

THE RECORD

> SERVING THE NEEDS OF
MANUFACTURING COMPANIES

GRAINGER DISCOUNTS NOW INCLUDE METALWORKING PRODUCTS

NTMA has partnered with Grainger to drill down on exclusive NTMA savings that identify the key areas targeted on members' needs. — p20

FALL MAY BRING NEW REGULATIONS FOR MANUFACTURERS

With the start of the busy Fall legislative and regulatory calendars, the manufacturing industry is gearing up to face new regulations from the federal government that have the potential to seriously disrupt the industry. — p6

NTMA INSURANCE

Your NTMA Insurance Program offers comprehensive coverage which is tailored to meet the needs of members that are involved in precision machining and metalworking. — p27

BENCHMARK YOUR WAGES AND BENEFITS — THE REPORT IS FREE

NTMA understands the importance of helping manufacturers control costs, especially when making hiring and promotion decisions. — p29



More than your traditional Purchasing Fair, the Supply Chain Network Fair will bring together buyers and sellers and provide an ongoing forum to stay connected.

Thursday, November 5, 2015

Welcome Reception:
Wednesday, November 4, 2015
5:30pm - 7:00pm

THE NTMA SUPPLY CHAIN NETWORK IS COMING TO LIFE! YOU AND YOUR FIRM CAN MAKE MONEY BY BUILDING OR IMPROVING A SUPPLY CHAIN INITIATIVE WITHIN YOUR STRATEGIES. - PP 8-9

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San Francisco Bay Area Chapter Mr. Michael Drewniany 37399 Centralmont Place Fremont, CA 94536-6549 www.southbaysolutions.com

T.A.P.E. INC.

Cleveland Chapter Mr. Forrest Mohrman 22038 Fairgrounds Road Wellington, OH 44090-9266 www.tape-inc.com

ZOOK MACHINE

Indiana Chapter Mr. Zach Owen P.O. Box 192 Delphi, IN 46923-0192 www.zookmachine.com

ISTMA STATISTICAL YEAR BOOK — 2015 EDITION

ISTMA has just released a new edition of its Statistical Year Book, with updated information about international trade in the tooling industry. The Year Book presents statistical information about international trade and



manufacturing on tools, dies and molds using extensive graphical presentation and numerical tables as a prevailing support. More than 900 figures on 410 pages are accessible in order to fully describe product and country industrial tooling dynamics in long time-series - one decade - presentations.

The 2015 edition introduces economic information and highlights providing industry information on 29 countries: Austria, Brazil, Canada, China, Czech Republic, Estonia, Finland, France, Germany, Hungary, India, Italy, Japan, Korea, Mexico, Poland, Portugal, Russia, Singapore, Slovenia, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, UK and USA.

The 2015 edition of the "ISTMA Statistical Year Book" aims to provide useful information for a more comprehensive understanding of the global and present framework picture, delivering an additional tool, not only to understand the consequences of the present situation, but also to help recognising the dynamics of the structural changes in the industry worldwide.

To obtain the book or for additional information please contact ISTMA Secretariat: secretariat@istma.org . See more at www.istma.org/istma-world/ISTMA_Statistics#sthash. EYGnmEnh.dpuf





PRESIDENT'S UPDATE

DAVE TILSTONE / NTMA PRESIDENT

With Wall Street going through a major "correction," what about manufacturing? What is NTMA doing to keep you ahead of competition?

Regardless of whether you are an investor in the stock market or a casual observer, one of the most newsworthy items of late has been the significant drop or "correction" in stock indices. There is no shortage of explanations/rationalizations, but it's clear that there are many moving parts to this issue. The lower growth forecasted for China is certainly a factor often cited as are geopolitical issues between Russia and the Ukraine. Regardless of whether you export or not, world economies have an impact in the U.S. We've already seen exports decline due to the strengthening dollar against the Euro.

You hopefully know from reading previous editions of the Record that we are developing a partnership with ISM (Institute for Supply Management) in conjunction with our Supply Chain Network Fair (f.k.a. Purchasing Fair). ISM is an association of 59,000 members of supply chain personnel from all major companies and industry sectors. Like many of you, I follow ISM's monthly PMI index (Purchasing Managers Index). If the PMI figure is above 50, economic activity in the manu-

facturing sector is expanding. In fact, the August PMI was 51.1, down by 1.5 percentage points from July. However, August was the 32nd consecutive month of expansion in manufacturing. Analyst attribute our industry's sustained growth to strong demand in aerospace, medical, automotive and general engineering. Lower fuel and raw material costs coupled with productivity improvements have made the past several months more profitable across most business segments. The exception is oil and gas exploration as well as mining, industries hit hard by lower oil prices and strict emission laws.

Regarding transportation, auto manufacturers are ramping up large vehicle production due to lower gas prices while heavy truck continues to do well as manufacturers produce to haul the products being produced. Auto is also investing heavily in new capital equipment, especially presses to stamp new body panels from higher strength steel alloys. Aerospace has been and is forecasted to be a bright spot for mid and long term. The backlog of airplanes declined from 49 months to 42 months but demand for aero engines continues to grow. Rolls Royce has reportedly developed a new engine that will offer fuel savings analogous to that provided by hybrid engine technology in automotive.

Automotive is using more and more composite materials such as carbon fiber reinforced plastics. These materials are less expensive and easier to fabricate than carbon fiber and are typically molded. These relatively new materials, coupled with new lighter but stronger steels are being pushed to their limits so automotive manufacturers can meet federal CAFE requirements.

Medical implants and sports medicine technologies continue to show very strong growth. As baby boomers continue to age, more and more are extending their active lives with knee, ankle, shoulder and hip replacements. I recently visited one of the world's leading manufacturers of sport medicine components that has experienced 12-15% annual growth since 2005.

How does NTMA help you stay competitive?

Benchmarking. Exposure to new technologies and partners. Training of key personnel using NTMA-U.

BENCHMARKING.

Benchmarking is one of the easiest and most cost effective ways to measure your company's performance. As an NTMA member you have access to the OCEC (Operating Cost and Executive Compensation) Report, Wage and Fringe Benefits Report. If you are in the "tooling" business (plastic injection molding, gigs and fixtures, die casting etc.), we encourage you to participate in a benchmarking study being conducted by WBA., a benchmarking study free of charge to NTMA members. They are the leader in the tool and die industry (http://www. werkzeugbau-akademie.de/en/). The relatively simple process begins with a questionnaire, followed by visits to member shops by WBA personnel. The WBA is a leading research and resource group that is a combination of the most elite manufacturing technology universities in Germany (Aachen http://www. rwth-aachen.de/cms/~a/root/ lidx/1/) and the Fraunhofer Institute (http://www.germaninnovation.org/about-us/gcripartner-institutions/fraunhofergesellschaft) that is the largest institute for applied sciences and collaborates with industry. All information is collected is strictly confidential. If you are in the "tooling" business and would like to learn more or participate, please contact me (dtilstone@ntma.org).

NEW TECHNOLOGY.

Keeping abreast of new technologies is a full time job but one of the most impactful

 ${\tt CONTINUED~ON-P6}$

THE RECORD

OPERATIONS & EDITORIAL

Dave Tilstone, President Sally Safranski, Executive Editor

NTMA EXECUTIVE TEAM

Herb Homeyer, Chairman Homeyer Precision Manufacturing – St. Louis, MO

$$\label{eq:mattwardle} \begin{split} & \text{Matt Wardle, Vice Chairman} \\ & \mathcal{J} \; D \; \textit{Machine - Ogden, UT} \end{split}$$

Ken Seilkop, Board Member Seilkop Industries – Cincinnati, OH

Mark Vaughn, Board Member
Vaughn Manufacturing Co., Inc. – Nashville, TN

Theodore O. Toth, Jr., Board Member Rosenberger-Toth – Pennsauken, NJ

ADVERTISING INQUIRIES

To advertise in *The Record*, or for information on publishing your corporate newsletter or sales literature, contact *NTMA* at (216) 264-2847 or tbryson@ntma.org for advertising, ssafranski@ntma.org for editorial content.

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NATIONAL TOOLING & MACHINING ASSOCIATION

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One of the great parts of Tiffany Bryson's role as National Account Manager is meeting leaders of **National Associate** member companies and touring their operations. In this photo she joined Ron Wright (left) and **SCHUNK President Milton** Guerry (right) at National **Associate** member **SCHUNK'S North Carolina** headquarters.





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to your profitability, productivity and quality of your products. The Manufacturing Technology Team has worked closely with Tiffany Bryson and me to assemble the world's leading providers of technology as our National Associate Members. The list reads like the "Who's Who" of technology companies ranging from machine tool manufacturers, software companies, robotics manufacturers, controls, cutting tool suppliers, machine accessories etc. As an NTMA member you have direct access to their executive management team, at our Executive Tours in Europe, Japan and at IMTS, as well as at the Fall Conference in St. Louis this month and at the MFG Meeting 2016 in Desert Palm, CA. If you have any question about our National Associates or programs, please contact Tiffany Bryson at tbryson@ ntma.org.

SKILLS TRAINING.

Regardless of where I travel, members express their frustration with finding skilled personnel. Most areas of our country do not have apprenticeship programs nor do they have a machinist training program. NTMA has developed a tailor made apprenticeship program for your training needs: NTMA-U. The NTMA-U apprenticeship program is the most popular, fastest growing and comprehensive program we offer. This year alone 1,402 modules have been purchased to train NTMA member employees and students. NTMA-U should be your first choice for your training needs. If you want to know the competency of your current or future employees, NTMA-U has a Competency Test that is also specific to our industry. Over 750 tests were used by members in 2014 and that number is expected to reach over 900 in 2015. If you have any questions about NTMA-U or the test please contact Ken McCreight at kmccreight@ntma.org

In closing, please take advantage of your NTMA membership "tools" to stay competitive and grow your businesses. Let's grow successful together!

DAVE TILSTONE / NTMA PRESIDENT



Dave alstrue



END OF SUMMER MAY BRING NEW REGULATIONS FOR MANUFACTURERS

The long, lazy days of summer have come to a close. With the start of the busy fall legislative and regulatory calendars, the manufacturing industry is gearing up to face new regulations from the federal government that have the potential to seriously disrupt the industry.

First, the Department of Labor issued a proposed rule that would increase the salary threshold for mandatory overtime. Current regulations require employers to pay overtime to all hourly and salaried workers who make less than \$23,660. The new regulations would more than double that salary threshold to \$50,440. Increasing this number could have drastic effects on the manufacturing industry, and especially on small businesses. Preliminary analysis shows that the regulation may result in many salaried workers being reclassified as hourly in order to offset costs.

NTMA filed comments on the rule with the Labor Department on September 4, 2015. Writing in conjunction with PMA under the One Voice banner, NTMA described the new regulations as a "disincentive" for manufactures. The comment said, "Employers will either hire more part-time employees, outsource those functions, or increase their automations – all resulting in fewer manufacturing jobs in the U.S."

Secondly, new regulations from the Environmental Protection Agency (EPA) is also threatening the manufacturing industry. With an eye on his legacy, the Obama administration is committed to making an impact on environmental issues. As a result, the EPA is expected to soon roll out new regulations that would require deductions in ground-level ozone. The agency wants to cut ground-level ozone pollution which stems from emissions from tailpipes and smokestacks.

Research from many different organizations consistently shows that the

EPA's proposal would be the most expensive regulation in history. A recent study by the National Association of Manufacturers (NAM) showed that the cost to businesses could exceed over \$1 trillion, meaning billions of dollars in rising compliance costs and slashing thousands of jobs per year. This number is particularly striking when the results of the most recent NTMA membership survey are considered. In 2015, over 99% of respondents said that affordable and reliable electric power is "very important" or "somewhat important" to business success.

NTMA's team in Washington will continue advocacy efforts in the media and with policymakers to remind Washington of the impact of pending regulations on small and medium sized manufacturers. Manufacturers have a lot at stake, and to make a difference in Washington, those who know the industry best have to participate in the process. Keep up with One Voice advocacy efforts and find ways to get involved on the One Voice website - www.metalworkingadvocate. com - and by following @onevoiceformfg on Twitter.

Remember that NTMA members can give unlimited corporate or individual contributions to the NTMA Government Affairs Administrative Fund which supports the work done by The Franklin Partnership and Policy Resolution Group at Bracewell & Giuliani LLP. Additionally, NTMA members can make limited personal donations to the Committee for a Strong Economy (CFASE) PAC, which supports pro-manufacturing Congressional candidates.

NTMA



NWPA NTMA CELEBRATES 50 YEARS

Leaders from the Northwestern Pennsylvania region's tooling businesses first joined together in the 1960s to set a standard in training for toolmakers that would be recognized both statewide and nationally. Founding members of the Tooling Association of Erie included Joe Prischak, Rav Golubieski, Henry Snow and Anthony Sedziak. In 1965, the Northwestern PA Chapter of the NTMA (NWPA Chapter) was established. The Chapter gained traction in the surrounding area and within five years C&J Industries and Actco Tool became active members. Both members are celebrating 46 and 45 years respectively of service with the NWPA Chapter.

Additional active members celebrating over 40 years of service with the NWPA Chapter include Talbar, Inc., Pennsylvania Tool & Gages, Inc., BraVor Tool & Die Company, Layke Tool & Manufacturing, Inc., Custom Tool & Design, Inc., Starn Tool & Mfg. Company, Micro Tool & Manufacturing, Inc., Canto Tool

Corporation and Aetna Machine Company.

NWPA Chapter members played an integral part in forming the machining program at the Vocational Technical School in the 1960s and the National Institute for Flexible Manufacturing (NIFM) in the 1980s - now known as Precision Manufacturing Institute (PMI). Over the years, the Chapter has hosted three National Apprenticeship Contests and nine regional RoboBOTS Competitions. Other notable projects include The Source, an effort which advertised the collective talent and capacity of chapter members through trade shows and an on-line RFQ and bid program, Top in the Shop, which promoted careers in the trade by featuring employees in local newspaper articles, and the development of an Apprenticeship Program template. Signature events of the NWPA Chapter include the Blue Collar BASH, RoboBOTS and TECHFEST.

Special awards received by the Chapter include the 1994 Dr. H.C. Winslow Award

for "profound effect on the lives and well-being of our community" and NTMA Star Chapter of the Year in 2011 and 2012 recognizing the chapter's leadership, growth, participation at national NTMA meetings and on committees, as well as organizational excellence. Chapter leadership has included past NTMA Chairmen of the Board, Harold Corner (1981) and Larry Sippy (2003).

To celebrate this rich history and their 50th Anniversary year, the 120-member NWPA Chapter gathered on September 15 at the Iroquois Club in Conneaut Lake for the Golden Gala. The group gathered lakeside with live music in the background. After dinner, Doug Peters, Bill Starn (Past Chapter Presidents) and Don Douglass (former Chapter Executive) provided comments regarding the Chapter's rich history. Guests closed out the night with dancing.

NTMA



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It is not unusual for supply chain efforts to reduce costs by 10, 20, 30 percent and more, which drops earnings to the bottom line of a company – like yours and your customers'. If a \$2-million-dollar revenue business spends \$500,000 per year on materials and MRO, a 10% savings could be \$50,000. And a \$10 million business that spends \$2.5M on materials and MRO could save \$250-300K. You do the math!

The NTMA Supply Chain Network is coming to life! You and your firm can make money by building or improving a supply chain initiative within your strategies. For many NTMA members' customers, supply chain is a key initiative. For uninformed suppliers, however, this term can conjure up images of "commodity" purchasing competitions and rigorous negotiations.

Competitiveness is more than price – it is a blend of timeliness, correctness, flexibility and balance sheet factors such as inventory and WIP. "Purchasing" has evolved to a key role in operations for customers and for their suppliers, too. Why?

Procurement and supply chain efforts focus on many factors, including logistics and procurement. Key measures throughout the supply chain (both to NTMA companies and from NTMA companies) include on-

time to customer request, quality acceptance rates, process compliance, cost savings, content requirements, etc. Supply chain professionals focus on much more than price.

Many of our customers are public companies which are valued by stock markets – that is by investors who evaluate companies

"As a supplier, we have attended several NTMA Supply Chain Network Fairs over the last several years and they've been tremendous sales opportunities for us. This allows us to have face-to-face meetings with new potential customers and buyers whom we had previously been unable to gain access to. We typically send two of our people who each talk to 11 or 12 potential qualified customers. For the cost of registration, there is simply no other sales opportunity for us that comes close to the value we receive."

Ron Overton, Overton Industries, Mooresville, IN

on how efficiently they make money in their line of business. The primary correlation to stock price is considered to be Return on Invested Capital. When a company can operate with lower costs, it gets higher returns and thus higher ROIC. When it can operate with lower inventory or assets, it has a higher ROIC. Both factors play together to accomplish financial objectives of the firm. And Supply Chain strategies have both effects

- reduction of costs and reduction of assets. Yes, our customers have these priorities. But do we pursue them in our companies?

Does your firm have a procurement strategy? Are you equipped to negotiate with highly trained procurement professionals, with information and substantiation at the ready? How do you communicate value to a cost-driven professional? Would you like to install processes for procurement to get the best deals, while honoring the long-term relationships that have supported your company?

NTMA will team with the Institute for Supply Chain Management (ISM) to help members develop techniques that supply chain professionals include in their set of business skills. Two big benefits of participating in the NTMA Supply Chain Network are:

- 1. Network within the community of supply chain professionals who are our customers and suppliers.
- 2. Develop your company's skills and processes in supply chain management.

Through our budding relationship with ISM, NTMA members will have access to the network which includes training, forums, topical meetings and the community of customers working on the same projects and

concepts that you are.

We will welcome Tony Conant, Chief Operating Officer from ISM (The Institute for Supply Management) to the 2015 NTMA Fall Conference in St. Louis. Tony will join us at the Fall Conference on Thursday, October 22nd and will be presenting with Dan Bagley from 1:30pm-3:00pm in the Sales Business Development Track.

This is an opportunity you won't want to miss. If you've not yet signed up, register now to attend the Fall Conference. And be sure you've registered for the Supply Chain Network Fair (f.k.a. "Purchasing Fair") in Indianapolis.

See what the Supply Chain Network can do for your firm!





More than your traditional Purchasing Fair, the Supply Chain Network Fair will bring together buyers and sellers and provide an ongoing forum to stay connected.

Thursday, November 5, 2015

Welcome Reception: Wednesday, November 4, 2015 5:30pm - 7:00pm

and suppliers looking to connect and

communicate on an on-going basis.

Host Location

HURCO'

mind over metal"

Hurco USA One Technology Way Indianapolis. IN

Supply Chain Network Fair Rates

Member Regular\$995 Non-Member Regular\$1695

Are you also attending the Sales & Marketing Workshop on November 4th?

Member Rate for both events......\$1370

Hotel Information



Wingate by Wyndham Inn Indianapolis Northwest 6240 Intech Commons Drive Indianapolis, IN 46278

Room block available until Friday, October 9th. Any room reservations made after this date are subject to availability.

To make a reservation, call 317-275-7000 and reference the group code "NTMA (HURCO)".

Contact

For questions, please contact Brittany Belko at 216-264-2848 or bbelko@ntma.org An important connection within the Supply Chain Network Fair is ISM — The Institute for Supply Management. ISM is a community of buyers, procurement managers, logistics managers and much more and they can play two important roles in the network. First, connecting their buyers with NTMA members to help accomplish their initiatives, and second, bringing their mastery tools to NTMA members to potentially save them thousands of dollars in direct and indirect spending.

₩ednesday, Oct. 28th Receive a list of confirmed

Buyers and their outsourcing requirements via email to prepare for the Supply Chain Network Fair. You will also receive instructions on how to schedule your Buyer appointments. You will be responsible for making your appointments and they will be on a first come basis (limited based on registration numbers).

Wednesday, Nov. 4th

1.5 hour Sales Seminar presented by Dan Bagley, NTMA Strategist. Join Dan for a conversation on sales techniques and tips to make your experience at the Supply Chain Network Fair a great one. (Full Sales & Marketing Workshop is available at an additional registration fee.)

Wednesday, Nov. 4th 1.5 hour Welcome Reception sponsored by Hurco USA. Take advantage of this opportunity to network and mingle with other buyers and sellers.

Thursday, Nov. 5th Supply Chain Network Fair. Featuring scheduled 15 minute appointments, you will have the opportunity to sit down and connect with numerous buyers. Lunch will be provided as an additional networking opportunity.

Register today and get connected to this new concept — The Supply Chain Network Fair

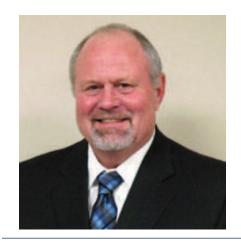


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CHAIRMAN'S CORNER

HERB HOMEYER / NTMA CHAIRMAN OF THE BOARD

I would like to update you on some of the leadership activities of the Executive Team.

Planning has already begun for 2016. It will be a strong year, with continued focus on developing the organization to the next level. It has been an exciting year this year – as I travel to your chapters, tour your companies and meet with you, we have started many conversations around the theme "Authentic Leadership."

We'll continue to focus on leadership, tweaking it slightly to hone in on our Emerging Leaders. The goal is to develop support and programs for the industry's next generation. Emerging leadership is not just an ownership phenomenon. It is not isolated to just the family legacy of ownership, although that is certainly the reality of some member companies. Emerging leaders exist at all levels of your companies.

How do you identify and nurture the leadership skills of employees in your shop? In your sales team? In your office functions? In your management and supervisory team? You will see in 2016 an organizational focus on tools and resources specifically targeted on these concerns. It will be an exciting year and I look forward to seeing how your company's and the industry's growth can benefit from this focus. We would like to hear from you, too, on what tools you need to help accomplish the growth of your emerging leaders.

One day, regional technology seminars will continue, after some great successes in 2015 with programs such as roundtables for plant managers, financial managers, and human resources professionals as well as sales and marketing workshops. Each of these programs will have some element of the emerging leadership development, as well as focused programs with expert

speakers speaking about professional development. And, of course, peer-to-peer networking is always a benefit of any such program. I hope you will join us and consider sending your leaders for a day of professional development.

Leadership changes within NTMA include the pending close of Ted Toth's tenure on the Executive Team. I would personally like to thank Ted for his service to NTMA, for his vision for and dedication to the organization and to the industry.

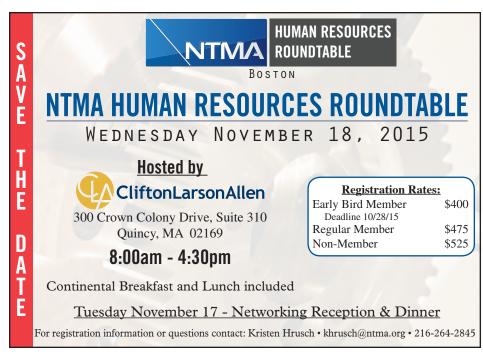
What role can you take in the leadership of NTMA? I encourage you to consider serving on an NTMA Team. The NTMF (National Tooling & Machining Foundation), specifically, is looking for individuals to serve on their Board of Directors. The Foundation is visionary - helping to secure flexible and reliable sources of funding to support high quality education technical training, and leadership development for the next generation of career professionals in manufacturing technology. Please contact Chairman of the Foundation's Board, Jeff Kelly (or Dave Tilstone or me) if you'd like more details on how you can get involved in this or other NTMA Teams.

The next generation of leadership is vital not only to the success of our companies – it is up to all of us to help lead NTMA into the future as well. I'm up for the challenge – how about you?!

HERB HOMEYER / NTMA CHAIRMAN









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NTMA AND CENTER FOR AMERICA PARTNER TO GET ANSWERS



As every NTMA member knows, precision makes all the difference between success and failure. Unfortunately, the lack of precision in addressing the specific help needed by companies trying to hire veterans is causing many employer recruiters to settle for fewer veteran hires – or none at all.



U.S. Air National Guard photo by Senior Airman Joshua Horton

With the skills shortage growing while one million veterans of the most highly trained and most technologically advanced military in the world are still looking for full-time jobs, it is smart to figure out specifically what resources can help NTMA members successfully hire veterans.

In collaboration with NTMA and many other business and trade associations, Center for America has launched a national survey among employers. The goal is to identify how the specific veteran recruiting problems of companies differ by industry, location, size of company and level of HR recruiting resources.

Understanding how the needs of NTMA members differ from employers in other industries will enable us to develop tailored resources to address these needs. These may include webcasts, guides, networking connections, panel presentations, conference calls and answer hotlines.

Your participation in this 15-minute survey – anonymously if you wish – can make a big difference in having enough responses to tailor free resources for the NTMA membership. The ROI of investing 15 minutes to complete this online questionnaire is that you and your recruiters will have access to better resources through NTMA that will lead to successful hires.

To join with other NTMA members, click on this link which takes you to Survey Monkey on the internet. Please be sure to input "NTMA" in the first question where it asks for the association code. https://www.surveymonkey.com/r/36PW85F_CFA

TOO MANY VETERANS LIVING ON THE CHARITY OF FRIENDS AND NONPROFITS

Although the economy is improving, the situ-

ation for hundreds of thousands of veterans is still very precarious and government statistics alone blur the real story. There are more than 500,000 veterans who are unemployed and dependent on unemployment compensation. However, the 26 week compensation runs out for most vets long before they get jobs. Recently, some states have moved to cut back on Food Stamp benefits for some recipients now that the formal "employment emergency" has been declared over. It is not known how many veterans may fall into the cutback group, but it is likely many will.

Another estimated 500,000 veterans are working part-time while seeking full-time work commensurate with their training and prior level of responsibilities in the military. Such part-time work is usually at minimum wage, which in Colorado, as one example, is \$8.23 an hour. In Colorado, the Fair Market Rate for a one-bedroom rental apartment is \$804 a month, which means a veteran would have to work 75 hours a week on minimum wage to afford this even if the vet can rent an apartment without having full-time employment to qualify as a renter.

Some employers may ask whether these problems are relevant to them since all these veterans volunteered for military service. As Americans, we can ask ourselves if we are satisfied with the fact that a million veterans of our nation's armed forces are stuck on the fringes of our economy, depending on the charity of friends, family and community nonprofits for their daily well-being.

As taxpayers, we can ask how comfortable we are with hundreds of million dollars being paid in

unemployment compensation to veterans coming out of the military every year going through most or all of their benefits before they find full-time jobs. Taxpayers paid hundreds of thousands of dollars to train each one, and now taxpayers are paying millions more because the veterans can't find jobs.

As business people, we can ask whether we're comfortable that a million or more highly trained and experienced people are finding, that instead of their military experience as a high priority reason to recruit them, their military experience is only confusing some employers and not taken seriously as a plus by many others.

Our all-volunteer military is a great asset to our nation, but it can be at risk if young recruits come to believe that they will not have a good future in the civilian sector when their enlistment periods are up. At a minimum, we might say that continued high unemployment and underemployment among our current veterans does not serve to reassure future volunteers that military service will be a good asset in building their long term careers.

Steve Nowlan is president of Center for America and coordinator for the American Jobs for American Heroes campaign. For free help with your veteran recruiting, contact Steve at 201-513-0379 or SNowlan@ CenterForAmerica.org. Download a free copy of CFA's Best Practices Guide for Veteran Hiring at http://www.CenterForAmerica.org/bpg.html

NTMA

IN MEMORIAM - HAROLD LEROY CORNER



Harold LeRoy Corner, (80) of New Castle, PA, passed peacefully September. 21, 2015, surrounded by family at his home. Formerly of Meadville and Cochranton, PA,

Harold was born on October 19, 1935.

Harold graduated from Cochranton High School in 1952. A veteran serving in the U.S. Army with a tour of duty in France, Harold was honorably discharged in 1957. After his return, Harold completed a tool and die journeyman apprenticeship at the Talon Zipper Co. In the later part of the apprenticeship in 1962, he partnered with C. Richard (Dick) Johnston and Richard (Dick) Copeland and they started Meadville Precision Tool Company in Harold's garage. Mr. Copeland later sold his share to Harold and Dick, and the two of them founded C&J Industries Inc. Harold retired from C&J in

He served as both the local Northwest Pennsylvania Chapter president and national chairman of the National Tooling and Machining Association (NTMA). He was always active in business consulting and an entrepreneur creating opportunities throughout his life.



YES! INVESTMENT IN THE NRL LEADS TO BUILDING YOUR FUTURE WORKFORCE



Last June, Highlands High School in Natrona Heights, PA, just outside of Pittsburgh, held its annual Senior Awards Ceremony. The usual awards were presented: Best Dressed, Most Likable, Funniest Senior, Best Athlete, Most Likely to Succeed and so on. However, a newly created award was also presented that will change the lives of five graduating seniors as well as the lives of numerous peers to follow. This recognition was a different take on the Most Likely to Succeed award; being an accolade that will definitively come to fruition while not perpetuating the stereotypical high school popularity contest.

In order to fully appreciate the significance of this award, let's flashback to when it all began. The year is 2014, high school students are rallying around each other while making last minute modifications to their robots at the Southwestern Pennsylvania BotsIQ Final Competition held at the California University of Pennsylvania Convocation Center. All Pittsburgh Chapter NTMA member companies were invited to attend, exhibit and volunteer at the competition. One precision manufacturing company, Oberg Industries (www.oberg.com), took advantage of all three opportunities. Here is a snapshot of what happens when a company such as theirs Gets Up, Gets Involved and Gets Engaged!

With free access to almost 1,000 high school students and their teachers, parents and other manufacturing companies, Bryan Powell, Senior HR Generalist at Oberg Industries, capitalized on the opportunities afforded by the BotsIQ Finals. First, he had an ace up his sleeve in the form of Greg Chambers, Oberg's Director of Corporate Compliance and a BotsIQ volunteer. Mr. Chambers was serving as the head safety judge and was in the Pit Area during the competition with participating students and teachers. Competitors and judges already knew Mr. Chambers well since he has been actively involved in the BotsIQ pro-

gram for the last 10 years, giving Oberg name recognition among a younger demographic. More importantly, key stakeholders associated Mr. Chambers' professionalism, attention to safety and

enthusiasm for the competition with the Oberg name.

Mr. Powell also utilized an exhibit table to reach those students, teachers and parents. He understood that exhibiting at the BotsIQ competition would better enable him to promote his company to the community and network with diverse audiences while at one event. In addition, he was already trying to devise a program for high school students that could serve as a feeder into the company's existing apprenticeship program. Oberg's own research showed that they must hire a minimum of 77 new machinists and other skilled trades people by the year 2020 in order to maintain their current workforce levels due to employees reaching retirement age and other attrition factors (this is before taking into account any expansion efforts). Local vocational schools, training centers, colleges and "off the street" talent searches would produce some new hires, but not enough to fill the void.

During a break in the action at the BotsIQ Finals, Highlands High School Physics teacher, John Malobicky, began a conversation with Mr. Powell. Mr. Malobicky was looking for the next step in how to better engage his students in STEM related career paths. His students were energized about the BotsIQ program and he needed a way to move them along the pathway to a career in manufacturing. John explained that, "Public education must be more flexible and adaptive to fill the needs of the 21st century labor market. It is critical for schools to respond to workforce



Congratulations to the 2015 Inaugural Graduates of the Junior Apprentice Advantage (JAA) Program.

Top: Dylan Nolan, Elijah Anderson, Taylor Ayers. Bottom: Steve Maddinic and Alex Telford who recently received Certificates of Completion for finishing their JAA course of studies during their senior year at Highlands High School, Natrona Heights, PA. Each will soon begin working at Oberg Industries as full time apprentices.

shortages through partnerships with private sector companies that immediately address those skills, which are in short supply and to target curriculum to enhance the high-tech employment prospects of graduates."

The conversation between Mr. Powell and Mr. Malobicky resulted in two things. First, Mr. Malobicky went back to his school's Pit table and told one of his students to speak with Mr. Powell about a potential job opportunity. Second was born a partnership between Highlands High School and Oberg in order to create a preapprenticeship program, later to be named the Junior Apprentice Advantage (JAA) program. JAA was designed to directly connect high school students to industry-specific training while mirroring the Oberg apprenticeship experience. A win-win for both parties . . . a new curriculum and viable career training for the school and its students along with a new approach to talent acquisition to build out the increasing demands of an expanding Oberg apprenticeship.

During this past academic year, five senior high students registered for the JAA pilot program. These students participated in a course of study that was designed to help them not only develop industry-specific technological skills, but to also begin to immerse them into the industry culture and values. Throughout the year, JAA students were also given access to Oberg's manufacturing operations for lesson-specific enrichment practicums and job shadowing that allowed them to work with Oberg's skilled craftspeople. Students who successfully completed the JAA courses with high marks

and satisfied Oberg's apprenticeship entrance requirements would be pre-qualified for hire as full-time apprentices at Oberg Industries upon graduation.

That brings us back to that Highland's Senior Awards Day celebration. On hand to present the aforementioned new and unique award was David Bonvenuto, Oberg's President and CEO along with Eric Oberg, Chairman of the Board for Oberg Industries. All five JAA students were presented with a framed certificate of completion for their JAA work and an offer of employment to work for Oberg Industries.

"Both Highlands and Oberg felt strongly that this program would provide each student with a head start toward a challenging and lucrative career in advanced manufacturing," said Mr. Bonvenuto. "We are glad to be part of this rewarding partnership and look forward to continuing to help students and parents realize that advanced manufacturing is an excellent career choice. We are especially proud of these five young men of the inaugural JAA class who will begin working for us as Oberg Apprentices."

And it all began at a BotsIQ competition. Fully utilizing its involvement in a local NRL competition, Oberg has established a strong reputation among Southwestern

Pennsylvania teachers and students as an exceptional and authentic organization. The company took advantage of the opportunity to exhibit at a competition and was rewarded for their investment. Oberg established a relationship with a teacher and that connection resulted in five new apprentices beginning in the summer of 2015. The bonus: all five new apprentices have already spent an academic year learning about Oberg's workplace culture and have gained a clear understanding of what is expected of them as an Oberg employee. Additionally, those students' parents have also been engaged by Oberg, seeing the benefits of a career in manufacturing and seem to like the idea that this opportunity is right in their back yard.

Now it's your turn! NTMA member companies must be proactive in changing the perception of a career in manufacturing and in creating talent supply pipelines. A full commitment to the NRL program is a ready-made opportunity to connect with local schools and to develop your company's future workforce. The time is now to stop kicking the can down the road and GET UP, GET INVOLVED, GET ENGAGED and GET WORKERS. It's never too late.

At least 15 Highland High School stu-

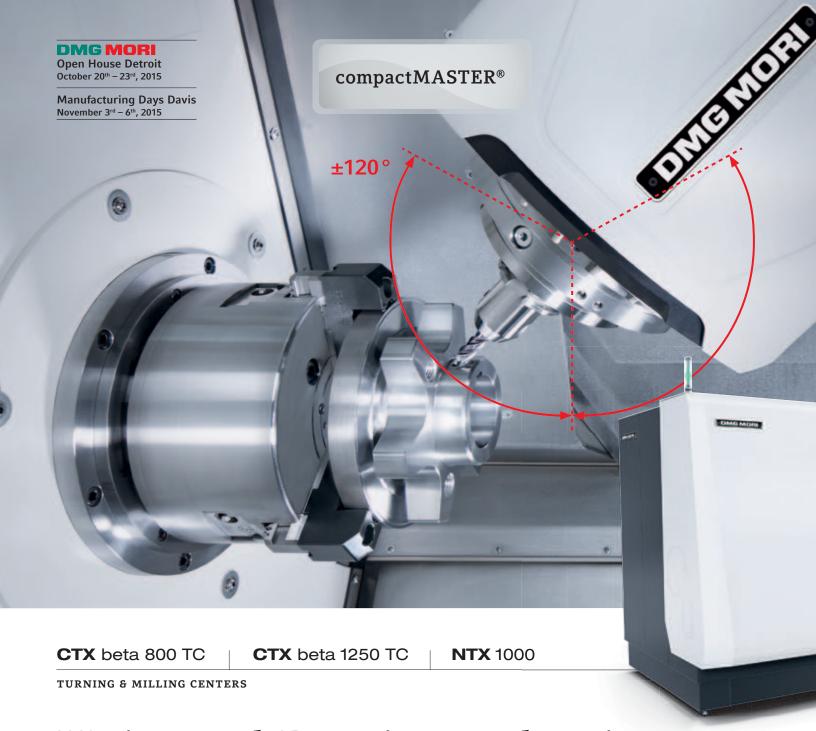
dents are expected to be participating in the JAA Program during the 2015-16 academic year as the JAA enters into its second pilot year. The curriculum has been expanded to build on the Pilot 1 experience and features the major addition of a new Metrology course. These are exciting changes which are certain to further raise the bar of potential Apprentice talent and is expected to help the Highlands student make an even easier transition from high school to full-time employee and Apprentice.

The success of a program such as the JAA is only possible because of strategic and active community and educational partnerships. This could also happen to your company if you make the personal investment to be involved in the NRL program. Yes, building a Bot leads to building tomorrow's manufacturing workforce. Will yours be next?

If you would like more information about Oberg's JAA program, contact Bryan Powell at bryan.powell@oberg.com. If you are ready to get involved in the NRL program, contact Bill Padnos, NTMA's Director of Youth Engagement, at bpadnos@ntma.org.

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Hip bone socket / Medical Material: Titanium Dimensions: ø 2.4 in.

Production time: 7 min., 30 sec.





MAXIMIZE YOUR TIME, UTILIZE THE NTMA ONLINE SUPPLIERS GUIDE

Want to do business with other NTMA members? Do you need a product that a member manufactures? Use your NTMA Suppliers Guide – it's online and right at your fingertips! This is for NTMA members only.

Tooling and machining professionals can cut through the clutter of traditional search engine results with the NTMA Manufacturing Suppliers Guide. Easily accessible from a link on the NTMA website, members can perform targeted searches for industry-related products and services using either a user-defined keyword search or an alphabetized directory search by product categories.

Imagine blending a Google style search engine with the Yellow Pages and you have the NTMA Manufacturing Suppliers Guide, the industry's premier online supplier directory. Find fantastic new products and save valuable time and money by utilizing the Manufacturing Suppliers Guide. Please go to: http://www.ntma.org/resources/manufacturing-suppliers-guide and take a few minutes to see how it can work for you.

NTMA makes searching for other members easy. Our online suppliers guide is the go-to search for members. Share your insight on the supplier's guide too! All you need to do is fill out a short form and email in your comments.

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Stop wasting precious time searching for suppliers and start using your NTMA online guide! Or feel free to contact Sarah Shoaff, Director of Membership and Business Development at sshoaff@ntma.org.



NIMS SUPPORTS NATIONAL EXPANSION OF APPRENTICESHIPS



CROSS-SECTOR, PUBLIC-PRIVATE PARTNERSHIPS WILL PREPARE MORE STUDENTS AND WORKERS FOR SUCCESS IN HIGH-DEMAND MANUFACTURING CAREERS

NIMS is proud to be partnering with Focus: HOPE to develop a robust apprenticeship program in Michigan to fill in-demand technical jobs in manufacturing. The project was selected as a winner of the United States Department of Labor's American Apprenticeship Initiative grant program, announced today, and will build on NIMS' competency-based apprenticeship model.

NIMS will serve as an engaged partner through the following activities with the Focus: HOPE American Apprenticeship Program:

- Identifying the skills and competencies individuals need to enter into and complete advanced manufacturing apprenticeship programs
- Supporting the development of career pathways, apprenticeship models and tools, and integration of NIMS industry-recognized credentials
- Aligning training programs to industry standards
- Providing technical assistance to schools, employers and other partners

"There is a growing skills gap nationally and in Michigan for jobs in advanced manufacturing, particularly in metalworking," said James Wall, Executive Director, NIMS. "The Focus: HOPE American Apprenticeship Program will provide individuals with the skills and credentials aligned with open jobs, ultimately providing a pathway to career advancement."

National trends show that there is an increasing demand for individuals with machining skills. In Michigan, there will be nearly 125,000 jobs requiring machining skills, with demand for CNC Programmers expected to climb 15% by 2024. The average hourly wage for machining jobs in Michigan is \$20.47.

As part of its commitment to expand manufacturing apprenticeships, NIMS participated in the White House Apprenticeship Summit on September 8, 2015. Mr. Wall and NIMS board members, Greg Chambers, Director of Compliance, Oberg Industries, Inc., and Roy Sweatman, President, Southern Manufacturing Technologies, Inc., joined 100 employers to share success-

ful apprenticeship models, best practices, and how to promote apprenticeships to other employers.

About the NIMS' Competency-Based Apprenticeship System

Competency-Based NIMS' Apprenticeship System was developed in partnership with the United States Department of Labor and over 300 companies, integrates NIMS national standards and skill credentials into measuring required competencies for multiple occupations. NIMS has developed over a dozen competency-based apprenticeship models in the machining and metalworking industry. These models monitor progress based on performance, in lieu of rigid hours, allowing individuals and companies to customize the apprenticeship model based on respective needs.

NIMS has developed skills standards for entry-level to master-level metalworking operations and industrial technology maintenance. NIMS certifies individuals' skills against these national standards via industry-recognized credentials that companies can use to recruit, hire, place and promote individual workers. These credentials validate skills needed in 90% of manufacturing companies. Training programs, both at the secondary and post-secondary level, incorporate the credentials as performance or completion measures of academic coursework in metal forming or machining programs. Currently, NIMS offers 52 distinct credentials. In 2014, NIMS issued 18,947 industry-recognized credentials, representing a 36% increase from 2015.

For more information about NIMS standards and credentials and apprenticeships, visit www.nimsready.org. To learn more about how to partner with NIMS, please contact Melanie Stover (mstover@nimsskills.org) or (703) 352-4971.

NIMS is the developer of quality competency-based skills standards and credentials for jobs in manufacturing and related industries. Through these efforts, NIMS helps build and maintain a globally competitive workforce (www.nims-skills.org).





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In addition to 10% off and pre-paid freight on all products, we've added product category discounts on the items you use most! Now Grainger offers discounts on over 250,000 metalworking products you need to support both your production and maintenance needs.

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Be sure to use the exclusive NTMA member Grainger website http://www.grainger.com/content/ntma to get this special NTMA discount! For more details, contact Sarah Shoaff at sshoaff@ntma.org or 216-264-2858.





Date:

Wednesday, November 11

Welcome Reception & Dinner: Tuesday, November 10 - 6:00pm

Where:

CBIZ 700 West 47th Str

700 West 47th Street Kansas City, MO 64112

Cost:

NTMA MEMBERS

\$400 - Early Bird Member Rate
Deadline 10/14/15
\$475 - Regular Member Rate

NON-MEMBERS \$525 - Non-Member Rate

Continental Breakfast & Lunch Included

There is no cancellation fee prior to 10 days before event. If cancelled less than 10 days prior, it is non-refundable.

For more information regarding our cancellation policy, event registration refunds or other concerns, please contact the NTMA office at 216-264-2822.

CPE Information:

- Details Coming Soon -

Financial Managers

Roundtables

Sponsored by:

At this conference, participants will learn about:

• 401k Fees and Expenses

- P&C: How to maximize your coverage and minimize your premium
- Affordable Care Act and A&A Updates
- R&D Tax

Speakers from the industry and the profession will present new ideas and valuable information on financial management. With sessions on 401k, P&C, Affordable Care Act and A&A Updates and R&D Tax, your organization will want to be represented as participants deal with the current issues facing financial managers in manufacturing.

Additional Information:

Who Should Attend: CFOs/Controller of Manufacturing Companies

Delivery Method: Group Live

Prerequisites: None

Advanced Preparation: None Program Level: Intermediate

About CBIZ: CBIZ, Inc. is registered with the National Association of State Boards of Accountancy (NASBA) as a sponsor of continuing professional education on the National Registry of CPE Sponsors. State boards of accountancy have the final authority on the acceptance of individual courses for CPE credit. Complaints regarding registered sponsors may be submitted to the National Registry of CPE Sponsors through its website: www.learningmarket.org.

For more information or to register contact:
Brittany Belko (bbelko@ntma.org) or phone 216-264-2848

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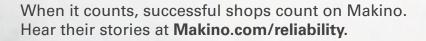
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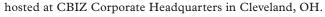


AUGUST CFO ROUNDTABLE IN CLEVELAND



"Peeling the Onion on 401(k) Fees and Expenses." ERP Systems. Affordable Care Act. Tax Landscape. All are topics high on the daily agendas of most financial managers, accounting managers, controllers and CFOs at NTMA member companies. All

were part of the discussion at the August CFO Roundtable. This one-day Roundtable was part of the series sponsored by National Associate Member CBIZ – this time



Many attendees saw the ERP Systems panel as one of the most valuable topics presented. The panel was moderated by Jeff Smith from Socius, joined by panelists Mark Lilly (Synergy Resources)

and Bryan Sapot (Datix, Inc).

As is the case with so many of NTMA's one-day regional events, networking was also noted as one of the benefits of attending the Roundtable. Having that focused and dedicated time to learn with and from one's peers and from industry experts is well worth the time and travel of the attendees from Maine, Ohio, Texas, Wisconsin, Missouri and Pennsylvania.

"I recently attended the NTMA CFO Roundtable in Cleveland and was impressed at the amount of takeaways that I brought back to our company. The Roundtable was definitely worth the value. If you have not attended a roundtable you should probably give it

a chance to learn and see what you are missing," said Tim Wetzel, General Manager at Homeyer Precision Manufacturing.





GROUNDBREAKING FOR NEW OBERG EXPANSION PROJECT

SARVER, PA – With a symbolic first shovel of earth, Oberg Industries' Board Members and Executive Management

Team marked the official start of construction for a new multi-function manufacturing facility on their Sarver, PA campus. Oberg Industries is a full-service contract manufacturer of precision metal components, tooling and stamping assemblies for over 67 years. During the past several years, the company has been growing – adding new customers, employees, and equipment to provide more services to support their diverse customer base.

Eric Oberg, Chairman of the Board for Oberg Industries, said, "This expansion project represents a measure of confidence in our talented employees, the continued success of our customer partners, and growth of our business and to this region in continuing to lead advanced manufacturing on a global scale." W.K. Thomas from Butler, PA has been selected to be the contractor for this new building which is being erected on the company's existing Sarver campus. This building expansion will give Oberg more than 80,000 square feet of addi-

tional floor space to expand their manufacturing operations and new product development efforts.

"The new building will give us room to expand for future growth as well as do more cellular manufacturing to increase efficiency," said David Bonvenuto, Oberg's President and CEO. "This will

allow the company to be more flexible on its manufacturing floor, handle larger projects, and be more cost competitive in addition to adding physical space to increase our employee development training areas," Bonvenuto added.

Oberg's new facility is expected to open in the spring of 2016. The company is presently recruiting personnel for several open manufacturing positions needed to support this capacity expansion.

ABOUT OBERG INDUSTRIES

Headquartered just north of Pittsburgh, Pennsylvania, Oberg Industries is a diversified manufacturer with over 750 employees worldwide specializing in the production of precision



Oberg's Board of Directors and Executive Management Team make the first symbolic cut of earth at the construction site.

machined or stamped metal components and precision tooling. Oberg is a strategic contract manufacturing partner for companies in the Aerospace, Automotive, Consumer/Industrial Products, Defense, Energy, Construction and Housing, Medical Device, Metal Packaging, and Munitions markets. The company's global manufacturing footprint includes operations in Pennsylvania and Costa Rica. Each manufacturing facility is ISO certified and operates under one or more of the following standards: ISO 9001:2008, ISO/TS 16949:2009, ISO 13485:2003 and AS 9100:2009 Rev. C.

The company's website is www.oberg.com.



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BUDGET SEASON

DOUG DEROSE, VICE PRESIDENT/CHIEF FINANCIAL AND ADMINISTRATIVE OFFICER (DDEROSE@NTMA.ORG)

I've been in the accounting profession for over 25 years (gasp) and in 18 of those years I have been responsible for creating the budget for my employer. I tend to think of the early part of the 4th business quarter of a fiscal year as "Budget Season." For a number of years I worked in an industry that was more focused on year-over-year performance, so a budget wasn't necessary. I had a hard time with that approach, however, because I felt that the lack of a budget created a gap in our strategic plan and a lack of focus on operational efficiency.

Over the years I've developed a process that I think creates an accurate and integrated budget and I've done it in a variety of industries. I've used it for organizations with as little as \$3MM to as much as \$25MM in sales. Here are some of the concepts that I think lead to an excellent budgeting process:

- 1. Determine the type of budget you need. Examples follow.
- 2. Start with a timeline and create a list of milestones to ensure timely completion.
- 3. Define stakeholders and involve them in the process. Their input is essential.
- 4. Leverage your accounting software to help with reporting and analysis, along with Excel.
- 5. Create a list of major assumptions that drive the budget.
- 6. Determine the level of detail needed. You may want a top level budget with line item detail for the entire company, or you may want to have budgets by business line or even by department.
- 7. Develop contingencies. As accurate as you and the stakeholders are, you will still want a list of actions you can take should the plan miss the mark.

As far as the type of budget you need, here is a list of those used by business:

• STATIC

This is the most typical form of budgeting, where a business creates a model of its expected results and financial position for the next year, and then attempts to force actual results to align with the model as much as possible. This budget format is typically based on a single expected outcome, which can be very difficult to achieve. It also can create rigidity in an organization, rather than allowing it to react quickly to ongoing changes it may encounter.

ZERO-BASE

A zero-base budget involves determining what outcomes management wants, and developing expenditures that will support each outcome. By combining the various outcome-

expenditure scenarios, a budget is derived that should result in a specific set of outcomes for the business. This is most useful in service-level entities; however, it also takes a considerable amount of time to develop, in comparison to the static budget.

• FLEXIBLE

A flexible budget model allows you to enter different sales levels in the model, which will then adjust planned expense levels to match the sales levels that have been entered. This approach is useful when sales levels are difficult to estimate and a large amount of expenses vary with sales. This type of model is more difficult to prepare than a static budget model, but tends to create a budget that is fairly comparable to actual results.

• INCREMENTAL

Incremental budgeting is an easy way to update a budget model, since it assumes that what has happened in the past can be rolled forward. This approach results in simplified budget updates, but it does not create a detailed analysis of company efficiencies and expenditures.

ROLLING BUDGET

A rolling budget requires that a new budget period be added as soon as the most recent period is completed. By doing so, the budget always extends a uniform distance into the future (typically a year). However, it also requires a considerable amount of budget work every accounting period to create the next incremental update. As a result, it is the least efficient budgeting alternative, though it does focus ongoing attention on the budget.

ROLLING FORECAST

A rolling forecast is not really a budget, but a regular update to the sales forecast, usually monthly. The organization then models its short-term spending on the expected revenue level. This approach has the advantages of being very easy to update, and requiring no budgeting infrastructure.

Of the budgeting models shown here, the static model is by far the most common, despite being difficult to create and rarely attained. A considerably different alternative is to use a rolling forecast, and allow managers to adjust their expenditures "on the fly" to match short-term revenue expectations. Smaller organizations may find that the rolling forecast is a more productive form of budget model, given its high degree of flexibility.



OKUMA'S NEW INTELLIGENT TECHNOLOGY SERVONAVI® SHORTENS CYCLE TIMES AND ACHIEVES HIGHER CNC MACHINING ACCURACIES

HIGH PRECISION TECHNOLOGY IS IDEAL FOR MAINTAINING LONG TERM ACCURACY, SURFACE QUALITY AND CUTTING PRECISE, HEAVY PARTS.

Okuma America Corporation, a world-leader in CNC machine tool manufacturing, introduces ServoNavi, a new Intelligent Technology that improves cycle times and accuracy when machining heavy parts. ServoNavi is the fifth option available in Okuma's set of performance-enhancing "Intelligent Technologies" and is standard on most machining centers, lathes and multitasking machines equipped with the OSP-P300 control.

SERVONAVI HIGHLIGHTS

Work Weight Auto Setting: Automatically estimates table loads, adjusting for optimal speed resulting in faster cycle times. This function is ideal for dies requiring surface shaping.

Auto Inertia Setting: Estimates chuck and workpiece speed and direction, automatically

changing servo parameter settings to optimum values to reduce positioning errors. High accuracy and stable movement are maintained during machining.

Reversal Spike Adjustment: Maintains machining accuracy and surface quality by fine tuning slide resistance changes that occur over time due to various machine tool applications. Decreases reversal spikes and eliminates crease marks during axis reversal, resulting in better surface finishes.

Vibration Auto Adjustment: Eliminates noise and vibration which contributes to longer machine life while improving surface quality.

For more information on ServoNavi visit $\label{eq:http://www.okuma.com/servonavi} http://www.okuma.com/servonavi \ .$



SENATORS: MANUFACTURING IS WHERE IT'S AT



If you've served in the military and are looking to transition to the workforce or if you're just starting out in life and are considering your options, U.S. Senators Angus King and Kelly Ayotte, (R-New Hampshire), have a suggestion.

That suggestion, the senators said Friday (September 11), is manufacturing.

Making aircraft engines or repairing nuclear submarines or manufacturing parts for any number of applications is a growing part of the industrial sector.



Sen. Kelly Ayotte, R-N.H., and Sen. Angus King, I-Maine, pose with Eric Matheson and Nick Claesson during a tour at Pratt & Whitney North Berwick. Matheson is currently enrolled in the company's apprenticeship program, offered through a partnership with York County Community College. Claesson is one of several Thornton Academy High School students working at Pratt & Whitney as part of the National Tooling and Machining Association-U curriculum offered at the high school.

SUBMITTED PHOTO/Courtesy of Pratt & Whitney

Yes, we make things in America. And while manufacturing once made up a larger part of the nation's economy than it has in recent years – it was 40 percent of gross domestic product 25 years ago and is about 12 percent today, according to King – manufacturing is making a comeback.

King and Ayotte along with a regional business organization, the New England Council, took a private tour at Pratt & Whitney Friday and then talked to the news media about manufacturing.

"Manufacturing has a bright future in New England," said King.

And one very necessary part of a healthy and vibrant manufacturing sector is skilled workers. This is not only to replace employees ready for retirement, but to accommodate growth at industries like Pratt & Whitney, which among other local manufacturers is ramping up for more production.

According to figures supplied by Maine Manufacturing Extension Partnership, the

Maine chapter of a nationwide organization designed to strengthen competitiveness of U.S. manufacturers, companies in the state that returned a survey conducted by the Maine Department of Labor revealed there were about 1,330 vacancies in Maine's manufacturing sector in 2014.

King said the number one issue he hears as he tours manufacturing facilities is the need to find the right employees.

"These are good paying, middle class jobs," he said of opportunities in the manufacturing sector.

Both King and Ayotte co-sponsored the "Revitalize American Manufacturing and Innovation Act of 2014," which the president signed into law in December to establish a network of industry-led manufacturing institutes to help bridge the gap between research and development and improve access to cutting edge equipment and capabilities.

"We want to make sure people have a current view of manufacturing," said Ayotte.

They spoke out Friday to help spread the word that there are jobs and training opportunities available.

One case in point is a program in Sanford through York County Community College, developed specifically to train machinists. Pratt & Whitney recently contributed surplus machinery and \$90,000 to aid that program, according to company spokeswoman Cindy Szabo. The company earlier this year announced a part-

nership with the community college whereby 100 to 150 workers were to be hired and then trained.

Thornton Academy in Saco, recognizing the need for skilled workers, is now using an online program developed by the National Tool and Machine Association combined with internships to train and educate 30 students for the workforce. Headmaster Rene Menard who was among those on the tour Friday, said the six semester curriculum includes internships with companies like Arundel Machine, Pratt & Whitney and others to prepare students for the manufacturing workforce. Some students interned at Pratt & Whitney all summer, and several are working at the company part-time, after school. Thornton Academy is the first school in the nation to use the program.

"Students can apply what they learn on state of the art equipment," during internships, Menard said.

Both King and Ayotte said they're looking to get the word out about manufacturing, not only to students but to others, like those leaving the military, where a veteran can benefit from landing a good, well-paying job and companies gain skilled workers.

"It helps keep manufacturing in the United States," said Ayotte.

Reprinted with permission, York County Journal Tribune.





1,402 MODULES

NTMA-U continues to grow at light speed. We have registered NTMA Member employees into 1,402 modules in 2015 alone. That's right! Employees of NTMA member companies have enrolled into 1,402 modules in just the past nine months (year-to-date 2015).



NTMA-U has just launched an NRL Safety Course for all National Robotics League teams at NO CHARGE!!! Don't risk a high school student being injured and claiming that they did not receive proper

safety training. It's FREE because we believe in Safety First!!

We are pleased to announce that now NTMA-U's LMS (Learning Module System) has just completed and has launched iPad Support on an iOS app. The newest version of NTMA-U (the one that we currently use) can use the iOS app and we are pleased that we now support more versions and more devices! NTMA-U learners now have options to complete courses, exams and surveys on their iPhone and iPad. The 2015 version supports any iOS device v7 or later and it allows our learners to access NTMA-U training whenever and wherever it suits our students the best.

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FANUC ROBOTICS



On a recent visit to the FANUC America facility (Mason, OH), NTMA National Account Manager Tiffany Bryson was introduced to robotic automation and how it can help small- to medium-sized job shops. Tiffany saw first-hand the FANUC M-2000iA robot, the world's largest robot with a 2300kg payload.

FANUC offers a wide range of robots with payloads from .5kg to 2300kg designed for a variety of applications to meet the needs of customers from small shops to large automotive manufacturers.

Tiffany learned that there are many reasons manufacturers automate their production facilities. One of the more obvious reasons is the ROI factor of labor savings. However, other often overlooked factors can have a more significant impact, including:

INCREASED PRODUCTIVITY

Robots are able to increase spindle utilization by 20% or more as long as the robot has materials to supply the process. These savings include the ability to work through

break periods and evenings when the machines are unattended.

• ABILITY TO PERFORM SECONDARY OPERATIONS

The same robot can perform secondary operations such as deburring, finished part gaging, packaging, and/or assembly.

• IMPROVED ERGONOMICS

Robot utilization can remove human operators from difficult and dangerous operations.

INCREASED QUALITY

FANUC's built-in iRVision allows the robot to 100% inspect both raw and finished parts.

ELIMINATION OF FIXTURES

Robots using 2D iRVision can pick parts with stable orientations from flexible feeders or conveyors. 3D iRVision allows a robot to pick parts from baskets or bins, thus eliminating the need for costly fixtures and providing flexibility to handle more parts of various shapes and sizes.

For more information on FANUC's robotics program contact Geoff Dawson, Account Manager, FANUC Authorized



System Integrator Sales, FANUC America Corporation – Robotics (geoff.dawson@fanucamerica.com) or www.fanucamerica.com.

NTMA

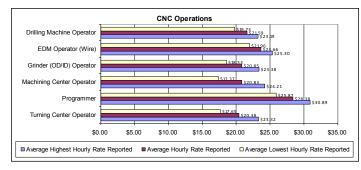
BENCHMARK YOUR WAGE & FRINGE BENEFITS!

NTMA understands the importance of helping manufacturers control costs, especially when making hiring and promotion decisions. From the OCEC Report, we know that over one-third of all the costs faced by NTMA member companies are plant payroll costs. The annual Wage & Fringe Benefit Survey is a valuable tool for manufacturers to use in their efforts to compensate employees in a fair and competitive manner.

TALENT RETENTION REMAINS EMPLOYERS' TOP HR PRIORITY.

To attract and retain valuable workers, however, you must consider your overall employee compensation plan, both pay scales and benefits. And you need to know what other shops in your area are offering.

- 1. 40 job positions surveyed
- 2. Survey results by geographic location national, regional, state, your chapter
 - 3. Line of Business analysis
 - Tools & Dies
 - Molds
 - General Precision Machining
 - Aerospace Machining & Fabrication
 - Special Machines
 - Production Operation



Fringe Benefits and Pay Practices results are included in the report

	Typical	New	Mid	South	Mid-	North	South	
Benefit Programs	NTMA	England	Atlantic	East	West	Central	Central	West
Medical/Hospitalization - Employee	95%	86%	88%	100%	89%	88%	93%	97%
Medical/Hospitalization -Dependent	86%	56%	88%	100%	89%	88%	73%	92%
Prescription Drug Plan	89%	72%	93%	100%	90%	90%	82%	89%
Dental Plan	81%	72%	76%	75%	83%	83%	73%	93%
Vision/Optical Plan	50%	28%	55%	58%	47%	48%	55%	67%
Long-term Disability Insurance	53%	50%	53%	67%	56%	56%	45%	37%
Short-term Disability Insurance	64%	78%	69%	75%	81%	54%	55%	22%

Survey deadline November 1 – Don't miss this important opportunity to develop highly specific benchmarks for targeting shop floor compensation levels. If you need a copy of the survey, contact Kelly LaMarca (klamarca@ntma.org) or contact your Chapter Executive. Wage & Fringe Benefit Survey results are free, but you must participate to receive the report.



Some NTMA members have already made the commitment to upgrade their visibility in the 2016 interactive Directory! — *shouldn't you?*





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Alan E. Ortner President

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For more information contact:

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F. 216.264.2840 klamarca@ntma.org

NTMA 2016 EVENTS

JANUARY 13, 2016

Plant Managers Roundtable North Carolina

FEBRUARY 10, 2016

Sales & Marketing Workshop Dallas/Austin, TX

FEBRUARY 17, 2016

Financial Managers Roundtable Atlanta, GA

MARCH 2-5, 2016

MFG Meeting Desert Palm, CA

MARCH 23, 2016

Human Resources Roundtable Indianapolis, IN

APRIL 11-13, 2016

NTMA/PMA Legislative Conference & Emerging Leaders Conference Washington, D.C.

APRIL 16-24, 2016

Japan Tech Tour

APRIL 20, 2016

Financial Managers Roundtable Pittsburgh, PA

MAY 20, 2016

Workforce Development Roundtable California University of Pennsylvania California, PA

MAY 20-22, 2016

NRL Competition California University of Pennsylvania California, PA

JUNE 8, 2016

Financial Managers Roundtable Denver. CO

JUNE 8-10, 2016

Emerging Leaders Conference Chicago, IL

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2016

SEPTEMBER 12-17, 2016

IMTS Chicago, IL

SEPTEMBER 28, 2016

Sales & Marketing Workshop Philadelphia, PA

OCTOBER 12-15, 2016

Fall Conference Charlotte, NC

OCTOBER 26, 2016

Plant Managers Roundtable Boston, MA

NOVEMBER 2. 2016

Sales & Marketing Workshop TBD

NOVEMBER 2-3, 2016

Supply Chain Network Fair TBD

NOVEMBER 16, 2016

Plant Managers Roundtable Denver, CO

^{*}All Tech Seminars have a reception Tuesday evening



THE RECORD

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