS OF MEMBERSHIP



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All proceeds to benefit the National Robotics League, NTMA's job-driven, project-based STEM learning experience to close the skills gap and promote pathways to careers in manufacturing.

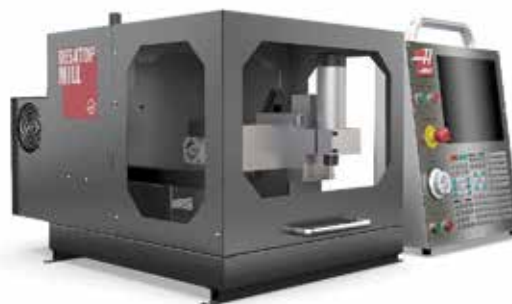
Seed the Future of Manufacturing at Your Local School
Raffle entries closed on December 16, 2019 at 11:00 p.m. EST

Ticket Prices: \$100 for 1 / \$250 for 3

Purchase tickets at <https://tinyurl.com/Raffle-NRL19>



Markforged Mark Two Desktop Carbon Fiber 3D Printer



Haas Desktop Mill with Haas G-code Control



Table of Contents

Presidents Update	4
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IN THE NEWS

Pilot Precision Products Opens New, World-class Facility	6
New Opportunities Spurred by Economic Slowdown	8
How important is Improving Your Bottom Line?	9

FEATURES

MachineMetrics - Shop Floor Communication Redefined	10-11
The Unbending Strength of the R&D Tax Credit for the Metalwork Manufacturing Industry	12-13
Manufacturers' Direct-to-consumer Transformation (Part 3) — a Big Impact on Gross Margin	14
2020 Calendar of Events	15
Lean Manufacturing Comes from Smart ERP Software Use	16

CHAPTER NEWS

San Francisco NTMA Educational Foundation	16
Michiana Chapter MFG Day 2019	17

MEMBER NEWS

National Tooling and Machining Association Launches NAM Health Care to Address Member Health Coverage Needs	18
MFG Day at SMT!	20

THE RECORD

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Welcome New Members

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Upcoming NTMA & Partner Events



Chapter Leadership Summit
January 26-28, 2020
Orlando, FL



Spring Conference
March 9-11
Cleveland, OH



International Tech Tour
April 18-25
Japan



PRESIDENT'S UPDATE

What a perfect time to focus on benefits of NTMA membership! We just had the 2019 Fall Conference in Austin, Texas and I think that event does the best job of showcasing those benefits. First of all, hats off to Austin, which provided fun venues for members to visit in a very walkable downtown area. It was a great location for the event. Second, the conference was packed with content from beginning to end. The feedback I heard from members was that the entire event was on point, which is great to hear. The staff and Association leadership put a lot of time into planning the event.

But what about it is a member benefit? After all, a member still has to pay a registration fee and transportation costs to attend. Here's why: we had general sessions that touched on tariffs and Trump, evaluating your business model, manufacturing trends and the keys to success with Industry 4.0; team tracks that focused on working on your strategic plan, utilizing your data, government regulations that impact human resources and developing talent for your own company.

Then there were the Ignite Sessions where topics like zero down time, implementing digital manufacturing, digital tooling technology and addressing the shortage of skilled labor were explored.

Finally, there was networking. A lot of networking, which has been the focus of this event for the last few years because members love it! From fundraising events to just plain fun events, networking was available everywhere, including the ever popular Industry Roundtables, where members have the opportunity to address issues in their sector with their peers.

Of course as an employee of the Association, I am going to tell you the benefits available to you at the Fall Conference to get you to attend. But I recommend you take the time and talk with someone who has gone to an NTMA conference and ask them what they got out of it. After all, ROI is a huge factor for a company when looking to spend money on an association membership. I know I have asked our members over the years. And their responses for attending end with

the phrase, "I am so glad I took the time and spent the money. I have been coming for years." For most who attend, the ROI is priceless. From finding a mentor or a peer that helped them grow their business and take it to the next level, to keeping up on industry and sector trends that they can't find in an online article or trade publication. From developing a personal relationship with an industry supplier they wouldn't have had the chance to meet on their own, to learning what it takes to make their shop the best in class.

Overall, the value of an NTMA conference is truly what you make it, just like all member benefits. But it could very well be the best member benefit NTMA offers. One you cannot afford to miss!

Doug DeRose
Interim President

WHY ATTEND EVENTS?

TAKE FULL ADVANTAGE OF YOUR NTMA MEMBERSHIP

Here's why you should be attending our NTMA Events:

NETWORKING: This is our members' top reason to attend an event! Our events are a great way to meet new people and stay in touch with your peers year after year. Make a connection that impacts your company – creatively, structurally, and financially.

INVEST: Invest your time in an NTMA event and you're investing in the future of your company.

GROW YOUR BUSINESS: We have the resources and programs that are proven to make manufacturing companies successful.

LEARN and ACQUIRE NEW IDEAS: It can be difficult to keep up with all of the changes when you are busy with the day-to-day operations of running a company. Let NTMA be your source for knowledge. With educational sessions and new technologies being highlighted it's easy to stay abreast of trends in the industry.

OPTIMIZE: Let NTMA help you be as effective, productive and profitable as possible. Whether it's a nationally recognized expert in industry 4.0 or a class about 6S/LEAN, we've got you covered.

Here are what attendees are saying about our most recent event, the 2019 Annual Fall Conference:

"The networking opportunities are great, at each Fall Conference I've given my business card to at least one person that reaches out in the weeks following for an RFQ."

– NJ Goulet, United Centerless Grinding

"I thought this was the best event yet, really appreciate you and the opportunity to be a part of such a welcoming organization. We have found that there is an opportunity for us to help a lot of members, and plan to engage further."

– Bobby Mercurio, Global Shop Solutions

"I felt this conference had a very welcoming and warm feeling. It was enjoyable to visit with the members and this points out why our association is one of the best. Encouraging to see new faces and a younger crowd."

– Sam Griffith, National Jet

Pilot Precision Products Opens New, World-class Facility

Plants roots, offers precision tools in an area long known for manufacturing expertise

South Deerfield, Mass.

New England and precision component manufacturing have been synonymous since the first Industrial Revolution. Continuing the time-honored traditions of forefathers and the region, a new company has opened its doors in South Deerfield, Massachusetts, and sits poised for a revolution of its own, offering broaches and small round cutting tools from top brands in the industry. Pilot Precision Products, locally-owned and operated, is the parent company of duMONT Minute Man® Industrial Broaches and Hassay Savage broaching tools, and is the exclusive American distributor of Magafor® and GMauvaisUSATM products.

The location of the company was just as important as the depth and breadth of the product offerings, because to CEO and founder, Eric Hagopian, the two go hand-in-hand. "It was important to me to stay in Massachusetts, and particularly in Franklin County," he said. "We are strategically located among potential customers and employees. We are in close proximity to a number of aerospace, defense and medical device companies, in addition to many vocational schools, colleges and universities that are developing new talent." He furthered, "This is also an area where there are top-notch, skilled metalworking experts." Given the industries that rely on products from the family of manufacturers—aerospace, automotive, electronics and medical, to name a few—precision and dependability are necessities. "Every item we design provides the best quality and maximum value in productivity and dependable performance," said Hagopian. He furthered, "Customers often call for custom tooling.

We never shy away from that challenge and in fact, enjoy working to create a unique and highly productive solution."

Pilot Precision Products holds ISO:9001 certification, an internationally recognized Quality Management

ing Technology (AMT). All provide opportunities for professional advancement, networking and thought leadership exchanges to keep Pilot Precision Products at the forefront of the industry.

Hagopian expressed that the company's spirit and commitment to American craftsmanship remains

steadfast. "We continue to offer the superior quality, service and passion for excellence that would make our brand founders proud. We haven't forgotten our roots, but are poised and excited for growth."

About Pilot Precision Products
Pilot Precision Products is the world's largest supplier of all types of industrial broaches and small, round cutting tools from duMONT Minute Man® Industrial Broaches and Hassay Savage broaching tools, and is the exclusive American distributor of Magafor® and GMauvaisUSATM. Located in western Massachusetts, an area long known as a manufacturing hub, Pilot Precision Products balances time-honored traditions with innovative manufacturing techniques in all its products, and partners with like-minded brands.

As a result, customers can trust the best-in-class, durable and reliable products that the manufacturer couples with outstanding customer

service and fast, reliable delivery. To learn more about the company, its subsidiaries or to find a distributor, visit pilotprecision.com

System that holds the company to first-rate quality standards and gives assurance to global customers of this excellence. The company is also a member of three industry associations: The National Tooling and Machining Association (NTMA), Industrial Supply Association (ISA) and Association for Manufactur-



AFFINITY DISCOUNT PROGRAMS

Save on Your Bottomline

NTMA

AFFINITY PARTNERS

Affinity partners offer services at specially negotiated rates available only to NTMA members. As you've heard it said, membership has its privileges, **Are you maximizing yours?**



GRAINGER

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- Minimum 10% discount on all items
- Deeper discounts up to 40% on industry-related categories (lubricants, cutting tools, safety)
- Free freight on all items
- Grainger value added services – consulting, inventory management and lighting



SYNCFAB

- Gain direct access to vetted RFQs that match your capabilities from pre-qualified hardware buyers nationwide
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AVIS/BUDGET

- Up to 40% off base rentals throughout the United States on all vehicle classes
- Also applies to truck rental for moving equipment or expanding a facility
- For business or personal rentals for all of your employees



NATIONAL PURCHASING PARTNERS

- NTMA members can access business and employee discounts through National Purchasing Partners (NPP). NPP helps members reduce costs with exclusive pricing
- Members can save on many useful brands, including Unifirst, Office Depot, Priceline, Expedia, IMPAC, LegalZoom, Sherwin-Williams and more! You can even share select deals with your employees
- NPP membership is free and there is no obligation to buy



PARTNERSHIP®

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HEARTLAND

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- Integrates with Eascentral HR platform



SAFESTHIRES

- Provides criminal and civil background checks, driving records, verifications, drug testing, and other occupational health services at special rates for NTMA members only
- NTMA members will be able to take advantage of SafestHires RapidHire™ screening technology, which was developed in partnership with 500 HR and Talent Acquisition professionals to be the easiest, fastest and most accurate background checks platform for busy hiring teams



CBIZ

- In synergy with the association, CBIZ RPS has developed a comprehensive and cost effective offering for plan sponsors in the precision manufacturing industry
- Their proprietary process, helps you mitigate the risks and maximize the benefits of your 401(k) plan



APPI

- Energy contracting services to manage electricity and natural gas costs
- Available to members located in deregulated states

For more information on these programs and more, please visit www.ntma.org/member-benefits/ or call 800.248.6862

New Opportunities Spurred by Economic Slowdown

Contributed by Big Kaiser

Recent news headlines echo what manufacturers are already feeling, a noticeable slowdown over the record gains of 2018. Forecasters at a recent AMT meeting gave a macro perspective, pointing to economic uncertainty, trade wars and disruptions to the automotive and aerospace industries as factors contributing to a downward trend in U.S. manufacturing into the first half of 2020.

But the news isn't all bad for manufacturers. Despite the larger trend, different manufacturing sectors recorded growth in 2019, including the aerospace, medical and energy industries. AMT's chief knowledge officer, Pat McGibbon, reassures that orders this year will still be good, but simply smaller than last year. "The U.S. manufacturing landscape continues to grow, albeit at a slower pace. This development, in conjunction with concerns about trade policy impacts on exports, points to a decline in manufacturing technology orders in 2019 over 2018."

This general shift to slowing purchases nevertheless offers manufacturers a chance to re-think strategy and regroup. "It's great when we have the chance to tool up new machines for our customers, but when new machine purchases slow down, our focus shifts to optimization," said Chris Kaiser, CEO of BIG KAISER. "That's where our product managers and reps can really make a difference. They've pretty much seen it all — different materials, applications, and machines. They know all of the tricks and tools and accessories that can be applied to save time, improve part quality and extend tool life."

We offer several products that can help with such optimization goals. Presetters allow for higher speeds and increased precision to machining shops. Peterson Machining is a recent shop to integrate this tool—lead machinist Steve Carper says, "We always post from the presetter, so a tool is ready to go in any

machine that can accept the tool. It could run 10 different jobs and we won't touch it off again." The BIG-PLUS spindle is another tool geared toward optimization. It substantially improves the rigidity of a tool, thanks to simultaneous taper and face contact between the tool holder and machine spindle. The result is improved surface finish and accuracy and extend tool life.

Accessories should not be overlooked by shops when looking to reach their goals. The gage bar is used to regularly inspect spindle accuracy, which then extends spindle accuracy, translating into lasting superior part quality. No matter your specific optimization goals, BIG KAISER offers a variety of tools and products to help you reach them.



How important is Improving Your Bottom Line?

Contributed by Kelly LaMarca

This year, we have spent a lot of time visiting our members and chapters with the hopes of better understanding your needs and how we can better serve you. Members have been eager to share their thoughts with us as we work together to increase the value of NTMA membership and deliver the ROI that members are expecting. We have started looking at our products and services from our members' perspective and making needed improvements.

Familiarizing yourself with your member benefits is a first step. If you do not understand your member benefits and do not take advantage of at least one of them, you are not maximizing your membership. For instance, by simply using our discount purchasing programs, your membership could literally pay for itself. The average NTMA member save \$1,267 on the Grainger program alone.

Benchmarking reports may be our most under-utilized member benefit. The Executive Compensation Report, Operating Costs Report, and Wage & Fringe Benefits Report are free to members who participate in the surveys. These reports have been recently upgraded and are now delivered in an Excel® dashboard that allows you to create customized reports by selecting specific columns of data you want to benchmark against your company. These reports are vital to keeping your company competitive with other shops in your state, region and across the U.S. Successful business owners use these resources to evaluate, plan and better manage their businesses.

Members find value in different places. Some members join strictly for Networking, while others join because of our NTMA-U on-line courses. Perhaps they knew someone who is a member of NTMA and through peer-to-peer dialogue, heard some great things about NTMA and decided to join. Membership is perhaps the defining quality of nonprofit trade associations and

professional societies. It's more than just a bundle of benefits. To join the NTMA is to become a member of a community, a place to belong, where like-minded people share knowledge and work together toward goals they couldn't achieve alone.

Are you using your NTMA member benefits to the fullest? We encourage you to take a new look at how NTMA is working to help you become a world-class business owner.

BENEFITS INCLUDE:

- Networking:** Local, regional & national networking opportunities.
- Education & Training:** NTMA-U, National Apprenticeship Program, Regional Training Centers, NIMS
- Discount Programs:** Business programs, supplies & shipping
- Business Insurance**
- Membership Healthcare Plans**
- Market Research:** Business

HOW MUCH CAN YOU SAVE WITH VERICUT FORCE OPTIMIZATION?

<p>FORCE OPTIMIZATION - MACHINE SAVINGS CALCULATOR</p> <p>Hourly Machine Cost \$ (total burden)</p> <p>0 50 100</p> <p>Number of Machine Tools</p> <p><input type="text" value="5"/></p> <p>Weekly Machining Hours</p> <p><input type="text" value="80"/></p> <p>Estimated Reduction in Machining Time Reduce machining time by as much as 15-25% or more</p> <p><input type="text" value="25% (typical reported savings)"/></p> <div style="background-color: #008000; color: white; text-align: center; padding: 5px;"> ANNUAL MACHINE SAVINGS \$520,000 </div>	<p>FORCE OPTIMIZATION - CUTTER SAVINGS CALCULATOR</p> <p>Hourly Cutter Cost \$ (average cutter cost/cutter life hours e.g. \$100/1 hour)</p> <p>0 50 100</p> <p>Number of Machine Tools</p> <p><input type="text" value="5"/></p> <p>Weekly Machining Hours</p> <p><input type="text" value="80"/></p> <p>Estimated Increase in Cutter Life Extend the life of your cutters up to 100% or more</p> <p><input type="text" value="+50% increase"/></p> <div style="background-color: #008000; color: white; text-align: center; padding: 5px;"> ANNUAL CUTTER SAVINGS \$692,640 </div>
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CLIENT



Why did you choose MachineMetrics over the competition?

Mike: We looked at a couple of companies. The look and feel of MachineMetrics felt right to us—the dashboard, the app, the ease of use, the drill-down abilities. It just felt like something that we were able to adopt quicker than some of the other opportunities out there. I think the fact that it's a Massachusetts-based company was kind of cool, and the open architecture piece. If we come up with an idea and MachineMetrics implements it, then everybody wins. Likewise, if there's another customer that comes up with something, MachineMetrics just opens it up to everyone so we get to take advantage of that. That's not a philosophy of, "We're going to keep things secret." It's a sharing environment. It's for the benefit of the industry, and it's going to make us better. If it makes our competitors better, so be it, let's raise the standard of our industry. We open our doors to competitors—come on in, this is what we do. Maybe you can learn something and then you can help us out as well.

“The look and feel of MachineMetrics felt right to us—the dashboard, the app, the ease of use, the drill-down abilities. It just felt like something that we were able to adopt quicker than some of the other opportunities out there.”

MICHAEL TAMASI

President and CEO, AccuRounds



Paul and Jake, two of our Process Engineers, reviewing MachineMetric's real-time dashboards.

THE METRICS

20%

INCREASE IN OEE

6%

INCREASE IN OTD

90%

REDUCTION IN
PAST DUES

15%

REDUCTION IN
TOOLING SPEND

52%

REDUCTION IN
TURNOVER RATE

60

DAYS TO ROI

“MachineMetrics is a tool to help keep spindles running, and that’s what we’re paid to do. It’s enhanced the culture for sure. We’ve seen it. It’s allowed us to identify issues quicker and get them resolved faster.”

MICHAEL TAMASI

President and CEO, AccuRounds

www.machinemetrics.com
www.accurounds.com

The Unbending Strength of the R&D Tax Credit for the Metalwork Manufacturing Industry

By Omar Nashashibi, The Franklin Partnership, LLP — September 26, 2019

The U.S.'s fabricated metal industry is anticipating substantial growth in terms of revenue, employment and exports over the next few years. For example, the structural steel fabrication market is expecting to reach more than \$184 billion by 2026, with manufacturing being one of the market's primary sectors. Although these numbers certainly offer hope for those in the business of metal manufacturing, it also means that competition will likely increase, forcing these companies to innovate more than ever.

Luckily, this innovation comes with a substantial financial benefit called the R&D Tax Credit. This government incentive, enacted in the early 1980s to stimulate economic growth and drive domestic business, offers American businesses (and specifically American manufacturers) the chance to receive significant tax relief for what usually amounts to their daily projects.

A Powerful Tool

The incentive has helped companies in the U.S. claim roughly \$10 billion a year in federal tax savings — additional revenue that can be put right back into their business. While tax code provisions are intimidating enough to send any business person running for the hills, it's key for those working in any field of manufacturing to realize that the R&D tax credit isn't just about basic research, but also about applied research.

Simply put, the incentive rewards manufacturers who bring a new or improved product to market, as well as those who are improving the manufacturing

The credit has evolved over time for the benefit of U.S. businesses, with the most recent changes coming as a result of the passage of the Tax Cuts and Jobs Act. Businesses working in the manufacturing industry shouldn't turn a blind eye to this tax saving opportunity — particularly with this legislation expanding individual AMT relief and eliminating the corporate AMT — changes that will greatly impact the number of businesses able to benefit from this incentive. And with a host of qualifying activities, manufacturers are well positioned to reap the benefits of a stronger R&D Tax Credit year after year.

Even for those in the metalwork manufacturing industry who have already claimed the credit, revisiting the credit calculation could mean the difference of hundreds of thousands of dollars.

process itself. Companies that have made technical enhancement to any product or process that they use on a daily basis would more than likely be a good candidate for the R&D credit.

The everyday technical problem-solving that manufacturers perform to improve an existing product, the steps taken on the factory floor to solve a production issue to make that product, or even the trial-and-error performed to ensure the product meets a client's specifications are all generally what qualify these businesses for the credit.

Finding the Application

So, how valuable can the R&D Tax Credit be for a job shop or contract manufacturer? Countless production and design specializations make precision machine shops, fabricators, stampers and other metalworking companies potentially eligible for substantial tax savings. Alliantgroup has helped manufacturers in general claim more than \$2 billion in credits, and NTMA Members specifically have claimed more than \$38.8 million in credits and incentives using the firm's services. While manufacturers make up the largest portion of those already claiming the credit, due to a deep understanding of recent regulatory changes alliantgroup has consistently been successful in unearthing additional value when revisiting projects and claims for organizations already claiming the credit. Here are some examples of qualifying activities that have led companies to large returns:

- *Integrating new materials to improve product performance and manufacturing processes*
- *Achieving compliance with changing emissions laws and regulations*
- *Prototyping and three-dimensional solid modeling*
- *Streamlining manufacturing processes through automation*
- *Programming PLCs, CNCs, RTUs, DCS, PACs, CLCs, CNCs, SCADA and more*
- *Exploring new or improved material applications and testing alternative uses of steel, iron, aluminum or plastics*

Manufacturers need to simply create or improve upon an existing product or process in order to set themselves up for a return. When it comes to actually calculating the credit, which should be done by an experienced tax professional, the end result will ultimately be impacted by the supplies consumed or used during those qualifying projects and the wages of the workers performing those specific projects.

A History of Success

The key for manufacturing companies attempting to claim credits is making sure to take into account all of the activities completed during the lifecycle of the project. This includes activities involved the ideation, design, testing and production phases.

One example of alliantgroup helping a company claim the credit came when a small secondary automotive manufacturer reported expenses dealing with developing and prototyping its manufacturing process for certain automotive parts. For four years' worth of qualifying projects, this company received more than \$1 million in federal and state tax credits.

In other examples of alliantgroup helping metal manufacturers claim the benefit, a steel ring manufacturer received \$406,000 in federal credits for design improvements in its products, a manufacturer of high-tech armor defense was granted \$787,000 in federal credits and a multi-tools manufacturer was able to claim more than \$286,000 in federal credits.

Manufacturers of all shapes and sizes are turning to government incentives to put money back into their company to create and maintain a competitive edge. With numbers like these, any manufacturer should take a second look at what the R&D credit has to offer. Even if a company has already claimed the credit, revisiting the calculation of the credit is always wise. As the premier expert in the credit, alliantgroup has helped countless companies in the metalwork manufacturing world claim more than they ever thought possible thanks to alliantgroup's deep understanding of the credit.

Those businesses who haven't allowed an experienced firm like alliantgroup conduct a proper credit calculation analysis could be missing out on hundreds of thousands of dollars that could be put right back into the business, so the time to act is now.

Doing so might be the most profitable move they make — so why wait to act?

Manufacturers' Direct-to-consumer Transformation (Part 3) – a Big Impact on Gross Margin

By Harry Moser, Founder/President, Reshoring Initiative

In my last column, we saw how Sherrill Manufacturing reestablished the flatware industry in the U.S. by reshoring production from offshore. They built a successful “Made-in-America” brand, and remained price competitive with offshore rivals by selling direct to consumer (D2C). In this column we will examine how other manufacturers are winning with a D2C business model.

Direct to Consumer: a Complex Yet Attractive Transformation

Companies that are considering a D2C transformation face challenges like choosing an ecommerce technology platform, marketing to and engaging with customers and building a reliable transaction process. But for the manufacturer that is willing to invest in, and commit to, a new business model the rewards can be very attractive.

The Appealing Margins of a D2C Strategy

Manufacturers can achieve a consumer price below the retail price of low-cost country offshore products and well above their wholesale price to retailers. For example, consider a case where the offshore manufacturing cost is \$X, the wholesaler's Total Cost is \$1.4X, the retailer's wholesale price is \$1.5X and the retail price is \$3X. If the U.S. manufacturing cost is \$1.4X, the U.S. manufacturer has two choices. Sell thru retail, receiving maybe \$1.8X (an unsustainable 22% gross margin). Or, sell D2C for \$2.8X. Made-in America for less than the retail price of the imported product, and with a solid 50% margin. As companies reshore to move closer to U.S. customers for efficiency and to satisfy changing consumer expectations, D2C enables competitive pricing against imports. With growing offshore concerns and tariff uncertainty, reshoring and a D2C business model make good economic sense for many companies.

Companies That Optimized These Trends

Yeti, founded in 2005 by two brothers with a love for fishing, is a manufacturer of high-end outdoor gear. The company began with an indestructible cooler designed and manufactured with the serious outdoor enthusiast in mind. By 2011, sales were overcoming manufacturing capacity so they sold a majority of the company to Cortec Group, a firm with operational know-how and reshored some of their manufacturing to the U.S. from Asia. By moving closer to customers, they were able to gain manufacturing control and diminish the time to market.

Yeti - now listed on the NY stock exchange, was able to artfully build its “cool” brand and become a leading manufacturer of outdoor lifestyle products through its award winning digital storefront and popular outdoor lifestyle videos. Through a successful D2C strategy, Yeti is now popular with outdoor sporting enthusiasts, college students and suburbanites. Today, Yeti's Tundra coolers are manufactured in the USA at facilities in Iowa and Wisconsin as well as at a facility in the Philippines.

Made In - “smartly designed cookware specifically with the home cook in mind,” cookware, kitchen tools and cutlery are manufactured in the U.S. and France. Made In keeps consumers happy with free shipping, free returns, a 100-day return policy and a lifetime warranty. According to the founders, Made In's D2C model allows them to sell premium quality cookware at a steep discount.



Casper - a bed-in-the-box startup, had a D2C strategy built on simplicity that included just one model of bed, sold at an affordable price and delivered right to the customer's home. Designed and assembled in America, Casper hit \$100 million in sales in less than 2 years. Today, the five-year old billion-dollar mattress startup has a \$1.1 billion valuation and a growing share of the U.S. mattress market.

For manufacturers considering a D2C transformation, we propose sourcing or manufacturing locally to satisfy the shift in consumer expectations for faster delivery, quality, and customization. Use the Reshoring Initiative's free TCO (Total Cost of Ownership) Estimator to see if reshoring makes sense for your company.

Harry would love to hear from members who have helped customers reshore by producing parts or tooling previously offshore. The Reshoring Initiative would combine your stories in an article for Industry Week or similar. Not necessary to name customers. Harry.moser@reshorennow.org.

2020

NTMA CALENDAR OF EVENTS



NATIONAL TOOLING AND MACHINING ASSOCIATION

Chapter Leadership Summit

January 26-28 – Orlando, FL

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.

Legislative Conference

May 4-6 – 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.

Spring Conference

March 9-11 – Cleveland, OH

Strategize, revitalize and let NTMA equip you and your business with the tools you'll need to succeed. Join NTMA during our Spring Conference offering business development sessions, educational speakers, and our highly rated roundtable discussions and networking events – these are conferences not to miss!

NRL Competition

May 14-16 – Akron, OH

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.

International Tech Tour

April 18-25 – Japan

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 Japan's most successful manufacturing companies.

Summer Conference

June 15-17 – Phoenix, AZ

Strategize, revitalize and let NTMA equip you and your business with the tools you'll need to succeed. Join NTMA during our Summer Conference offering business development sessions, educational speakers, and our highly rated roundtable discussions and networking events – these are conferences not to miss!

Emerging Leaders Conference

April 27-29 – Kansas City, MO

To ensure 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.

Annual Fall Conference

October 27-30 – Kansas City, MO

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.

**Please Contact Kristen from our Events Team
for more information and to register:**

Kristen Hrusch khrusch@ntma.org – 216-264-2845 Or visit: www.ntma.org/upcoming-events

Lean Manufacturing Comes from Smart ERP Software Use

Global Shop Solutions

The use of enterprise resource planning software has increased significantly as organizations are uncovering the ways in which the solution can benefit their businesses. Companies involved in manufacturing can become substantially more efficient by implementing an ERP solution.

For example, a report from Quality Magazine highlighted how ERP software can help a company operating in the industrial field implement lean manufacturing practices. These businesses can better manage their inventories, improve customer service and use data to uncover inefficiencies which can lead to changes that will help a company improve operations and lower costs in the process.

However, it's important to remember that there are a number of ERP software platforms that are available on the market today. There is no one-size-fits-all fix because no two companies are alike. Implementing the wrong solution can have adverse benefits to the business. It can also lead to increased costs when it comes to uninstalling a platform and introducing another.

Still, as is true with nearly all technologies, advancements are being made to make ERP software platforms that are already good, even better. Because of this, decision-makers looking to implement ERP software into their businesses need to be aware of trends taking place within the sector to ensure that platform installed can fully meet the needs of the organizations involved.

ERP software trends that are coming in the future Abas ERP listed a number of changes that will essentially reshape enterprise resource planning software and make it more beneficial for companies. The biggest benefits will allow a company to be more agile in its processes and react to changes quickly. One of these is the introduction of mobile technology integrated into the platforms.

The website stated that within six years, mobile devices that can access the ERP software and be used to input data or make changes will become commonplace. This is largely due to the increased adoption of smartphones and tablets that are powerful enough to support this functionality.

"The more unwired we are in terms of devices the more tethered we are to the business," Cindy Jutras, president of Mint Jutras, an independent consulting firm, told Quality Magazine. "In the past people would get alerted on their mobile device. Then they would call someone to do the corrective action. People are becoming less patient. They don't want someone else to have to dig into and do the corrective action. This brings an executive user to ERP when in the past they did not touch it."

Another coming trend to ERP software platform is the ability to increase collaboration and communication within an organization and also with its customer base. Real-time information is critical when it comes to keeping consumers in the loop as well as decision-makers inside of an organization. By allowing everyone access to the same information, it makes for a better working environment and improves the relationship a company has with its customer base. Finally, ERP software platforms will be developed with ease of use in mind. Abas ERP wrote that as the workforce becomes younger, particularly within the manufacturing sector, ERP solutions will have to be simplified in such a way that new users can quickly learn how to effectively use the system, allowing the company to maintain efficient operations.

"The consumerization of IT is a real thing," Jutras told Quality Magazine. "If applications do not have ease of use and intuitive interface then people just won't use them. Even if it is a requirement of their job, they may just go somewhere else where they have better technology to use."

San Francisco NTMA Educational Foundation

The San Francisco NTMA has started an Educational Foundation to help fund manufacturing education in the Bay Area.

"We all know the skills gap exists and the Bay Area NTMA is ready to do the work to help our manufacturers continue to thrive in the coming years. This Foundation is the next logical step in our continued growth in Northern California. Donations to this Foundation will fund novice, intermediate, and advanced manufacturing & technical education at local schools and colleges. As an association, we must be promoting, advocating, and helping our member businesses."

notes President, Mike Appio.

SFBA NTMA covers the greater Bay Area in Northern California and has grown its membership by 20% this past year. Members are seeing the value that the association is providing in programming, education, & advocacy.

To get involved and to donate, contact Chapter Executive Kaity Van Amersfort for more information: info@sfbantma.org or 626-510-4085.

Submission for MFG Day 2019 Michiana Chapter

On Friday, October 4, the sixth annual South Bend Region Manufacturing Day provided nearly 800 area students from nine area high schools and SBCSC Adult Education with the opportunity to visit 36 local manufacturers, explore education and career opportunities in our community, and see how their classroom learning today is building a foundation for their future success.

The South Bend Region Manufacturing Day presenting partners are Centier Bank, Tenneco, and the National Tooling and Machining Association (NTMA) Michiana Chapter. Additional sponsors include: 1st Source Bank, AEP, FDC, Honeywell, Ivy Tech Community College, Nuway Construction, Conexus, Elkhart Plastics, Ivy Tech Community College, Purdue Polytechnic South Bend, and Tuesley Hall Konopa, LLP.

"The Chamber is excited by the growing collaboration between business and education in our region and proud to serve as a connector and leader of initiatives like Manufacturing Day," says South Bend Regional Chamber President & CEO Jeff Rea. "Engaging students and showing them the wonderful opportunities in our community to continue their education, begin a career, and make an impact helps drive growth of existing business and attraction of new ventures.

In the South Bend Region, students and educators from nine high schools and SBCSC Adult Education will learn about real career opportunities, training, and resources. The day will also support educators as they work to introduce their students to career possibilities...MFG Day 2019 planning is led locally by the South Bend Regional Chamber of Commerce, in partnership with NTMA Michiana Chapter, Ivy Tech Community College, Purdue Polytechnic South Bend, South Bend Community School Corporation, Career Academy, Mishawaka High School, Penn High School, New Prairie High School, Saint Joseph High School and SBCSC Adult Education.

THANK YOU SPONSORS

Thank you to our sponsors for supporting Manufacturing Day 2019 and the opportunity to allow students and educators to learn the truth about manufacturing and manufacturing careers, inspire a new generation of manufacturers, learn what is being made in our community, encourage entrepreneurship and inspire creativity.

PRESENTING SPONSORS



SAFETY SPONSORS



EDUCATION SPONSORS



PARTICIPATING SCHOOLS

ADAMS HIGH SCHOOL
CAREER ACADEMY

CLAY HIGH SCHOOL
MISHAWAKA HIGH SCHOOL
NEW PRAIRIE HIGH SCHOOL

PENN HIGH SCHOOL
RILEY HIGH SCHOOL
SAINT JOSEPH HIGH SCHOOL

SBCSC ADULT EDUCATION
WASHINGTON HIGH SCHOOL

The following manufacturers and educators are also assisting with planning and will host tours or be on site at Ivy Tech Community College to share their story with students:

AEP
Allied Specialty Precision
AM General LLC
B&B Molders, LLC
Bertrand Products, Inc.
Bethel University
C & S Machine
Complexus Medical
Conexus
Corteva Agriscience Pioneer
Curtis Products, Inc.
Daman Products
EDCOAT
Elkhart Plastics, Inc.

FDC
Graphic Films
General Stamping & Metalworks
Honeywell
Hoosier Racing Tire
Hubbell RACO
Imagineering Finishing Technologies
Ivy Tech
ITAMCO
The Lebermuth Company, Inc.
Lippert Components
Mack Tool & Engineering
North American Signs
Nuway Construction
Pretzels, Inc.

Purdue Polytechnic
South Bend Purity Cylinder Gases
Rieth-Riley Construction
St. Joseph Energy Center
Schafer Industries, Inc.
Sew Loved, Inc.
South Bend JATC 153 Electrical Training Alliance
South Bend Modern Molding
Speedgrip Chuck Company
Steel Warehouse
Tenneco
Tire Rack
Trine University
Yamaha Robotics

National Tooling and Machining Association Launches NAM Health Care to Address Member Health Coverage Needs

NTMA Offers Association Health Plan

National Tooling and Machining Association today announced it will offer an association health plan to its members, extending affordable health care to small and medium-sized manufacturing companies in approved states. In states where the association health plan is not available, the NTMA will connect manufacturers with available small-group options in their states.

The plan, called NAM Health Care (www.namhealth-care.com), was developed to meet the unique health care needs of manufacturers. It will offer a portfolio of health benefits options insured by UnitedHealthcare. In states where these plans are available, businesses with 2 to 99 employees will be able to choose from a variety of PPO (Preferred Provider Organization) and HSA (Health Savings Account) health plans.

Members will also have access to UnitedHealthcare's Choice Plus care provider network of more than 1.3

million physicians and care professionals, 6,000 hospitals and other care facilities nationwide. Under NAM Health Care, eligible member companies also will have access to supplemental benefits including dental, vision and life. UnitedHealthcare will work with any licensed and appointed agents who want to sell NAM Health Care.

Mercer will provide NTMA small-business members that elect Mercer as their agent of record with consulting services regarding health benefit offerings and contribution strategies, marketing support to sign up and enroll their employees, plan administration and compliance consulting services.

The Mercer Affinity 365+SM platform will provide members technology for obtaining quotes for employee benefits, facilitating enrollment and providing ongoing benefit administration to help drive cost efficiencies and employee engagement. Member employer groups

may continue to work with their current agents and consultants to obtain quotes through the NAM Health Care offering.

National Tooling and Machining Association is quoting these plans for eligible member groups for a November 1, 2019 enrollment date. To request a quote for these plans, where available, interested businesses may visit ntma.namhealth.com

NAM Health Care is an industry-based Association Health Plan (AHP) that's fully ACA-compliant, administered by Mercer and sponsored by The National Association of Manufacturers (NAM), of which NTMA is an affiliate member. Medical, Dental, Vision and Life insurance are underwritten by UnitedHealthcare®. Plans are not available to member employers in all states.

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Machine Type: 

- ☐ Machining Center
- ☐ Drill/Tap
- ☐ Boring Mill
- ☐ Milling Machine

Spindle: Milling 

Direction: V or H

of Main Spindles:

Max. HP:

Top RPM:

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MFG Day at SMT!

Contributed by SMT

In celebration of MFG DAY 2019, and as part of an industry effort to create awareness about careers in manufacturing, Tampa based company Southern Manufacturing Technologies, Inc. (SMT) opened their doors for student tours. SMT hosted approximately 350 students from 12 different Hillsborough County middle and high schools and served 158 pizzas. They learned that a career in manufacturing isn't necessarily dirty and dingy – it's high tech and often times high paying.

The students came from a variety of school programs including: STEM, aerospace technology, robotics, machine technology, welding and science. While some kids were just excited to get out of the classroom, others thought it was cool to learn we made parts that are now on Mars. When asked what percentage of jobs in our company require a college degree, the #1 answer we received was 100%. Many students were surprised that we do not require a college degree for any of our positions.

Two of our tour guides recently graduated from our apprenticeship program, one of which start working at SMT after being on a National Robotics League (NRL) team that we sponsored. In 2013, we hired our first students from our MFG Day tours and one of them is now a full-time employee that is working toward his Mechanical Engineering degree and hopes to become one of our process engineers.

After our 2018 tours, we have 2 promising full-time employees, and we hired our first 14 year old. SMT has already received five resumes from students on the 2019 tours and is interviewing students, hoping to get new employees into our manufacturing pipeline and train them through our apprenticeship program.

We hope our MFG DAY tours inspire the next generation of workforce talent to pursue a rewarding career in manufacturing.

Southern Manufacturing Technologies is a precision machine shop that primarily manufactures components and assemblies for aerospace, aircraft and defense markets.





SAVE THE DATE ORLANDO, FLORIDA

When: January 26-28, 2020
Where: Castle Hotel – Orlando, FL

SUPERCHARGE Your Machine Tools

PRECISION WORKHOLDING
for TURNING and MILLING



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2020 NTMA Membership Directory is Now Open to All Members

Reach the premier precision custom manufacturers in the U.S. and make your listings stand out from the rest. Advertising opportunities are open. Take advantage of this advance notice to secure your preferred location and lock in your discount.

For additional information, please contact:

Kelly LaMarca at 216-264-2837 or email
klamarca@ntma.org
Sandy Bailey at 216-264-2825 or email
sbailey@ntma.org



Know a great example of excellence in our industry?

The LA/NTMA is soliciting responses for its Manufacturer of the Year award. Now in its 3rd year, this prestigious award celebrates companies that are excelling in processes, product development, and application pertaining to precision tooling and machining. This award is given out once a year to a member of the Los Angeles Chapter of the NTMA and is celebrated at the annual installation dinner that takes place every January.

Past recipients include Axxis Corporation
& Q-Mark Manufacturing.

For more information and to apply, contact
Chapter Administrator, Kaity Van Amersfort:
949-369-7309 or admin@lantma.org.

NTMA/AMT TECHNOLOGY AWARDS

THE NTMA/AMT TECHNOLOGY AWARDS ARE A DEVELOPMENT OF THE NTMA TECHNOLOGY TEAM INITIATIVE TO BRING VALUE TO MEMBERS. THE INTENT OF THESE AWARDS IS TO RECOGNIZE NTMA/AMT MEMBER COMPANIES THAT ARE WORKING TO ADVANCE THEIR COMPANY IN EITHER TECHNOLOGY/BEST PRACTICES OR BUSINESS/CULTURAL PRACTICES.

WINNERS IN EACH CATEGORY RECEIVE:

- SOCIAL MEDIA EXPOSURE THROUGH ALL NTMA AND AMT PLATFORMS
- TWO-PAGE SPREAD IN THE RECORD
- PRESENTATION AT THE MFG MEETING OR FALL CONFERENCE
- FREE REGISTRATION AT THE MFG MEETING OR FALL CONFERENCE
- \$1,200 REWARD
- WEBINAR
- TRAVEL PAID UP TO \$1,000
- PLAQUE TO BE GIVEN OUT AT EITHER THE MFG MEETING OR THE FALL CONFERENCE
- IF APPLICABLE, NATIONAL ASSOCIATE MEMBER (NAM) TO PROVIDE EXPOSURE FOR WINNER ON ALL NAM PLATFORMS

If you would like a nomination form for either category, please email Linda Warner at
lwarner@ntma.org
Submission deadline is December 15, 2019



Who We Are

OUR MISSION

The NTMA connects our members in the U.S. precision manufacturing industry. We provide opportunities that leverage their collective experiences and ingenuity to improve the capabilities of all members through the accelerated adoption of tools, technologies, and best practices. Speaking and acting with one voice, we advocate for our industry and provide learning resources for our members.

OUR VALUE PROPOSITION

We connect manufacturers to leverage their collective power for networking, learning, and advocacy. Together, we're building on strong manufacturing traditions to design a robust tomorrow for our businesses and our industry.

OUR VISION

The U.S. precision manufacturing industry is regarded as "world-class" by our customer & stakeholder communities.

The Value of Membership

www.ntma.org/member-benefits

Membership pays dividends back to your business and when you use the programs below, your dues pay for themselves.

To say it simply, the NTMA gets it. We understand your challenges in today's economy. We recognize that many of you face a talent gap, with necessary skills in short supply. And we know that there's a gap between the reality of our industry and the public's perception of it.



Shipping Program



Metal Working Supply Program



Jobs Program



Manufacturing Solution Program



Health Insurance Program



Rental Car Program



Energy Procurement Program



Office Supplies Program



Retirement Plan Program

\$35B

Represented in Annual Sales

38K

Employees Represented

For an complete overview of our programs and events, visit www.ntma.org



NATIONAL TOOLING AND MACHINING ASSOCIATION

1375 Rockside Rd.
Cleveland, OH 44134

Manufacturing America's Future

**Have an interesting story you would
like to share with other NTMA members?**

Each issue of The Record will feature one or more stories
from members that fit the month's theme.

The submission deadline will be the first day of
the month prior to the publication date.

Email to James Mayer at jmayer@ntma.org.

Upcoming Record Themes:

November

Benefits of Membership

December

Year in Review

January

What's in Store for 2020?

What's Your Story?

