

THE RECORD

Published by the National Tooling and Machining Association

INSIDE THIS ISSUE

How NTMA Members Stay Connected During
Unprecedented Times - p 7

The Value of Membership - pp 20-21

Takeaways from the Paperless Insights
2020 Buyer's Report pp 26-27

and so much more...

THE VALUE OF MEMBERSHIP



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THE RECORD

OPERATIONS & EDITORIAL

Roger Atkins, President
Doug DeRose, Editor

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Upcoming NTMA National Events



Chapter Leadership Summit
NTMA Connect - All Virtual Conference
January 31-February 2, 2021



NTMA Spring Conference
Denver, CO
March 29-31, 2021



Emerging Leaders Conference
Phoenix, AZ
May 3-5, 2021



NTMA Summer Conference
Indianapolis, IN
June 14-16, 2021

DATES AND LOCATIONS ARE SUBJECT TO CHANGE



PRESIDENT'S UPDATE

With such an unusual year coming to an end (thankfully), what better time as an association and as association members for us to stop and consider the “Value of Membership.” I think 2020 highlighted the true value of being part of an association. The ability to receive industry specific, company size specific, and state specific information during the height of the pandemic seemed to be paramount for many of our members.

From an association standpoint, when the pandemic hit, our single-minded focus was immediately on you our members—protecting the family if you will. Now that we are 7 months into this attack, our strategy paid off. During the most unprecedented time in our business careers, NTMA members found that their membership paid off of helping them weather the crisis. While many continue to struggle, we are seeing a resurgence of activity across our membership.

For our year-to-date membership numbers, we are at a three year low in member resignations. Whereas I hate to lose any member, this year we have lost less than 5% of our total regular membership while we hear of much greater numbers across a multitude of associations. The real number affecting our total membership is the lack of incoming new members, which is not a surprise. We, as an association, made a conscious decision when the pandemic hit to focus on and protect our current members, which we have done.

So where do we now find ourselves? First of all, as an association, we are moving forward and have refocused our attention back towards membership GROWTH. We have re-engaged our third party new member development team which we put on hold during the height of the pandemic. We continue our bi-weekly COVID update calls with our Washington team of Franklin Partners and Bracewell Policy Resolution Group. In addition, we continue to have our twice a month Member Drop-In zoom calls during which we have an association member open with a brief presentation on a specific/current issue/event within their company, followed by member discussion and updates.

There is no doubt that the pandemic has driven people, companies, and industry to a virtual world of communication. A challenge to many, however, much of which most likely will be here to stay in some form. As an association, it has forced us to a virtual world as well.

That said, one of the most exciting things NTMA is currently doing to help us end the year with focus, direction, and vision for 2021 is our upcoming ENGAGE2020 “Virtual” Conference. This unique virtual platform will allow you, our members, to experience key industry leading speakers, technology presentations, and networking opportunities at this great event. Our virtual platform will also allow you to interact with your industry peers and partners from across the country in live on-line conversations.

As is the theme of this month’s Record “Value of Membership,” I think true association values come from us all in a variety of ways. Critical opportunities as we look ahead include:

1. **Attendance at ENGAGE 2020** – Please invite your key employees, industry peers, and colleagues to attend this event.
2. **Membership Growth** – It takes us all to grow the association; tell your story and invite others to join. There is strength in numbers to have even greater impact on our industry.
3. **Expanding Member Benefits** – We will be announcing some new programs at ENGAGE 2020 that will increase member value opportunities that I think you will find exciting.

So, let us remember: **We are In This Together** and **We are Stronger Together**. Embracing these words will support you, our members, and us collectively as an association. I ask us all to play a part in growing our association and strengthening the U.S. Manufacturing community for future generations.

Roger Atkins, President - NTMA

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How NTMA Members Stay Connected During Unprecedented Times

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, 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.



Upcoming Member Drop-Ins are scheduled on the following dates:

December 1, 2pm EDT; December 15, 2pm EDT;
December 22, 2pm EDT

Please check your email for future invites, or contact NTMA's Member & Chapter Relations Manager, Kelly LaMarca at klamarca@ntma.org or (216)264-2837.

We hope to see you on the next call!

New Member Highlights



Northwest Machining & Manufacturing
www.nwmachandmfg.com
Western At-Large Member

Northwest Machining and Manufacturing offers a full line of manufacturing services specializing in high performance aerospace and nuclear parts and assemblies.

COMMITMENT TO EXCELLENCE

When Guy Gage founded Northwest Machining & Mfg. in 1982, he envisioned a company that would provide solutions-focused expertise in the manufacturing of machined parts and assemblies.

He determined what would make Northwest Machining & Mfg. stand apart from the rest was — experienced personnel in all departments, best manufacturing

practices that would encourage efficiencies, robust process control systems, and the continuous investment in state-of-the-art machinery.

Our manufacturing capabilities are among the largest and most advanced in Idaho. Machined parts and assemblies have been its primary business for Northwest Machining & Mfg. The recognition of this level of importance has always driven Northwest Machining & Mfg. to new heights of performance, from prototyping machined parts to development advances in manufacturing through continuous improvement initiatives. We fully understand our customers' needs, wants and expectations, and strives to exceed them all.



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TSTC was established 50 years ago to help create a strong Texas. At the time, Governor John Connally predicted we would become “the most sophisticated technical-vocational institute in the country.” TSTC is living proof of that vision with ten campuses in Abilene, Breckenridge, Brownwood, Fort Bend County, Harlingen, Marshall, North Texas, Sweetwater, Waco, and East Williamson County.

Indeed, with a statewide role and mission, TSTC is doing what we were created to do. We are efficiently and effectively helping Texas meet the high-tech

challenges of today's global economy, in partnership with business and industry, government agencies, and other educational institutions.

TSTC graduates are highly valued by business and industry for their work ethic, knowledge, and workplace skills. Whether a student is considering upgrading their skills, or just starting out on a new career path, one of the many TSTC campuses is a great place to prepare for a great paying job in the vibrant Texas economy.



SilencerCo
www.silencerco.com
Northern Utah Chapter

SilencerCo staked its claim on a large share of the market and strives to increase market share with top-level customer service, innovative products, and the introduction of new products. We aspire to be the benchmark for innovation, marketing, education, and manufacturing for all consumer product companies.

We love suppressors. We believe in saving hearing, reducing recoil, and maintaining situational awareness while shooting and hunting to create a more enjoyable experience. We ultimately question why shooting has to be loud. We never build a “me too” product. We never settle for “good enough,” we strive to disrupt. We do what we do because we want better products, because we believe in the 2nd Amendment, and because we are users — we shoot and hunt and want the best experience possible. SilencerCo enjoys the challenge of bringing products to market in a meaningful way that captures immediate market share.



Davis California Industries II, LLC
www.dimfg.com
Arizona Chapter

Davis Industries is a small precision machine and sheet metal shop located in the heart of Southern California. Family owned and operated, the Davis family has been involved in the manufacturing world since 1969, combining fine traditional craftsmanship with the modern technologies of today.

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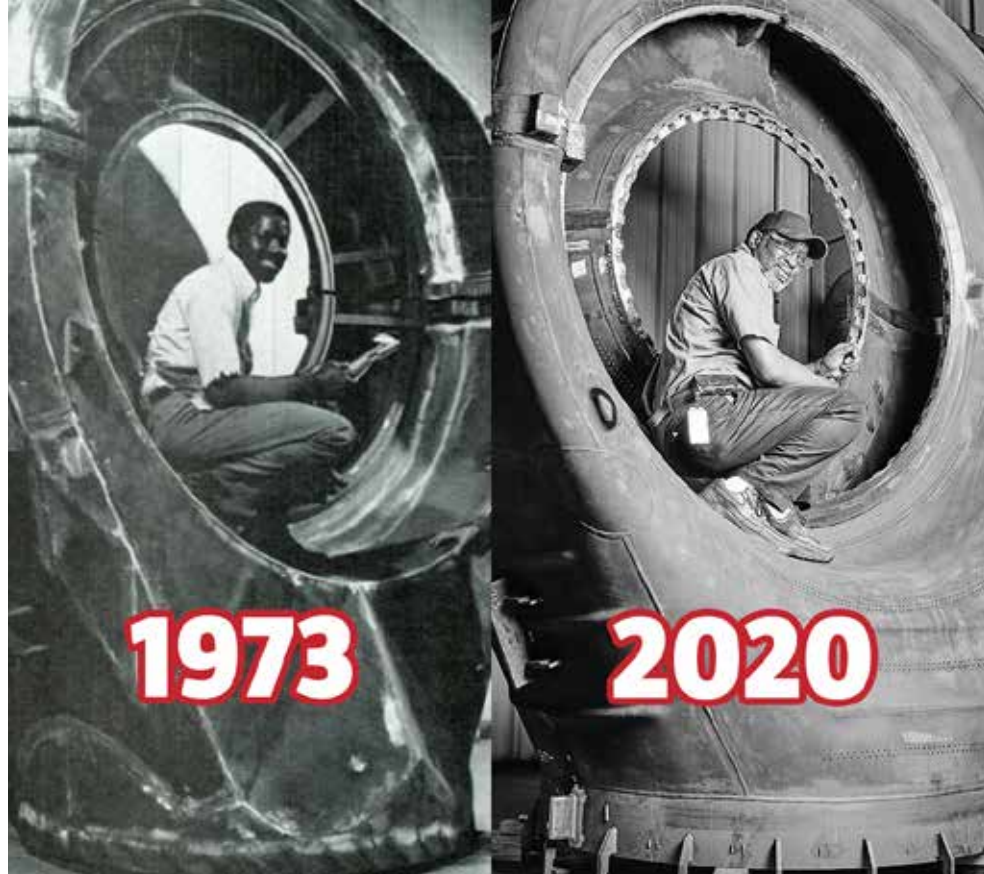
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Major Tool 53 Years of Service

Major Tool & Machine is where our People Make the Major Difference! Gene Davis celebrated his 50th anniversary in 2017 and continues to play a vital role in the business.

As we look forward to celebrating our 75th anniversary in 2021, we had a unique opportunity to recreate a photo from 1973. Congratulations to Gene, 53 years for service and counting!



In Memoriam: Raymond Mueller III



Raymond Mueller III and his wife, Sheila at a September 2010 Chapter plant tour.

The St. Louis Chapter was saddened to learn of the September 18, 2020 passing of Raymond Mueller, III, President of Mueller Machine & Tool.

Please join NTMA and the St. Louis Chapter in sending our sincere condolences to everyone in the Mueller family. If you wish, memorial contributions can be made in Raymond's memory to the American Cancer Society.

In Memoriam: Nick Hotujac



NTMA sends our condolences over the recent passing of Nick Hotujac.

Nick was a long-time member of the Cleveland NTMA Chapter, and a key member of the manufacturing community in northeast Ohio.

Nick is survived by his three children (Ann Marie, Joanne, and Robert), his loving family, and the entire Cleveland manufacturing community.

Memorial contributions can be made to a charity of one's own choosing.

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Event Highlights a Bright Future for Pittsburgh Manufacturing

By Molly West

When a global pandemic interferes with plans to celebrate your 2020 apprentice graduates, the only option is to build a super event—worthy of the graduates it honors. That's exactly what the Pittsburgh Chapter completed at the start of autumn.

This past August, the Pittsburgh Chapter held their annual Apprentice Graduation Banquet. Liz Blashock, the Pittsburgh Chapter NTMA Apprentice Program coordinator, touted its importance. "First of all, it gives the people that support manufacturing education a first-hand look at the faces of the next generation of manufacturers—the people that their participation and sponsorship supports. Secondly, our

apprentices get a glimpse at what their future can be with a career in manufacturing."

The graduation honored 29 graduates and their companies who have completed the four-year course of related instruction along with the necessary 8000 hours of on-the-job training required of Pennsylvania apprentices. Additionally, the chapter named Cody Endress of Alle-Kiski Industries the winner of the 2020 Pittsburgh Chapter NTMA/MSC Apprentice Competition. As Ed Sikora, executive director of the Pittsburgh Chapter, observed, "The future is bright for southwestern Pennsylvania manufacturing."



David Holm, the new President of Alle-Kiski Industries, stands with Alle-Kiski apprentice Cody Endress who took first place in the 2020 Pittsburgh Chapter NTMA/MSC Apprentice Competition.

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Founder & President - Reshoring Initiative



Lisa Ryan

Chief Appreciation Strategist - Grategy



Paul Nathanson

Senior Principal
Policy Resolution Group at Bracewell LLP



Omar Nashashibi

Partner - The Franklin Partnership



Caitlin Sickles

Director, Government Affairs
Policy Resolution Group Bracewell LLP



John Guzik

Partner - The Franklin Partnership



Jim Carr

President & CEO - MakingChips LLC



Jim King

President & Chief Operating Officer
Okuma America Corporation



Jason Zenger

Founder & Visionary - MakingChips LLC



Montez King

Executive Director - NIMS



Nick Goellner C.M.T.S.E.

Partner - MakingChips LLC



Stu Shepherd

Vertical Development Director, Americas
Universal Robots USA, Inc.



David Anderson OSCP

Principal - CliftonLarsonAllen



Dr. Chris Kuehl

Managing Director - Armada Corporate Intelligence



Tripp Burd

Manager, Strategic Application Engineering
Markforged



Scott Dawson

President & Owner - Core Business Solutions, Inc.



Chris Kuntz

VP Marketing - Augmentir



Scott LoSasso

CEO - LoSasso Integrated Marketing



Elizabeth Engler Modic

Editor - GIE Media Manufacturing Group



Robert Schoenberger

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For more information and speaker biographies

EVENT PRICING \$295 PER MEMBER COMPANY

With **ENGAGE 2020**, NTMA's Premier Precision Manufacturing Conference, going all virtual, our goal is to provide the best online event experience to all attendees.

That starts with registration: to experience all four days of this virtual event, registration is **priced at \$295** per NTMA member company. You can now register an **unlimited number of individuals** from your company, allowing employees in all areas of your business to **Engage** with the nation's largest Precision Manufacturing network.

CONNECTED AND BACK TO WORK

November 17-20, 2020

ENGAGE 2020 is now an “all virtual” event! NTMA is committed to providing a format of the highest quality: an unprecedented event for unprecedented times.

Opening Keynote

The New Normal - Are You Ready for the Next Disruption?

Jim King President & Chief Operating Officer,
Okuma America Corporation

Facing continuous workforce disruption, ambiguity, and confusion, manufacturing leaders need a reality check on which advances in technology will enable you to sustain your competitive advantage and adapt new talent strategies to grow your company. We are in the midst of a business transformation and it is not just changing how we machine parts. It is changing nearly everything we do. Jim will draw a roadmap to help you find a winning strategy to future proof your company and provide positive bottom-line results.

General Session 1

Reshoring/Onshoring

Harry Moser Founder & President - Reshoring Initiative

It is now clear: shorter supply chains are stronger, more competitive supply chains. Harry will demonstrate how to convince your customers that they will be more profitable buying from you – even just 20% to 30% of products they now import. He helped one job shop win a \$60 million order.

General Session 2

Election in a Pandemic - An Update from Washington, D.C.

John Guzik Partner - The Franklin Partnership

Omar Nashashibi Partner - The Franklin Partnership

Paul Nathanson Senior Principal - Policy Resolution Group at
Bracewell LLP

Caitlin Sickles Director, Government Affairs - Policy Resolution
Group at Bracewell LLP

Our team in Washington, D.C., The Franklin Partnership and Policy Resolution Group at Bracewell, will provide their insights into the election outcomes and the results of the race for the White House, battle for the U.S. Senate, and what control of the presidency means for manufacturing in America. This presentation will provide manufacturers with information on how the elections affect tax, trade, job training, and regulatory policy and possible scenarios for action in 2021.

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General Session 3

The 2020 Buyer: Today's Buyer & What They're Looking For In Finding New Business

Jason Ray CEO & Founder - Paperless Parts

The buyer profile is changing, and their expectations have evolved. Keeping buyers satisfied and finding new ways to position your business are the keys to your success. This session will cover the profile of parts buyers today; how/when/where buyers look for new manufacturing partners, what characteristics buyers look for in a shop, buyer expectations, and how to gauge price sensitivity.

General Session 4

Cyber Battle - Attacker vs. Defender

David Anderson OSCP Principal - CliftonLarsonAllen

This interactive session will demonstrate network attacks from two perspectives: the attacker and the defender. The attacker will demonstrate popular attack vectors that many organizations are vulnerable to. The defender will demonstrate how to defend against these attacks. This session will help you understand the attackers' methodology, identify ways to detect malicious activity, and learn about free tools that assist network administrators secure their environment.

General Session 5

The Year of Living Dangerously [Economically Speaking]

Chris Kuehl Managing Director - Armada Corporate Intelligence

This has been a tumultuous year thus far - threats of a manufacturing recession, supply chain crises due to virus outbreak, collapsed markets. All on top of issues that have been hitting manufacturing for years - labor shortage, trade disputes, rise of the robots, and so on. What is the sector looking at now and what does the rest of the year look like?

Closing Keynote

A Deeper Look Into the Future of Manufacturing

Elizabeth Engler Modic Editor - GIE Media Manufacturing Group

Robert Schoenberger Senior Editor - GIE Media Manufacturing Group

Eric Brothers Senior Editor - GIE Media Manufacturing Group

A panel and roundtable discussion session with industry experts from GIE Media who will discuss what the future is looking like for different industry sectors.

Breakout Sessions

What is Industry 4.0? Practical Strategies to Develop Your Industry 4.0 Workforce:

Jim Carr President & CEO - MakingChips LLC

Nick Goellner C.M.T.S.E. Partner - MakingChips LLC

Jason Zenger Founder & Visionary - MakingChips LLC

As more and more processes on the manufacturing floor become digitized and connected, shop owners are finding the biggest challenge is people. Learn best practices from overcoming issues, establishing practical and more effective ways to close skill gaps, maximize training efforts, and getting your frontline workforce ready for Industry 4.0.

How Can Job Shops Automate Low Volume High Mix Production with Low Risk:

Stu Shepherd Vertical Development Director, Americas - Universal Robots USA, Inc.

Learn tips on how small shops are automating machining, metrology, and welding processes using cobots and achieving fast payback. Examples will show how taking a lean integration approach can make introduction of automation manageable and low stress for shop owners and employees.

Government Resources for You - Putting Money Back in Your Business:

John Guzik Partner - The Franklin Partnership

Omar Nashashibi Partner - The Franklin Partnership

Learn to identify the various tax credits and deductions that support manufacturing businesses. Review the latest grants available for job training, worker retention, and hiring new employees. This presentation will help manufacturers put their tax dollars back into their businesses by making your government work for you.

Improving Your Company's Productivity through Performance-Based Training:

Montez King Executive Director - NIMS

In the ever-changing landscape of workforce development, manufacturers need to implement best practices in their learning and development approach to engage and retain their employees. We will be sharing these best practices on how companies are accelerating learning and on-the-job training to impact their speed to competency and overall performance.

Introducing Additive Manufacturing in your Shop: How it can Reshape your Future

Tripp Burd Manager - Strategic Application Engineering - Markforged

Additive manufacturing represents a new transformative shift in the way things can be made. The companies that thrive will do so by embracing new technologies and changing the way they do business. Investing in new equipment is a hard choice, and it is critical to balance the capital cost against the new revenue your project could be generating.

What I'm Seeing in Manufacturing:

Scott LoSasso CEO - LoSasso Integrated Marketing

Social media influences everything we do in our day-to-day lives, and its role in the manufacturing industry is evolving even today. Scott LoSasso will provide an expert analysis on the perception of social media in manufacturing, and will teach you how to shape your online image, bring in new business, and help potential customers and workers "see" manufacturing.

Thriving in a Multi-Generational Workplace

Lisa Ryan Chief Appreciation Strategist - Grategy

With five generations in the workplace at the same time, it's important to realize that people are wired differently simply based on the year they were born. In this session we will explore the significant differences and similarities between generations, as well as the characteristics of each generation and why they "act like that."

Company Certifications Today and Which Ones You Need for Tomorrow

Scott Dawson President & Owner - Core Business Solutions, Inc.

Each market segment brings with it new requirements that must be met just to land your first contract. This session will address the different certifications and how a small-to-medium size business can use an integrated approach to simplify the addition of new certifications.

Augmented Reality and Connected Worker Technology for Manufacturing

Chris Kuntz VP Marketing - Augmentir

With the growing skills gap and aging workforce causing increased pressures and COVID-19 related workplace dynamics forcing remote and independent work, manufacturing companies are turning to disruptive technologies such as Augmented Reality, Artificial Intelligence, and Connected Worker software to connect and empower their workforces with the tools and knowledge needed to perform at higher levels. Learn how leading manufacturing companies are using augmented reality and connected worker technology to adapt to the new normal.

Bonus Breakout Sessions

In an uncertain time, value doesn't just come from price - but also what can be offered to build up and prepare you, your business, and its employees for the future. That goes beyond owners and general managers. These Bonus Breakout Sessions will provide other key leaders within your company, including **Human Resources, Operations, Financial Managers, Sales & Marketing, and Emerging Leaders**, with meaningful, enriching discussions and key resources for their areas of your business.

EVENT PRICING \$295 PER MEMBER COMPANY

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For more information contact:

KRISTEN HRUSCH - 216.264.2845

KHRUSCH@NTMA.ORG

THE VALUE OF MEMBERSHIP

By Caitlin Sickles, The Policy Resolution Group at Bracewell

If life — and business — is a mixture of calm waters and rough seas, 2020 has had us clinging to our lifejackets and waiting for a break in the storm.

There's no doubt that these are challenging days for the manufacturing industry. The COVID-19 pandemic, and the shutdowns imposed in an effort to contain it, have significantly impacted our industry. Still, no matter the difficulty, manufacturers remain essential, getting the work done every day to create the products that keep Americans safe, healthy, and comfortable.

At NTMA, we see our association as a large ship, breaking through the waves to make easier passage for smaller member company vessels. Perhaps it is because of our association's seaworthiness that we are seeing NTMA membership retention year-to-date at a two-year high.

We wanted to know what makes NTMA an asset to our members, particularly in difficult times. So, we asked some members; their comments are included here.

+ ADVOCACY

Through our advocacy team on the ground in Washington, D.C., NTMA is constantly working on behalf of members and small- and medium-sized American manufacturing businesses to assess the impact of Beltway policy on business and communicate the needs of Main Street manufacturing to Washington policymakers.

In a time of tremendous uncertainty, NTMA has been providing manufacturers with real-time, trustworthy information about COVID-19 including federal, state, and local actions; safety guidance from OSHA and the CDC; and tax and loan programs to support business operations.

"When COVID-19 hit, getting updates on regulatory issues and information on the SBA and PPP programs was extremely valuable," said Ed Danzer, CEO of 6K Products. "We were able to utilize printed posters, keeping our employees up-to-date on HR issues. Being able to go to the One Voice website and have immediate access to information and resources saved me time and money."

NTMA's COVID-19 response information and webinar recordings are available online at www.onevoiceinfor.org.

+ BENCHMARKING

NTMA members know that manufacturing is a people business. So, members find value in NTMA's industry information which helps them secure top talent for the future.

"MetalQuest's employees are our greatest asset so we need to have a competitive compensation strategy to attract the best talent we can, especially in a state with a low unemployment rate," said MetalQuest Unlimited, Inc. Vice President and COO Scott Volk. "The NTMA Wage & Fringe survey helps us ensure that we are offering a competitive compensation package while establishing sustainable costs relative to others in our industry."



+ NETWORKING

Bringing the precision manufacturing industry together—to network, learn, and grow with each other—has always been at the heart of NTMA's mission. *"Through the past 12 years Win-Tech, Inc. has been involved with NTMA and during that time we have received many benefits as a result, but the one that is most valuable to me and to Win-Tech is networking,"* said Dennis Winslow, President & CEO of Win-Tech, Inc. *"Attending national conferences has provided me with the opportunity to network with peers who just 'get it' and who I would normally never get the chance to meet. I always leave each conference feeling energized and full of ideas that I can bring back to my shop."*

In these unprecedented times, NTMA is evolving to keep making vital connections happen, while ensuring that members can participate safely and cost effectively. With the help of an all new digital platform, NTMA is taking this year's Manufacturing ENGAGE 2020 event online. The virtual conference will keep attendees engaged, informed, and inspired. A full agenda (in development) is online here.

www.manufacturingengage.com



+ COST SAVINGS PROGRAMS

It's no surprise that every company wants to make the most of every dollar. NTMA supports members by helping them find cost savings—at no cost to them.

"Many companies claim they can save you a lot of money in products or services. We've all heard it," said Donald Lloyd, President of The Lloyd Co. *"It is a way to get the door open to present those products or services, which more often than not, are not savings at all. We found this to be true with comparing electricity service promotions. They quote an appealing upfront rate. But when the hidden add-on charges show up on the billing, it's not so attractive."*

That's not true for NTMA and its partnership with APPI Energy, Lloyd said. *"We met Noel Temple at a NTMA conference and set up an appointment for them to review our electricity costs. We expressed our concerns regarding pricing. APPI compiled our usage over the last few years and went to market. They negotiated with the top providers in the Texas market and compiled a list of 11 all-inclusive offers for our service. APPI also provided a provider/term recommendation and we went with their recommendation."*

The new contract has meant real savings for the company, as Lloyd explained. *"Our previous electricity expense was \$4,600 monthly. With our new plan, we save \$1,910 per month. That's \$22,920 savings per year. We've been on this plan for 2 years, so our savings so far have been \$45,840. This is serious money!"*

The best part? *"Engaging APPI did not cost us one cent,"* Lloyd said.

+ NTMA-U

Much has been written about the manufacturing industry skills gap and efforts to build bridges and bring new talent into the manufacturing industry. NTMA is taking real action by supporting members in their efforts to recruit, retain and train employees throughout their career trajectories.

"It is evident that NTMA member companies are keenly aware that their consistent need for skilled employees can only be solved by bringing more young people into the industry," said Frank McPhillips, Precision Machining Instructor at Prosser Career Education Center. *"They have consistently demonstrated actions of investing unselfishly for the benefit of all employers in the precision machine industry. The commitment and dedication to Precision Machining students in the state of Indiana and the Prosser Precision Machine program is to be commended."*

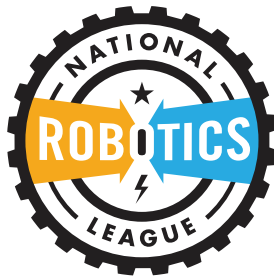
A quote often attributed to President Franklin Roosevelt says, *"A smooth sea never made a skilled sailor."* At NTMA, we know that's true. Manufacturers are the engine of American innovation and success. Together, we have weathered other storms and come out stronger. Together, we will help this country through the COVID-19 pandemic and beyond.



www.gonrl.org

FULL CONTACT INNOVATION

Engaging Manufacturing's Next Generation



Not a Typical Year for Manufacturing's Next Generation

By Bill Padnos, Workforce Development Manager, NTMA

During a typical year, NRL student teams from across the country would be working on their bot designs right now. They would be looking at ways to refine their previous bots, or create a new one from scratch, by:

- **Researching which materials will help their chassis to withstand a titanium spinning weapon.**
- **Strategizing new ways to secure their electronic components – and ensure they will be operational after a head-on collision.**
- **Designing their bot specifications – either on paper and pencil or their school's CAD software.**
- **Meeting as a team to finalize their bot and getting the parts ready to be machined.**

As we all know, this is not a typical year – but students are continuing to participate in our job-driven, project-based STEM learning experience.

Last week, my daughter and all of her classmates received an email from their Technology Education teacher joining the school's NRL team. Besides having a hard time realizing that my daughter was a high school freshman, I smiled when she read the email to me. This has continued across the country – Gretchen Santo from the Beaumont School told me the other day that her team is almost ready to work with Christopher Tool on machining their bot parts.

While we are all uncertain that there will be NRL competitions in the spring, manufacturing's next generation is still engaged in Full Contact Innovation.

The COVID-19 pandemic may postpone in-person events, but it is not stopping students from learning through the manufacturing process of designing, building, and testing a 15lb. bot.

This is why we have launched the NRL Mastercam Design Challenge – to reward student teams for their dedication to our program, and the innovation at its core. Eight winning schools with the best bot designs and documentation will each receive a \$1000 grant, which they can use to build their bots. For more information, visit <https://gonrl.org/nrl-mastercam-design-challenge/> – and spread the word to high schools in your community. The application deadline is December 1, 2020.

As you can tell, the pandemic has also not stopped AMPED from working to fulfill our mission to inspire, attract and prepare America's precision manufacturing workforce.

We need your support by participating in the NRL 50/50 Raffle. Visit <https://nrlraffle20.ourraffle.org/> and purchase your raffle tickets today.

The winner will be announced on November 20 during ENGAGE 2020. Seed the future of manufacturing today and help us close the skills gap through the NRL program. Even through an atypical year, we continue to see the budding strength in manufacturing's next generation. And, in spite of that uncertainty, the future for our industry looks bright.

One Voice: Federal Government Advocacy Program

Although 2020 has offered new and unique challenges to our industry, it's important to continue to have a partner in advocacy. NTMA continues to work closely with the team at One Voice: the combined federal government advocacy program representing small and medium-sized business manufacturing in America.

In addition to providing guidance through the uncertainties caused by COVID-19, One Voice has an innumerable amount of fantastic resources, not only to help you answer questions in your shop, but to continue to make the most of your business. This includes sponsored virtual events, news releases, educational materials, the Talking with One Voice podcast, and much more.

We hope you continue to utilize this key partner in One Voice—one that ensures that millions of manufacturers across the country have their voices heard.

Please visit www.metalworkingadvocate.com for more information.

www.OneVoiceInfo.org
 ONE VOICE COVID-19 (CORONAVIRUS)
 RAPID RESPONSE WEBSITE

Your source for trustworthy information.

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A JOINT EFFORT BY NTMA AND PMA

Core Business Solutions, Inc. is Proud to Announce We are Now an Affinity Member with NTMA

We are ISO and Cybersecurity consultants. Our dedicated, expert consultants set us apart. Core Business Solutions offers customized, simplified ISO 9001, AS9100, and CMMC consulting services for small businesses seeking ISO 9001 certification and related standards.

American owned and operated, we are committed to strengthening and improving America's small businesses.

Core provides consulting, documentation, training, and auditing support for customers who are already certified as well. We created and continually update our CORE Compliance Platform which is used for implementation and maintenance of ISO, AS, and CMMC standards.

As an NTMA member, you receive added value from Core:

You receive a 5% discount for consulting programs and also have access to online training for your QMS for many popular standards for Machine Shops such as ISO 9001, AS9100, ISO 13485, CMMC, and more. We offer a 2-for-1 price for all NTMA members for online training.

For more information visit www.thecoresolution.com or email info@thecoresolution.com.

As an NTMA member you receive a 5% discount



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2% of Every Order from an NTMA Member from November 1 Through December 31, 2020 goes directly to the NRL



BIG KAISER

Invest in world-class tooling, workholding and measuring systems from BIG KAISER and support the NRL at the same time.

"This will be our fifth annual promotion to support workforce development and STEM through the National Robotics League," says Chris Kaiser, President/CEO of BIG KAISER. "We love to help our customers reduce set ups and cycle times, improve part finishes, and reduce costs through longer tool life. We also hope this year-end offer will incentivize NTMA members who haven't tried us yet."

There is no order minimum or maximum, and only two requirements:

1. Place your order through your local BIG KAISER distributor and request "drop-ship" from BIG KAISER.
2. Note "NRL2020" on your order so that NTMA benefits from every dollar you invest.

BIG Kaiser offers 9 products lines of precision tooling, workholding, and tool management systems aimed at reducing both the overall process time and the cost per part. Download the latest product guide or find your local distributor at <https://us.bigkaiser.com>.

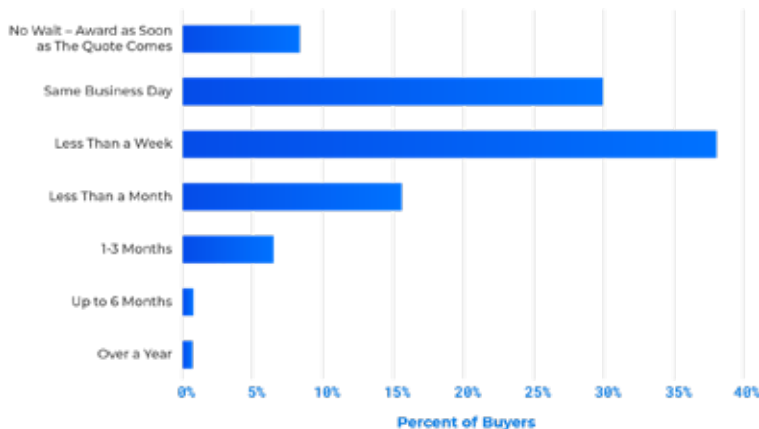


PLACE YOUR ORDER BEFORE DEC. 31, 2020 TO BENEFIT THE NRL!

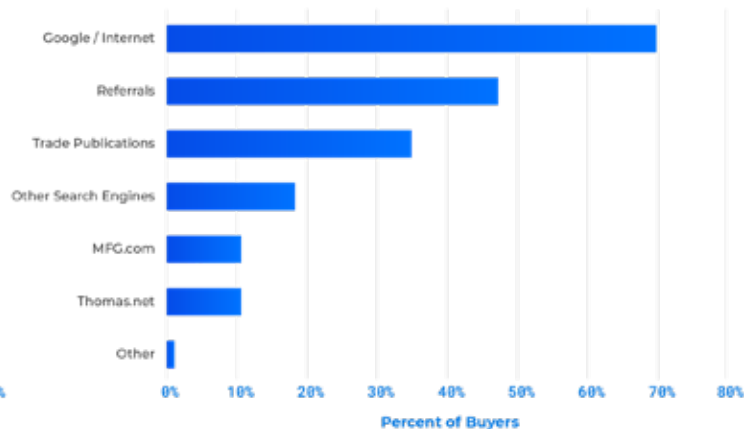
3 Takeaways from the Paperless Insights 2020 Buyer's Report

By Jason Ray, CEO, Paperless Parts

Time Between Receiving a Quote and Making a Purchasing Decision



How Buyers Found New Suppliers in the Last Year



Jason Ray, CEO, Paperless Parts

The custom parts manufacturing industry has never been more competitive, with small job shops forced to compete against large manufacturing networks like MFG.com, Xometry, and Fictiv. It's a race to meet buyer expectations – which means delivering a modern, seamless experience. Today's buyers want high-quality customer service, immediate quoting, and fast lead times and shipping, all without sacrificing quality of the product. Buyers are in the driver's seat – so job shops need an updated road map.

To help job shops understand how to cater their businesses to modern buyers, Paperless Parts surveyed more than 400 buyers on their preferences for finding, selecting, and working with job shops. This firsthand feedback from buyers is invaluable. Job shops should use these top three takeaways to guide their business strategy forward into Industry 4.0 and beyond.

1. Make an Online Presence a Top Priority

Having a web presence is crucial for competing in today's digital market, as 70% of buyers used a Google/Internet search to find new suppliers in the last year. This growing focus on web presence may be due to the buyer demographic, which is skewing younger. The majority of buyer respondents are in their 30s or 40s. Not only does this generation expect digital buying experiences – they are used to seamless online transactions, from shopping to banking – but they are also facing a whole new set of demands. Large companies are focused on streamlining procurement expenses to enhance profitability – forcing buyers to manage more vendors, focus less on personal relationships, and deprioritize understanding

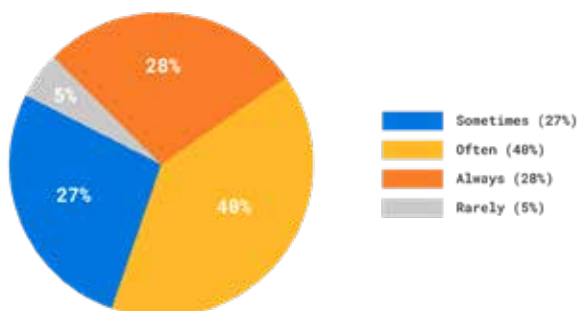
the parts they are buying. To cater to these buyers, job shops should make finding their shop as obvious and easy as possible with a strong online presence.

Once a buyer finds a job shop, they even use online presence to decide if they want to work with the shop. According to buyer respondents, a job shop's capabilities are the primary deciding factor. Therefore, job shops must clearly communicate all capabilities on their website, going beyond simply listing equipment on a webpage.

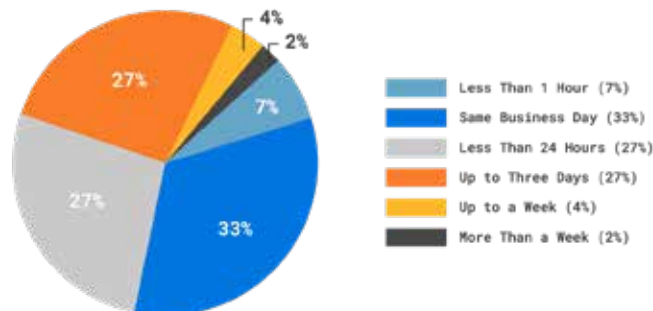
As the average age of buyers decreases, so does their level of experience with manufacturing technology. Gone are the days when buyers knew exactly what a job shop could produce on a 5-axis machining center or that in many applications the newest laser technology can compete against a punch press. Forty-three percent of these buyers check to see if a job shop has a website when determining if they want to work together, and an incredible 30% leverage social media accounts (Facebook, LinkedIn, etc.) to determine if a job shop will be a good manufacturing partner.



How Often Do Buyers Look for Local Suppliers First?



Buyer Expectations for RFQ Response Times



2. Prioritize Local Business

Location matters when buyers are looking for suppliers to work with. Sixty-eight percent of buyers look for local suppliers at the beginning of new jobs before searching elsewhere. Job shops can (and should) use this trend to their advantage. Proactively, they can look at a map and identify every potential customer within 200 miles of their facility. Shops can then market to those buyers with print ads, local events, and digital media that filters by location (e.g., LinkedIn ads). It's important to understand the buyers and competitors in the local market and to spend more money marketing to fewer people.

Job shops can also prioritize quotes this way. Knowing that people want to buy locally, job shops can assume they are at a disadvantage when they receive requests from potential customers based far away. In this case, shops should communicate with the buyer and find out why they have reached out of their local market. Based on the buyer's reasoning, and their general location, job shops can determine which jobs are most winnable, and therefore, which quotes to respond to first.

3. Streamline Quoting for Fast Turnarounds

Today's buyers want speed. Sixty-seven percent of respondents expect a quote in less than 24 hours – and 94% are not willing to wait longer than three days. Knowing this, job shops must send quotes as quickly as possible. They can't afford to spend time engineering quotes at the expense of a quick turnaround. Yet many job shops are still hindered by inefficient internal processes, bottlenecks and manual tools that make fast quoting nearly impossible. Investing in a paperless quoting platform will address these problems, improve the accuracy of quoting, and undoubtedly expedite turnaround. If job shops want to satisfy modern buyers, paperless quoting is a must.

Once the order is placed, buyers continue to prioritize speed. Ninety-two percent of buyers are willing to pay extra to get their parts faster. In fact, more and more buyers are willing to pay for speed, because there is an opportunity cost associated with slower delivery, and buyers are often responsible for mitigating the risk of late deliveries. Job shops should not hesitate to offer customers an option to pay more for expedited service on every quote, because buyers don't always

communicate when they need it or are willing to pay more for it. Digital quotes make offering multiple options easier for shops and more convenient for buyers.

Today's buyers are products of the times. As professionals in their 30s and 40s – many of whom are digital natives – they expect a certain level of immediacy and convenience that many job shops have yet to achieve. However, it's not impossible. With the right digital tools, job shops can eliminate laborious, manual processes that hold them back from fast turnaround times and seamless customer service. Digital quoting, for instance, can help job shops quote faster and more accurately, minimizing time wasted on over-engineering, so that buyers hear back faster. The less time job shops spend quoting, the more time they can spend marketing themselves, connecting with buyers, and winning business.

www.paperlessparts.com



NATIONAL TOOLING AND MACHINING ASSOCIATION

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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
of the month prior to the publication date.

Email to Kelly LaMarca at klamarca@ntma.org.

Upcoming Record Themes:

December
Year in Review

What's Your Story?

