

THE RECORD

Published by the National Tooling and Machining Association

INSIDE THIS ISSUE

Is Your Supply Chain Linked?
pp 18-19

When is a Not-Recession,
Actually a Recession?
pp 22-23

and so much more ...

SUPPLY CHAIN IS YOUR CHAIN LINKED?



NATIONAL TOOLING AND MACHINING ASSOCIATION

BEST IN-CLASS COST PER PART

DMG MORI

ADAPTIVE
BEAM
CONTROL

DEVELOPED &
MANUFACTURED
IN THE
USA

NON-CONTACT
RECOATER



LASERTEC 30 *SLM* US

+ Build Volume: 300 x 300 x 300 mm

+ 1,000 W single to ring beam



Visit dmgmori.com
to learn more!

Developed.
Manufactured.
Assembled.
in Davis, CA.

OPERATIONS & EDITORIAL

Roger Atkins, President
Doug DeRose, Editor

2023 EXECUTIVE COMMITTEE

Chairman - Gillen Young
Custom Tool, Inc., Cookeville, TN

Vice Chairperson - Bonnie Kuhn
Kuhn Tool & Die Co., Meadville, PA

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

Board Member - Eric Hagopian
Pilot Precision Products, South Deerfield, MA

Board Member - Kevin Ahaus
Ahaus Tool & Engineering, Inc., Richmond, IN

External Board Member -Debbie Holton
Converge Consulting, Wolverine Lake, MI

External Board Member - Barry Laughlin
Springfield, OH

DESIGN & LAYOUT

Bluebird Branding
www.bluebirdbranding.com



ADVERTISING INQUIRIES

To advertise in The Record, or for information on publishing sales literature, contact editor@ntma.org or call 800.248.6862.

President's Update	4-5
New Member Highlights	6

IN THE NEWS

DMG MORI Redefines the Footprint of Additive Manufacturing.....	8
Datanomix Lands \$12M in Growth Capital.....	10
The Lowest Hanging Fruit On the Supply Chain Risk Management Tree.....	12
Betar, Inc. Elevates Jason Wilkins to VP of Operations.....	14
Southern Manufacturing Celebrates 40th Anniversary.....	14
Congratulations to the NTMA & AMT Technology Award Winners.....	16

FEATURES

Is Your Supply Chain Linked?.....	18-19
When is a Not-Recession, Actually a Recession?.....	22-23
Risk Takers & Goal Makers.....	24
If I Only Knew Then... ..	26

SEND US YOUR STORY

Each issue of The Record will feature stories from members – and we want to hear from you. Send us stories of success, or those that fit the theme of the month's issue. The submission deadline is the first of the month prior to publication. contact editor@ntma.org or call 800.248.6862.

FUTURE THEMES

July 2023: Emerging Leaders Rising 2023

August 2023: Technology, Automation & Robotics...The journey Continues

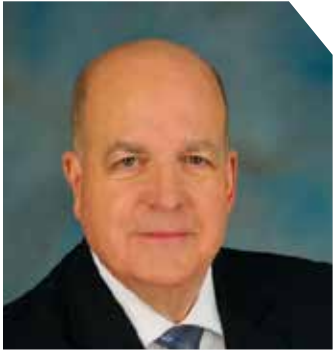
September 2023: MFG Day 2023...Your Time to Educate & Advocate



UPCOMING NTMA EVENTS



Engage 2023
October 18-21 | Indianapolis, IN



PRESIDENT'S UPDATE

To say things have changed in the last two years is an understatement both personally and professionally.

This month's focus is **Supply Chain...Is Your Chain Linked?** I would say those of us in the industry prior to 2020 agree that many of our work processes and contacts, at the very least, have been disrupted, if not in some cases destroyed. This brings me to the subject of "Supply Chains," probably not a topic most small- to medium-sized businesses prioritized before 2020.

We just expected the products to arrive as always and that the processes of working with our suppliers and vendors would continue as usual. Honestly, I think "supply chain" was a term rarely used and rarely focused on by us manufacturers because things just worked. We considered the term "supply chain" as a term used by the big OEMs and saw ourselves as a part of their supply chain. We never contemplated that each of us had our own supply chain, even if it was called something else. I dare say we usually didn't specifically manage it any differently than normal daily operations.

For most of us, economic downturns, a few material shortages here and there, and wars (if you go way back), were the few things that ever disrupted our so-called supply chain. I contend that the global pandemic did not only disrupt our supply chains but actually "CHANGED" them for years to come. For the first time, it truly introduced small- to medium-sized

manufacturers to the fact that each of us has our own supply chain and that those chains are important to the sustainability of our ongoing operations.

Some companies have even changed the titles of departments and positions from Purchasing to Supply Chain Management. Additionally, business conditions have made it no longer acceptable for purchasing persons in our companies to just purchase items for operations at will without consideration of sustained availability.

The unplanned change to Supply Chain Management was not only forced on us as manufacturers, but it is now an expectation demanded by our customers. It is now our responsibility to assure our customers that we are managing and ensuring that "we" are protecting "their" supply chain for the products we manufacture, procure, and assemble. Yes, another responsibility passed down to us, and one that it is critical that we perform for their sake and ours.

What does this new responsibility mean to us? It means we must have a more defined purpose and possible expertise in our procurement/supply chain groups within our operations. It is no longer about just getting product, but also being able to consistently get and manage product across supply chains. We must continue to monitor, analyze, and assess on an ongoing basis. Our customers will continue to

put more pressure on us to manage the availability of product, know where the product was sourced, or where the materials used for the product were sourced or extracted. As always, manufacturers must supply and retain the certifications and associated paperwork for proof at the time of delivery and for proof years down the road in case the product is returned or has failed.

The disruption and change have not only increased our responsibilities but also those of our OEM customers. They came face to face with the effect of what a complete sellout to offshoring can cause when an unplanned disruption occurs. For most of them, this is the first time in years that the supposed price reductions and savings have slipped through their hands faster than the savings fell into their hands. Years of savings have evaporated over the past couple of years forcing OEMs to re-think their sourcing strategies causing much of the reshoring of product seen in the US. They will continue to focus on near-shoring, re-shoring, and manufacturing closer to the point of use to not jeopardize product, as has been seen in the last couple of years. Adding in the unplanned global conflicts of the day will only further necessitate revisions to their supply chain plans.

So I go back to the question, "what does this mean for us the small- to medium-sized manufacturers?"

I think it all means "opportunity." That said, these new "opportunities" demand improved and enhanced performance on our side. This opportunity coupled with the current workforce challenges we face means that while we are working to grow and train our future workforce, we must be consistently focused on producing more product with the same number of people.

This drives us to improve efficiencies and productivity through automation and improved processes at every level of our organizations. This is the time we must collaborate with industry partners whose livelihoods also depend on us meeting the challenges of these new opportunities. The National Tooling and Machining Association (NTMA) has the right partners who are willing and able to help. If you need introductions or help, let me know.

In closing, I have been told by leaders in Washington DC, that this could be the greatest opportunity for US Manufacturing in many of our lifetimes. My question is, "What will we do?"

We can look at these new responsibilities and increased demands as negative to our operation and employees OR we can view these opportunities as a competitive advantage to further differentiate ourselves from our competition locally, nationally, and internationally.

The large OEM's will and are demanding this type of service and support, and they will be forced to only use those who can and do consistently perform under these new requirements.

It will take Courage, Action, and Performance, and I commit to each of you that NTMA will do everything possible to support you in this endeavor we call "US MANUFACTURING."

Together this will be the way we Advance Manufacturing's Future.

Roger Atkins, President – NTMA

You can help today, simply refer a member to NTMA.

IT'S YOUR TURN TO CREATE EXCELLENCE

Crafted with more than a century of experience, Okuma LB EX lathes have turned machining into an art form. Create new possibilities for your shop.

Learn more at okuma.com/lb-ex-ii

- Rigid box-slant bed design
- Thermally stable base casting
- Live tooling, sub-spindle, Y-axis
- Chuck sizes: 6–15 in
- Bed lengths: 9.84–78.74 in
- Automation-friendly



NEW MEMBER HIGHLIGHTS

HOYT ARCHERY

Northern Utah Chapter Member



Hoyt Archery was born in 1931 of one man's passion for archery and a relentless pursuit for innovation to deliver the best performing products in the world. With his father as his business partner and the application of his engineering skills, Earl Hoyt led the way in archery innovation and eventually left his job as an aerospace engineer and launched Hoyt Archery.

Fast forward over 90 years and this passion and legacy remain deeply ingrained in everyone at Hoyt. While many things have changed since 1931, our relentless pursuit for innovation and performance has not. Over the years, this pursuit has resulted in the development of new materials, new methods, new products, almost 50 archery patents, and countless other archery innovations that have changed the standards in the archery industry forever.

593 N Wright Brothers Dr., Salt Lake City, UT 84116-2847

(801) 363.2990

www.hoyt.com



PIVOT MANUFACTURING

Arizona Chapter

Pivot Manufacturing is located in Central Phoenix and does CNC machining and assembly for prime contractors like Northrop, Gen. Dynamics, BAE Systems, Raytheon, Nammo, and Boeing amongst others. Over the last 5 years Pivot has added 11 HAAS high speed CNC Mills and 2 CNC lathes as we replaced our older equipment. Four years ago, the average age of our equipment was 14 years old, today the average is 4 years and our capability and capacity have been increased significantly. Our wheelhouse is medium volume of low to medium complexity machined parts and assemblies and Pivot scores extremely high in terms of quality and delivery to our customers.

Pivot is AS 9100D/ISO 9001:2015 certified, NIST 800-171 compliant, and has recently purchased the building the company has inhabited for the last 22 years. With the repurposing of space and departure of previous tenants, Pivot will be able to about double the manufacturing capacity of the building to around 14,000 sq. ft., which will allow growth without disrupting operations and will enable the company to retain their various quality and small business certifications.

2602 E. Magnolia St., Phoenix, AZ 85034

(602) 306-2923

www.pivotmfg.com

MARZILLI MACHINE COMPANY INC.

Boston Chapter



Marzilli Machine Co. is a family-owned and operated precision CNC machining company located in Fall River, Massachusetts. The company was founded in 2011 by Jamie Marzilli and his wife Lee Marzilli, who had a vision of providing high-quality machining services to a variety of industries. Marzilli is now focused on serving the Aerospace, Defense, Firearms, & Medical industries. The team is capable of manufacturing anything from prototypes, to high-volume production runs (1000+ pcs). Quality has always been Marzilli's priority.

Being an ISO 9001:2015 certified shop, you can ensure your parts will be manufactured to exact tolerances, and go through a multitude of inspection systems. Current capabilities include but are not limited to CNC prototyping, multi-axis CNC milling, CNC turning, live tooling, CAD / CAM, & CMM & Visual Inspection Systems.

621 S. Almond Street, Fall River, MA 02724

(508) 567.4145

www.marzmachine.com

TRUE POSITION, INC.

Pittsburgh Chapter



Established on Pittsburgh's North Side in 1985 by John Z. Spudic, True Position, Inc. (TPI) is a family-run business now under its 3rd generation of leadership. TPI is a flexible, precision contract manufacturing facility, specializing in custom parts for the Department of Defense and power generation industries. The company is a growing supplier to the steel manufacturing industry by reverse engineering outdated equipment, providing repairs and collaborating with engineers to improve on existing designs. TPI also works with various local companies to repair and replace heavy equipment parts.

Now located in Gibsonia, their 11,000 sq. ft. facility includes seven CNC Mills and Lathes, a Ø60" VTL with live tooling, manual machining and grinding, welding, sandblasting, CMM inspection equipment, painting capabilities, and a 7-ton overhead crane. In addition to precision CNC turning and milling, TPI offers welding, painting and fabrication services. TPI has US Navy approved procedures for welding carbon, stainless, and aluminum and experience with machining a variety of materials, from nylon to nickel.

3919 Chessrown Ave., Gibsonia, PA 15044-9612

(724) 444.0300

www.truepositioninc.com

ProShop

REAL SHOPS.
REAL RESULTS.

30-40%
Increase

ON-TIME DELIVERY

50%
Decrease

SET-UP TIMES

93%
Decrease

EXPEDITING FEES

25%
Increase

SHOP THROUGHPUT

www.ProShopERP.com

XPAND YOUR WIRE EDM CAPACITY

PARTNER WITH ONE OF THE
LARGEST WIRE EDM FACILITIES
IN THE COUNTRY WHEN
YOU NEED EXTRA CAPACITY

XACT

Wire EDM Corporation

- Wire EDM Services
- Small Hole EDM
- Laser Part Marking



Proud Member



ISO 9001:2015 Certified

800.798.9228

www.xactedm.com

DMG MORI REDEFINES THE FOOTPRINT OF ADDITIVE MANUFACTURING

Groundbreaking: Domestic Manufacturing of LASERTEC 30 SLM US

By launching the new LASERTEC 30 SLM US with Adaptive Beam Control – developed and manufactured domestically – DMG MORI delivers a class-leading machine to address the rising demands of the US Market.

The LASERTEC 30 SLM US will start delivery from December 2023, focusing on best-in-class cost per part and complex geometries in an envelope of 11.8 x 11.8 x 11.8 inches. Breaking the mold of incumbent technology, the machine features several key advancements – Adaptive Beam Control enabling dynamic changes to Laser Power, Laser Speed, and Laser Beam Profile. Non-contact recoating improves the freedom and independence of powder spreading. Best-in-industry production cost using an optional innovative hybrid toolpath strategy that dynamically changes between laser beam profiles

using a 1.2 kW laser. The new LASERTEC 30 SLM US is launching at North America's most influential additive manufacturing event, the RAPID + TCT 2023, in Chicago from May 2 to 4.

With R&D and manufacturing for Additive Manufacturing in the US, Japan, and Germany, DMG MORI answers the growing demand for additive technologies in the US market and abroad. This contributes to the supply chain resilience and supports export-regulated applications or industries in local markets. The LASERTEC 30 SLM US will be the first additive manufacturing product to fulfill this requirement.

As an innovation leader in machine tool manufacturing, DMG MORI has expanded its broad portfolio of conventional manufacturing methods

with additive technologies since 2013. The LASERTEC DED hybrid and LASERTEC SLM models enable highly productive and reliable manufacture of additive metal components within the holistic DMG MORI ecosystem going from metal powder to high-precision finish machining. In the ADDITIVE INTELLIGENCE consulting unit, DMG MORI also supports beginners and experienced users in fully exploiting the potential of metallic 3D printing. DMG MORI is your partner for the next generation of manufacturing method through continuously developing innovative solutions in additive manufacturing and metal processing.

40 years of innovation and regional engagement

The launch of the LASERTEC 30 SLM US happened during the 40th anniversary year of DMG MORI USA. It marks another growth milestone for the company locally in the USA. With 12 locations in the USA featuring technology centers, showrooms, and the DMG MORI Manufacturing USA production facility in Davis, California,

DMG MORI has built up an outstanding regional presence in the country, supporting local customers like no other. Furthermore, it contributes to developing the skillset in the local workforce, which also serves the local communities.

DMG MORI

About DMG MORI

DMG MORI is a leading global manufacturer of machine tools and is driving holistic process integration based on technology integration, automation, and digitization for greater sustainability. In the "Global One Company," more than 12,000 employees work together to be a total solution provider for our customers. DMG MORI is represented in 43 countries worldwide - with 16 production sites and 113 sales and service locations.



Launch of the new LASERTEC 30 SLM US, developed and manufactured at DMG MORI Manufacturing USA, Inc. in Davis, CA



The House of Intelligent Automation



**Less idle times,
higher and more
stable quality
and integrated
production
processess**



**High quality combined
with fast and reliable
lead times supply the
customers with the
right parts, right time
and right measures
while keeping you
profitable.**



**Intelligent Automation
means an increase in
capacity, decreases in
labor and machine tool
investment costs per
part equaling
higher profits**

**To see how efficient your machines are running, call our automation
experts today for a free Productivity Audit - 513-779-4614**

**Fastems delivers intelligent factory automation solutions that
help metalworking manufacturers to increase their productivity.
Learn more about Fastems and visit www.fastems.com**

DATANOMIX LANDS \$12M IN GROWTH CAPITAL FOR ITS LEADING PRODUCTION INTELLIGENCE PLATFORM

New funding from MK Capital, Joint Effects, Hub Angels and existing investors to drive geographic and digital expansion of its mission to deliver Production Intelligence for the Next Generation™

Datanomix the leading production intelligence platform for precision manufacturers, announced it has raised \$12M in new growth capital. The round was led by MK Capital and Joint Effects, with investment participation from Hub Angels, multiple Datanomix customers, and previous investors Gutbrain Ventures, PBJ Capital, and CEAS Investments. Mark Koulogeorge of MK Capital will be joining the company's Board of Directors.

“Over the last two years, Datanomix has taken the market by storm with significant customer growth and product leadership,” said John Joseph, CEO and Co-founder of Datanomix. “Our No Operator Input™ approach to production monitoring, which does not burden operators with any data entry, frankly awoke a sleeping market that has been waiting for innovation. We are proud that our brand has been recognized by leading customers, partners and investors for the differentiation and impact we are providing to industrial manufacturers.”

Production monitoring as a category has been largely focused on asset utilization and downtime reason code collection. Datanomix pioneered a new methodology, the aforementioned No Operator Input approach, which takes downtime reason codes, the overburdening of operators, and complex data integration requirements completely off the table. “When Datanomix arrived on the scene, production insight had stagnated,” said Kylan Hastreiter, Vice President at Hastreiter Industries. “ERP systems had not evolved, and still only gave high level job stats after the fact, when it was too late to make improvements.

Some monitoring systems had their user interfaces slightly updated, but the methodology was unchanged from the last decade where raw data is collected, operators are tasked with tedious data entry and

tagging, and interpretation is left to manufacturing personnel who are already overloaded. Real-time, zero-burden insights were the gap that needed to be closed, and Datanomix has delivered that.”

Greg McHale, Co-Founder and CTO at Datanomix, added, “We spent hours with manufacturers who were using prior-generation monitoring systems, and saw exactly why operator input, complex integrations, and asset utilization alone were not transforming how they ran their businesses. While the category is called production monitoring, this is really about production

share their tales of making the switch to Datanomix after giving up on other monitoring solutions.

Datanomix has similarly caught the attention and trust of several major partners such as Hexagon, Vallen, Caron Engineering, ProShop ERP, and Flexbotics. These partnerships span from deep technical integrations to resale and broaden the reach and ability to serve customers who need access to critical production insights to drive their company forward.

“Onshoring is a major investment theme of ours,” said Mark Koulogeorge, Founder and Managing Partner of MK Capital, “and we have an obligation, even beyond the capital, to contribute to American competitiveness, especially in manufacturing. Datanomix is clearly the transformational technology in this rapidly emerging category, with a product foundation that puts them in position not only to lead today, but to continue to acquire, analyze, and provide insight into additional digital and operational assets on the manufacturing floor. John and Greg are experienced veterans to start-ups and new markets, and I am honored to be joining the Board to help implement the vision of Datanomix and be part of this massive opportunity to transform manufacturing.” The growth capital will fuel deeper product development and data source integrations in key production areas such as tooling and quality, and further investment in the industry-leading customer success and training programs Datanomix has built.

“

Over the last two years, Datanomix has taken the market by storm with significant customer growth and product leadership

John Joseph, CEO and Co-founder of Datanomix

management. Monitoring is a passive word, and people get into monitoring not to be passive, but to actively manage their operations better. What the market was missing was a vendor that believed it was their responsibility to provide context, insight, and impact that causes people to get out of their chair and respond because of what has been uncovered in their production data.”

Datanomix counts customers large and small in its success stories. From a handful of machines to hundreds in the same or multiple facilities, Datanomix serves operations ranging from household OEM's to major tier 2 suppliers to job shops. Datanomix has had particular success displacing legacy vendors, as showcased on its dedicated site where customers



About Datanomix

Founded in 2017, the Datanomix mission is to deliver Production Intelligence for the Next Generation™ by providing high quality, high impact, low burden operational insights to industrial manufacturers. Its flagship offerings include its No Operator Input™ Production Monitoring platform and Digital GEMBA Boards™. Learn more at www.datanomix.io and follow us @DatanomixInc



HEIDENHAIN

5x^{axes}



HEIDENHAIN TNC Controls

Reliably master 5-axis machining

Consider five-axis machining as a way to enhance your manufacturing throughput, reliability and part portfolio. TNC controls from HEIDENHAIN make this powerful technology accessible to users on the shop floor. You can program complex parts directly at the machine, simulate your programs with dependable machine modelling and

ensure perfect results with renowned HEIDENHAIN motion control. Normally complex tasks become easy thanks to user-friendly canned cycles for machine calibration and automated workpiece probing. And importantly, the Dynamic Collision Monitoring (DCM) function protects your machine from damage and downtime.

Discover
powerful
functions

www.heidenhain.com/5axes

HEIDENHAIN CORPORATION
www.heidenhain.us

THE LOWEST HANGING FRUIT ON THE SUPPLY CHAIN RISK MANAGEMENT TREE

By: Allison K. Giddens, President / Operations - Win-Tech, Inc.

We all on-board new employees. It's important they understand company procedures, job expectations, and begin to learn about the environment's culture. Why don't we on-board new suppliers? Isn't it important that at a minimum, they understand our company, the business partnership, and our expectations?

It can be tough to prioritize something that isn't directly revenue-generating, let alone something that seems to border on micro-managing (Spoiler Alert: No one likes to be micro-managed.) For small manufacturers, the aerospace and defense industries look vastly different today than it did 15 years ago. Requirements that find their way into contracts are layered. The types of expertise we ask of our suppliers seems to expand beyond their core competencies - but we still set the bar high and expect them to excel at it all.

There is no end in sight to this expansion of need, certainly not when it comes to how interwoven the supply chain has become. In recent months, my business has experienced a few hiccups that have made me realize how often mistakes could have been avoided if only the two parties were on the same page to begin with.

Example #1: Simon Says...

We received a call from a new customer telling us that a part we shipped them was held up in their non-conforming bin - not because of part quality, but because there was a paperwork error. When I heard this, I cringed. What industry no-brainer had we missed? The customer told me that we had failed to include a special code in the Shipping Notes.

"I'm sorry," I apologized. "Can you please tell me where this is called out on the purchase order?" I fumbled through the paperwork, looking for the instructions that would have guided this and trying to figure out where our process failed us (and the customer).

She responded: "Oh, it's not on the purchase order. It's just something our suppliers need to do." Upon further questioning, I learned that this special code was buried in a clause that was listed within the Terms & Conditions, which was linked via [broken] URL on the purchase order. Because of this, payment on the order was going to be delayed. Oof. Seems a bit silly, doesn't it? Not the shipping code. It is silly that we were just supposed to know to look for this. Imagine the time and headache saved on both sides had we been on-boarded.

Example #2: The Approved Supplier Club

Frequently, there are approvals in industry that pertain to the specific process required after the manufacture of parts.

Does a C-130 part call out for chrome plate? Does an F-35 part require non-destructive testing?

Many of these activities are controlled, driven by the design-authority and using proprietary codes and specifications. How would you know these things? Well, read the customer Quality Manuals, of course.

Oh - and the appendices, too. You'll also need access to a special website to access the specifications, too. Often, there isn't a single person (although your buyer is a good place to start) to ask about that access. Imagine the increased likelihood of compliance by the manufacturer if they are on-boarded.

Example #3: What's in the Box?

With Cybersecurity Maturity Model Certification (CMMC) on the horizon and industry "experts" who love to point out "NIST 800-171 has been in contracts for years, you should have been doing this all along!" - can you imagine how different the landscape would look if small business had been on-boarded back when it was quietly added to contracts back in 2017?

The clause was buried in subcontracts to the little guys in hopes small business would accept with no questions asked and fulfill the order with minimal disruption to the supply chain.

There are other pieces of flow-down that make me wonder what suppliers are agreeing to, but likely don't understand it or see how it applies to their responsibility in the supply chain: Human trafficking policies, conflict mineral guidance. When will small businesses be required to become subject matter experts in the health hazards of trace chemicals found in common adhesives found in your home's junk drawer?

Whether it's CMMC or the DFARs-flow-down du jour...

What if, before accepting an order for the first time that included all of this, a customer met with a supplier to review it in the first place? What if we didn't expect our suppliers to know it all? What if we required, before any first-time orders were accepted, an orientation of sorts?

Perhaps you already do this. If you do - congratulations, and nice work! I'm betting you have fewer systemic problems downstream in your supply chain.

What resources could you commit? What types of short-term delays and disruptions are acceptable for a bigger payoff later? If you're the supplier: What information do you find is so often assumed?

Imagine: An hour or two on the front end of a business relationship to mitigate all sorts of risk and help increase the chances that everyone is singing from the same sheet of music from the start.

Large projects and contracts have this built into their processes by default - but what about the rest of the supply chain? How many non-conformances would this prevent? How much risk could we mitigate?...or should we all just keep winging it?



www.win-tech.net



For more information, please contact
Linda Warner at lwerner@ntma.org or 216-264-2824.
Applications and self-assessment documents can be found here:
<https://ntma.org/resources/ntma-awards>
Applications should be sent to 6Saward@ntma.org

NTMA 6S Excellence Award

PURPOSE:

To improve the perception of American manufacturing by promoting and recognizing excellence in member shop organization and efficiency.

HOW IT WORKS:

- NTMA companies apply for the award by submitting a self-assessment based on criteria that demonstrate best-in-class practice in the six S's:
1. Safety 2. Sort 3. Set in Order
4. Shine 5. Standardize 6. Sustain
- Certificates are awarded every year for the first five years based on self-assessments submitted. Once the recipients receive five certificates, they are also presented with a trophy.

SPONSORSHIP OPPORTUNITY:

- Conference exposure via introductions, etc.
- Promotional exposure: web, print, blogs, and emails that promote and support the award.

SUBMISSION DUE DATE:

Please submit your application by **September 1, 2023** to be considered.

Qualified Tool and Gage Makers are Critical to Your Success!



169 White Oak Drive • Berlin, CT 06037

**Your manufacturing
environment demands skilled
tool and gage makers ready to
take on every day challenges
without delay**

We have the TEAM to help you!

MADE IN AMERICA AT AN



COMPANY

 **Sirois Tool**
www.siroistool.com
(860)828-5327
info@siroistool.com

 **Dow Gage**
www.dowgage.com
(860)828-2450
sales@dowgage.com

BETAR, INC. ELEVATES JASON WILKINS TO VP OF OPERATIONS

John Lohse, president of Betar, Inc., announced the promotion of Jason Wilkins to Vice President of Operations. Wilkins, who received the NTMA Emerging Leaders Rising Award in 2021, joined Betar in 2019 as Manufacturing Coordinator — his first position in the manufacturing industry.

In addition to a full range of responsibilities on the manufacturing floor, Wilkins led the company's ISO certification process, which was recently approved.

Betar is an industry leader in gundrilling —drilling holes up to fifteen feet long in metal materials, as well as honing, turning, milling, custom machining, surface grinding, and equipment build and repair services.

Betar was established in 1968 and delivers drilling, honing, turning, and other manufacturing services.

For more information about their services or to request a quote, please visit betar.net.



Jason Wilkins, left, recently promoted to VP-Operations at gundrilling firm Betar, Inc., with company President John Lohse.

SOUTHERN MANUFACTURING TECHNOLOGIES, INC. CELEBRATES 40TH ANNIVERSARY

Southern Manufacturing Technologies, Inc, better known as SMT, is proud to be celebrating their 40th anniversary.

Pictures are from an anniversary party / open house held for all the employees. On March 10, 1983, Roy Sweatman closed on the purchase of what was then Southern Machine and Tool.

There were 5 employees and no CNC equipment. Now there are nearly 100 employees and 23 CNC machines, some running 24/7. SMT grew 15% in 2022, ending with a new sales record.

SMT primarily serves the aerospace, aircraft, and defense industries, with parts on piston engine aircraft, commercial jets, fighter jets, missile defense systems, satellites, many Mars rovers, and even Artemis / Orion.

Roy Sweatman has been an active member of NTMA since 1984, serving on many committees both locally and nationally, including serving as nation NTMA Chairman in 2008. Roy's daughter, Shannon Sweatman, has been active locally since 2002 and nationally since 2007.



COMPLETE TOOLING CAPABILITIES



EXCLUSIVE Promotion for NTMA Members!

We're running an exclusive promotion on our TetraFeed & DOMX products for NTMA members.

Scan the QR code to browse our catalogs & request a quote to claim the promotion!

ip.pilotprecision.com/tetrafeed-and-domx



DOMX PROMO

Get a Free Holder buying one of the following options:

- ▶ 50 inserts 3/4" or 20mm Holder
- ▶ 70 inserts 1" or 25mm Holder
- ▶ 90 Inserts 1-1/4", 32mm or Capto Holder

TETRAFEED PROMO

Buy 10 Inserts/Pocket, Get a FREE Tool Body!



Tool Holders
Boring Tools
Cutting Tools
Workholding
Tool Measuring

**HIGHER PERFORMANCE.
GUARANTEED.**

You don't compromise and neither will we. Our mission is to find the best solution for you and deliver it with a personal commitment of efficient and measurable performance improvements.



CONGRATULATIONS TO THE NTMA & AMT TECHNOLOGY AWARD WINNERS 2023

By: Linda Warner, Executive & Membership Support – Tech Team Liaison

The NTMA and AMT Technology Teams deliver value to members in the areas of manufacturing technologies and best practices. The NTMA & AMT Technology Awards are designed to recognize and share excellence shown in these fields, strengthening the precision manufacturing industry. **The awards are focused on two categories: the Technology Excellence Award and the Leadership and Culture Excellence Award.**

The Technology Excellence Award is given out to a company that displays and exemplifies Advanced Technology Development and/or Integration. This can be defined as advanced manufacturing technologies that are strategically targeted or developed in order to achieve improved results in the following core fundamentals: market development, throughput, scrap, and/or safety.

This year, the Technology Excellence Award was presented to Focused on Machining and its owner Justin Quinn at the MFG meeting in Phoenix, AZ. Focused on Machining, located in Colorado, was purchased by Justin in 2016. Their primary growth sectors are aerospace, defense, and medical industries. Justin and his team spearheaded an integration of Paperless Parts and ProShop ERP in his shop. This has allowed the company to grow 40% in 2020, 20% in 2021, and 35% in 2022 all while keeping staff and overhead the same. His focus on leveraging technology to provide customers with superior services sets him apart from his competitors.

Adoption of all of the Paperless Parts communication tools provides customers with better service and reduces scrap caused by miscommunication from the customer to the shop floor. Quotes are turned around in 24 hours or less and 80% of that process is automated. Customer communication emails are 100% automated from start to finish of the part or order utilizing their ERP. The Leadership and Culture Excellence Award is focused on best practices in leader and associate partnerships and Goal or Visual management system deployment that has yielded world-class performance. This year's award was

presented to Boston Centerless and its owner, Steve Tamasi, at the MFG meeting as well. Founded in 1958, Boston Centerless supplies precision bar materials and grinding services. Their corporate location is a 45,000 sq. ft. state-of-the-art facility in Woburn, MA with two additional distribution centers strategically located across the country.

Boston Centerless has won the Leadership and Culture Excellence award for its best practices in Core Purpose and Core Values approach to business. Programs such as their "Golden Bar" monthly employee recognition, annual KPI's, Employee Skills dot matrix board, morning production meetings, and daily department huddles are just a few. Their continuous improvement committee ensures lean efforts throughout the shop. Investments are regularly made in training tools and technology for staff. Boston Centerless takes great pride in their world-class performance through the diversity of the workforce. Great effort is made to ensure every employee is treated with the utmost respect, regardless of their background. Flags representing each individual country their operators are from can be seen hanging along the front wall of their manufacturing floor.

NTMA is so very proud of these members for being recipients of these technology awards and wishes them continued success in their business endeavors. Congratulations!



Justin and Sarah Quinn



Roger Atkins, Sarah Quinn, Justin Quinn, Alex Renner, Steve Tamasi



Roger Atkins, Justin Quinn



Steve Tamasi, Roger Atkins



Tim Shinbara, Steve Tamasi



Awards

“Simply effective.”

We’ve developed our B-Cool MC 600 to help you minimize your process costs. Whether you produce large or small series, this water-miscible coolant with its economical formulation ensures stable and robust performance in universal machining applications. It keeps workpieces and machines clean and is gentle to people and the environment.

Test us. It’s worth it.
blaser.com/bcoolmc600



Our Liquid Tool. Your Success.

Dr. Olivia Bossart and Stefan Freudiger
R&D Chemist and Area Sales Manager
Blaser Swisslube AG

Is Your Brand Showing Decades of Wear?

Research shows **60%** of consumers avoid brands with logos they find odd or unappealing.

We know how the story goes: Your manufacturing business was the dream of past generations. Or it started out of a garage or small shop. And once the business took hold, your logo – your brand – may have been drawn up on the back of a napkin. It’s still there today. We certainly understand the importance of legacy and value your history. But that doesn’t mean your brand has to feel dated. At Bluebird Branding, we help businesses like yours **evolve**, **stand** out and **achieve long-term growth** and **success**.

BEFORE



AFTER



SCAN THE QR CODE TODAY FOR
YOUR **FREE** COMPETITIVE ANALYSIS





By: Ed Marsh - Growth & Strategy Consultant

Is Your Supply Chain Linked?

By: Ed Marsh - Growth & Strategy Consultant

Supply chains are complex. We knew that prior to 2020, and the COVID-19 pandemic reinforced it. Just-in-time is now often just-in-case. Having a single source is a weakness rather than a position of negotiation and strength. Mergers and acquisitions (M&A), labor shortages, and financial stressors impacting suppliers can quickly change availability, quality, and pricing. Managing supply chains is a mission-critical discipline, and the interlinking of supply chains is both a source of resilience and exposure.

Consilium

www.consiliumglobalbusinessadvisors.com



Supply chains aren't the only part of your business where things are linked, nor the only one where those linkages may be opaque.

Revenue Growth Systems

Industrial companies tend to think of the elements of a revenue growth system – such as strategy, marketing, sales, and technology – as very distinct. Strategy focuses on finance, investment in capacity growth, brand alliances, and expansion into new markets. Marketing concentrates on trade shows, some communications, a website, and paid journal ads. Sales fixates on closing business. Technology is normally focused on production and ERP.

They're all important, yet distinct. That view is a reasonable, linear evolution of the way companies have normally operated, and it's a reflection of the skills and preferences often present in founders and executives. Therefore, it's reflected in most organizational structures and in resource allocation.

But there's a problem.

Buyers, customers, and prospective buyers and customers see the world differently. Today, there's no longer a simple linear engagement with buyers. They research early and often. They consume volumes of information that frequently leads to incorrect self-diagnosis. Their buying journeys are convoluted, bouncing between early-stage activities normally associated with the marketing function, and much later-stage activities commonly aligned with sales responsibilities.

Rather than having siloed departments, a more realistic way to view the revenue growth system is like the old nursery rhyme "Dem Bones." Just as the thigh bone is connected to the knee bone that's connected to the shin bone, so also are strategy, marketing, sales, and technology deeply interrelated and interconnected.

A Systems View of Revenue Growth

I often hear companies say something like, "When we have a seat at the table, we win more than our fair share of deals." Oddly, while they instinctively track many production metrics, rarely can they specify their actual Closed Won/Closeable deals KPI. But their point is clear; they think they need more leads. Too often I've seen teams handed lots of leads, with a normal distribution of quality, that fail to schedule a single meeting, much less sell anything.

We often chase symptoms because they're obvious while the problems may not be clear, and the solutions are even more elusive.

We have to step back to understand how all the interconnected pieces fit together. Even a mid-size company's revenue growth is a tremendously complex system today. Let's look at some representative highlights.

Strategy informs which buyers you're targeting by company profile, job title, industries, problems they likely have, solutions you offer (and those planned on your roadmap), pricing, organic/inorganic growth, board of directors' role in planning, staffing, and resource allocation.

That means that the messaging on your website, the sales process your reps follow, the communication channels you offer buyers, and the sales tools that marketing creates all are interconnected byproducts of strategy.

Marketing generates leads but also sells because buyers are 70% of the way through their buying journey before they want to talk to a salesperson. Strategy defines the buyers they want to reach, and therefore their search engine optimization (SEO) and content planning. But SEO without a strong site design, good user experience, and conversion optimization does little good. Product marketing, competitive intelligence, public relations, and sales enablement all tie back to other functions.

Sales must engage buyers and close deals. But which buyers? Are the leads that marketing provides appropriate? Does customer service deliver on the company's promise? Training, coaching, sales process, and sales methodology all must evolve to reflect the current market zeitgeist and buyer expectations.

Technology is critical to track and measure the contribution and return on investment (ROI) of every dollar spent on revenue growth, and to manage toward improvement. Just as a production line with excess downtime gets attention, so must a marketing expense that underperforms or a rep who chronically misses quota. Often the same technology tools that help marketers reach the market, also help buyers communicate with your team, and sales understand buyers' digital body language.

All these elements of the revenue growth system are interconnected.

The Mindset Challenge

Executives and managers instinctively understand the interconnectedness of supply chains. When failing overall equipment effectiveness (OEE) is caused by raw material variance, it triggers supplier review, improvement, or replacement. That's second nature.

We need a similar mindset around revenue growth. If we don't have enough leads, is it because marketing is underperforming or because the sales division doesn't adequately prospect? If our leads don't convert, is it because strategy is confused and marketing can't clearly speak to ideal prospects, or is it because sales doesn't have the tools, skills, coaching, and accountability to work them? If CRM isn't providing the expected return, is the software wrong, accountability lacking, or process undefined?

These are simple examples of a complex system. Owners, directors, executives, and managers need to begin to visualize interconnected revenue growth systems so that their planning and execution are properly nuanced.



IMTS+

Explore a New
Digital Destination!



WATCH.

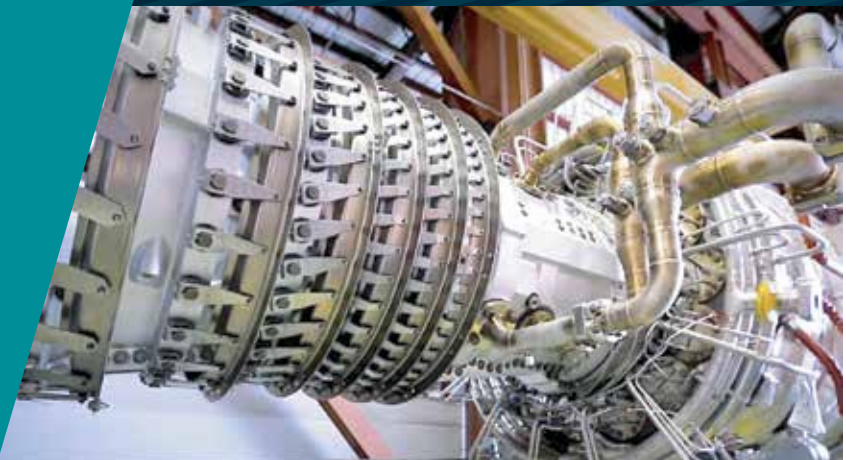
Discover the people behind the latest advances in manufacturing technology.

READ.

Dive into stories at the heart of manufacturing innovation.

JOIN.

Experience world-class manufacturing events.



LOG IN RIGHT NOW AT [IMTS.COM](https://www.imts.com)



NTMA MEMBERS

Optimize Your Machine Tool Performance, Productivity and Profits with Royal Products!



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





When is a Not-Recession, Actually a Recession?

By: Thomas W. Derry, Chief Executive Officer, Institute for Supply Management

While the US economy may not have technically entered a recession during the second quarter of 2023, the overall economy is far from strong. Based on data from the Institute for Supply Management (ISM), I would say the overall economy is close to stalling out, and the manufacturing sector has been in a full-blown contraction since December 2022.

Gross domestic product (GDP) growth in the US has been anemic since the start of 2022. In fact, the official GDP data from the US Bureau of Labor Statistics showed the overall economy actually contracted in the first and second quarters of 2022. The rate was minus 1.6% in Q1 followed by minus 0.6% in Q2. For most of us, two quarters of contracting growth is the definition of an economic recession, but it wasn't labeled as such by the

National Bureau of Economic Research, the academic body that officially identifies US recessions.

Since then, growth rebounded to a decent 3.2% annualized rate in Q3 2022 but has decelerated sharply after that. It declined to 2.6% in the fourth quarter and was only 1.1% in the first quarter of 2023. Based on ISM data, economic growth was a mere 0.54% in April – a clear trend in the wrong direction.

Taking a narrower focus on the manufacturing sector itself – the most relevant data for NTMA members – the picture unfortunately is a little bleaker.

Consider the following ISM data:

Manufacturing new orders started contracting in September 2022 and have been contracting for eight consecutive months now.

- New manufacturing orders started contracting in September 2022 and have been contracting for eight consecutive months since. As a result, order backlogs have been contracting since October 2022, seven consecutive months. These trends led to a contraction in production, which is now in its fifth consecutive month.
- Capacity utilization in US manufacturing declined from a relatively healthy 88.4% in December 2022 to only 82% in April.
- Inventories followed suit (as expected) and have been in contraction mode for two consecutive months. (In its Q1 release of GDP data, the Bureau of Economic Analysis specifically cited a decrease in private inventory investment as a significant factor in slowing overall economic growth.)
- Finally, and unusually, 62.7% of manufacturers say their customers' inventories are "about right." That's unusual because manufacturers generally tend to complain that customers' inventories are too low.

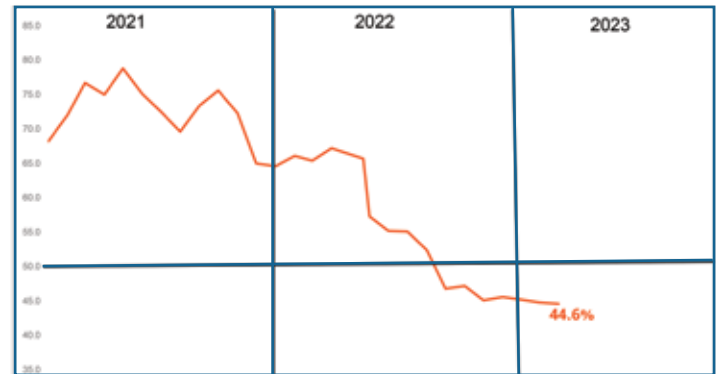
Manufacturing Price Index

ISM® Manufacturing Prices 2021-2023



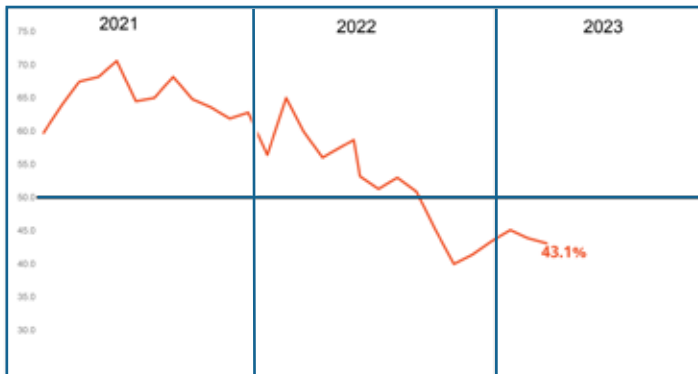
Manufacturing Supplier Deliveries Index

ISM® Manufacturing Deliveries 2021-2022



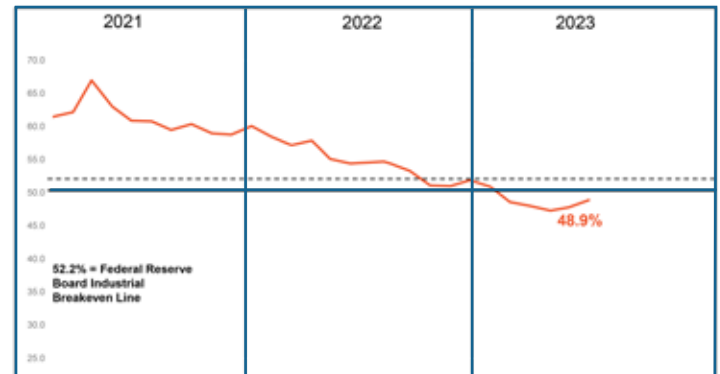
Manufacturing Backlog of Orders Index

ISM® Manufacturing Backlog of Orders 2021-2023



Manufacturing Production Index

ISM® Manufacturing Production 2021-2023



While the entire US economy may not be in contraction, I think it's more than fair to say we are experiencing a manufacturing recession. By now you're probably asking, "Is there any good news?" There are some noteworthy positive trends:

- Supplier deliveries to manufacturers have been getting faster. This is normal in a period of softening demand, as suppliers look to support sales and revenue by increasing shipments. It's certainly a welcome change from the chronic shortages that occurred in 2020 and 2021.
- After a period of intense inflationary pressure in global supply chains, prices appear to be reaching a point of equilibrium. It's worth recalling that, in July 2021, manufacturers were paying 60% more for their raw materials, inputs, freight, labor, and every other component of cost than they were 12 months earlier, as measured by the Producer Price Index for Intermediate Goods published by the Bureau of Labor Statistics. In contrast, ISM's Prices Paid

Index has been bouncing between contraction and expansion over the last several months, an indication that the automatic price increases of 2021 and 2022 are mostly behind us now.

- Manufacturers reported to ISM that prices paid increased 2.3% over the first four months of 2023, slightly better than their expectation of 2.5% last December. Their full-year expectation is further moderation, with year-over-year increases expected to be only 1%.

I would make the case that inventories, prices paid, and supplier deliveries are a sign that we are reaching a healthy point of balance in the manufacturing economy.

The future of the US economy depends on the consumer as consumers drive approximately two-thirds of all economic activity. Fortunately, the indicators show positive predictions. People have jobs and the unemployment rate is at a near-record low of 3.4%. Another measure is the labor participation

rate, which has increased to 62.6%, approaching its long-term average of 62.84% from 1948 to 2023. If inflation recedes, and consumer spending remains strong and free of external shocks, there is reason to be optimistic about the second half of 2023.

ISM's most recent semi-annual economic forecast indicates that manufacturers are also generally optimistic about the remainder of the year. They anticipate that manufacturing employment will grow by 0.5%, that production capacity will increase 0.4%, and that revenues will increase by 1.7%.



www.ismworld.org

Risk Takers & Goal Makers

By Michelle Edmonson, CEM, AMT Vice President – Exhibitions

Grit. Resolve. Mettle. No matter how you describe it, plenty of people in the manufacturing industry have the courage and audacity to dream big and do bigger. Three of these individuals are featured in season three of Profiles in Manufacturing – an IMTS+ Original Series, which was just released. **They are:**

Rick Kline

Sr., Chairman & CEO, Gardner Business Media (GBM)



Media for Manufacturing

Richard (Rick) G. Kline Sr. has spent his life in the industry impacting a generation of manufacturers. As the grandson of company founder Don Gardner, Kline Sr. GBM has become a preeminent publisher of manufacturing technology magazines that reach beyond the United States in a variety of ways.

Kline Sr. has grown the company to about 120 people producing eight English-language publications and three publications for the Mexican market, as well as becoming an industry digital content leader, diversifying its products with Gardner Intelligence reports and in-person industry conferences and events.

AMT recently honored Kline with the Albert W. Moore AMT Leadership Award – given to members of the manufacturing technology community who have demonstrated a lifetime of dedication to the industry.

Courtney Silver

President & Owner, Ketchie Inc.



Improving Parts and Lives

Courtney Silver entered manufacturing in 2008 when she joined Ketchie Inc., a precision machine shop, with her late husband, Bobby Ketchie. She'd never been in a machine shop before. "I immediately fell in love with machining and manufacturing," Silver says. "I love the fact that we're working with our hands, our hearts, and our minds to make products that are useful all across the country."

Although manufacturing quality parts is a top goal, Silver's greatest satisfaction is the company's emphasis on improving the lives of people. That starts with helping her employees develop their skills.

Andrew Crowe

Founder, The New American Manufacturing Renaissance



A Renaissance Man

When Andrew Crowe preaches the gospel of modern manufacturing, young people listen. His national campaign, The New American Manufacturing Renaissance tour, is reminiscent of a revival; the tent is big and all are welcome.

Crowe is dedicated to addressing the skills gap in manufacturing by attracting new, diverse talent from the next generation. He spoke on the IMTS+ Mainstage at IMTS 2022 about ways to give people from all walks of life the opportunity to find a purpose and a passion in manufacturing. Crowe's message is about elevating yourself and others. The sense of greater possibilities becomes palpable in his presence.

Watch season three of Profiles in Manufacturing, just released on IMTS+ at [IMTS.com/WATCHProfiles](https://www.imts.com/WATCHProfiles). If you haven't seen season one or two, check them out now on IMTS.com. New content is available 24/7 on IMTS+ at [IMTS.com](https://www.imts.com).

ALPLAN | EXCEED
YOUR LIMITS

ULTIMATE STABILITY

DISCOVER THE WORLD'S MOST STABLE ALUMINIUM

ROLLED AND READY-MILLED
ALUMINIUM PLATES FOR
IMPROVED PRODUCTIVITY

If I Only Knew Then...

By: Mark Baxa, President & CEO - CSCMP

Atop of the pyramid of human survival sits the world's senior-most supply chain leaders. I imagine this statement causes some degree of pause or even denial.

In essence, it is the supply chain that takes the demand of both society's needs and wants and translates them into tangible product delivery right at your fingertips, including all of the processes and stops in between.

It wasn't until the COVID-19 pandemic and the awfulness it cast upon society that we began to realize (now more than ever before) what makes the world move: the supply chain. Product inception, planning, procurement, manufacturing, delivery, distribution, shelf space fulfillment or e-delivery, service, and financial reconciliation are all part of the supply chain. These things are better represented as interconnected and interdependent processes that fulfill consumer demand, whether that be as a business or end consumer.

So, where are we now?

The supply chain's senior-most leaders are looking to reset and rebalance their supply chains so that they can once again build up and solidify the fluidity needed to deliver the business results. The COVID-19 pandemic spawned a complete dismantling of the supply chain performance continuum and optimized work processes. Digital systems as enablers were prevalent and powered the flow of data between all parties in the supply chain. We were optimizing inventory, planning, and routing freight like clockwork. Trust was at its optimal point. We could deliver

anything everywhere and more of it tomorrow, just as the customer expected. Global supplier networks could be trusted, and options to source the same raw or finished goods materials from multiple places were commonplace. That is no longer the case, not by a long shot. Sprinkle in a few more elements like the Ukraine war, geo-political saber rattling, inflation, and the cost of capital, and we have a big mountain to climb on the road ahead.

In this "recovery period" we are experiencing, we must ensure the workforce of today and tomorrow has the competency and capability to meet the demands of both the business and the consumer. As you can imagine, we learned so much more from the past two years as consumers: choice, ease of access, where and when to buy, and much more. We are smarter. And so are today's digital technologies, such as AI and Machine Learning. Combine those two factors together and the task is absolutely daunting for today's supply chain leaders. And why would it be anything else? You see, the most common regret or we could say awakening is that we often fail to invest in our people. Consider now that the supply chain landscape has changed. We are in a post-pandemic era where remnants of the ill effects on supply chain performance remain, and there is a high desire to progress out from underneath it.

If we are to succeed in crafting the new supply chain amidst the external forces we now face, resiliency to overcome and rise above the challenges only comes

from being a well-prepared organization. We must seek greater levels of competency so that your supply chain becomes more capable. You can't hire enough competency from outside the organization you lead. You can, however, choose to invest. How? Start with assessing your capability.

Do you know where your specific opportunities are when it comes to supply chain processes and overall knowledge? Once you determine that, a development plan must be instituted. You can't ignore this and expect to succeed on the road ahead. As the leading source of supply chain competency building, CSCMP is uniquely positioned to stand in the learning gap, specifically for senior-most leaders through the Executive Inner Circle and that of our Enterprise Corporate Membership. I believe that the smartest supply chains win!



Mark Baxa
President & CEO - CSCMP
msbaxa@cscmp.org



CMC Cardinal Machine Co.
Precision Machining & Manufacturing

GREGORY A. KASZEI
President

14459 Foltz Parkway
Strongsville, Ohio 44149
Email: CARDINALMACHINE@aol.com

Phone: (440)238-7050
Fax: (440)238-7051

QUALITY > INTEGRITY > ON TIME DELIVERY

PRECISION PROFILES
PRECISION MACHINING SINCE 1994

CORE CAPABILITIES

- > Turbine Component Manufacturing
- > Precision grinding (up to 136" in length)
- > Multi-Axis Milling, Machining, & Turning
- > Saw Cutting (straight, angle, radius, angle + radius)
- > Wire EDM

* EFFICIENT RESPONSE TIMES
WE REGULARLY STOCK STAINLESS STEEL ALLOYS SUCH AS:
403, 405, 410, 415, & 422

ITAR REGISTERED
US/CA JCP CERTIFIED
(CAGE CODE Available Upon Request)
SAM REGISTERED
ISO 9001:2015 REGISTERED
SMALL BUSINESS
(+25 Employees)

45727 STATE HIGHWAY 27, TITUSVILLE, PA 16354 > 814-827-9887 > precisionprofilesllc.com

NTMA
NATIONAL TOOLING AND MACHINING ASSOCIATION

PartnerShip

Freight shipping discounts with YRC, XPO, Saia and more.
PartnerShip.com/54ntma

Smoooooth.
Honing precision to the ⁿth degree.

For precision honing as tight as $\pm 0.0002"$ and weights up to 8,000 lbs, Betar does it better. Drilling, milling, turning and surface grinding, too.

RAPID QUOTES:
www.betar.net • 908-359-4200

John Lohse, President • Trustee, www.NTMA-NJPA.com

BETAR
PRECISION DEEP HOLE DRILLING

Modern Machine Shop

Your All-in-One Resource for the Latest Innovations in Metalworking

Subscribe, follow and join us – it all starts at **MMOnline.com**



JUNE 30-31, 2023
CENTRO CIBOLA/MEX
MEXICO CITY

THE PRECISION MANUFACTURING CONFERENCE

ENGAGE 2023

POWERED BY



TM

PLAN AHEAD

OCTOBER 18-21, INDIANAPOLIS, IN



IMPROVE
QUALITY
COLLABORATION
COMMUNICATION
COMPLIANCE



High QA quality management software brings quality and manufacturing together.

Manage, monitor, document and share the manufacturing quality process internally and throughout your supply chain.



GET A FREE DEMO

www.highqa.com/NTMAdemo



www.highqa.com



[/highqa](https://www.linkedin.com/company/highqa)



info@highqa.com



888.727.1266



NTMA SERVICE AWARDS 2023

NOW ACCEPTING NOMINATIONS

The Service Awards are given out each year at the Manufacturing Engage Conference. We need your help finding the best candidates for these awards.

Award categories are:

MEMBER AWARDS

HONOR AWARD

Nominate a member for continuing meritorious service and dedication to the industry and/or the Association by a regular member; traditionally awarded for longevity of service in dedication, as opposed to a single act or service in a short-time industry or Association position.

L.A. SOMMER MEMORIAL AWARD

For outstanding and continuing service of the highest magnitude; emphasis is placed on service to the Association by a regular member, 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.

WILLIAM E. HARDMAN AWARD FOR EXCELLENCE IN TRAINING

For a company or individual (regular member or education member) which consistently demonstrated strong support and active participation in structured training for the precision custom manufacturing industry.

NON-MEMBER AWARD

DISTINGUISHED SERVICE AWARD

For outstanding service to the industry by a person outside the NTMA regular member companies.

Help us recognize deserving individuals and/or companies that have supported and advanced the industry and the Association.

Submit your nomination(s) by Friday, August 11th, 2023.

For a nomination form, contact Linda Warner at lwarners@ntma.org

ADVERTISE IN THE RECORD

The NTMA Record is a high gloss publication that has grown from a member newsletter to one of the industry's leading sources of manufacturing insights, technology and industry trends. Every month The Record delivers important industry knowledge through curated content, timely articles and opinion pieces. When you advertise in The Record your product or service will be seen by thousands of qualified industry targets and premier precision custom manufacturers in the US.

PRICE PER AD

	Available Per Issue	Annual	Quarterly	Monthly
Premium Full Pages				
- Inside Front Cover	1	\$9,550.00	\$2,500.00	\$900.00
- Back Cover	1	\$9,550.00	\$2,500.00	\$900.00
- Inside Back Cover	1	\$8,800.00	\$2,300.00	\$850.00
- Opposite President Letter SOLD	1	\$9,550.00	\$2,300.00	\$850.00
All Other Pages				
- Full Page	4	\$7,800.00	\$2,000.00	\$900.00
- Half Page	8	\$5,000.00	\$1,300.00	\$550.00
- Quarter Page Ad	6	\$4,900.00	\$1,200.00	\$450.00
- Business Card Ad	20	\$1,000.00	NA	NA

SPECIAL ADVERTORIAL SPREADS 2

BEST DEAL \$2,000

Showcase your product with rich editorial and images that tell your story.



THANK YOU TO OUR SPONSORS

PLATINUM SPONSOR



DMG MORI

GOLD SPONSOR



HEIDENHAIN



SILVER PLUS SPONSOR



SILVER SPONSOR

BRONZE SPONSOR



NATIONAL TOOLING AND MACHINING ASSOCIATION

NTMA

O-D TOOL & CUTTER, INC. 

CNC GRINDING
KEVIN M. O'DONNELL
 PRESIDENT
 ISO 9001 CERTIFIED
Family Owned Since 1959

KEVIN@ODTOOL.COM
 PH: 508.339.7507
 FAX: 508.339.5667
 CELL: 508.341.5576

PO Box 372
 150 GILBERT STREET
 MANFIELD, MA 02048
 WWW.ODTOOL.COM

UNITED

CENTERLESS GRINDING
 & THREAD ROLLING

Normand J. Goulet III
 Vice President
 Manufacturing Engineer

25 Rosenthal Street ■ East Hartford, CT 06108
 phone: (860) 289-2987 ■ fax: (860) 289-3142
 web: www.unitedcgtr.com ■ email: njgoulet@unitedcgtr.com

ANOPLATE

Tim Stone
 VP of Business Development

ANOPLATE CORPORATION - an ISO 9001/14001 Registered Firm

459 Pulaski Street
 Syracuse, NY 13204-1134

Phone: 315-471-6143 x134
 Email: tstone@anoplate.com

For more Information: www.anoplate.com

Office Fax: 315-471-7132

Cell: 315-679-6265



INDUSTRIAL GRINDING INC

Specialists In Precision Grinding
 Ceramics - Flame Spray - Plasma Coatings
 Spindle Repair - Large O.D.-I.D. Surface Grinding
 AS9100D ISO 9001:2015

2306 Ontario Avenue, Dayton, Ohio 45414
 PH 937-277-6579 FAX 937-277-4536
www.industrialgrinding.com + sales@industrialgrinding.com



NATIONAL TOOLING AND MACHINING ASSOCIATION

1357 Rockside Rd.
Cleveland, OH 44134

Manufacturing America's Future



CELEBRATING 80 YEARS!

A BRAND NEW NTMA EXPERIENCE!

FEATURES INCLUDE:

- ***EASILY MAKE PAYMENTS***
- ***SHOP IN THE ONLINE STORE***
- ***LOG ONTO NTMA CONNECT***
- ***CHECK ON UPCOMING EVENTS***
- ***FIND NEW DISCOUNT PROGRAMS***
- ***DISCOVER NEW INDUSTRY REPORTS***
- ***BROWSE OUR ENTIRE MEMBER DIRECTORY***



**SCAN THE QR CODE & LOG ON TO
WWW.PORTAL.NTMA.ORG FOR YOUR NEW MEMBER EXPERIENCE,
TODAY!**

