



NETWORKING: CREATING RELATIONSHIPS FOR BUSINESS SUCCESS

Let NTMA help you connect at Fall Conference and beyond

Inside this issue

REACHING THE NEXT GENERATION:

It's time to get involved with the NRL. - p.8

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The networking event of the year. - pp.13-15

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BASIC NETWORKING:

How to make the connections that count. - p.20

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



2017 NATIONAL EVENTS AND TECHNICAL SEMINARS

September 17-22

EMO, Hannover, Germany

September 26-27

PMA Sales & Marketing Summit - Milwaukee, WI

September 28

PMA Sourcing Solutions - Milwaukee, WI

October 24-27

Fall Conference - San Antonio, TX

November 9

Plant Managers' Roundtable - Detroit, MI



NTMA WELCOMES NEW MEMBERS

ADVANCE MANUFACTURING TECHNOLOGY

Northern Utah Chapter
 Mike Valdez
 839 South 3600 West
 Salt Lake City, UT 84104

HUMANETICS

North Texas Chapter
 Mr. Jack Wehrle
 1700 Columbian Club Drive
 Carrollton, TX 75006

PLETHORA

San Francisco Bay Area
 Chapter
 Mr. Marc Steimer
 701 Cesar Chavez
 San Francisco, CA 94124

RAPID TOOLING, INC.

North Texas Chapter
 Mr. Neil MacRaild
 2605 Technology Drive,
 Ste 360
 Plano, TX 75074

SYMMCO, INC.

Northwestern Pennsylvania
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 Mr. Rob Peoples
 40 South Park Street
 Sykesville, PA 15865

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Pittsburgh Chapter
 Mr. Bill Radion
 1159 Industrial Park Rd
 Vandergrift, PA 15690

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 Sussex, WI 53089



PRESIDENT'S UPDATE

DAVE TILSTONE / NTMA PRESIDENT

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Networking...one of the most important and overlooked part of a business strategy.

Networking is often a priority when someone needs something. I've seen this behavior over and over again. What's wrong with this? Quite simply, it makes others feel used and in some cases, it's viewed as a sign of desperation. Neither is good. The best time to network is when you don't need any information or connections with peers or business associates.

Building your network is important to your business strategy. It provides a basis and source of expertise and connections that you may need one day. It's also a way to help others. A well-developed network can also function as a leadership peer group that provides input you need to improve your business and provide guidance from trusted colleagues about opportunities and challenges within your business. Your network becomes more valuable when you keep it updated with new contacts, and are proactive with those you value the most. One of the best practices of networking is to offer your help and assistance to someone during your first interaction or networking session. It's an effective way to show your willingness to help others and offers an opportunity to reconnect with the new contact when you follow up with

them. Your network also becomes more valuable when you introduce others to your network. However, be careful not to provide other's contact information before you clear it with them. It's respectful to do so and helps build a trusting relationship.

Building your network takes time. One of the most efficient and effective ways to build your network is through organizations such as the NTMA. Your chapter meetings and our national conferences provide significant opportunities to meet new people. Regardless of the programs and content of our meetings and conferences, networking with NTMA members always ranks number one. We specifically design breaks, social events and meetings with networking in mind.

Social media can also play a role in your networking efforts. LinkedIn was initially the most popular, but Facebook is quickly becoming more important to business leaders. Social media can provide timely information and "news" to you. You can participate in a technical group, a business oriented group or simply contribute to your social media network. It also provides confidential messaging with others to get questions answered and in many instances, provides a forum for conversations with those you trust.

Regardless of your opinion on social media, it's becoming the virtual network that you can and should leverage, but do realize its constraints. It's probably most important to know how to keep your

personal contact information and other confidential information secure. It's often the case that someone interested in doing business with you or someone interested in networking with you will look at your profile. Keeping your information current is another important criterion when participating in social media. Likewise, be very careful with the content you post. It helps others understand your interests, your company and who you are, but one poorly worded post or comment can make a lasting negative impression. A good rule of thumb is to only post information or comments to social media you wouldn't mind seeing on the front page of your local newspaper.

As an advocate and believer in the value in networking, I have approximately 7,000 contacts in Outlook, 1,765 connections on LinkedIn and several hundred friends on Facebook. I make an effort to have a face-to-face networking meeting at least twice a month with someone within my network. It helps me stay connected, informed and aware of ways to help others.

DAVE TILSTONE / NTMA PRESIDENT

Dave Tilstone



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NTMA TOP SHOP SEMINARS: WELL RECEIVED NATIONWIDE



The NTMA wrapped-up the initial series of Top Shop seminars with a stop in St. Louis last month. Originally scheduled to take place at Paulo, the event had to be moved due to overwhelming response.

Discussion included best practices in financial management, human resources, shop floor management and machine technology in

SEE "TOP SHOPS" PAGE 7



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"TOP SHOPS" CONTINUED

order to maximize profits and take companies from good to great. This was the third in NTMA's series of "How to be a Top Shop" seminars that have been held in Cleveland, Los Angeles and St. Louis leading up to the Gardner Media and Modern Machine Shop Top Shops Conference in Indianapolis September 6th and 7th. NTMA's partnership with Gardner Media is designed to provide the best in industry benchmarking for NTMA members..

The event wrapped up with a tour of NTMA National Associate Member, Paulo and a cocktail networking reception at the Urban Chestnut Brewery.

A special thanks to our sponsors: Makino, Memex, CliftonLarsonAllen, & Paulo



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PREPARING FOR TOMORROW'S MANUFACTURING LEADERS

BY BILL PADNOS, NTMA DIRECTOR OF YOUTH ENGAGEMENT



Imagine having the opportunity to kill two birds with one stone. With limited time available to work “on” your business instead of just working “in” it, the NTMA has a cost-effective way to train your company’s future leaders and solve the skills gap problem at the same time. The solution: connecting your company with high schools to create education programs.

Becky Morgan, in her Industry Week article, “The Only Manufacturing Skills Shortage That Matters,” provides a case for focusing recruiting efforts on candidates with the willingness and ability to learn. Manufacturing leaders are experts in both their current processes and their continuous learning about what the near future demands. Wouldn’t it then make sense to hire new employees based on what they can do for you tomorrow, next year or even five years from now instead of just concerning yourself on what you need today to finish that part?

When reviewing resumes or job applications, it is impossible to determine that an individual has a willingness to learn. It can be included in their personal description, but that is just words with no proof of action. You might be able to learn about the individual during the interview, however, that is just a limited snapshot of who you might be hiring. You do not receive the full picture until that candidate is hired and shows up on day one, day two and the following weeks to demonstrate on the job that they are able to learn how to operate your machines.

The NRL is designed to provide you with the opportunity to connect with a potential workforce base at your local high school. While spending time with these students (an hour a week or less), you are able to witness which students have a willingness to learn about the manufacturing process. Then, you can take the time to cultivate your relationship with those individual students.

Think of how much time you have wasted in the past hiring a bad candidate. Now, compare that to this ability to create the perfect job applicant. Serving as an NRL industry advisor and being a part of the program bring a great return on your investment.

While it is important to hire based on a candidate’s willingness to learn, it is critical that your current employees have the ability to teach and mentor. You can have your most experienced machinist demonstrate to the new employees how to use a particular machine his or her way. That will not provide you with a team of precision machinist, just a group of operators that can follow direction. You need for your current employees to learn how to be a trainer.

Utilize the NRL program as a training opportunity for current employees that you have identified as potential leaders. Having an apprentice or a young engineer take the leadership role in working

as the industry advisor for a school. This is a great way to see if that employee is able to teach the students about the manufacturing process. Are they able to communicate how critical project and time management is to industry? Can they teach students how to properly and safely use one of your machines? Is your employee able to understand the CAD drawings of the school bot to determine if the part could be machined and provide feedback on any changes that need to be made?

We are now at the start of the school year. This is the time to step up and offer to be a part of the NRL program for both schools and manufacturing companies. We know that your primary concern is your current openings, not necessarily finding someone who is interested in learning and growing. We recognize that it is not easy

to allow one of your rising stars to spend work time on a pro-bono project instead of concentrating 100 percent of what needs to be accomplished today. The only way that we can ease your current pain is to have you think about your company's future filled with employees that are eager to learn, and ones that are able to teach. To quote Becky Morgan, "Fill your company with those folks, and the future is unlimited."

For more information about the NRL program and how to engage manufacturing's next generation, contact Bill Padnos at bpadnos@ntma.org or visit www.gonrl.org.



SAVE THE DATE 11.08-09.17 Detroit, MI

NTMA

PLANT MANAGERS
ROUNDTABLE

Detroit, MI

November 8th & 9th, 2017

- Overview of Apprenticeship Programs and Workforce Development
- FMS Lines (Lights Out Machining) – Robot & CNC vs. FMS Systems
- Supply Chain Management
- Additive Manufacturing
- Roundtable Discussion
- Plant Productivity & Lean Principles

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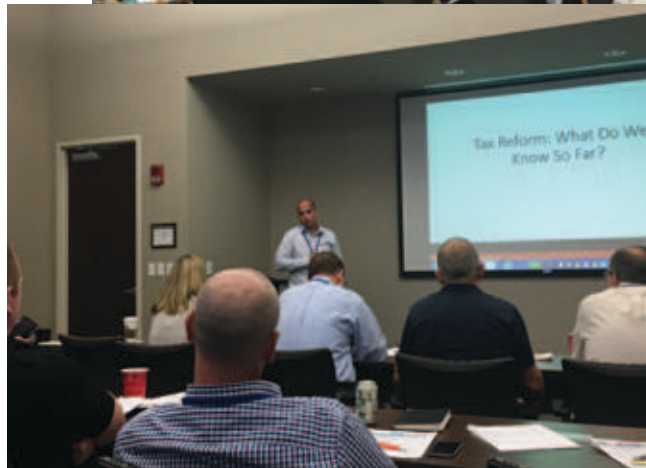
EMERGING LEADERS TACKLE THE FINANCIAL SIDE OF A MANUFACTURING COMPANY

August 23, the NTMA welcomed Emerging Leaders from Indiana, Mousuri, Kansas, Ohio and Illinois to St. Louis for the Emerging Leaders Roundtable: Financial Management for Non-Financial Managers, hosted by CliftonLarsonAllen.

ATTENDEES ATTENDED SESSIONS INCLUDING:

- Financial Management 101
- Reading Financial Statements
- Job Costing & Pricing
- Client Testimonial
- Capital Financing
- Tax Update
- Predictive Data vs. Historical Information

Andrea Wosel of C&R Manufacturing, Inc. was one of the event participants. "This seminar gave me a new perspective on several financial aspects of our company and I came home with new tools use right away in my decision-making process," Wosel said.



Attendees agreed the most valuable take-aways from the one day event were how to read cash flow statements and capacity metrics and understanding how

business financials relate to personal financials. The hands-on exercises really drove home the information.

A special thank you to CliftonLarsonAllen for sponsoring this day and to all who took the time to present and attend this Emerging Leaders event.



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NTMA IS NOW ACCEPTING APPLICATIONS FOR 6S AWARD



The NTMA Technology Team is committed to improving the perception of American manufacturing by promoting and recognizing excellence in member shops. The 6S Excellence Award is specifically designed to honor shops that display excellence in organization and efficiency.

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SHINE



STANDARDIZE



SUSTAIN



SAFETY

Recipients of the 6S Award are presented with a Certificate of Excellence at the NTMA Fall Conference which will be held in San Antonio, Texas, October 24-27.

For the 6S audit worksheets and application go to <http://www.ntma.org/resources/documents/6S-excellence-program/> or contact Kelly LaMarca at 216-264-2837 or klamarca@ntma.org

The deadline for applications for the 6S Award is October 9, 2017.

The Technology Team looks forward to presenting the 6S Award to you this year!



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1. Switch on the Ignition: Where to start with your Culture?
2. Journey to Lean & 6S: Beyond the Labeling, Philosophy and Method
3. Machine Tool Technology: Learn About the Heart of Your Machine Tool
4. Job Shops of the Future: Present vs. Future - Expectations of the Job Shop
5. Top Shops: What is a Top Shop and Why Should I Be One?

Moderated by: Randy Harland, Regional Director of DMG MORI

Randy Harland has been in the machine tool industry for 29 years. He has a master's degree in international management and has spent nine years living abroad in four countries. He enjoys facilitating group conversation about issues and trends in U.S. manufacturing.



Knowledge Bars

GRAB A DRINK & NEW IDEAS!

Take a break between sessions with some industry experts at our Knowledge Bars! These social stations are perfect for reenergizing with a beverage and snack while taking advantage of one of NTMA's greatest values – networking!

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Network, Network, Network

REGISTRATION

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A reception and registration wrapped in one! Come register for all your Fall Conference sessions and events while enjoying a drink and networking with all the NTMA attendees.

Tuesday, October 24
1:00P-5:00P

CONVERSATION LOUNGE FANUC

**Every day throughout
the Conference**

Stop by the Conversation Lounge during breaks to recharge your batteries, refresh your drink, and get reacquainted with members and National Associates. Grab a coffee or water, check your email and take part in our networking meet-and-greets with conference speakers.



CORNHOLE TOURNAMENT - SUPPORTING THE NRL

Tuesday, October 24
7:00P

Calling all competitors! Join us for a Cornhole Tournament the opening night of Fall Conference. Pair up with a favorite teammate, or let the NTMA help you connect with another member. The winning team gets bragging rights and logoed cornhole boards from our sponsors. Admission: \$25 per individual or \$50 for a team. Watch for a link to register!



NTMA'S 2ND ANNUAL 5K!

Be part of NTMA's second 5K as members race through the Hyatt Hill Country! Get in the competitive spirit by wearing your company logo and invite your whole crew to watch and network before and after the race. All participants will receive a race t-shirt. Be there to see who lifts the trophy when we award the top male and female runners! Registration Rate: \$35

Thursday, October 26
6:30A



PAC RECEPTION

Come have a drink on us as we celebrate those who support NTMA's Political Action Committee (PAC). Talk with John Guzik and Omar Nashashibi of The Franklin Partnership to learn more about all of our recent successes on the Hill and what you can do to become involved.

Wednesday, October 25
4:30P-5:30P



Thursday, October 26
7:00P-10:00P

CASINO NIGHT!

Feeling lucky? Join us for Casino Night and support the Government Affairs Administrative Fund (GAAF). Purchase all the chips you'd like-- if you're holding the most at the end of the evening, you'll walk away a big winner. Dinner and drinks will be provided.

A NIGHT AT THE ENCHANTED SPRINGS RANCH

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They say everything is bigger in Texas -- that includes our conference send-off. Thanks to Okuma and Paulo, conference goers will enjoy a Six Gun Fast Draw, meet and greet with a Texas Longhorn and get lessons from a Professional Trick Roper. We'll have a live band as well as a cowboy illusionist as we wrap things up in the Lone Star State.

Friday, October 27
7:00P-10:00P



EFFECTIVE COMMUNICATION – IT'S MORE THAN JUST WAITING FOR YOUR TURN TO TALK

BY STACEY SCHROEDER, NTMA DIRECTOR OF WORKFORCE DEVELOPMENT



The theme for this issue of The Record is networking. That word gets tossed around often, and I am sure for some, it induces a groan and perhaps a fleeting thought of 'is this really necessary?' Networking's spotty reputation is most likely due to people using it incorrectly – grandstanding about their accomplishments, steamrolling over others, or using it only for their personal gain. When done correctly, networking is one of the best ways to make connections, spark new ideas and make lasting relationships that have value for each individual.

The great news is that networking is grounded in communication, which is a process between individuals that can be constantly evaluated and adjusted to produce better results. In this article, I will cover some of the key aspects of communication, and tie it to effective networking. I hope that these tips will spark some ideas for your pro-

fessional and personal interactions, and make you feel more prepared to get the most out of upcoming events such as the Fall Conference.

Communication is a process. It starts with a thought. Then, the desire to share that thought with someone else. Then comes encoding, which is the selection of words, a tone of voice, facial expression and other non-verbal cues (sometimes unconscious ones) to convey your message. Then, the person you expressed your thought to has to decode the message, which is hearing, seeing and translating your words, cues, gestures and other non-verbals, until they get a thought. The idea that the person forms may or may not resemble the idea in your head.

As you can imagine, the tricky parts of the process are the encoding and decoding.



By using some of the active listening techniques explained in this article, you can help improve the accuracy of the decoding process, and the overall productivity of a conversation. Active listening skills are noticed by others – they might not be able to pinpoint exactly what was 'different' about their conversation with you, but they will feel that you understood them, were engaged and are likely to be interested in communicating with you in the future. That is what networking is all about, so let's dive in.

Listen more than you speak. Listen with your eyes – by watching the person that is speaking, you have a better chance of picking up clues like gestures, facial expressions

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and other non-verbals. Try to think about how the other person feels and make allowances. If a person has just had a difficult conversation, or has a pressing issue hanging over their head, they might not be at their conversational best. Be empathetic. Listen to the person's ideas, even if you've heard them before, or have a pre-conceived notion of their validity. Work at being open - maybe they have a viewpoint that you haven't considered. Let people speak - at their own pace. While it can be helpful to encourage with small nods, or short phrases like "yes," "go on", "that's so interesting", etc. - don't finish their sentences for them, or interrupt them. While the person might be sharing an opinion or idea that you disagree with, or otherwise find dismaying, resist the temptation to be critical or to evaluate the comment. Remember - there could be a mismatch between the intended message, and what you decoded the message to be.

The most critical listening skill is to check for understanding. To do this, simply paraphrase what you heard the other person say, in your own words. If the person doesn't believe you interpreted the message as they intended, they will correct you. Checking for understanding proves that you are vested



in the conversation, and that you are trying to make sure that you are following what the person is saying. That makes the other person feel valued, and much more likely to continue to engage with you - even if you did misunderstand part of the message initially.

A great conversation occurs when you are talking to someone instead of at them. This involves actually listening to what they are saying. Networking is about being authentic and genuine, and building trust and

relationships. Ask open-ended questions, listen actively, and agree upon appropriate follow-up actions and timing. Even in today's increasingly digital world, face-to-face interactions hold significant value. I hope you have found these tips helpful, and that you can approach networking events with renewed energy.



BUSINESS CONDITIONS REPORT – WHAT'S TRENDING IN THE INDUSTRY?

BY SANDY BAILY, NTMA

The NTMA Business Conditions Report covering the six months ending December 31, 2016 is now available. This report also provides a projection for the first half of 2017 as well as geographical and industry segment "snapshots" of business trends and conditions within the industry.

This Report, based on information from 93 NTMA member companies, indicates that overall business conditions during the 6-month period ending June 30, 2017 were very good to excellent for 38 percent of respondents, while business conditions were considered good by another 40 percent of respondents. This is slightly better than reported at the end of December 2016. Looking ahead, 60 percent are projecting that the next six months will bring a moderate-to-substantial increase in business conditions. The greatest level of optimism was expressed by members in the central area (IA, MO, NE, KS, MN) and by those serving the precision machining (excluding aerospace) sector.

Average work week per employee remained stable at 44 hours. However, future work on the books declined from 17.6 weeks to 14.7 weeks. Average Sales Per Employee came in at \$129,292 – up over \$9,000 from the December report.

TOP BUSINESS PRIORITIES INCLUDE:

- #1: Increase Productivity
- #2: Increase Sales (existing customers)
- #3: Finding Skilled Employees



- #4: Finding New Customers
- #5: Cost Reductions
- #6: Leadership Staffing

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



CONNECTICUT CHAPTER NTMA'S ANNUAL GOLF OUTING A SUCCESS

SUBMITTED BY DEE BABKIRK, EXECUTIVE DIRECTOR, CONNECTICUT CHAPTER NTMA



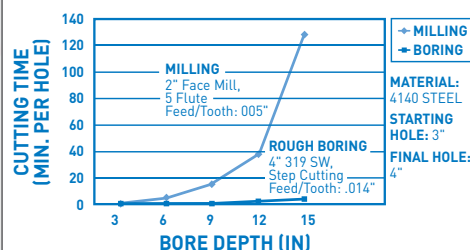
June 21, 2017, the Connecticut Chapter welcomed a record 156 golfers to their annual outing held at the Tunxis Plantation Country Club in Farmington, Connecticut. Everyone enjoyed a beautiful day, great raffle prizes and an amazing steak dinner. As he retires this year, the Connecticut Chapter would like to recognize Mark DiLorenzo who chairs the golf committee for a great event.



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NTMA'S FIRST STUDENT CHAPTER STARTS IN TEXAS

BY KARLA CHANDLER, NORTH TEXAS CHAPTER EDUCATION LIAISON



The North Texas NTMA Chapter is proud to announce a new initiative launched this summer at the HTEC Conference 2017, held in Grand Prairie, Texas. Under the leadership of the North Texas Chapter, educational institutions now have the opportunity to start a student chapter of the NTMA at their own campuses. The educational institution is required to be a member of NTMA to form a student chapter, and a local NTMA chapter must act as a sponsor.

The North Texas Chapter NTMA is honored to have coordinated this project with the help of local and national representatives from NTMA and the cooperation of educators from the Lincoln College of Technology Grand Prairie CNC training program.

Almost two years ago, Rick Calverley, Director of the CNC Education Program for Lincoln Tech, expressed a desire to initiate a student chapter program with NTMA. Karla Chandler, North Texas Chapter Education Liaison, took on the task of establishing guidelines for the new initiative.

With the help of the National Education Committee and a vote by the

membership, the Code of Regulations was amended to include the formation of student chapters in October 2016. Guidelines for establishing a student chapter were written and approved, as well.

As a result, NTMA now has its FIRST STUDENT CHAPTER---the Lincoln School of Technology Grand Prairie NTMA Student Chapter, chartered in July 2017. Another school, Richland College (Dallas County Community College District), is also in the process of chartering a chapter this fall.

Thank you to all the local and national representatives, from both business and education, who have participated to

make this happen.

If you would like more information on initiating a student chapter in your region, please contact Stacey Schroeder at sschroeder@ntma.org.





NETWORKING 101

BY DAN BAGLEY, NTMA STRATEGIST



Trust is the currency of business.

Networking is using the trust you have in someone to help you gain the trust of someone else that you would like to learn from or do business with.

Time and time again, when NTMA first-timers come to an event they rave about “networking.” And when owners of companies are asked why they come back year after year, very often their answer includes “networking.” What is this elusive social act that is so valuable to some? How does it work, what’s it for

and why does it have potential value?

In the advanced electronics world, networking is quite literally interconnections of independent hardware and software. These would just be simple wired connections, but for the twist that there is a language or code so that even disparate devices or software in the system can contribute or receive from the rest. This is true for people and companies, too. They can be networked.

“For some 8 years now, I’ve been shipping a super-flat, milled housing compo-

nent to a maker of medical imaging equipment. It is very profitable work for us, and I would be very interested in making more of these parts in variants, or other components in the same assembly, or other work that the buyer has, but I have no expertise in their industry. I don’t know who their competitors might be, or how to enter their segment. I’m a machinist and they build x-ray devices. I don’t have the first idea how to get inside to network. Do I need a plaid jacket and plenty of jokes? Really, though, can I get to know someone who knows the

space and help me connect in?”

In business settings, often who you know and how they feel about you can open or exclude you from a broader conversation or group of contacts. Sometimes people talk about a party in the next room that they didn't even know about. Networks already exist, and recognizing this – whether in a new bowling league, machine OEM, or helicopter spares business, people know each other and they have a “Rolodex” already. You can join this network, and move around in it by reference if you invest in some entry relationships, and are open about what you are trying to do.

“I want to learn about the medical imaging supply chain and how to find more business in the space. We are doing a little bit now, and it's a very good fit for us.”

“We are considering a move to 5-axis milling, which is like a moonwalk for us. We don't know who to trust or how to decide where to go to start.”

“Procurement contracts some buyers in the oil patch ask us to sign are more than we can bear. Where can I find experience from others about negotiating or accepting terms and conditions without hiring an expensive lawyer for every detail?”

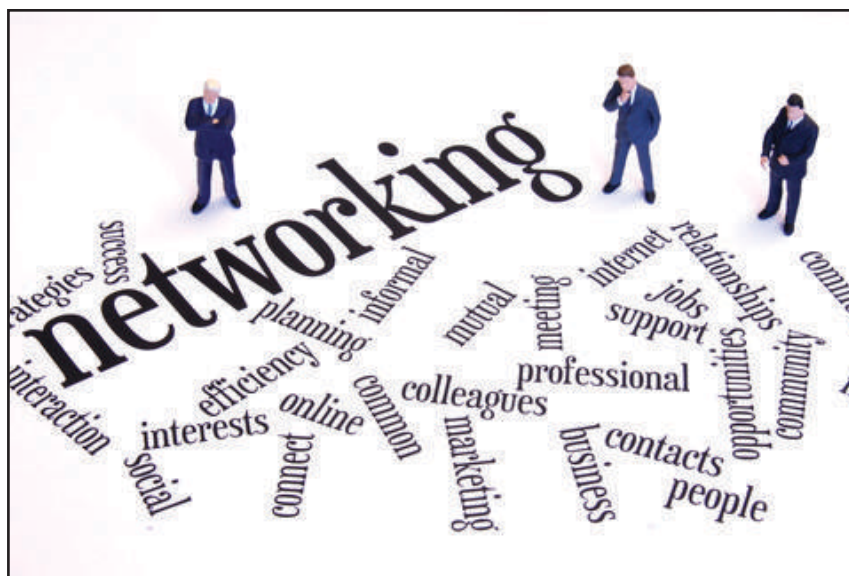
Have you ever been in a room full of people chattering in clusters, and you didn't know where to walk to join the milieu in progress? You know, a room full, but you are alone?

Imagine an aircraft suppliers meeting for a major OEM has invited you to vendor day. You may greet the one to your left and right, but are they who could help advance your company interests? In this case, networking would be finding a person who could introduce you to three other people who know the people you could benefit from getting to know. If this feels like “schmoozing” I really do understand. But you could view it as research, and you could invest

some discomfort by striking up a conversation with someone on the attendee list that you would like to know, for a start. HINT: Organizers or executives or staff of almost ANY event will go to great lengths to introduce you to a person of interest to you if they understand your mission.

WHY WOULD I “NETWORK,” YOU MIGHT ASK? EACH OF THESE CAN TURN TRUST INTO HARD BUSINESS BENEFITS:

1. Get deeper machine technology insight and access to engineering resources
2. Build friendships with senior ultimate decision makers and stakeholders
3. Develop referrals to customers from others in the same accounts or industries
4. Get senior level help or attention when bureaucracy gets in the way
5. Ask questions and get answers faster and from decision makers up the chain



6. Gain access to new technology or processes faster
7. Build trust worthiness as a customer, supplier or partner – faster
8. Develop mentors and supporters as you pursue investments
9. Access resources that your scale might not otherwise avail
10. Broaden your knowledge and experience through new colleagues

Now some fathers of business say that talking to a lot of people, and building networks of friends who can trust you and extend trust for you is a waste of time. Without the guile of wanting something, getting to know someone in your sphere is a natural, innocent act of someone who wants to learn.

FOUR TIPS TO LEARN TO NETWORK.

1. Pick one person that could help you in some way, and approach them with an open, honest request. “I'd like to get to know the president of XYZ Coolant Company because we would like access to the latest technology in that field.” Ask around – who might know this person, and ask for an introduction for a discussion to learn.
2. Pick a string to pull. You can meet someone in any room or group you walk into. If you use that person as a hub, they can refer you to someone. “Oh, you are new here, too? Who introduced you to the organization?

Have you met anyone who I could meet to help me learn the ropes?”

3. Go small. Don't try for 20 relationships – try for two or three, and invest in them. Go to dinner, get some time, have a coffee, plan a call... invest in a few and build them out. Then, move on to more.

4. Make a contact card for everyone you meet that is interesting. Contact space on your phone or computer is unlimited!

Put a contact in, make a few notes, and set a reminder on your calendar to follow up with them in the future. Seeds never grow that are not watered.

We'll explore more about networking and making connections work for you in future segments. Meanwhile, comments or questions to rdbagley@ntma.org.





BUILDING ON THE PAST AND MOVING INTO THE FUTURE

Wagner Machine Inc. was started in Doylestown, Ohio in a 575 square foot garage in 1957 by Phil and Betty Wagner. Phil worked for Babcock & Wilcox in Barberton, Ohio as a machinist and wanted to supplement his income to support his seven children. Phil retired in the 70s and his sons Philip and James moved the business in 1980. The new facility had 14,000 square feet. Betty worked in the business until 2000 and was everyone's favorite driver. She enjoyed making deliveries and staying involved.

Philip passed away in 1986, and James

became a corporate bankruptcy attorney in Hawaii, so Phil's youngest son, Michael, took over the family business. With the help of yet another brother, William, Wagner Machine, Inc. moved again in 2005 to a 35,000 square foot facility in Norton, Ohio where it exists to this day.

In 2016, the third generation of Wagners took over day to day operations when Michael's daughter, Courtney, became president of the company. Current management has big plans for the family business. The Norton location has plenty of room to expand and has recently invested \$1.2 million



in new equipment to increase productivity and facilitate efficiencies. This year marks the 60th anniversary of Wagner Machine Inc., and the company marked the occasion with a celebration on August 25, 2017. Wagner Machine, Inc. is definitely building on the past and moving into the future as the company strives for quality with integrity in order to exceed customer expectations.



CORRECTION TO WEILER NATIONAL ASSOCIATE MEMBER SPOTLIGHT

Weiler's specialty is building of high precision teach lathes, also referred to as the E-Series Precision Lathes. These lathes can operate in manual, cycle or full CNC mode. Best for small batch, one-offs, or prototyping applications. V-Series 4-Way precision lathes that allows for economic machining of both long and thin workpieces weighing up to 8t

without needing to re-clamp as the sides overrun the steady rest and tailstock.

WEILER is family owned and has sold over 150,000 lathe worldwide; employs over 500 people and has its own apprenticeship program. WEILER has become one of Europe's largest and best known manufacturers in its field.

WEILER North America, subsidiary of WEILER Werkzeugmaschinen GmbH, incorporated in 2006 and partners with distributors to meet our U.S. customer needs.

We regret the errors in the June 2017 article.



CUSTOM TOOL HIRES LARRY BATTLE AS DIRECTOR BUSINESS DEVELOPMENT

CONTRIBUTED BY MICHELLE YOUNG, CUSTOM TOOL, INC.

Precision machine company and NTMA member Custom Tool, Inc., of Cookville, Tennessee has welcomed Larry Battle as director of Business Development.

Battle brings significant industry experience in the healthcare, law enforcement equipment and heavy-truck markets, along with management experience gained with large manufacturers in the Southeast.

"This is a very dynamic time in manufacturing," said Bob Young, vice president of Sales and Operations at Custom Tool. "We are looking to Larry to introduce Custom Tool in markets where customers need a sustainable, dependable supplier for parts specific to their individual needs. That mission includes helping us build on our

workforce development efforts to ensure we have the talent-base to deliver high quality parts at a competitive price. We are confident Larry will play a big role in helping us reach these growth objectives."

Battle commented, "I was attracted to the unique culture of excellence and willingness to embrace change. When you combine that with our technical capabilities, ideal geographic location and our leaders' focus on strategic investments, you have a recipe for an exciting time at Custom Tool and a great partner for our customers."

Custom Tool specializes in maximizing the latest in CNC and robotic technologies to supply machined and fabricated component parts to companies in the automotive, marine, agricultural and consumer



markets. In April of 2016, Custom Tool was among the first companies in the country to obtain ISO9001-2015

certification of its' quality management system.



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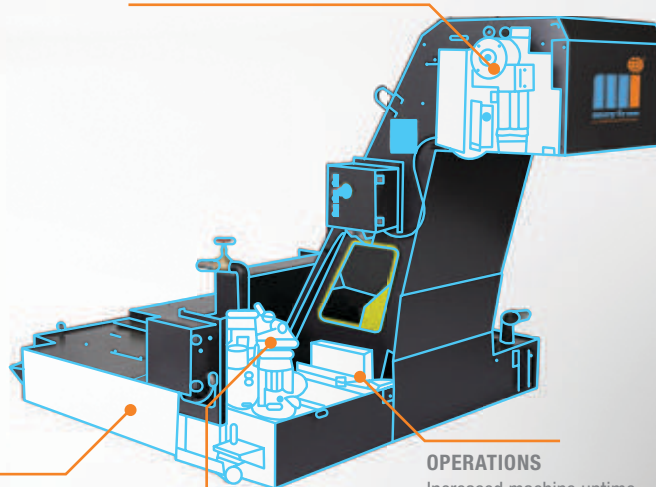
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MEET OUR NATIONAL ASSOCIATE: ZEISS INDUSTRIAL METROLOGY

An interview with Karthik Sukuma, Sales Manager- Metrology Services



WHAT IS YOUR COMPANY SPECIALTY?

ZEISS Industrial Metrology is a leader in CNC coordinate measuring machines and complete solutions for multidimensional metrology in the metrology lab and production. A dedicated metrology services team has also grown to support increasing customer demand. ZEISS engineers have dedicated contact, optical, laser, CT and visual inspection systems available at each facility. Customers are welcome to visit these metrology services labs in Charlotte, Boston, Detroit, Irvine, Minneapolis and Nashville.

WHAT IS YOUR COMPANY HISTORY? WHEN/HOW DID YOU START?

ZEISS is recognized throughout the world for its history of producing leading-edge technologies and products for over 120 years. The company became known above all for its top-quality microscopes and lens systems. Right from the very start, these high-quality products were manufactured with measuring and inspection tools that were produced in-house. These modest beginnings have evolved since 1919 to produce a business unit that today ranks as one of the world's leading manufacturers of coordinate measuring machines.

WHAT COMPANY ACCOMPLISHMENT ARE YOU MOST PROUD OF?

The history of metrology at ZEISS has been a unique success story. Within a span of 90 years, the Industrial



Metrology division developed into an integral part of the ZEISS family. Key scientific findings and a steady stream of machine and component innovations from ZEISS Industrial Metrology have made substantial contributions to the successful development of metrology and coordinate metrology. Around 2,200 employees now work for ZEISS Industrial Metrology at three locations in Germany, China, USA and India. In addition, there are approximately 100 sales and service centers around the world.

WHAT SETS YOUR COMPANY APART?

ZEISS Industrial Metrology is the market and technology leader that offers a unique range of measuring machines and

software based on decades of experience. With a will to innovate and push boundaries and a broad range of products and services, ZEISS Industrial Metrology continues on the path of success.

WHAT IS YOUR COMPANY MOTTO?

ZEISS continues to develop new and innovative products and technologies, consistently setting trends in the coordinate metrology field and tailoring its services ever more closely to customer requirements.

WHAT ELSE WOULD YOU LIKE OUR READERS TO KNOW?

The broad portfolio of the ZEISS Group encompasses six business groups and various strategic business units in four segments. The units develop, produce and distribute optical systems such as lithography systems, industrial measuring technology, microscopes, surgical microscopes, ophthalmic diagnostic and therapy systems, eyeglass lenses, planetary technology, cine and camera lenses, as well as binoculars, riflescopes and spotting scopes.



FINDING TALENT

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BY: TRACI McMILLAN BEACH

Hanging in the lobby of Southern Manufacturing Technologies Inc. is a large picture of a soldier holding a javelin missile. The picture is of Cpl. Steven Hollahan, whose troop was under attack from the Taliban when he set a record for the longest javelin missile shot ever recorded to take the enemy down almost a mile away.

Though some may be aware the javelin missile was produced by Lockheed Martin Corp., what many may not be aware of is that some of the parts in that missile came from Tampa, Florida — from Southern Manufacturing Technologies Inc.

Getting the word out through stories like that is exactly what SMT's President Roy Sweatman hopes to do to let people know that a small manufacturer in Florida is making parts for the big names. In fact, just a few months ago, SMT parts were in the missile defense system that was tested to block a missile coming from North Korea or other threats. In the past month, the company had a part that was in the Tomahawk missiles in Syria. "We're in the supply chain," Sweatman says.

SMT is not a new name on the block. The company was founded in 1953. Sweatman came from Ohio and bought the company in 1983. Since then, he's grown the five-employee company to 110 employees and \$13.5 million in revenue.

Walking through the manufacturing facility, you see hundreds of metal parts. Learning what they are used for is what's really impressive. The parts include a piece used in a fuel pump for Blackhawk helicopters and a turbo valve that can be used in a breathing apparatus or to control an IV drip. The company's list of customers includes Woodward, Honeywell International and Cobham. For each of its two largest customers, SMT produces more than 300 parts at its Tampa facility.

Now the company is taking an interest in OneWeb Ltd., a company that is hoping to supply global internet coverage through 900 satellites.

Though the company has been holding steady for the past several years at \$12.5 million to \$13.5 million in revenue, SMT is looking to spur growth. Up until four years ago, the company was growing 15 percent a year. Lately, it has struggled to continue the growth due to a big challenge — finding quality people to keep up with the demand.

FINDING NEW TALENT

One of the biggest problems is the lack of young talent entering manufacturing. When schools ended vocational-training programs and college became a more popular path for high school graduates, manufacturing fell off the radar.

So Sweatman is doing what he can to get involved in the community, get the company's name out, and share with schools that a company looking for quality engineers does in fact exist.

He's joined the advisory councils at several schools, and opens the doors to his facility to provide tours for local high schools and middle schools to show them the factory. He's even hosted a girls' summer robotic camp.

Sweatman has also funded equipment and donated old machines to local schools, to make sure schools continue offering classes like "shop" in course offerings.

But it's not just an educational campaign for students. Sweatman is also trying to let others know about the company. "Florida is not as well-known for manufacturing as a Cleveland or Chicago," Sweatman says. The benefits of nice weather doesn't seem to attract talent as easily as people would expect, he adds.

Sweatman is working with the Hillsborough County Manufacturing Alliance to educate the community about its needs because it creates jobs. SMT alone spends around \$35,000 a month in tools, according to Sweatman. As part of this campaign, SMT is putting together videos with the alliance on what it means to be in manufacturing. The company is also investing in ads on buses as part of the publicity campaign.

APPRENTICESHIPS AND TRAINING

In addition to education, Sweatman has ramped up the company's apprentice programs. The company has six apprentices, with five participating through AmSkills, a Tampa initiative to provide hands-on technical skills training for high school students, adults and veterans. "That's how we train people," Sweatman says. "The last few years it has gotten so bad that we decided to ramp up our training dramatically."

Sweatman is no stranger to apprenticeships. It's how he got started in the industry with a machinist apprentice course at General Electric in Erie, Pennsylvania. From there, he worked his way up from production control to

mid-management, to general manager of GE's facility in Cleveland.

But Sweatman knows his apprenticeship program and other efforts in the community won't totally solve his predicament. His workforce is getting older, and though they have many years of experience under their belts, "machinists are not good teachers," he says.

So, he invested in sending 29 of his employees to become certified on-the-job trainers through the National Institute of Metal Working Skills, where Sweatman is a board member. The team just finished its certification a little more than a month ago, and is now working on practice training and developing a database for different skills.

TECHNOLOGY INVESTMENT

Many may assume that with technology advances, manufacturing companies shouldn't be at a loss for finding people. But Sweatman says it's the opposite. Though technology has allowed the company to "make more parts with fewer people, the skill level of the people has to be higher to understand how to operate the technology," Sweatman says.

The technology in his line of business is becoming more and more complex, he adds. One machine SMT uses for quality control is a technology that can measure the specifications of a product to a tenth of the thickness of a single strand of hair.

The company's investment in training and technology, along with its focus on strategic planning, is most likely what helped SMT earn the recognition as a 2017 Florida Sterling Manufacturing Business Excellence Award winner, according to Sweatman.

But investment in technology can also be scary because of the high cost. Sweatman says his best business decision was also his scariest — investing in an automated pallet system. He learned about the machine from a contact in Colorado. He started with a single horizontal machine, but added a second a year and a half later, and eventually a third. The total investment was around \$3 million.

With the new technology, the company can tool up dozens of jobs, run 24/7 and operate on its own for a few hours without relying on manpower, Sweatman says. "That kind of productivity is what we need to compete globally."



BOYLE INC. IT'S THE END OF AN ERA.

Boyle Inc. was a fixture in Freeport, PA for over 30 years; almost everyone in the local tool and die industry knows Jim Boyle and his wife Dianne.

Before starting his own shop, Jim worked at Oberg Industries and Compositie in the Pittsburgh area. In the 70s, Oberg sent Jim and his young family to Singapore to open a plant there. A few years after returning to the States, he started his own company-- Boyle Inc. The company had customers all over the world and did precision work for other shops in the area.

Over the years, Jim helped many small shops get their start and trained dozens of apprentices. He also served as a Pittsburgh Chapter NTMA board member for 32 years and was active in industry programs. Jim believed in working together to promote the tool and die

industry and educate the next generation of toolmakers.

After quietly pursuing a sale of the company, the best fit for Boyle Inc. turned out to be just down the road at Oberg Industries. It was important to



Above: Jim and Dianne Boyle in the 1960s. Below: Jim and Dianne Boyle in the 2010s.



the Boyle family that the employees have a smooth transition to the next stage of their careers. Oberg recognized their talents and the opportunity to add their experience to the Oberg organization.

The Boyle Inc. building in Freeport, PA is for sale. An auction for the remaining machinery, tools and supplies will be held on Saturday, September 30 at 10am. For additional details, please visit: <http://boyleinc.com/>.

The Boyle family would like to thank all of the employees, customers, vendors and friends who contributed to the success of the company over the years. The NTMA would like to thank the Boyle family for their long-time membership and lasting contributions to the manufacturing industry.



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