Everything for your Grinding Machine

The broadest tool grinding toolholder program with 14 standard machine interfaces.
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# Upcoming NTMA National Events

**Chapter Leadership Summit**

**NTMA Connect - All Virtual Conference**

Wednesday, February 17 – Friday, February 19

**NTMA Spring Conference**

**NTMA Connect - All Virtual Conference**

Monday, March 29 – Wednesday, March 31, 2021

**NTMA Summer Conference**

**NTMA Connect - All Virtual Conference**

Monday, June 14 – Wednesday, June 16, 2021

**Emerging Leaders Conference**

September 2021
Phoenix, AZ

DATES AND LOCATIONS ARE SUBJECT TO CHANGE

# What's Your Story?

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 of the month prior to the publication date.

Email to Kelly LaMarca at klamarca@ntma.org.

**Upcoming Record Themes**

**February**
Navigating the New Sales & Marketing Landscape

**March**
Cyber Security Takes Top Priority

**April**
Setting a COVID19 Exit Strategy
Welcome 2021!
So - what is next, and where do we go from here?

These are great questions that we should all be asking ourselves, personally and professionally. As much as we would like to leave everything about 2020 in 2020, it does appear that much of it will follow us into 2021. That said, we enter the year with multiple vaccines for distribution, the election is behind us, we have learned to operate our businesses amid the pandemic, and I believe the winds of industry are starting to blow our way again.

As an association, I too think the winds are at our backs - starting to fill our sails and move us forward. We enter 2021 having weathered the storm of the pandemic with a multi-year high in member retention rates, a multi-year low in resignations, and having completed a recent year high in attendance at our Manufacturing Engage 2020 Virtual Conference. We topped off the year by being recognized as one of the “Top 13 Associations” going the extra mile to advance their industry.

Speaking of Engage 2020, I would be remiss not to acknowledge the success of this event. Deciding to pivot from years of face-to-face meetings to our first ever virtual conference was frightening! Having constant questions - or should I say nightmares - wondering would it work, could we pull it off, would our members attend, and would our National Associate Members (NAM’s) and Affinity Partners participate? The list of nightmares continued, knowing that none of these answers would be known until the event started and the event ended. In the past, this event would garner 80-100 companies and 175-200 in attendance. Engage 2020 exceeded all expectations, with over 90 participating companies and 487 individual registrants. From everyone creating their own avatar, to a virtual trade show exhibit hall, to breakout rooms, boat rides and even dancing, the event was truly engaging. The real value was the ability to have real-time online interactive discussions with each other, as if we were at a face-to-face meeting. Our NAM’s told us this was the best and most interactive virtual event they had attended all year. Many members echoed their comments. The good news is that NTMA has access to this virtual platform for one year and will build on our success of Engage 2020 to incorporate other events until we can again meet face-to-face.

Again, the question is: what is next and where do we go from here? I believe we start with a focus of growth, both as an association and as each of our individual companies. Part of NTMA’s role in that growth is to provide you with industry partners, opportunities that can help reduce your cost and/or help grow your company, and personal development to help support personal growth for you and your employees. I believe we are starting the year out strong with new partnerships that address each of these areas and bring significant savings/discounts to members who participate.

1) Factur – Sales & Marketing and Business Development
2) Paperless Parts – Quoting Platform for faster and accurate quotes to win more business
3) Core Solutions – Providing certification support and attainment of needed certifications
4) NFFS – Providing combined access to a DLA specific portal for RFQ’s for castings & machining
5) Heartland Merchant Services – Providing easy-to-use payment management solutions
6) WIM – Providing women in your companies free membership to Women in Manufacturing

We continue to work on other partnerships for which we believe will bring you member value and support. Like all our partnerships, whether with Grainger, APPI, PartnerShip, and others, they are only valuable if you utilize them. The savings generated by utilizing many of these programs can well outpace your actual association dues. I encourage you to stop and look at their potential value for your company.

In closing, one thing that the pandemic did was expose the cracks in supply chains around the world. Supply chains that have been focused on a workforce are now beginning to look at, and move towards, automation. It has opened the world to transition: some are calling 2021 the new economic expansion of innovation and productivity. Some are looking towards 2022 as the new frontier, and some are just calling it reshoring or onshoring. Regardless of what you want to call it, the question is, “ARE YOU READY FOR WHAT’S NEXT?”

The wind is in our sails - let us seize the moment, the opportunity, and the momentum to move forward. National will do all we can do to break the waves of disruption for you to make your journey in 2021 as smooth as possible.

WE ARE STRONGER TOGETHER….

Roger Atkins, President - NTMA
HOW MUCH CAN YOU SAVE WITH VERICUT FORCE OPTIMIZATION?

**FORCE OPTIMIZATION - MACHINE SAVINGS CALCULATOR**
Hourly Machine Cost $ (total burden)

<table>
<thead>
<tr>
<th>Number of Machine Tools</th>
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<tbody>
<tr>
<td>5</td>
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Weekly Machining Hours

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<th>Weekly Machining Hours</th>
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<tr>
<td>80</td>
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Estimated Reduction in Machining Time
Reduce machining time by as much as 15-25% or more

<table>
<thead>
<tr>
<th>Estimated Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>25% (typical reported savings)</td>
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</table>

**ANNUAL MACHINE SAVINGS**

$520,000

**FORCE OPTIMIZATION - CUTTER SAVINGS CALCULATOR**
Hourly Cutter Cost $ (average cutter cost/cutter life hours e.g. $100/1 hour)

<table>
<thead>
<tr>
<th>Number of Machine Tools</th>
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<td>5</td>
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<tr>
<td>80</td>
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Estimated Increase in Cutter Life
Extend the life of your cutters up to 100% or more

<table>
<thead>
<tr>
<th>Estimated Increase</th>
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<tbody>
<tr>
<td>+50% increase</td>
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</table>

**ANNUAL CUTTER SAVINGS**

$692,640

Calculate your own savings at: cgtech.com/force-calculator

- Reduce machining time by 15-25% or more -
- Increase cutter life and improve surface finish -
- Optimize ANY CAM or manually generated tool path -
The TNC 640 from HEIDENHAIN: for the first time, milling and turning are combined in one TNC. Now users can switch as desired between milling and turning—within the same NC program. Switchover is independent of the machine kinematics. It automatically takes the respective operating mode into account and without any additional action.
Many NTMA members are looking for ways to stay connected during these uncertain times. While we are not able to gather together in person, we can still connect virtually. To address this issue, in May 2020, NTMA started hosting a bi-weekly “Member Drop-In” virtual meeting. This is a unique opportunity to check in with your fellow NTMA members, discuss complex problems, and get ideas or solutions from your peers.

This virtual roundtable has been very beneficial to the members who have attended and we encourage you to take advantage of this quick, easy, and free networking opportunity.

The Drop-Ins have been very informational for me and have helped me keep in touch with membership... I think it is has really helped me get to know and interact with different members across the country. I see many old friends there as well as making some new ones. The NTMA remains a very important organization for Blaser and we will remain committed to participation in events.

Drew Borders
Business Development Manager, Global Markets
Blaser Swisslube Inc.
NTMA and AMPED Partner with Edge Factor: Free Experiences to inspire the next Workforce

NTMA and AMPED are proud to announce their 2021 Premiere Partnership with the e-learning storytellers at Edge Factor. Together, they will equip organizations across North America with three FREE Experience toolkits to inspire students and job seekers to pursue career pathways in manufacturing. This strategic Workforce Development initiative will provide schools, families, companies, and workforce leaders with FREE access to high impact multimedia, a keynote presentation, promotional tools, and practical guide books on how to plan, promote, host, and follow-up on engaging virtual events! These online Experiences empower students, parents, and job-seekers to explore skilled trades, apprenticeships, technical education programs, careers, STEAM, and soft skills.

Edge Factor, a widely used e-learning platform, has created thousands of videos, interactive activities, and lesson plans that focus on career exploration. K-12 and postsecondary schools, companies, and organizations partner with Edge Factor to help tackle workforce development regionally and nationally. Wielding the power of storytelling, Edge Factor media showcase industries and career profiles, teaches soft skills, show how STEAM comes alive on-the-job, provides Virtual Workplace Experiences, and promotes training and career opportunities.

Featuring select tools from the Edge Factor library, six free Experiences will be available during specific 2021 months, for organizations to share in classrooms, homes, and at events. To learn more and pre-register, please visit: edgefactor.com/free-experiences

“The NTMA partners with 1100+ tool & die and precision manufacturing companies,” said Larissa Hofman. “Together with the NTMA and their new 501(c)3 workforce development organization, AMPED, we will empower these companies with Experiences and high impact tools to meet one of their biggest needs: inspiring and recruiting the next workforce.”

From NTMA and AMPED President Roger Atkins: “We are proud to be a partner with Edge Factor in engaging manufacturing’s next generation. Two years ago, Edge Factor produced an amazing film, “Robobots” in collaboration with the AWT Foundation that truly captured the excitement and impact of an NRL program on students, teachers, industry, and the community. From that video, and their entire library and educational resources, we knew we were of like mind, passion, and desire to work even closer for greater impact and reach for the greater good of our country’s education and workforce needs. This new, deeply committed collaboration exemplifies our combined strengths, vision, and commitment to all of that and much more!”

NTMA and AMPED are specifically partnering with Edge Factor on the following three 2021 Experiences:

**Future Skills (Jan - Feb 2021)** - Promoting technical education programs with high impact videos and tools, in honor of CTE Month.

**Rock MFG DAY (Sept-Oct 2021)** - Tools to promote careers and showcase how STEAM comes alive in the exciting world of advanced manufacturing.

**Apprenticeships (Nov-Dec 2021)** - High impact resources for students and parents to discover the power of apprenticeship programs.

To pre-register today for these free 2021 Experiences, visit edgefactor.com/free-experiences

For more information on NTMA and AMPED, please visit www.ntma.org or email Bill Padnos at bpadnos@ntma.org, and for more information on Edge Factor or to book a demo, please visit edgefactor.com or email info@edgefactor.com.
The *Modern Machine Shop*, Shop Talk series is now on demand. Learn from shop owners and experts from all over the country about what it takes to run a successful machining business.

- What technologies increase shop floor efficiency?
- How can you train and retain top talent?
- What changes in the front office can affect the bottom line?

Each session features real-world experience and provides actionable insight that you can take straight back to your shop.

**VIEW ALL SESSIONS FOR FREE:**
short.mmsonline.com/tsshoptalk
NTMA President Named Top Leader Moving Their Industry Forward

In spite of the many challenges in 2020 with COVID, it was a momentous year for NTMA - and that success continues for our organization today. Warner Communications has recognized NTMA President Roger Atkins as one of their “Top Association Leaders Moving Their Industries Forward”!

NTMA is honored to be recognized for our outstanding leadership from Roger, and to join this elite list of industry leaders in continuing progress. Here’s more from Warner Communications on what this recognition means:

“Advancing and representing an entire industry is a complex and challenging endeavor. Thanks to associations, industries have a cornerstone for resources, community, a shared purpose, common goals, and a central voice for members and stakeholders. From establishing standards, to continuing education and certifying members and their businesses through training, to exclusive networking and more, associations lay the groundwork for innovation into the future.

“(These are the associations) we see going the extra mile to advance their industries and constituencies in achieving success on the global stage today, tomorrow, and beyond. From offering access to the latest research and technologies, to continuing education programs, and much more, these associations provide comprehensive support and services to propel industries forward.

“The future of American manufacturing has remained the NTMA’s focus since 1943. Its national apprentice program demonstrates strong commitment to small and medium size businesses, and student’s high placement rates are achieved through its training centers. The NTMA is the nation’s only American National Standards Institute (ANSI) accredited developer of precision manufacturing skill standards and competency assessments – creating instant value on the shop floor.”

Learn more about all of the honorees at https://warnerpr.com/top-association-leaders-moving-their-industries-forward/ Congratulations to Roger - and here’s to more successful leadership in 2021 and beyond in Manufacturing America’s Future!
For over 70 years, Royal Products has been helping manufacturers squeeze every last drop of performance out of their CNC machine tools. Our broad range of tooling, workholding, automation, and mist-control products help reduce setup times, increase throughput, improve part accuracy, and enable unmanned production. Optimize your production today with Royal Products.

Royal Quick-Grip™ CNC Collet Chucks
- Ten-second collet changes
- Ultra-precision accuracy – 0.0002” TIR or better
- Industry-leading gripping range – 0.062”
- Superior rigidity, gripping torque, and tool clearance

Royal I.D. Workholding Systems
- Internal gripping offers full machining access to the entire length of the workpiece O.D.
- Parallel expansion for optimum accuracy and gripping torque
- Custom systems available – up to 25” diameter

Royal Mist Collectors
- Low-cost, highly efficient mist and smoke collectors keep your shop clean and your workers healthy
- Over 150,000 units operating in over 50 countries worldwide
- Exclusive Royal Risk-Free Performance Guarantee

Royal Rota-Rack™ Parts Accumulator
- Safely collects a large volume of finished parts for hours of unmanned production on bar-fed CNC lathes
- Heavy-duty design handles up to 700 lbs. of parts
- Easy to setup and install – no interface with CNC control is required

For Additional Performance Solutions, visit www.royalproducts.com
Eight Tips to **OPTIMIZE** your Operation During the COVID Pause

**So you’ve hit the reset button. Now what?**

Home improvement projects went through the roof during the COVID pause. To do the same for your business, remember this acronym: **OPTIMIZE**.

**OPTIMIZE** = Optimize operations. **Purchase** locally. **Train** your staff. **Invest** in new technology. **Monitor** efficiency. **Innovate**. **Zoom** calls. **Execute** on the data.

An expert with 40 years of experience in the machine tool industry shares his thoughts on improving competitiveness.

Gisbert Ledvon, Director of Business Development - Machine Tool at HEIDENHAIN CORPORATION - advises companies to use this time to **OPTIMIZE** their organization:

- Optimize operations throughout your company and supply chain.
- Purchase locally – seek out new suppliers.
- Train your staff – teach your programmers and CAM operators more about the CNC control.
- Invest in new technology – the cost of borrowing is at an historic low and government incentives are available (including tax credits).
- Monitor your efficiency – how much time is the CNC really making chips?
- Innovate – get out of your comfort zone and explore new markets.
- Zoom – the new method of conference calls is here to stay, so use it to stay in front of customers.
- Execute on new information and data gathered.

HEIDENHAIN, with U.S. offices in Schaumberg, Ill., is a leading manufacturer of CNC controls, touch probes, encoders (linear, rotary, and angle), electronic, and other precision measurement and control equipment used in machining and automation systems. Ledvon started his career as an apprentice toolmaker in Germany nearly 40 years ago and has since held a variety of engineering, marketing, and business development positions with leading global machine tool manufacturers.

Ledvon mentioned the OPTIMIZE acronym to us during a Zoom interview for IMTS Network. Knowing that Ledvon has worked with companies of all sizes and industries to improve their operations, we conducted a follow-up interview with him so he could share some specific examples of OPTIMIZE in action.

**PURCHASE LOCALLY**

ACU-RITE, which produces readout systems, precision glass scales and CNC controls, is part of the HEIDENHAIN family. In 2018, ACU-RITE shifted some production from New York State to Schaumburg. With all of the job shops in the area, ACU-RITE chose to connect with one of them to source brackets and other mechanical components to support the retrofit of knee mills.

“Because of the depth of local resources in northern Illinois and Wisconsin, we can save a lot on shipping costs compared to buying brackets from overseas,” says Ledvon. “If there is a production issue, we are just 500 yards apart, so it’s easy to see what is happening at each other’s facility.”

Lower shipping costs, eliminating shipping delays and the ability to collaborate are just a few of the factors that influence supply chain performance. For a more detailed look, Ledvon advises companies to perform a total cost of ownership analysis, which includes using this online estimating tool.
TRAIN

Even good programmers benefit from training. In one case, a programmer was really proud of the program he wrote for a drilling cycle because he couldn’t find that function on the controller... but all he had to do was use the CNC control’s right arrow key to move the menu over to open up the drilling cycles and many others.

“We often see people who do not understand how to use three-point alignment functionality so that when you use our touch probe to locate a part, your 5-axis machine will automatically align the plane. As a result, you don’t have to shim the part,” adds Ledvon. “It’s like our smartphones. They’re very powerful, but we are only aware of a fraction of their capabilities.”

Another example he cited was programmers and operators who were unaware of the software function that lets them use a touch probe to inspect a part and generate a report before removing the part from its fixture. This can reduce rework, especially for the first few parts in a lot or if the part will be difficult to re-fixture.

INVEST

With money readily available and little or no cost, now is a good time to explore new technology. Users can start with simple automation, such as a pallet changer, a load/unload robot for cells dedicated to longer part runs, or a cobot to support workers.

“The touch probe just mentioned cost a few thousand dollars, but so many people don’t use one. Adding it to the tool carousel can really help you become more productive,” adds Ledvon.

Also, keep your talented staff. PPP loan funds are still available. Banks have the application process down pat, so getting approved moves much more smoothly.

MONITOR

“Large companies are looking for more data acquisition from their machine tools,” says Ledvon. “Understanding efficiency within and between locations first starts with better monitoring of your cutting machines.”

HEIDENHAIN offers its StateMonitor software to help companies monitor machine status. It automatically conducts analytics and generates data points. It can send out messages to operators, programmers, or maintenance personnel. New functions coming in 2020 include the ability to monitor specific sensors on the CNC, such as for a coolant tank, spindle, or ball screws.

“We had one customer connect 70 machines to their internal network. Through the StateMonitor, they quickly identified bottlenecks,” says Ledvon. “For example, they learned that even though the machine was available to run the part, machine operators were still waiting for the programs to be delivered, so they focused on other tasks and the machine went unused for an even longer period of time.”

Using the StateMonitor, the company in this example also learned operators were overriding speeds and feeds on the machine tool — not to gain time, but to slow it down because they were uneasy with instructions from the programmer. The operators lacked confidence and were worried about causing damage.

“This company addressed their operators’ fear factor through more training,” he says. “Now that operators have verified the programming for themselves, they’re no longer worried about crashing a half-million dollar machine or scrapping parts.”

INNOVATE

In challenging times, companies need to move outside of their comfort zone and look at new industries and opportunities.

“Who could have known that we would need to shift our manufacturing capabilities to masks, ventilators, protective equipment, or pill dies?” says Ledvon. “We can make anything if we just put our mind to it, so what can we make new or better? The crisis will cause new industries to be born and old manufacturers to realign themselves. What could some of those possibilities be?”

ZOOM

Since customers in some states could not travel because of quarantine requirements — yet they had made investments in millions of dollars of CNC machines — HEIDENHAIN developed a hybrid solution of virtual training to visually communicate with customers using Cisco’s Webex (of course, Zoom or Microsoft Teams accomplish the same objective).

The hybrid part comes from creating a control simulator that has the actual keyboard and screen from a HEIDENHAIN TNC 640 control, but with a video camera embedded in the screen.

“One company set up their control simulators on picnic tables in the shop so they could social distance, and others put them up near the CNCs in the shop, which are spaced more than six feet apart,” says Ledvon. “Training starts with two hours of our instructors working with them on the simulator, then the operators and programs move to the real machine for another couple of hours, and then they reconnect with the instructors in the afternoon. Our instructors have a head-mounted camera so students can follow their movement as they are working inside the machine and see the strokes on the keyboard.”

EXECUTE

With information gathered from monitoring and programmers/operators equipped with new skills, companies need their executives to live up to the “execute” part of their name.

“You can’t run a business efficiently relying on raw emotions from operators or your own gut instinct,” says Ledvon. “Data really opens people’s eyes, and the before and after situation when we install a StateMonitor follows a familiar pattern. People think they’re running at 70% efficiency. The spindle may be spinning, but the data shows they’re only cutting 40% of the time. More importantly, the data identifies the bottlenecks they need to remove, and that gives management the confidence to execute changes.”

The entire world is moving through uncharted territory — but it is moving forward. In our own lives, we’ve taken the time to remodel our kitchens or seen our favorite restaurants use the downtime to make improvements.

If you have the time, now is the right time for industry to OPTIMIZE. Uncover ways to become more profitable, explore new lines of revenue, and become your own light at the end of the tunnel.
Welcoming the 2021 NTMA Executive Committee

NTMA welcomes Alan Ortner as the new NTMA Chairman. Alan has been on the Executive Committee for three years as a member and we congratulate him on this new leadership role. Alan is renowned as a business leader, with a focus on employee safety and benefits, as well as product quality and high standards with vendors. He currently serves as President and CEO of Sirois Tool, establishing strategic planning and goals, as well as working with employees to ensure long-term success.

“I am excited to lead the NTMA Executive Committee for 2021 and to represent all the members of this critically important national association,” Alan said. “I look forward to continuing to work with my fellow Executive Committee members, our President, Roger Atkins, and all of the staff of NTMA.”

– Alan Ortner

NTMA also welcomes Gillen Young as the new NTMA Vice Chairman. Gillen has served as a member of the NTMA Executive Committee for two years, and we congratulate him on this new leadership role. Gillen brings over 20 years of consulting, technology, and business management experience, particularly in helping companies understand IoT and position themselves to benefit from it. Gillen, along with his brother Bob Young, currently jointly owns and operates Custom Tool, Inc.

Special Thank You to Mark Lashinske

In welcoming our new Chairman and Vice Chairman of the NTMA Executive Committee, we must also offer our thanks to Mark Lashinske. Mark’s leadership as NTMA Chairman since 2019 has proved invaluable and we appreciate his hard work and contributions. Mark will be staying on as a member of the Executive Committee for 2021.

NTMA welcomes Eric Hagopian as the newest Regular Executive Committee Member. Eric brings vast and valuable experience in precision manufacturing and we are excited to welcome him to the committee. Until 2013, Eric served as owner and CEO of Hoppe Technologies, Inc., a leading manufacturer of precision machined components and assemblies. He then joined forces with several successful software engineers to co-found MachineMetrics, Inc., a groundbreaking cloud-based shop floor data collection company that has grown to be the recognized authority in real-time shop floor data acquisition. In 2016, he became the owner and CEO of The duMONT Company, the largest designer and manufacturer of push and pull-type precision industrial broaches in North America. In 2017, he acquired the company’s main competitor, the Hassay Savage Company, and founded Pilot Precision Products, now the parent company of both, and the sole North American importer of Magafor and GMauvais tooling.

In addition to his work at Pilot Precision Products, Eric served on the Western MA Chapter of the National Tooling and Machining Association (NTMA) board of directors for 24 years, including two terms as president. He also sits on the Springfield Technical Community College board of trustees, and on several private company boards.

Special Thank You to Mark Vaughn

We offer a special thank you to Mark Vaughn, who Eric will be replacing on the Executive Committee starting in 2021. Mark served as Chairman for the Executive Committee from 2017 to 2019, as well as having served a term as Vice Chairman in 2016. Mark continues his work as President of Vaughn Manufacturing. NTMA is extremely appreciative of Mark’s time, efforts and leadership as part of the Committee and we wish him nothing but the best.
Think an Okuma is out of reach? Think again! The industry standard vertical machining center is being offered with unparalleled features at an unprecedented price point. Take your business to the next level with the GENOS M560-V:

- Bridge style, 3-Axis Design
- 15,000 RPM
- CAT 40 BIG-PLUS® Spindle
- 32-Tool Magazine
- Hinge Chip Conveyor

Okuma. Welcome to open possibilities.

okuma.com/genos-m560-v
IN THE NEWS

**BIG KAISER Announces New President, COO**

BIG KAISER Precision Tooling announces the promotion of Jack Burley to President/Chief Operating Officer as of January 1, 2021. Chris Kaiser, BIG KAISER President and CEO of 30 years, will take on the role of Executive Advisor.

“Jack has been my right hand in this company from the very beginning,” said Kaiser. “He’s shown his leadership in managing the sales and engineering teams and has made many significant contributions to BIG KAISER including new product designs and development. He’s more than ready and deserving of this promotion.”

Burley began his career with BIG KAISER more than 30 years ago and is currently Vice President, Sales and Engineering. Burley is a U.S. Marine veteran and earned his degree in mechanical engineering from State University of New York at Alfred. As President/COO of the North American operations for BIG KAISER, Burley will continue to hold his seat on the board of directors for BIG KAISER.

“I am very honored and excited about my new position with BIG KAISER, and truly grateful to the executive management at BIG DAISHOWA and to Chris for placing their trust and confidence in me to lead the company,” said Burley.

BIG KAISER is a worldwide leader in high-precision tooling systems and solutions for the metal cutting industry that guarantee extreme accuracy and repeatability. Our products are of the utmost quality — manufactured with materials and craftsmanship that enable superior performance. As a member of the BIG DAISHOWA Group (Osaka, Japan), BIG KAISER has grown into a well-recognized global tooling provider, with manufacturing facilities in North America, Switzerland, and Japan. In addition, BIG KAISER is the North American representative of Speroni tool measuring machines, Sphinx high performance drills, mp-tec measuring stands, Tekusa spindle cleaners and the UNILOCK zero point workholding system by Innotool.

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

**“My clear choice.”**

For Titan Gilroy and his team, our Synergy 735 is the best coolant they’ve ever used. It ensures spotless surfaces even with sensitive aluminum alloys, is easy to clean and allows for a clear view of the machining process. In addition, it is gentle to the skin and neutral in smell.

Test us. It’s worth it.
blaser.com/synergy735
Talking with One Voice in Washington & Making a Difference

By: Bill Padnos, Workforce Development Manager, NTMA

We have never experienced a year like this! The word “unprecedented” is constantly used to describe what we are all going through. Who would have thought that when we rang in 2020, by year’s end, we would be talking about COVID-19, PPP, PPE, essential businesses, states opening and closing, CARES ACT, FFCRA, or even Trump vs. Biden?

Through all of this, we have been able to rely on NTMA to provide us with the information that we need to keep our companies operating - and our employees safe. This would not have been possible without the foresight of our association leadership, and the partnership with our One Voice team in Washington, The Franklin Partnership and the Policy Resolution Group at Bracewell.

As the virus spread across the country, our team provided up-to-the-minute guidance on how to navigate our businesses in the “New Normal.” They developed the One Voice COVID-19 Rapid Response website at www.onevoiceinfo.org - a one-stop shop for information, providing us with valuable updates on state closures and openings. Additionally, they held 20 Bi-Weekly COVID-19 webinars to ensure that we heard and understood how actions from Congress and the White House were going to affect our operations. NTMA members were provided with real-time guidance from the CDC, OSHA, SBA, and the IRS, as well as top industry resources for PPP loans.

The results of their efforts have greatly benefited all of us: 97% of our member companies were able to open their doors, 86% received PPP loans, and multiple stories of our members making a difference landed in local and national news coverage. Through our work in Washington, we were able to update PPP to improve borrower flexibility, extend loan forgiveness from 8 to 24 weeks with terms up to 5 year, defer 2020 payroll taxes for two years, and increase limitation on deduction of expenses.

In addition, The Franklin Partnership worked with the staff at NTMA and PMA to organize 15 chapter-based Virtual Fly-in Meetings with U.S. Representatives and Senators, replacing the cancelled in-person Legislative Conference. Almost 300 members from NTMA and PMA participated in these Virtual Fly-in Meetings - a 600% increase in member engagement from our normal Legislative Conference in Washington.

Outside of support to industry due to the COVID-19 pandemic, our One Voice team worked on behalf of the association - increasing funding for Workforce Development by securing over $1 billion for job training and technical education, and expanding the Workforce Investment Opportunities Act to include training funds for e-learning. In addition, One Voice supported the creation of the Industry Recognized Apprenticeship Program, collaborated with lawmakers to update the National Apprenticeship Act, and lobbied to expand Career Technical Education in middle schools.

To support our members, One Voice lobbied to incentivize supply chain reshoring and onshoring. We protected manufacturers with trade law enforcement at historic highs and took action against currency manipulation. Also, we worked to prevent tariffs on specialty metals from Europe.

In the workplace and with government regulations, One Voice worked on limiting the infrastructure project environmental review period, crafted more balanced EPA cost-benefit rules, and outlawed use of Secret Science in rulemaking. In addition, One Voice helped to reverse the Ambush Election NLRB union rule and reform FMLA Intermittent Leave.

As we head into the start of 2021, a new administration will be taking over and our country will be emerging from the COVID-19 pandemic. Our One Voice team will remain committed to making a difference for us in Washington. On a bi-weekly basis our team breaks down how the latest news from inside the Beltway impacts manufacturing businesses across the country on the newly launched Talking with One Voice podcast. Visit https://ntma.org/programs/advocacy/talking-with-one-voice/ to listen to current and past podcasts.

In the upcoming year, your inbox will be inundated with emails about everything and nothing. On occasion, you will receive an email from One Voice asking for your participation in a survey or to write to your representatives in Congress. As you have seen above, your participation does make a difference and it will directly benefit your company operations along with the health and safety of your employees. Please make the commitment to continue to act and engage with our industry through One Voice.
NTMA Finds Success with First Virtual Conference

The National Tooling and Machining Association (NTMA) brought together a record number of manufacturing industry leaders - over 400 individuals from over 90 companies – for their first ever virtual conference, Manufacturing Engage 2020, at the end of November 2020.

With the help of a cutting edge new online platform, Manufacturing Engage 2020 took place in a 3D virtual world where attendees made their own avatars, enabling them to walk, talk, and shake hands with one another, almost as if they were there in person.

“Making connections between industry leaders in the precision manufacturing industry has always been one of the most important aspects of our mission,” said NTMA President Roger Atkins. “We were thrilled that so many in our association and across our industry decided to join us for this first virtual event. The success of this conference shows the power of innovative strategies in overcoming obstacles to bring our industry together and have people feeling engaged, informed, and inspired.”

NTMA built on its legacy of top quality content with keynote presentations from top industry voices including Jim King, President and Chief Operating Officer of Okuma America Corporation, and the editorial team from GIE Media. The conference also included 5 general sessions and 14 breakout sessions on unique tracks for professionals in a wide range of roles including sales and marketing, operations, financial management, human resources, and emerging leaders.

Brandon Dempsey from goBRANDgo! was the event emcee, keeping everyone energized and connected throughout the conference.

The event was made possible by a dozen sponsors including NTMA’s National Associate Members and Affinity Partners. Sponsors provided remote-participation coffee and lunch as well as pre-shipped conference swag like water bottles and earbuds.

“We are grateful to our sponsors, who are also our friends,” continued Atkins. “They jumped on board and took a risk with us to help offer attendees a completely different virtual experience than anyone had seen before.”

NTMA also delivered the association’s annual industry awards. Recipients included:

William E. Hardman Award for Excellence in Training: For a company or individual that has consistently demonstrated strong support and active participation in structured training for the precision custom manufacturing industry. 2020 Recipient: Mark Bosworth, Southern Illinois College.

Honor Award: For continuing meritorious service and dedication to the industry and/or the association. 2019 Recipient: Mike Mittler, Mittler Brothers – In memoriam.

Distinguished Service Award: For outstanding service to the industry by someone other than NTMA Member Company Representatives. 2020 Recipients: John Guzik and Omar Nashashibi of the Franklin Partnership and Paul Nathanson and Caitlin Sickles of the Policy Resolution Group at Bracewell.

L.A. Sommer Award: For outstanding and continuing service of the highest magnitude. Emphasis is placed on service to the Association, both of the highest order and over a period of time, connoting excellence in a particular role in NTMA, rather than as a participant in a single event. 2020 Recipient: Ted Toth, Rosenberger North America.

“The NTMA Awards are our way of recognizing the high standards of achievement set by our members, our companies and our partners both to our association and to the whole precision manufacturing community,” said Atkins. “We were honored to celebrate this year’s deserving recipients.”

“For an exhibit event like this…as unnatural as it is, it’s actually kind of natural. You can walk around, see different customers [and] different exhibits; you can introduce yourself to different contacts; it has a little bit of a feel of an actual trade show, even though we’re avatars in a virtual world. You can still get the contacts and develop some relationships.”

- Joshua Kris – Sales Manager, DMG MORI USA

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- JD Donald – Sales Manager, DMG MORI

“The conversations are definitely real. The avatars are not but the people behind them are, and I think there can be some real meaningful conversations that take place at an event like this.”

- JD Donald – Sales Manager, DMG MORI
"As we all know 2020 is a challenging year so far, specifically for the trade shows and other large events. Many organizers used Zoom or even live videos to interact with visitors but it always just feels that you just watching another PowerPoint or You Tube video. When NTMA decided to have a virtual event for the Fall Conference, I was skeptical on how that would successfully work with the NTMA members. But when I downloaded the application and did our “virtual booth set up” it felt like you were really setting up the booth, discussing things with your coworkers on what to show and what pictures to use, etc.

The interaction with attendees during the live event felt real and I was following the agenda very closely so I could participate in the round tables, breakout sessions, and main presentations. I met my NTMA friends in the HEIDENHAIN booth or on the main campus; it was like being at a nice event campus. Don’t get me wrong, I still prefer an in person event (without a cocktail in your hand) but this platform the NTMA team put together was probably the closest to being live so far this year. Thank you to Roger Atkins’ new leadership and the dedication of the entire NTMA staff who made this a memorable event."

- Gisbert Ledvon, Director, Business Development Machine Tool, HEIDENHAIN
### ENGAGE 2020
Companies Marking Noteworthy Anniversaries

| 75 YEARS | Hoppe Technologies, Inc.  
| J. W. Harwood Co.  
| Mitchell Machine, Inc.  
| Thrn, Inc. |

| 65 YEARS | Allied Mechanical  
| Vaughn Manufacturing Company, Inc. |

| 60 YEARS | Lancaster Metal Products Company  
| Powill Manufacturing & Engineering, Inc. |

| 55 YEARS | Acro Tool & Die Company, Inc.  
| Bawden Industries, Inc.  
| Benda Tool & Model Works  
| Chelar Tool & Die, Inc.  
| Gaum, Inc.  
| Lyons Tool & Die Company  
| Northern Machine Tool Company  
| Reuther Mold & Manufacturing Co. |

| 50 YEARS | Actco Tool & Mfg. Co.  
| Amtiy Mold Company  
| Colonial Machine Company  
| Edco, Inc.  
| Fredon Corporation  
| Maddox Metal Works, Inc.  
| Precision Die & Stamping, Inc.  
| Precision Grinding & Mfg. Corp.  
| Quality Tool Company  
| Tri-Craft, Inc.  
| Valco Valley Tool & Die, Inc. |

| 45 YEARS | Acro Industries, Inc.  
| Composidie, Inc.  
| Elizabeth Carbide Die Co., Inc.  
| Lange Precision, Inc.  
| May Industries of Ohio, Inc.  
| Monks Manufacturing Co., Inc.  
| P & N Machine Co., Inc.  
| Penco Precision  
| Penn State Tool & Die Corp.  
| Penn United Technologies Inc.  
| Skillcraft Machine Tool Company |

| 40 YEARS | All Tools Company  
| Allied Specialty Precision, Inc.  
| B-W Grinding Service, Inc.  
| Butler Tool & Die, Inc.  
| Guill Tool & Engineering Co., Inc.  
| Ka-Wood Gear & Machine Company  
| Rite-Way Industries Inc.  
| Ronlen Industries, Inc.  
| Tool Technology, Inc.  
| Top Tool & Die, Inc. |

| 35 YEARS | C.V. Tool Company, Inc.  
| Doyle Manufacturing, Inc.  
| Excel Stamping & Manufacturing, Inc.  
| Excel Tool & Manufacturing, Inc.  
| JM Performance Products, Inc.  
| Quality Mold & Engineering, Inc.  
| Skylyn, Inc.  
| Strohwig Industries  
| Superior Tool & Die Company, Inc.  
| Tschida Engineering, Inc.  
| Ultra Tech Aerospace  
| Walter Tool & Mfg., Inc. |

| 30 YEARS | A & E Machine Shop, Inc.  
| Astro Automation, Inc.  
| Austin Machine Company Inc.  
| Chicago Grinding & Machine Co.  
| Jatco Machine & Tool Company, Inc.  
| Kalman Manufacturing, Inc.  
| MPE Machine Tool, Inc.  
| Overton Industries  
| United Machine Co., Inc.  
| Wire Tech EDM, Inc. |

| 25 YEARS | CalWire, Inc.  
| Cee-San Machine & Fabrication Co.  
| Metplas, Inc.  
| Patriot Machine, Inc.  
| Paul E. Seymour Tool & Die LLC  
| Space City Machine & Tool Co.  
| TEKE Machine Corporation  
| Toolcomp Tooling & Components Co.  
| Younberg Industries, Inc. |

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3 Tax Developments for 2021 Manufacturers Should Keep on the Radar

by Bill Smith, Founder/President, Managing Director of the CBIZ National Tax Office

As virus cases still surge in many parts of the country, more stimulus related to business activity is expected from Congress. Much of the stimulus to date has involved tax credits and opportunities to lower tax liabilities. As the dust settles around election results, manufacturers are analyzing potential changes to taxes and how a new administration may seek to curtail some of the benefits offered by the former administration. Relief and policy changes will be a key focus in the new year, which will signal reaction from manufacturers once plans are solidified and rhetoric is put into action.

Prospects for Future COVID-19 Relief

During the second half of 2020, conversations around a next phase of stimulus legislation stalled out in Congress. House Democrats unveiled a 1,815-page, $3 trillion “CARES 2” bill for economic relief in May, and after receiving pushback about the price tag from the other side of the aisle, the House released an updated version of the legislation. Carrying a $2.2 trillion price tag, this updated House bill eventually passed as the HEROES 2 Act on October 1. The HEROES 2 Act faced strong opposition from the Senate, which called for its own Republican-backed $500 billion aid bill, but that bill did not pass.

As of the time of this publication, there is a possibility of a relief bill passing in the lame duck session, possibly during the week of December 14. There is also a competing focus on validating election results and a run-off Senate race in Georgia that could determine the composition of the Senate. Biden has made clear that as he takes office, response to COVID-19 will take a top priority. In addition to managing disease spread, he may also be looking at other solutions for helping businesses recover from the pandemic, including additional tax credits and stimulus measures. Biden’s desire to rebuild infrastructure also bodes well for manufacturing and could lead to significant benefits for the sector.

Tax Reform Possibilities

A strong influence on potential shifts in tax law will be the composition of Congress. Majority control of the Senate won’t be determined until January at the earliest. If control leans conservative, then it will be challenging for President-elect Biden to accomplish some of the big picture changes featured in his campaign without working strategically across the aisle. Even if Congressional control aligns with the administration, compromise will be key if Biden is sincere in his proposal to govern less with executive authority and more through legislative consensus.

There is a possibility that if Democrats gain control of the Senate (this assumes they win both Georgia runoff elections, all Democrats vote the party line, and the Vice President breaks a 50-50 tie), changes to tax law that are unpopular with Senate Republicans may be submitted via Budget Reconciliation rules, similar to how the tax reform law commonly known as the Tax Cuts and Jobs Act (TCJA) was passed in 2017. It is also possible that with the majority, Senate Democrats would seek to abolish the filibuster rights that would allow them to pass tax legislation by a simple majority. And, if the overall tax plan raises money instead of increasing the deficit, the Senate Budget Reconciliation rules would not impede the law passing by a simple majority.

Some particular items to monitor were featured in Biden’s campaign tax plan. He supports phasing out the Qualified Business Income (QBI) deduction for individuals with income over $400,000. He also wants to issue a 10% manufacturing tax credit to promote revitalizing, renovating, or retooling existing or recently closed facilities. This credit would be available for projects that expand U.S. facilities to grow domestic employment or for companies seeking to increase manufacturing wages above stated pre-COVID-19 baselines. Projects receiving the credit would benefit local workers and communities. To limit the practice of moving operations into lower tax jurisdictions overseas, Biden supports a 10% surtax on corporations that offshore manufacturing and service jobs to foreign nations in order to sell goods or provide services back to the American market.

Companies structured as partnerships should also be mindful of 2020 partnership tax form reporting changes. Further, companies will want to consider certain state and local tax workarounds as new relief measures are introduced.

Tax Changes We Know Will Affect 2021 Planning

Regardless of the composition of Congress when the new session begins, there are a few items that will have an effect on manufacturers, particularly those structured as partnerships. There are significant changes coming to partner capital reporting requirements for the 2020 tax year that may demand considerable time and attention. Additionally, the IRS recently provided additional guidance affecting the manner in which partnerships account for state and local taxes, which effectively minimizes the impact of the TCJA’s $10,000 limitation on deductions for state and local taxes. Furthermore, the Coronavirus, Aid, Relief, and Economic Security (CARES) Act fixed the so-called “retail glitch,” which will enable full bonus depreciation (100%) for qualified improvement property placed in service after Dec. 31, 2017.

Final Thoughts

The manufacturing sector will continue to navigate the challenges brought by the unprecedented public health crisis. Evolving tax policies will help support momentum around manufacturing and domestic productivity as the economy stabilizes.

The manufacturing sector is counting on the new Congressional session and incoming Biden administration to prioritize the policies that will support American manufacturing, and keep America competitive with respect to global supply chains. It is recommended that manufacturers work with their tax advisors to monitor for new developments and determine a plan of action for 2021 tax planning.

Bill Smith is Managing Director of the CBIZ National Tax Office and specializes in federal tax and legislative updates and tax controversy matters. For additional and updated tax and accelerated recovery content visit CBIZ’s online resources and executive insights.
Do Nothing Congress?
Not Quite,
Washington Still “Works”

While every President campaigns on draining the Washington swamp, they typically leave their term having simply raised the water level and added more mosquitos. President Biden, however, is a creature of this swamp I’ve called home for nearly a quarter century and knows how Washington works, or more often, fails to work. He never really left Washington and is bringing into the administration thousands of people who held similar jobs and are also creatures of the swamp. This means, they intend to hit the ground running, or dive into the swamp swimming.

President Biden and his fellow Democrats went into the November 2020 election expecting a wide victory on Capitol Hill and a tight Presidential election. The results were the opposite, and Speaker Pelosi finds herself with the slimmest majority in the U.S. House of Representatives in generations. In the Senate, as expected, neither party extended far beyond the magic number of fifty, making both chambers a hotbed of uncertainty.

This scenario of a divided Washington could lead to a flurry of deal making or total stalemate on Capitol Hill – both of which could benefit American manufacturers. Speaker Pelosi can afford to lose no more than four or five votes on any legislation of consequence. In her divided Democratic caucus, considerable disagreement exists between the more moderate wing of the party and liberal-leaning progressives. Because of this, Biden is more likely to look within his own administration than to Congress for action where he will encounter GOP opposition.

Every incoming President has over 4,000 vacancies to fill in various federal government positions with 1,200 requiring Senate confirmation. This takes time in a normal environment though we are hearing President Biden will immediately surround himself inside the White House with a smaller inner circle that can effectively pull the government levers from 1600 Pennsylvania Avenue. In the first weeks of the Biden administration, we expect that he will issue several Executive Orders, Actions, and Memoranda on environmental regulations, immigration policy, and health care. Most significant to manufacturers is a highly anticipated emergency COVID-19 OSHA workplace rule with strict universal guidelines for employers.

The NTMA took a leading role helping its members maintain a safe work environment while keeping companies updated on the constantly changing federal, state, and local rules. NTMA supported the Trump administration’s policy of issuing COVID workplace guidelines specific to each sector. The dry cleaner and restaurant run very different operations than do manufacturers, requiring a separate and specific set of rules. The Department of Homeland Security classifies nearly all NTMA members as Essential Critical Infrastructure, many of whom manufacture tools and components for medical devices needed to combat the pandemic. On July 30th, we arranged for NTMA President Roger Atkins to speak with senior officials in the Office of the Secretary of Labor about the need for specific guidelines, not OSHA one-size-fits-all policy, and ways the NTMA can work with the federal government on training and e-learning. Unfortunately, congressional Democrats are pressuring President Biden to immediately issue a one-size-fits-all OSHA regulation that would treat your local watering hole the same as the NTMA member manufacturing parts for respirators.

Due to the narrow majorities in the House and Senate, we expect significant regulatory action from the Biden administration, especially at OSHA and the EPA. In addition to COVID-related workplace rules, the NTMA anticipates lobbying in Washington on increases in...
overtime pay, permanent expansion of paid sick leave, streamlining union organizing efforts, and tighter standards on hearing, inhalation, and heat exposure.

At the EPA, the Biden agenda includes the reversal of new environmental rules meant to expedite the review of infrastructure projects, include social cost of carbon and public health impact in rulemaking, issuing stricter vehicle emissions, and mandating industrial machinery efficiency. These are all actions President Biden can begin taking on Day 1, which is why the NTMA is working in Washington with not only traditional allies on Capitol Hill and the business community but also with those expected to join the Biden administration or close to the President. Some of these sources indicate tariffs on China will likely remain in place for most of 2021, with efforts continuing to lift the import tax on steel and aluminum from our allies like the European Union. Closer to home, the NTMA is encouraged that the Biden administration will bring a continued focus on manufacturing and training for the 21st century. The Trump White House and Department of Labor placed a strong emphasis in this space, and we expect President Biden to increase the focus on job training, expand industry partnerships, and provide more funding for registered apprenticeships. However, strings are attached. Congressional Democrats oppose the Trump-created Industry Recognized Apprenticeship Program (IRAP), which supports non-registered apprenticeships. In addition, work-based learning programs will likely include a minimum “livable wage” requirement. Workforce training, NTMA’s top pre-pandemic lobbying priority, is one of the few places where a divided Congress could come together and send President Biden significant bipartisan legislation. The Higher Education Act will likely receive a vote in the first half of 2021 and Congress must reauthorize the Workforce Innovation and Opportunities Act (WIOA) next summer. NTMA will also work with lawmakers in both parties to pass the National Apprenticeship Act, which Washington last updated in 1937.

Even bipartisan programs like job training require federal government resources and, combined with the COVID-19 spending, many of us in Washington are expecting a tax increase of some form. The FY2020 federal government deficit rose to $3.1 trillion, triple that of the previous year. But who pays? Large Corporations? Privately held pass-through businesses? The lack of a strong Senate Democratic majority precludes President Biden from increasing the C-corporation rate to 27% but we could see some changes in the treatment of pass-throughs and limitations on higher earners’ deductions.

This brings us back to the swamp and process. When asked what today’s Washington means for manufacturers, I need to look no further than regulations vs. legislation. Any legislation of consequence will require bipartisan solutions that result in moderate and balanced policies benefiting manufacturers. However, a flurry of regulations will tell me President Biden has failed to gain political traction on Capitol Hill and to expect a difficult road ahead for manufacturers concerned about regulation. We shall see by the end of March whether this creature of the swamp is able to pull political levers to move public policy, or will rely on his decades of experience and use the regulatory process to achieve his goals.

Omar Nashashibi is a Founding Partner at The Franklin Partnership, LLC, a bipartisan government relations firm retained by the National Tooling and Machining Association in Washington, D.C.
Manufacturers Need to Step Up Now to Respond to the Skills Gap

It’s time to pay attention to the manufacturing skills gap. Simply put, there are too many open jobs and not enough skilled workers to fill them — to the tune of up to 2 million jobs by 2025.

According to Tooling U-SME’s Industry Pulse: Manufacturing Workforce Report, little has changed regarding the skills gap since the dangers of baby boomer retirements, a decreased talent pipeline, and the new skills needed for advanced technologies first became front page news. Despite the fact that the manufacturing industry has been sounding the alarm for years about the threat to growth posed by the skills gap, not enough manufacturers have heeded the warning. For some, the warning has been repeated so many times that it’s become invisible.

And that poses a danger to the industry. The skills gap is a real threat to growth, and ignoring it won’t make it disappear. According to the Industry Pulse report, only two out of five companies agree that their company trains people to develop the right skills. Survey respondents often blamed management’s lack of commitment as well as a lack of funding, time, and training. Yet, while manufacturers frequently complain that they don’t have the funds to invest in a standardized training and development program, the cost of such a program is dwarfed by their annual cost of turnover.

Even though the majority of actions organizations can take to develop and retain their employees are within their control — such as retaining new hires and making positions appealing to candidates — most manufacturers are not focusing on them. For example, only a small percentage of companies surveyed in the Industry Pulse report regularly use standardized on-the-job training (OJT), job pre-qualification assessments, performance management systems, structured onboarding of new employees, and training and development programs for job progression. Plus, very few respondents tie employee compensation to skills. It’s not too late to turn around your company’s approach to the skills gap. By focusing now on top priorities such as finding skilled new hires, upskilling the incumbent workforce, and retaining employees, you can propel your company toward productivity and profitability. When you use a systematic approach, creating training best practices, such as a strong onboarding process, formal training program, continual education, and train-the-trainer programs, does not have to be daunting.

While your company may recognize the urgency of providing an internal training program, you may not know where to start. Tooling U-SME’s Industry Pulse report lays out a clear path in five steps:

1. IDENTIFY THE BUSINESS OBJECTIVES
   A successful training and development program must have the support of senior management. The best way to do this is to demonstrate learning’s impact on the business. Tie your training program to the bottom line.

2. DEFINE PERFORMANCE-BASED COMPETENCY MODELS
   Having a system in place to codify knowledge and skills required for a specific job role is critical to ensuring individuals are successful in their roles. This also guarantees institutional knowledge is passed on to the next generation as veteran workers retire. Today, more employers are using competency modeling to provide a structured way of looking at training or job progression, job skills assessment, and workforce planning.

3. STRUCTURE YOUR ON-THE-JOB TRAINING PROGRAM
   Performance-based training programs should require the use of standardized OJT tools and techniques to maintain consistent delivery of training. Your company should ensure that it trains the trainers, developing its OJT mentors and instructors so they have competencies in adult learning, mentoring, and delivery of OJT sessions.

4. DEVELOP AND EXECUTE A MEASURABLE IMPACT STUDY
   At the start of program design, your company should document goals related to production, quality, innovation, and employee retention. Later, your team can refer back and see how the program measured up.

Based on the findings of the Industry Pulse report, it’s clear that many companies are still unprepared to address the pressing issues surrounding the talent gap. But by taking basic steps now, they can avoid the catastrophe associated with not having the right — or enough — skilled workers to meet customer demands. To further combat the skills gap, many respondents to the Industry Pulse survey are taking additional steps, such as partnering with educational institutions, enhancing compensation, offering 100% tuition reimbursement, and strengthening onboarding processes.
Reshoring: Bringing Supply Chains Home
by Harry Moser, Founder/President, Reshoring Initiative®

Thus far the United States has no formal plan to compensate supply chains for reshoring. To drive reshoring of the supply chain we need to show OEMs that they will be at least as profitable reshoring some, maybe 20-30 percent, of what they now import. Doing so would balance the trade deficit and increase U.S. manufacturing by 40 percent.

Overdependence on Offshore Supply Chains

The COVID-19 pandemic clearly demonstrated that the U.S. supply chain is weak, especially in emergency situations. PPE (personal protection equipment) dependency became clear to Americans when 86 percent of U.S. hospitals expressed concern about PPE shortages for front line medical workers. About 80 percent of all PPE is manufactured in Asia. There are hundreds or thousands of essential products that we consume in volume but import most or all of what we consume. The best measure of this dependency is our consistent $800 billion/year trade deficit. We import more than we produce. The deficit is due to the U.S. manufacturing cost/FOB price on too many products being 20 percent higher that the other developed countries and 40 percent higher than developing countries such as China. This lack of competitiveness is primarily because the USD is consistently too high.

Overcoming the Problem - Job Shops

Job shops can reduce the perceived price gap by convincing OEMs to source based on TCO (total cost of ownership) instead of FOB price. The Restoring Initiative’s TCO Estimator and one-hour training webinar are free online at www.ReshoreNow.org. Using TCO closes a 15 to 25% price gap, enough to bring back about 20% of what is now imported. See Import Substitution Program, below. Companies can reduce the actual price gap by investing more in automation and skilled workforce training. Germany relies on automation and a skilled workforce to achieve a huge trade surplus despite wages equal to U.S. wages.

Achieve delivery times that Asia cannot match. For surface freight, domestic shipping times are four to six weeks shorter than Asia’s. If your time from quote to ship is equal to or less than Asia’s, you have a huge competitive advantage. If not, try lean or QRM (Quick Response Manufacturing). I have seen many high mix/low volume companies use QRM to cut their quote to ship time by 50 to 70% and cut costs.

XStream Trucking began manufacturing its TruckWing panels to improve truck aerodynamics and save fuel in 2015. As their suppliers struggled to hire skilled manufacturing technicians in a tight labor market, XStream began sourcing offshore. But as China’s labor costs increased and offshore risks grew, they found that a mixture of automation and skilled workers at home reduced costs by 10-20 percent and lead times by up to 4 weeks. “In all, we’ve brought back about 60% of our production requirements to the U.S. Our U.S. suppliers also are a little bit ahead of their foreign competition when it comes to automation,” says Daniel Burrows, CEO of XStream Trucking.

OEMs

OEMs should remember their 2020 supply chain disruption and shorten supply chains to prevent a recurrence. Companies that claim to be socially conscious could help their communities and country by reshoring and providing jobs in-house and at suppliers. Use TCO to the 20 to 30 percent of products and components that can be reshored while maintaining or improving profitability. Schneider Electric, a leader in the digital transformation of energy management and automation, is investing $40 million towards modernizing its U.S. manufacturing plants in Iowa, Kentucky, Nebraska, and Texas. COVID-19 highlighted critical vulnerabilities in Schneider’s global supply chain. The U.S. investment is part of a strategic approach to strengthen resilience and increase flexibility. “By modernizing and localizing our operations, we can better serve our customers and minimize the risk of interruption when we face the challenges of global economic changes.”

Government

The future state of U.S. manufacturing depends substantially on our success in reducing, rather than further increasing, our approximately $800 billion non-petroleum goods trade deficit. That deficit, after adjustment for price differences, equals about 40 percent of actual U.S. manufacturing output, about five million manufacturing jobs at current U.S. productivity levels. Policies that permanently level the U.S. competitiveness playing field can provide the opportunity to balance the trade deficit and bring those jobs to the U.S. over the next two decades. Such policies include: 20% lower USD, a major shift of resources to skills training, a well-designed value added tax, not raising the corporate income tax, or changing immediate expensing.

Working Together

Now is an especially good time for companies to reevaluate the choice of domestic vs. offshore production. To help quantify those costs, the Reshoring Initiative website provides tools to help companies decide objectively whether their overhead will come down more than their manufacturing cost goes up when sourcing locally. The free online Total Cost of Ownership Estimator® will more accurately determine the real profit and loss impact of reshoring or offshoring. After doing the math, most companies will decide to bring some work back. Our Import Substitution Program can help shops identify and sell to the largest importers of products the shops make. We identify the importers. You use TCO as a sales tool to show the advantage of sourcing from you. Report your successes helping customers reshore. We will summarize in an article, with publicity for your company and for NTMA.

See if reshoring makes economic sense for your company or your customers. Companies are more receptive now because of the crisis and the publicity regarding supply chain dependency. The Restoring Initiative’s resources can be found on the website (www.ReshoreNow.org).

For more help and resources, contact Harry Moser:
Mobile: (847) 867-1144
Email: harry.moser@reshorenow.org

Harry Moser, Founder/President, Reshoring Initiative®
New NTMA Partners for 2021

As we begin the new year, NTMA’s commitment to our members remains stronger than ever - and we’re excited to put the spotlight on some of our new partnerships for 2021 and beyond! With new Affinity Partners and Partner Programs, all working to leverage your NTMA membership effectively and provide helpful and affordable resources for your shop, there’s never been a better time to be a member of NTMA!

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**Factur**

NTMA is proud to introduce Factur as a new Affinity Partner! Factur’s sole purpose is to find customers and grow revenue for suppliers in the industrial manufacturing industry. Through Email Lead Generation and Lead Outsource Prospecting, Factur can provide affordable integration to your sales and marketing teams to build your customer base and find new business opportunities.

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**Paperless Parts**

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**Heartland Payment Solutions**

NTMA is proud to welcome Heartland Payment Solutions as a new Affinity Partner! Heartland for Service Professionals is an all-in-one, easy-to-use payment management solution designed specifically for home and professional service businesses. By bundling tools specific to service professionals, Heartland helps streamline daily operations from scheduling jobs and work orders to invoicing customers and collecting payments – optimizing your business from service to payment.

**NTMA members can receive a 50% discount on subscription fees for ICON!**

Learn more at: [https://icon.nffs.org/](https://icon.nffs.org/)

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**Women in Manufacturing (WiM)**

NTMA is proud to partner with Women in Manufacturing (WiM)! Women in Manufacturing is the only national trade association dedicated to providing year-round support to women who have chosen a career in the manufacturing industry. Supporting more than 5,200 members and 133 companies in 44 states and beyond, their efforts in inspiring women to discover careers in manufacturing and develop the local manufacturing workforce across our country are second to none. We look forward to joining with WiM in continuing to develop the future of manufacturing.

**WiM membership is free!**

Make sure to mark “NTMA” as your parent association – you can register at: [https://www.womeninmanufacturing.org/membership-information](https://www.womeninmanufacturing.org/membership-information)

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**Heartland Payment Solutions**

NTMA is proud to partner with Women in Manufacturing (WiM) in cooperation with the Defense Logistics Agency (DLA), has reached an agreement and is partnering with NTMA - providing a new NTMA membership benefit program, and helping to solve the critical shortage of machined metal castings and metal components desperately needed by defense and military customers. This is an incredible opportunity for NTMA member machine shops and we look forward to working with NFFS! As part of this strategic partnership, NTMA members will be able to tap into the NFFS’ Integrated Casting Order Network (ICON) program to match with machined metal contracting firms.

**NTMA members can receive a 50% discount on subscription fees for ICON!**

Learn more at: [https://icon.nffs.org/](https://icon.nffs.org/)

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**Core Business Solutions, Inc.**

NTMA is proud to announce its newest Affinity Partner, Core Business Solutions, Inc.! Core Solutions are ISO and Cybersecurity consultants, offering customized, simplified ISO 9001 and AS9100 services for small businesses seeking ISO 9001 certification and related standards; and providing consulting, documentation, and support for customers who are already certified as well!

**NTMA members can receive a 5% discount for consulting programs!**

Learn more at: [www.thecoresolution.com/iso-9001-for-precision-machining](http://www.thecoresolution.com/iso-9001-for-precision-machining)

Looking for more information on these or any of our other fantastic partners and programs? Please contact Kelly LaMarca (klamarca@ntma.org)
AMPED connects employers with precision manufacturing talent.

Post your job where the precision manufacturing industry’s most qualified talent go to advance their careers.

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