NTMA THE RECORD



POLITICS AND GOVERNMENT ARE NOT SPECTATOR SPORTS

The public's view of Congress is at an all time low, and voter participation in elections is on the decline. —p11

MADE IN USA MAKES COMEBACK AS A MARKETING TOOL

It's becoming downright American to make stuff in America. —p14

NATIONAL TOOLING AND MACHINING Foundation legacy of giving

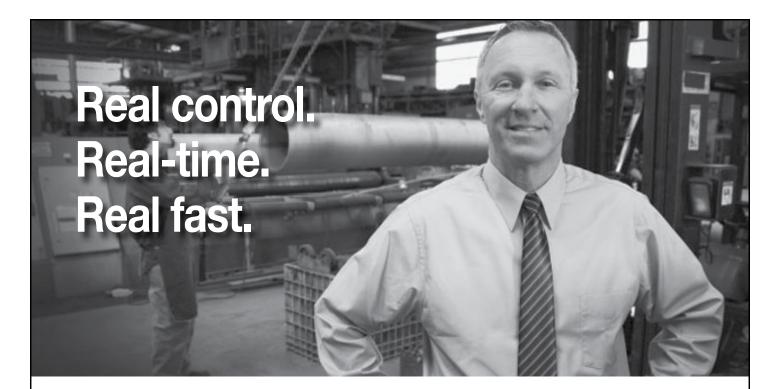
Including National Tooling and Machining Foundation in your will is one of the most valuable legacies you leave. —p17

LA NTMA CHAPTER HOSTS NTMA Chairman elect at annual Installation dinner

The Los Angeles Chapter came together on January 19th to celebrate the installation of it's 2013 Board of Directors.—p30

ATLAS MACHINE AND SUPPLY MACHINIST ATTENDS STATE OF THE UNION ADDRESS

BRADLEY HENNING, A 23-YEAR OLD JOURNEYMAN MACHINIST AT LOUISVILLE, KENTUCKY-BASED ATLAS MACHINE AND SUPPLY, WAS IN THE NATIONAL SPOTLIGHT WHEN PRESIDENT BARACK OBAMA DELIVERED HIS STATE OF THE UNION ADDRESS. —P6



The E2 Shop System helps you manage your shop... Anywhere... Anytime!

The E2 Shop System is designed with one thing in mind - to give you optimal control of your shop by allowing you instant access to all mission-critical business information from your phone, iPad, Tablet or laptop.

With E2, you can:

- Quote fast and accurate
- Schedule the shop floor realistically
- Manage material effectively

See why E2 is the #1 most widely used shop management system on the market today.

Visit **www.shoptech.com** or call **800-525-2143** for a free information packet.

The Authority on Shop Floor Control.

Shoptech is American owned and operated

- Track jobs instantly
- Ship on time, every time
- Increase profit margins



Watch a FREE DEMO at shoptech.com





CONTENTS

NTMA WECLOMES NEW MEMBERS

4 Chairman's Corner

ATLAS MACHINE AND SUPPLY MACHINIST ATTENDS STATE OF THE UNION Address as guest of first lady michelle obama

> 9 NTMA COMES BACK TO ALABAMA

11 Politics and government are not spectator sports

11 STUDENTS PREPARING FOR MACHINING COMPETITION

> 12 Turning Point

14 MADE IN USA MAKES COMEBACK AS A MARKETING TOOL

> 14 State of the Union Address -Manufacturing industry analysis

NATIONAL TOOLING AND MACHINING FOUNDATION LEGACY OF GIVING

18 2013 Contract Manufacturing Purchasing Fair

20 A&E CUSTOM MANUFACTURING EARNS 2013 INDUSTRY AWARD

> 22 Reshoring Summit

23 NTMA SCHOLARSHIPS

24 SAN FRANCISCO BAY AREA NTMA CHAPTER WELCOMES NTMA CHAIRMAN Elect and executive staff

27 LAI INTERNATIONAL OPENS NEW MANUFACTURING LOCATION IN ARIZONA

28 NLRB RECESS APPOINTMENTS RULED UNCONSTITUTIONAL

28 MTCONNECT HELPS GETTING DATA OFF YOUR SHOP FLOOR MUCH EASIER

> 30 La NTMA CHAPTER HOSTS NTMA CHAIRMAN ELECT AT Annual installation dinner

32 THE NTMA OPERATING COSTS AND EXECUTIVE COMPENSATION (OCEC) Benchmarks Performance!

32 MAZAK INTRODUCES 3D FABRI GEAR MK II FOR TUBE, PIPE AND STRUCTURAL Applications

> 33 PIPE SAW PERMITS BETTER END PREPS

35 NTMA CHAPTERS STRENGTHEN THROUGH NATIONAL...

35 New Rex-cut Abrasives website introduces videos, blog and Distributor locator

> 36 Calendar of events

NTMA WELCOMES NEW MEMBERS

7 G DESIGN AND MANUFACTURING

Pittsburgh Chapter Mr. Demetrius Grimsley 827 Ohio River Blvd Pittsburgh, PA 15202 412.728.3547 ddgrims@gmail.com

ACME MACHINE & WELDING COMPANY

Pittsburgh Chapter Mr. R. J. McSorley, Jr. P.O. Box 1099 Punxsutawney, PA 15767-0099 814.938.6702 rj@acmemw.com

AUTO-VALVE, INC.

Dayton Region Manufacturers Association Mr. Robert Hale 1707 Guenther Rd Dayton, OH 45417-9344 937.854.3037 haleb@autovalve.com

E. W. JOHNSON COMPANY North Texas Chapter Mr. Jim Harris 1495 N. Kealy Street Lewisville, TX 75057 972.436.7528 jharris@ewjohnson.com

EDM TECHNOLOGIES,INC.

Mr. John K. Cater, Jr. 325 Bell Park Dr Woodstock, GA 30188-1663 770.924.8328 ohncater@edmtechnologies.net

JORDAN MACHINE COMPANY

Mr. Matt Slay 355 Clow Lane Birmingham, AL 35217 205.849.5050 mattslay@jordanmachine.com

KENNEY INDUSTRIES, INC.

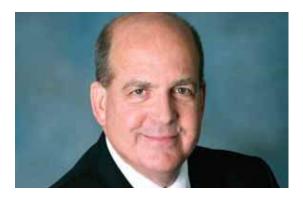
North Texas Chapter Mr. Mike Kenney 2343 Lone Star Drive Dallas, TX 75212 214.421.4175 mike@kenneyind.com

PRECISION COMPONENTS & ASSEMBLIES, INC.

St. Louis Chapter Mr. David Didion 30 Patmos Court St.Peters, MO 63376 636.928.7288 ddidion@precisioncomponentsinc.com

CONTINUED ON - P9





CHAIRMAN'S CORNER

ROGER ATKINS / NTMA CHAIRMAN OF THE BOARD

As I write this article, it's with bitter sweet feelings realizing that my year as NTMA Chairman is quickly coming to an end. Many of us are headed to the 2013 MFG Meeting in Kona, Hawaii where I will turn the Chairman's reins of our association over to the able leadership of Mr. Bob Mosey. I have personally served with Bob for the past three years and can assure you NTMA will be in great hands to move forward.

Personally, I will say that this has been one of the most challenging yet rewarding years of my entire career in manufacturing. I think the inner feeling of any leader is the desire to leave the organization stronger and healthier than you inherited it. I can proudly say with confidence that we will do just that.

Each year, the Executive Team presents a theme, building on the previous year's theme and priority. For 2012, our theme has been "Transforming for Competitiveness". It has truly been my heart, passion, and focus to help lead NTMA in providing our member companies with as many opportunities as possible to "transform" themselves and their companies for the future.

As I have traveled across our great land this year, visiting member's shops and seeing what they produce, tolerances they hold, industries they serve, and the special niche processes each company owns, topped off by their manufacturing knowledge, has been nothing short of amazing.

As I have shared many times about our member shops; the Good Book says "the Lord did not create any one of us alike", I can assure you that there is not any one shop alike to another. Everyone has their own special flare, processes, or services. That is what makes us so special.

This year I made 17 Chapter visits coupled with visiting 54 member companies. My last Chapter visit and presentation was to my home Chapter in Houston. What a fitting way to end a great year! I also visited 10 Industry related meetings, and 4 National Industry related Conferences, all culminating in having touched approximately 1500 people concerning NTMA and our Industry. As with any success, there are so many people behind the scenes that have contributed. For me, that is no different and I will do my best to acknowledge those who played such an important role in NTMA's success in 2012.

• For our Industry Partners who opened their arms to NTMA during my chairmanship...ThankYou.

• For Affinity Partners who worked tirelessly to present and improve programs for NTMA members...ThankYou.

• For those NTMA members who allowed me to visit your companies...ThankYou.

• For those NTMA Chapters who allowed me to speak at your local NTMA meetings and banquets/ special events...ThankYou.

• For those of you who chauffeured me around, hosted me in your homes, catered to my needs while visiting/traveling ...Thank You.

• For those of you who sent encouraging notes/emails and supported our efforts this year...Thank You.

• For the support of the Houston Chapter especially Donald

and Mary Lloyd for their ongoing support and encouragement ... Thank You.

• For Dan Bagley's continued contribution to NTMA at large as well as to our members as pertains to marketing our association, our companies and our industry... Thank You.

• For Captain Michael Abrashoff and Jeff Knight; both nationally acclaimed speakers for agreeing to speak into the heart of American Manufacturers at NTMA Fall Conference in Nashville...Thank You.

• For Dave Tilstone, Vicki Satterfield, Emily Lipovan, Ken McCreight, Jeff Walmsley, John Capka, and the "entire" National Staff for their flexibility and endlessly work to support NTMA, myself, and our industry...Thank You.

• For the NTMA Executive Team for their tireless work and dedication on behalf of all NTMA and your constant support and encouragement of me...ThankYou.

• For Jim Taylor; President, of MIC Group, our MIC Executive Team, and my MIC Sales Team who have supported and encouraged me this year as I have traveled on behalf of NTMA and our Industry...ThankYou.

• To my wife Juanita and my daughters Angela, Alyssa, and Adrienne for their unwavering love, support, and encouragement...... Thank you with all my love.

The accomplishments for NTMA this year have been many due to the combined efforts of many persons both the in the forefront and behinds the scenes. Some of those accomplishments are:

• New permanent home for the

NTMA Offices in Cleveland, Ohio • Established and growth in capacity of our National Staff

• The successful launch and growth of NTMA-U on-line training

• The successful launch to an NTMA Sponsored Insurance Program with AIX

• Two successful national conferences with top programs and speakers

• Successful Tech Suites at our national conferences giving NTMA members direct access to top level executives from our Industry Partners

• The achievement of a \$1M rebate from Grainger due to our combined purchasing strength

• The commitment and hiring of a National Robotics League Director

• A successful auction and donation to support the NTMA Foundation

• Successful launch of Fast Friday Webinar Series for NTMA only members

• A first ever NTMA Team Leaders weekend to train, review NTMA strategic plan, and align team priorities

• The continued success and effectiveness of our NTMA Government Affairs Team, The Franklin Partnership, and Bracewell Giuliani on behalf of all the metal working industry

• Ending the year with one of the highest member retention rate in NTMA's history of 92% while achieving Net Membership growth of 32 new members

• Last but not least, NTMA is ending the year of 2012 in the CONTINUED ON - P5

THE RECORD

OPERATIONS & EDITORIAL

Dave Tilstone, President Emily Lipovan, Managing Director Editor

NTMA EXECUTIVE TEAM

Roger Atkins, Chairman MIC Group – Brenham, TX

Robert Mosey, Vice Chairman Moseys' Production Machinists Inc. – Anaheim, CA

Theodore O. Toth, Jr., Treasurer Toth Technologies – Pennsauken, NJ

Grady Cope, Past Chairman of the Board Reata Engineering & Machine Works – Englewood, CO

John Belzer President, TCI Precision Metals

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, elipovan@ntma.org for editorial content. Design & layout by Z Graphics david.zablo@gmail.com



NATIONAL TOOLING & MACHINING ASSOCIATION 1357 Rockside Rd. Cleveland, OH 44134 1-800-248-6862 www.ntma.org

© Copyright 2012 NTMA



"Black" even after all the unplanned/unbudgeted expenses. This is the first time since 2009 that NTMA has ended the year with positive cash

There are great challenges ahead, highlighted by the continued need for a trained workforce to off-set the current and growing need through coming retirements. Where there are great challenges there are great rewards for those willing to meet the challenge. The goal for NTMA remains to lead in meeting those challenges and provide you every opportunity possible to improve, strengthen, and grow your business. I can confidently say the future is bright for NTMA and our Industry. I encourage you to engage, utilize, and support NTMA at every level.

In closing my last Chairman's Corner, I can only say Thank You for the opportunity to serve as Chairman of the National Tooling and Machining Association. It has been humbling to lead my peers and one of the greatest honors of my life.

My final thought is a comment one my daughters made to me after attending the 2012MFG Meeting in Orlando; they said "your NTMA friends really are pretty special people"...I could not say it better. God Bless You All.



ROGER ATKINS / CHAIRMAN



VERICUT is the world's leading CNC simulation software – used in all industries with all CAD/CAM/PLM systems to simulate CNC code, whether programmed manually or post-processed from your CAM system. Simulate and optimize the entire machining process with VERICUT's virtual machining environment.

With direct sales and support throughout North America, CGTech is here to help you. Scan the QR code or visit cgtech.com to learn more.



Right the first time. Every time. . Irvine, California . (949) 753-1050 . info@cgtech.com

VERICUT





MACHINIST ATTENDS State of the Union Address NTMA Member in national spotlight

Bradley Henning, a 23-year old Journeyman Machinist at Louisville, Kentucky-based Atlas Machine and Supply, was in the national spotlight when President Barack Obama delivered his State of the Union address.

Bradley was First Lady Michelle Obama's guest in the gallery at the Capitol when the president delivered his speech to Congress. Brad was invited to the White House and to be present for the speech because of his successful career path as a skilled journeyman machinist.

In the State of the Union Address, the President emphasized the importance of training workers with skills that lead directly to good jobs in industries that need workers. He focused on manufacturing and high-tech job creation. "Our first priority," he said, "is making America a magnet for new jobs and manufacturing."

According to Atlas, Bradley was first introduced to the skilled trades by a teacher during his sophomore year at Breckinridge High School in Harned, KY. His interest grew, and he continued taking vocational classes through his senior year at the Breckinridge County Area Technology Center. During his training he used his mechanical ability to successfully compete in welding and small engine technology, taking him all the way to state level competitions. In 2008, Bradley won the "Machinist of the Year" award from the Technology Center.

As Bradley's high school career was coming to an end, he began working part-time for Atlas Machine and Supply as a Cooperative Apprentice Machinist. It was at Atlas that he was first introduced to real-life, complex machining and remanufacturing processes. Two days after his high school graduation in June 2008, Bradley was hired full-time as an Apprentice Machinist and received additional training at the Kentuckiana Machining Association. Bradley completed the mandatory 576 hours of classroom training and 8,000 hours of on-the-job training to earn his journeyman's card in July 2012.

Today, Bradley, as a Journeyman Machinist, is serving as an apprentice mentor and continues to sharpen his skills and receive advanced, on-the-job training at Atlas Machine and Supply. His long-term goal is to advance his career within the company and grow his level of responsibility to future apprentices, his co-workers, and his customers.

"This is the perfect example of what can happen when a student graduates career-ready with 21st-century skills," said Kentucky Education Commissioner Terry Holliday. "When he graduated high school, this young man had the core academic skills, the employability skills and technical skills to get a job, pursue postsecondary training and start on a lifelong career."

Brad's invitation from the White House came after a national media story about his experience with career and tech education, the apprenticeship and his entry into manufacturing as a lifelong career.

About Atlas Machine and Supply, Inc. – Atlas is a 106-year old business based in the Jefferson Riverport in Louisville, Kentucky. The fourth-generation, family-owned company employs about 200 employees, and in addition to Louisville, has locations in Evansville, Indiana, and in Cincinnati and Columbus, Ohio. For more information, visit www.atlasmachine.com.

This story is adapted from press releases published by Atlas Machine and Supply, Inc and the Kentucky Department of Education. Photo Courtesy of Atlas Machine and Supply, Inc.

NTMA

NTMA INSURANCE

FIRST-CLASS COVERAGE

WE KNOW YOU

From property, general liability, equipment breakdown, commercial auto, worker's compensation and beyond, we work closely with you to draft a customized plan that delivers on your unique business needs and prepares you for unforeseen events.

Our competitors may suggest to you that our aircraft liability exclusion isn't crucial; however, if the unexpected occurs, you and your employees can be held accountable. Why put your employees and your business at risk? This coverage with NTMA ensures that any costs associated with your legal defense are paid by NTMA Insurance.

We aim to protect you and your employees. Our specialty knowledge, directed claims adjusting, and knowledge of your industry help us to provide you with stability in coverage, cost, and employee safety.

- YOUR INDUSTRY
- YOUR ASSOCIATION
- YOUR INSURANCE

Let the association you support take care of your complete coverage needs. Contact an official NTMA insurance program representative today.

Jim Grosmann 314-409-3799 ntmainsurance@ntma.org



NTMA Insurance is provided by AIX Nova. Britt Paulk Insurance (BPI) and Barney & Barney, LLC are program administrators.

Join the Revolution!



- Global R&D Tax Credit Studies
- Section 199 Optimization
- Commercial Property Benefits Analysis
- Hiring Incentives
- Unemployment Claims Management
- IC-DISC (US Exporters Tax Incentive)
- Contract R&D Audit & Consulting Services.

Tax Savings—DELIVERED

www.taxcreditrevolution.com

It's your money—our RESULTS

Paradigm Partners 281.558.7100 ext. 139 info@paradigmlp.com



Strategic Business Partner

New Members Continued

RJ LINK INTERNATIONAL, INC.

Rock River Valley Chapter Mr. Rodney Link 3741 Publishers Dr Rockford, IL 61109-6316 815.874.8110 (201) rlink@rjlink.com

TRIUMPH AEROSPACE SYSTEMS - SEATTLE

Puget Sound Chapter Ms. Sharon Black 22922 Ne Alder Crest Dr Redmond, WA 98053-5894 425.636.6657 slblack@triumphgroup.com

DEKING SCREW PRODUCTS, INC.

San Fernando Valley Chapter Mr. Geno Devandry 20416 Prarie Street Chatsworth,CA. 91311 818.882.3331 gdevandry@gmail.com

CRANSTON MACHINE WORKS,LLC

Boston& RI - SE MA. Chapter Mr. Daniel Nadeau 370 Wellington Ave. Cranston,RI. 02910 401.780.8860 cranstonmachineworks.com

SUPERIOR ROLL, LLC

Toledo Chapter Mr. Jeff Johnson P.O. Box 5 Petersburg,MI. 49270 734.279.1831 johnson@superiorroll.com

PRECISION GRINDING, INC.

Mr. Miles Cunningham P.O. Box 19925 Birmingham, AL. 35219 205.942.2491 miles@precisiongrinding.com



David Didion, Precision Components & Assemblies receives his new member plaque from St Louis Chapter President Bill Bachman and Nick Berilla of Hartwig Inc.

Photo courtesy of David Lippe, Mid-America Commerce & Industry Magazine

NEW NATIONAL ASSOCIATE MEMBERS

OWNER RESOUCE GROUP

National Associate Mr. Will Burnett 600 Congress Ave. Suite 200 Austin TX. 78701 512.505.4180 wburnett@orgroup.com

INDUSTRIAL MAGNETICS, INC

National Associates Mr. Dennis O'Leary 1385 M-75 South Joyne City, MI. 49712 231.582.3100 doleary@magnetics.com

SYSCON INTERNATIONAL, INC.

National Associates Mr. Tom Thomas 1108 South High Street South Bend, IN. 46601 574-232-3900 tomt@syscon-intl.com

NTMA

NTMA COMES BACK TO Alabama

Members in AL are working on a plan to start a state chapter. A recruitment team has formed to provide leads and other help in developing enough members to form a chapter.



Above (L-R) William Strickland (Source 360 Media), Jim McDaniel (McDaniel Machinery), and Matt Slay (Jordan Machine) have agreed to form the nucleus of the new team and devote some of their precious time to this task. They are joined by Taylor Anderson (Wells Fargo Insurance) not pictured. Already the team has provided over 20 leads to NTMA that are being followed up on and in the next few months will be discussing a timetable to form the chapter. The NTMA thanks these men for their time and dedication to this project.



Matt Slay at Jordan Machine, Birmingham, AL.

Automatic Door Openers



Solution For single and double doors on mills, lathes and other machinery.

☑ Improve ergonomics, eliminate manual door moving tasks.

- Smart System" interfaces with machine's control.
- Door reverses if met with an obstruction.
- Ideal for robotic applications.

Automatic and Manual Pallet Changers and Door Openers for Every Machining Center

Proudly made in the USA



(847) 593-8420 www.midaco-corp.com



M

POLITICS AND GOVERNMENT WE NE ARE NOT SPECTATOR SPORTS VOICE

The public's view of Congress is at an all time low, and voter participation in elections is on the decline because all voters, Republicans, Democrats, Independents, Men, and Women are extremely frustrated by what they see is going on (or not going on) in Washington.

But this is not the time to sit back and complain. It is time to take action!

Government touches all of our lives, the IRS levies taxes, OSHA, NLRB, EPA and other agencies regulate our business, Social Security and Medicare take care of our parents and grandparents.

Federal Agency and Congressional action or inaction costs manufacturers millions of dollars each year in compliance costs. How much do we all spend on lawyers, accountants and consultants just to comply?

Recognizing this, your NTMA has joined forces with the Precision Metalforming Association to create the One Voice for Manufacturing Advocacy effort (www.metalworkingadovcate.org). Now, we have a team of professionals in Washington who advocate on behalf of you – small and medium size manufacturers before Congress, the Administration and in the news media.

Our DC team has successfully lobbied to extend many tax provisions important to manufacturing like Bonus Depreciation, the Research and Development tax credit among others. They fought back against Big Labor's effort to pass Card Check legislation. On Card Check alone, Big Labor spent \$400 million to get it passed. One Voice and our partners didn't let it get to the Senate floor for a vote. And they continue to work on efforts to reform our current workforce development programs so we can hire employees who have the necessary skills to meet the challenges of a global marketplace.

We are not the size of the NRA, AARP or organized labor, but we have an impressive track record of success. But know our opponents are continuing to push for policies that harm manufacturing.

As the saying goes, "if you're not at the table, then you're on the menu". One Voice gives every NTMA member as seat at the table!

Every year, your NTMA contacts you about raising money for two different types of funds to pay for this advocacy effort in DC – NTMA's PAC, named Committee For a Strong Economy (CFASE), and the Government Affairs Administrative Fund GAAF. Below is a brief summary of the differences between the two funds: NTMA'S POLITICAL ACTION COMMITTEE

Groups with advocacy efforts in DC form "PAC's" in order to raise money to donate to certain candidates and elected officials to help them run for office. The NTMA PAC (Committee for a Strong Economy CFASE) has a policy of donating only to candidates or elected officials who understand manufacturing.

The money donated in 2012 helped 92% of the candidates we donated to win their election. (extremely Good %). We "score" elected officials based on how they voted on specific pro-small business/small manufacturing issues we support or are driving. These scores help the GAT make decisions on who we believe supports manufacturing in America.

The Federal Election Commission (FEC) has set rules for nonprofits that we must strictly adhere to. In order to collect PAC funds, we can only "solicit" money from member companies that have signed the Approval to Solicit form (also known as the PAC Authorization Form). Members can only give permission to one PAC to be solicited.

These rules were set up by the FEC to favor union organizations and make it difficult for business PAC's to raise money.

All monies donated to the PAC MUST come from personal funds with a cap of \$5,000/yr. No corporate funds allowed. ANYONE can donate to a PAC if they choose but we can only "solicit" from those that have signed the form.

GOVERNMENT AFFAIRS ADMINISTRATIVE FUND (GAAF)

This fund handles money that pays for our DC team's lobbying activities. It also pays for mailings, printing costs, staff travel on GAT duties, any speakers we may have at our Legislative Conference and other "administrative" costs our advocacy efforts incur. Money to this fund can come from anybody, anywhere. No limits, can be corporate or personal. Associate members can contribute as well to the GAAF because what we do in DC benefits you as well.

So please look in your inbox and mailbox for letters seeking support for these two important efforts. We cannot afford NOT to participate in Government and Politics.

NTMA

STUDENTS PREPARING FOR MACHINING COMPETITION

Two students from the C4 precision machining class at Columbus North High School will participate today in the 10th annual Indiana High School Machining Competition in Indianapolis.

The Indiana chapter of the National Tool & Machining Association puts on the event, which will see students from a total of eight high schools and career centers statewide convene about 8 a.m. at Indianapolis' Ivy Tech Community College Glick Family Technology Center, 50 W. Fall Creek Parkway.

Competitors will be tested in not only basic machining principles, but also creating devices on lathes, mills and other equipment, according to an Ivy Tech central office press release.

Dan Ross, the first-year precision machining teacher from North, said his

team, consisting of juniors Cody Ross and Brandon Albert, is confident and ready to compete at a high level.

The winner, runner up and third-place finishers will receive cash prizes, scholarships and special tool sets donated by machining companies.



TURNING POINT

Southern Manufacturing Technologies continues work with robotics program to address workers shortage

By: Denise Kalette | Editor/Tampa Bay

When a Navy pilot roars from a combat ship off the coast of Afghanistan, bound for a strafing run on an enemy firing at U.S. forces, there is a good chance that tucked away in the pilot's equipment are essential parts from Tampa Bay that could save his life.

Those parts are built into his parachute — sturdy metal housings and mechanical components. If the pilot is forced to bail out over the ocean and lands, unconscious, in the water, a sensor detects the fluid and blows his parachute away so it doesn't drag him under. In rapid sequence, his head is lifted from the water and his life jacket inflates, while a second sensor triggers a flare so rescuers can find the pilot.

The metal parts that house the sensors are manufactured at a littleknown Tampa company that occupies a 20,000-square-foot building where the lights burn 24/7. At Southern Manufacturing Technologies (SMT), a private company celebrating its 30th year in business, workers churn out 20,000 highly precise components per month, for the aircraft, aerospace, and defense industries.

Although the plant's products have been used in high-profile places — the Mars rover, air-to-air missiles, communications and military satellites, and commercial aircraft — SMT President Roy Sweatman has been content to fly under the radar of public notice. But now, as his company reaches a critical turning point, the low profile is working against him.

After growing his company for three decades, Sweatman, 66, is facing the inevitable need to hand over the reins to a new chief, within five to eight years. At the same time, he anticipates receiving a major contract in 2015 to manufacture parts for a new generation of fuel-efficient aircraft engines for Boeing 737s and the Airbus A320. Sweatman and his top managers are reconfiguring space at the plant to shoehorn in the new operations. They will need to hire machinists at a time when many young people seldomly consider manufacturing or skilled trades as a career. What makes it even harder to attract talented applicants is that despite SMT's achievements and high standing in the aerospace world, many Tampa families and even business leaders have never heard of it.

"Nobody knows we exist," says Sweatman. "It's partially because we don't make the airplane, we just make some of the components." Many Americans have the impression that most U.S. manufacturing has shifted to China, so kids see no future in it, and parents steer them toward universities, he says. "Everybody's supposed to go to college."

Sweatman has a lot at stake. The plant owner, who grew up on a Pennsylvania dairy farm, has taken his machine shop from five employees when he bought it in 1983, to 110 skilled workers, and from \$360,000 in revenue the first year, to \$13.3 million in 2012. And even without the aircraft contract, the company is still growing, and searching for workers.

With Tampa Bay's unemployment rate dropping to 8% in December, one might conclude that plenty of willing workers could don a uniform at SMT. But along the Gulf Coast, many small and mid-size manufacturers share Sweatman's dilemma of a shortage of workers with sufficient technical backgrounds.



To help attract more skilled workers for his manufacturing company, Roy Sweatman works with local schools and colleges to encourage and support robotics programs.

"It's not uncommon," says Cliff Csulik, president of the Bay Area Manufacturers Association. Companies are having a hard time finding technicians, welders, and machinists who can operate the computer numerical control (CNC) machines programmed to make precision parts for the defense, aerospace or medical industries.

Small and mid-sized manufacturers of 25 to 100 employees supply essential parts to behemoths such as St. Petersburg-based circuit maker Jabil, which operates 60 plants in 25 countries; Raytheon, the aerospace and electronics giant; or Lockheed Martin, which builds military aircraft and defense systems.

But as young people increasingly choose more lucrative or prestigious careers, small manufacturers struggle to keep up with the demand for products. "It's not the glory type of job that some of these younger generations may want, but they're still needed," says Csulik. "That's what made America's backbone, these middle-class type of jobs."

Florida's 18,099 manufacturers employ 317,690 people, according to the Manufacturers Association of Florida. Based on the number of facilities, the state ranks fourth in the nation in manufacturing. Plant managers are opening their doors to student tours, and hiring promising young candidates. They work with schools and training centers to strengthen STEM curricula — science, technology, engineering and math. But even as they reach out to educators to bolster their work force, manufacturers also are advancing in another direction—toward the brave new world of automation.

ROBOTS: MORE THAN A GAME

As he pencils in plant changes in anticipation of the potential 2015 growth spurt, Sweatman knows that not only will a new generation of skilled employees help his plant carry on after he retires, so will the next generation of automated machines, including robots. Already, smart machines can select tools and mill metal parts with mathematical precision. They can move multiple pallets along the plant floor, shuttling along a metal rail.

SMT uses about 20 Computer Numerical Control (CNC) machines, and it employs a few basic robots. The Mars rover, after all, is a robot, and robotics are integrated not just in end-user military or space products, but also in the manufacturing process. Sweatman and his daughter Shannon, SMT's systems administrator, work with local schools and colleges to encourage robotics programs, which make math and science fun. The students compete in robot tournaments in which their machines fight competitors.

Girls enjoy bots as much as boys. "Down in the Miami area, there's Catholic high schools with all-girl teams. In these competitions when they fight and the bots get damaged, [the girls] are back in the pits helping each other out" with pit-stop repairs, says Sweatman, laughing.

Some Tampa kids come to the plant to perfect their bots, and occasionally, get hired part-time. New workers with no training generally earn \$10 an hour, while those with some training get \$14 an hour and skilled workers, \$20 to \$25 per hour, says Sweatman. "One-third of Southern Manufacturing's workers earn more than \$50,000 per year."

As he searches for workers who are precise yet innovative, Sweatman has raised his profile, taking lead roles in professional groups and serving on the U.S. Commerce Department's Manufacturing Council, which advises the Secretary of Commerce on manufacturing issues. "Now I prefer not to be under the radar, so that people know there are good jobs and good opportunities and things other than going to college."

RACING THE CLOCK

To see how far he has come as he nears the close of his stewardship, Sweatman has only to look into the glass case in his lobby, where metal parts — bronze, titanium, and steel — gleam like trophies. Each one tells a story.

It wasn't easy to become a key player in the complex world of satellite and aircraft production. At 17, he apprenticed at General Electric in Erie, Pa. and stayed to hone his skills before becoming general manager at a machine shop. In 1982, he brought his life savings to Tampa and bought the small machine shop. The owner provided financing, and Sweatman paid it off in two years. The shop made parts for locomotives and medical devices as well as aircraft, but soon settled into an aerospace and defense niche. Sweatman convinced customers his shop could make the parts they needed. He developed a pivotal relationship with Conax Florida Corp. in St. Petersburg, now a subsidiary of Cobham PLC. Conax explosives technology is used with the parachutes for which Sweatman's firm provides housings.

In 1988, just five years after Sweatman bought the machine shop, it made the Inc. 500 list of fastest-growing companies. As it grew, he reinvested in SMT to improve efficiency. The latest investment, a \$750,000 machining center, holds 180 tools, and boasts six pallets. To pay its cost, it runs 24 hours a day, contributing to SMT's \$17,000 monthly electric bill.

The machine's robotic arm plucks a tool from the new array, as a pallet shuttles along an enclosed rail. Amid the plant's whine and hum of machines, workers study calculations or plunge their hands into a cleansing water spout. Shiny valves wait on flat surfaces for the next step, as a faintly acrid odor of treated metals wafts through the plant.

In his office, Sweatman rolls off the names of missile defense systems to which SMT has contributed, including the Harpoon, Tomahawk and Javelin. As he hurries to meet the new deadline — the expected aircraft parts contract less than two years from now, with its influx of people, equipment, and production timetables — Sweatman is also planning for the longer term. He hopes his daughter, who has a master's in management information systems, will take a leadership role at the company. And he has groomed a management team. But he remains firmly in charge.

And highly competitive. His daughter recently gave him the gift of a Mario Andretti Racing Experience, a chance to race an Indy 500-style car around a Miami track. He sped at 154 miles per hour. Of all the day's riders, Sweatman's was the fastest lap of the day.

NTMA





MADE IN USA MAKES COMEBACK AS A MARKETING TOOL

Y: OLIVER ST. JOHN, USA TODAY

It's becoming downright American to make stuff in America.

Small manufacturers, craftsmen and retailers are marketing the Made-in-USA tag to score do-gooder points with consumers for employing stateside, says Margarita Mendoza, founder of the Made in America Movement, a lobbying organization for small manufacturers.

It's working: Over 80% of Americans are willing to pay more for Made-in-USA products, 93% of whom say it's because they want to keep jobs in the USA, according to a survey released in November by Boston Consulting Group. In ultra-partisan times, it's one of the few issues both Democrats and Republicans agree on.

When considering similar products made in the U.S. vs. China, the average American is willing to pay up to 60% more for U.S.-made wooden baby toys, 30% more for U.S.-made mobile phones and 19% more for U.S.-made gas ranges, the survey says.

Now Wal-Mart wants a piece of the action. The behemoth, embroiled over the past year with worker protests and foreign bribery investigations, pledged recently to source \$50 billion of products in the U.S. over the next 10 years, says Wal-Mart spokesman Randy Hargrove. They're not alone. Mendoza says both Caterpillar and 3M have also made efforts to source more in the U.S. "Regardless if this is a PR ploy or not, it doesn't matter. A lot more people will look for the Made-in-USA tag," she says, adding that, considering Wal-Mart's size, \$5 billion a year is only "a drop in the bucket," for the retailer whose 2012 sales reached almost \$444 billion.

Kyle Rancourt says his American-made shoe company, Rancourt & Co., hit it big as concern over U.S. jobs mounted when the recession hit in 2009. But he says he lies awake at night worrying if Made-in-USA is just a passing fad.

"It's inevitable that times will change," Rancourt says. "But I am still holding out hope that this has become a core value of our country."

Mendoza says that if buying American turns out to be a passing fad, the country is in trouble.

"If they don't understand the economic factor, we need to pull on their heartstrings," she says. "The thought of having a country like China taking over, that alone is bone-chilling."

But do folks care enough about U.S. manufacturing jobs to permanently change the way they shop? David Aaker, vice chairman of brand consulting firm Prophet, says the companies that get the most credit for being American, such as Apple and Cisco, don't even source products in the U.S. "I don't think it matters unless it becomes visible," Aaker says. "The most common way for that is if something bad happens, like if Nike gets some press about conditions in factories overseas."

But Rancourt says his customers believe foreign-made shoes lack the soul of their American counterparts.

"There's hundreds if not thousands of workers working on those factories. They do one specific job, maybe put an eyelet into a specific place," he says. "They don't have an idea or concept of a finished product and how that should look."

Just watch out for phony Made-in-USA claims. It's illegal to claim a product is U.S.-made unless both the product and all it's components are sourced in the U.S. Even products that could imply a phony country of origin with a flag or country outline are verboten. Julia Solomon Ensor, enforcement lawyer at the Federal Trade Commission, says the FTC gets "several complaints each month about potentially deceptive 'Made-in-the-USA' claims."

It sets a bad example. Mendoza says the U.S. needs to let kids know it's OK to work in manufacturing. "Not all children are going to grow up to be dentists, and lawyers, and investment bankers."

NTMA

STATE OF THE UNION ADDRESS - MANUFACTURING INDUSTRY ANALYSIS

BY THE FRANKLIN PARTNERSHIP, LLP

On Tuesday, February 12, 2013, President Obama delivered his fifth State of the Union (SOTU) Address to Congress. Lasting exactly sixty minutes, the President had broad themes and proposals throughout the speech. Discussion of foreign policy accounted for 16% of the speech, the economy and jobs also 16%, budget policies 11%, education 8%, and gun violence 8%.

Manufacturing emerged as a dominant theme at times cutting across several key policy areas including tax reform, education, jobs, and the economy. The President mentioned manufacturing seven times in this 2013 SOTU compared with sixteen times in 2012. While this is a decrease, the number still outpaced all previous addresses to Congress by the past four Presidents. MANUFACTURING INNOVATION

The President said, "our first priority is making America a magnet for new jobs and manufacturing." Among the proposals he promoted during the SOTU was the launch of three more National Additive Manufacturing Innovation Institutes such as the one created last year in Youngstown, Ohio. He again called on Congress to authorize establishing a network of fifteen of these hubs where businesses partner with the Department of Defense and Energy, among other agencies.

MANUFACTURING SKILLS

Manufacturing groups around the country have said for years that we have a major skills gap in the industry and a recent survey showed 91% of metalworking manufacturers struggle to find qualified employees. The President said the Administration will reward schools that develop new partnerships with colleges and employers, and create classes that focus on science, technology, engineering, and math (STEM). The Administration, over the past several years, has handed out millions of dollars in competitive grants to some states to promote technical and vocations programs and purchase equipment for training. However, Washington has yet to reform the workforce system which already has nearly 50 overlapping federal programs. **TAX REFORM**

In addition to an emphasis on skills training and encouraging STEM education programs, the President reaffirmed his commitment to what he described as creating a "tax code that lowers incentives to move jobs overseas, and lowers tax rates for businesses and manufacturers that create jobs right here in America." While calling for comprehensive tax reform, in his speech he provided few details of what that would entail. In the past, the Administration "Framework" proposed a 28% corporate tax rate and a 25% effective tax rate for manufacturers structured as C-Corporations. We are hearing the White House wants to use an expanded Section 179 and other deductions and credits to lower the tax rate for small businesses. However, Administration officials have indicated to us they are not supportive of extending beyond 2013 Bonus "Accelerated" Depreciation, a tax provision used by more than 80% of metalworking manufacturers in some industries.

ADDITIONAL ISSUES RAISED DURING STATE OF THE UNION ADDRESS

• Climate Change: Called on Congress to pass a Lieberman-McCain style climate change bill; if not, the Administration will issue executive actions and regulations on its own;

• Vehicle Fuel: Proposed to use some of oil and gas revenues to fund an Energy Security Trust to drive new research and technology to "shift our cars and trucks off oil for good";

• Trade: Announced the Administration is officially beginning TransAtlantic Partnership Agreement talks with the European Union;

• Infrastructure: Proposed a "Fix-it-First" program and a Partnership to Rebuild America to leverage private and public funding for infrastructure projects but did not say how to pay for it;

• Workplace: Called on Congress to pass the "Paycheck Fairness Act" this year;

• Minimum Wage: Proposed increasing the federal minimum wage from \$7.25/hour to \$9/hour over the next three years and automatically adjust for inflation moving forward.

NTMA

Boring Tools • Tool Holders • Cutting Tools • Presetting • Workholding • Accessories

PRECISION SHOWS.

Our products perform—and the benefits are evident. That's why we guarantee the quality of every tool we sell—including the new **Kaiser Series 310 EWD precision boring head**. Press PLAY for a look at the measurable accuracy advantages of this digital dynamo—and challenge yourself to achieve higher performance levels.





www.bigkaiser.com

Visit www.bigkaiser.com/boring or scan the QR code to watch the video.

Discuss your applications with us @ The MFG Meeting





We've got a vision for your part, and it's something you never

imagined. With superior technology, progressive techniques and a little creative problem solving, you can have the speed, accuracy and efficiency to make the competition sweat. It's possible with the widest breadth and depth of machine technology in the world.

Machining is believing.[™]





See the latest technology and advanced techniques. Register now at idays2013.com

www.dmgmoriseikiusa.com 855-364-6674

NATIONAL TOOLING AND MACHINING FOUNDATION LEGACY OF GIVING

BY: MIKE KARTSONIS, NTMF BOARD MEMBER, PRECISION GRINDING & MFG. CORP.

BEQUEST

Including National Tooling and Machining Foundation in your will is one of the most valuable legacies you leave to insure that future generations will grow in the knowledge of the faith, values and heritage passed on to you.

There are four ways to benefit the mission of National Tooling and Machining Foundation:

• Specific Bequest-With a specific dollar amount, specific piece of tangible or real property or a stated percentage of an estate.

• Residuary Bequest- With all or a portion of an estate after specific bequests, debts, taxes, ex-penses and fees have been distributed.

• Contingent Bequest- When the primary beneficiary passes on before you or disclaims the property or under other special circumstances.

• A Trust- Proceeds after termination of a trust established under your will provides income support to family members or friends.

CHARITABLE GIFT ANNUITY

A simple contract between you and National Tooling and Machining Foundation provides an irrevocable gift in return for which you and /or another beneficiary receive guaranteed fixedincome payments for life.

• The rate is based on age, number of annuitants and the date of the gift.

• If the gift is made in cash or no-appreciated assets, a portion of the income will be tax-free for most or all of your lifetime.

• You receive an immediate tax deduction for a portion of the gift and excess can be carried forward for five years.

• Capital gains tax is reduced or eliminated on appreciated, long term property.

• Guaranteed fixed payout is particularly attractive if you are 55 years or older.

DEFERRED GIFT ANNUITY

Younger donors can make a gift now

and defer payments to themselves until a future date that they determine.

The annuity rate is based on your age at the time it is established and the number of years before the first payment.

• You provide an immediate benefit to National Tooling and Machining Foundation.

• You take a charitable deduction for a significant portion of the gift at the time it is estab-lished.

• Deferred annuity payments supplement retirement income when you are likely in a lower tax bracket.

• A portion of annuity payments are tax-free if established with a cash or non-appreciated se-curities are fixed.

• Advantageous if you have contributed the maximum deductible amount to you retirement plan because a substantial income tax deduction.

CHARITABLE LEAD TRUST

You make a gift to National Tooling and Machining Foundation with the irrevocable transfer of cash, securi-ties or other property which pays income for a term of years or the lifetime of one or more individuals. When the trust term ends, asset growth and principal are transferred to heirs whether outright or in trust at reduced gift and estate taxes.

• If you desire to transfer significant assets to heirs and are interested in reducing estate taxes while benefiting National Tooling and Machining Foundation, this is an attractive option.

• National Tooling and Machining Foundation will receive fixed or variable payments depending on type of trust while your beneficiaries will receive the trust's assets upon termination.

• Assets transferred to heirs will incur lower tax costs compared to same assets transferred through an estate while asset growth within the trust will be distributed to beneficiaries free of gift or estate tax.

• You qualify for a federal gift tax deduction which varies depending on tim-

ing of gift. CHARITABLE REMAINDER TRUST

You make a gift to National Tooling and Machining Foundation with any appreciated asset that can be sold without capital gains tax and are entitled to immediate income tax deduction for a portion of the value of the gift.

You can retain the right to receive income for life or term of years and also name survivor beneficiary to re-ceive income stream.

• This may be a unitrust which will pay you and/or another beneficiary a lifetime "fixed dollar amount" each year agreed (at least 5%) of fair market value of the trust assets as revalued annually, a beneficial option if assets are either lowincome producing or low-yield (such as real estate) and one wishes to avoid paying capital gains.

• This can be an Annuity Trust that pays you and/or another beneficiary a lifetime "fixed dollar amount" each year agreed upon when the trust is established (at least 5% of the initial value of the trust). However, an annuity trust cannot receive additional contributions.

• Both types are ideal for enhancing current income from a gift, cash or appreciated assets with little or no spendable income and for replenishing wealth for heirs while avoiding federal estate and inher-itance taxes.

"Letter of Intent" for a legacy gift is found on the following page. Consult your tax attorney to determine which of these giving instruments is right for you and to assist you in developing a legal document of convey-ance for your gift.

Please send all correspondence to: National Tooling and Machining Foundation, Inc., 1357 Rockside Road, Cleveland, OH 44134 • info@ntma.org

NTMA



AGENDA

THURSDAY, MAY 16 Marketing and Sales Sessions

Noon	Registration
1:00pm - 4:30pm	Sales and Marketing Seminars
4:30pm - 7:00pm	Cocktail Reception

<u>Friday, May 17</u>

Contract Manufacturing Purchasing Fair

8:00am	Registration and Breakfast
9:00am	Contract Manufacturing Purchasing Fair Begins
Noon	Industry Lunch
4:00pm	Contract Manufacturing Purchasing Fair Closes

WHERE BUYERS HAVE MET For more information please visit www.pu



MEMBER TESTIMONIAL "MY LARGEST CUSTOMER THAT I'VE HAD FOR OVER FIVE YEARS CAME FROM ME ATTENDING AN NTMA Purchasing Fair!."

NTMA CA Member

MEMBER TESTIMONIAL "I NEEDED TO START DIVERSIFYING MY CUSTOMER BASE BECAUSE I WAS SO DEPENDENT UPON THE AUTOMOTIVE INDUSTRY FOR MY BUSINESS. I WAS OVER 90% AUTOMOTIVE AND OVER 75% IN MICHIGAN. I STARTED GOING TO NTMA PURCHASING FAIRS AND NOW MY CUSTOMER BASE IS ABOUT 60% AUTOMOTIVE BUT 70% OUTSIDE MICHIGAN."

NTMA MI Member

MEMBER TESTIMONIAL "ATTENDING NTMA PURCHASING FAIRS HAS GIVEN OUR COMPANY MORE THAN ENOUGH BUSINESS TO PAY OUR DUES FOREVER. I MET ANOTHER MEMBER AT A PURCHASING FAIR AS WE WERE STANDING IN LINE WAITING TO TALK TO A BUYER. SEVERAL MONTHS LATER I GOT A CALL FROM THAT MEMBER THAT HAD JUST LANDED A HUGE CONTRACT THAT HE NEEDED OUT KIND OF EXPERTISE TO FULFILL. WE ENDED UP WITH A LONG-TERM CONTRACT WORTH OVER \$7 MILLION BECAUSE I HAPPENED TO START TALKING TO ANOTHER MEMBER."

NTMA PA Member

SUPPLIERS FOR 30 YEARS urchasingfair.com or call 1.800.248.6862

A&E CUSTOM MANUFACTURING EARNS 2013 INDUSTRY AWARD

ductivity rates; and

cross-training

employees so they can react quickly to

changes in custom-

er demands. The

company is certain

about growth in the

face of uncertain

right after the Great

Recession, NTMA

Member Company,

Manufacturing

its profitability on

sured as income

as a percentage of

sales. It climbed

from 1.36 percent

in 2009, 2.68 per-

cent in 2010, 3.70 percent in 2011, to

Custom

mea-

increasing

Starting in 2009,

times.

A&E

began

operations,

NTMA MEMBER COMPANY, A&E CUSTOM MANUFACTURING, MAKES THE RIGHT MOVES TO BUILD ITS BUSINESS AND EARNS THE FABRICATOR'S 2013 INDUSTRY AWARD FOR THOSE EFFORTS BY DAN DAVIS

A&E Custom Manufacturing, Kansas City, Kan., has survived a bankruptcy in the early 1990s and two major recessions in the last 10 years. Such experiences have influenced the way it runs its business. But this isn't a tale of a company that sits on every last penny, waiting for a sure thing to come along before it makes any type of investment. Much like other metal fabricators that are dealing with the uncertainty that marks today's economic climate, A&E Custom Manufacturing is focusing on intelligent growth—controlling costs to keep expenses less than revenues; enacting lean initiatives to free up space on the shop floor; investing in equipment that can increase pro-



The management team that has helped to put A&E Custom Manufacturing on a consistent growth path includes (from left to right, starting in the front) Steve Hasty, owner; John Jaixen, general manager; Vicki Hasty, owner; Clark Ward, sales manager; Bernard Jarvis, plant superintendent; Steve Zollman, engineering manager; and Bill Goodman, controller. Photos courtesy of Dave Kaup Photography, Kansas City, Kan.

6.67 percent in 2012. Over the last five years, the fabricator almost has doubled its revenues; it earned \$9.1 million in sales for 2012. **CONTROLLING COSTS**

Like other shops, A&E is striving to become more efficient on the shop floor because it wants to be able to increase productivity. Five years ago, the motivation was to avoid hiring people only to let them go potentially a short time later because of an unforeseen hiccup in the economic recovery. Today the company simply can't find the right employees to fill vacancies, so it must take creative steps to maintain current throughput levels.

A&E Custom Manufacturing began life as a tool and die shop and later became involved in full-scale metal stamping. As that high-volume, low-mix business slowed, the company began to look at metal fabricating to expand the business. Today the tool- and diemaking business plays a small but vital role for the company as it easily can build its own tooling for those jobs that can be processed more economically in a progressive die than on several pieces of fabricating equipment.

John Jaixen, general manager, said the company is currently looking for second-shift welders and inventory personnel. The fabricator employs 72, which is up from about 65 a year ago.

"If we could find them, we probably could add four to five people," Jaixen said.

The company is focused on keeping its production running as smoothly as possible—without increasing costs willy-nilly. Frankly, it's a lesson that other, much larger institutions could stand to learn.

As an example, Steve Hasty, owner and president, pointed to his company's campaign to identify the "cost of quality" for each job. This effort calls for measuring the costs associated with customer rejection of parts, rework needed on the shop floor, and scrapping of parts that don't meet internal quality checks and then comparing that dollar figure to sales.

Hasty said each department on the shop floor is responsible for tracking quality costs and preparing a weekly report for management. This ratio has been 0.007 percent or less six of the last seven years. He credited the company's ISO 9001:2008 program and quality personnel for helping to maintain the high levels of production quality.

Pulling together information and being able to use it to better a business is not an easy task, especially for a job shop where the jobs are many and complex. A&E was no longer simply a metal stamper processing jobs (see Figure 2) that called for a run of 50,000 pierced, formed, and cut-off parts; it was a processor of metal parts that often called for multiple bends, welds, or other value-added activities.

Running a blanket schedule, on which the shop floor personnel could see all jobs in the queue, for the past several years overwhelmed everyone with data. With more than 2,000 jobs per month coming in the door, it was easy to take the eye off jobs that were pressing. For example, if a job was recurring on a monthly basis, a press brake operator might choose to bend enough parts for three months, even if only one-third of them were needed for an immediate deadline. As a result, those parts just sat on the floor until they were needed.

That led management to begin feeding the shop floor with a three-day schedule. The shorter time frame allows everyone to focus on a smaller quantity of work and deal with a lot less data, according to Jaixen.

"It allows our managers and supervisors to look at that three-day window, know exactly how many hours there are in setup, and produce what was on the quote. They then can review the performance and stay on track," he said. "We use flex time or overtime if they are running behind; or if they are getting ahead of the game, we might pull in something from the next bucket [three-day period]."

Hasty said that these improvements are related to a concept called "velocity scheduling." When the job hits the floor, the goal is to get it out the door as quickly as possible.

CLEARING THE DECK

The ERP "enhancement," as company Controller Bill Goodman called it, further improves A&E's ability to ensure that all raw material and ancillary sourced items, such as fasteners, are available to process upcoming orders. There is no need to have excess inventory lying around just in case it's needed; the ERP system dictates what is needed, where it is needed, and when it is needed for the day's schedule.

This is just one factor that helps to keep the aisles clear, so that the company can stay in its 44,600-square-foot facility, even as more jobs come its way.

"The lean manufacturing initiative has allowed us to stay in this facility and fully utilize the floor space," Goodman said.

"The only things that don't move around here are the lasers and the big punch presses," Hasty said.

A&E Custom Manufacturing has moved away from its stamping roots and taken on more fabricating work, it has seen a need for more drilling and tapping work

RELYING ON AUTOMATION

Actually, the steps taken to improve inventory and job tracking and reduce the clutter are pretty important as the company has invested in automation in recent years. Simply put, these machines are a necessity, and they can create a lot of product in a short amount of time, which could cause a WIP nightmare for an unprepared fabricating operation.

However, it ramped up its investment in automation when faced with customer demands that required a new manufacturing approach. The most recent example is the new laser/punch combination machine. The main motivator behind the purchase was the need to find a cost-effective way to produce the housings for a generator that was to be the showcase job for a large customer. The housings require several holes to be knocked out and special shapes to be laser-cut.

Additionally, the generator design was subject to frequent revisions as it was finding new markets beyond its military origins. The generator, which is able to provide electric, hydraulic, and pneumatic power all in one package and at the same time, has been adapted for use by the railroad industry and for farmers and ranchers. Design changes are even less of an issue when the part is processed on equipment capable of both laser cutting and punching.

Customer demands also led to the purchase of an Amada Astro 100NT robotic press brake (see Figure 6) late in 2012. An electric

car manufacturer originally came to A&E requesting a quote on stampings for a family of parts. Realizing that the tool and die costs were going to be astronomical for a part order of 11,000 units per year, the company's management team suggested fabricating those same parts. The piece price was going to rise, but the tooling costs were going to go way down.

The challenge was the complexity involved in bending. For example, one part had 14 bends in it.

That's where the robotic press brake made so much sense. It automatically set up the tooling for the complicated bends and

got to work bending immediately. In fact, the longest tool change on the automated press brake was four minutes, which happened to be for the part with 14 bends. Well, that complicated job no longer exists as the interest in high-end electric cars subsided, but the robotic press brake remains an important fixture on A&E's floor.

PROMOTING THE PEOPLE

While the automated equipment is very good about pushing quality product quickly to the next downstream fabrication activity,



The robotic press brake also provides consistent bends, enabling the equipment to meet high tolerances repeatedly.

people are a necessity when it comes to adapting to the ever-changing job mix that hits the floor at A&E. Nothing is as flexible as an employee who can handle multiple responsibilities.

"If they are capable, we can move them to a bottleneck in the value stream, and it helps to balance everything out. It keeps things moving forward," Jaixen said.

That's why the company has made such a commitment to crosstraining, Hasty said. Representatives from OEM suppliers, outside training consultants, and internal experts routinely assist with crosstraining and certifications.

Cross-training has required a mental shift for many in the company because a person is no longer tied to just one manufacturing activity, Hasty said. The bottom line is getting the product out the door as fast as possible, which means everyone needs to assist where they can.

"Sometimes you have an \$18- or \$20-per-hour guy doing \$14- or \$15-per-hour work. It's about getting the orders to and through the shop quickly," Hasty said.

The cross-training, according to Jaixen, also provides employees with a clear opportunity to step up and seek more responsibility, which involves more money as well in many cases. The employee becomes more valuable because he or she is learning to run multiple types of equipment and, as a result, can be used to fill in for others during their absences or assist with a departmental bottleneck on the shop floor. The company has a much more flexible workforce that can react to dramatic shifts in customer needs.

The benefits of cross-training don't end there for the metal fabricator. Over the last three years, six employees have improved their skill sets to the point where they were able to assume supervisory roles in various departments.

SERVICING THE CUSTOMER

As A&E's profits rose over the past five years, so did the satisfaction of its customers. These customer satisfaction levels have been tracked with an annual, online, anonymous survey since 2007, and Hasty said the results have consistently indicated high levels of satisfaction. The survey responses also provide invaluable feedback on how the fabricator can improve services.

> For a specific example, Hasty pointed to the company's No. 1 customer, which rates its suppliers monthly. The report from the fourth quarter of 2012 showed a satisfaction rate for the metal fabricator as "excellent" with a score of 98 percent. Continued growth has not damaged the fabricator's ability to serve its customers.

> "I don't think the key to A&E is our pricing," Hasty said. "We are easy to do business with. You have to have quality, delivery, and capability to do it, but you also have to be able to know your customer and help the customer get to where they are going. My guys are really good at that. They do what

the customers need to have done.

"That's the best thing that we do: Focus on the customer and what the customer's needs are. Then do everything that we can to help them get there," he added.

That vision won't die easily—no matter what fiscal cliffs, busted economic bubbles, or market collapses stand in the company's way.

\			
		10 4	1.0
- N	ЧI	īM	V 2



MARCH 12-14, 2013, CLEVELAND MARRIOTT DOWNTOWN AT KEY CENTER | CLEVELAND, OH

The Only Meeting Together the Bringing Right People With the Right Information to Make Reshoring Practical and Profitable Join manufacturers and their suppliers, government agencies, key associations, bottom-line analysts and site selection specialists so you can:

• Obtain the in-depth analysis critical to making your reshoring business case

• Absorb lessons learned from first movers who profitably reshored

• Network and strengthen ties to successfully facilitate your reshoring

ABOUT THE SUMMIT

For years, the offshoring of manufacturing operations has proven to be very profitable for U.S. companies. But now the trade winds are beginning to blow the other way. Changing global economics are driving manufacturing back to the U.S. Rising wages in China, higher transportation costs, and the need for many companies to be closer to markets at home and thus more nimble in terms of customization, inventory management, and delivery are all pushing this "reshoring" trend.

It's no wonder that recent studies have found 40% of manufacturing firms are considering the movement of manufacturing plants back to the U.S. This trend, coinciding with the lower costs related to the shale gas boom in Ohio and Pennsylvania, as well as increasing innovation in automation, and a consequent reduction in the importance of low cost labor, is leading many manufacturers to seriously consider bringing production back home.

However, those firms interested in reshoring can face a series of daunting challenges and a successful reshoring initiative will require a thorough set of information. As a conthe reshoring community and build valuable relationships through critically informed networking. The Summit will provide a forum where you will:

• Obtain the in-depth analysis essential to make your reshoring case

• Absorb lessons learned from first movers who have profitably reshored

• Network and strengthen ties to successfully facilitate



sequence, Infocast has organized the Reshoring Summit, the first-ever meeting aimed at providing firms with the wherewithal to conceive and execute this innovative business plan. The Summit is the only event bringing together stakeholders across the spectrum - manufacturers and their suppliers, governmental development organizations, site selectors and consultants - for the chance to dig into the issues, learn through case studies and interactive panels, meet with key leaders in

your reshoring initiative

In short, the Reshoring Summit offers a unique opportunity to obtain the informed guidance you will need to make your reshoring decision both practical and profitable.

DON'T MISS OUR PRE-SUMMIT Workshop: Navigating the site Selection process

An intensive workshop led by seasoned professionals in this highlyspecialized field who will guide you through the numerous practical factors that are integral to your decision-making process.

SET UP MEETINGS WITH OTHER PARTICIPANTS BEFORE THE EVENT THROUGH OUR EXCLUSIVE EVENT CONTACT SYSTEM

As a confirmed attendee, one week prior to the event you will receive an email with a password that will provide you with exclusive access to other attendees so you can set up meetings before the event. INFOCAST BUSINESS INTELLIGENCE CONFERENCES

Infocast **Business** Intelligence Conferences provide definitive, up-to-theminute information on critical business opportunities, challenges and techniques. These conferences deliver information straight from decision-makers and active market participants. There is a lot of data out there; Infocast conferences help turn that data into valuable business intelligence.

"25% OFF REGISTRATION, USING DISCOUNT CODE 132008."



www.infocastinc.com/reshoring

www.infocastinc.com/reshoring

www.infocastinc.com/reshoring

Scholarships

THE BROCK BABB MEMORIAL SCHOLARSHIP

The Brock Babb Memorial Scholarship is an annual tuition scholarship created by the: National Tooling and Machining Association in support of students advancing their education, and pursuing careers in manufacturing.

Successful scholarship applicants will receive a minimum award of \$1,000.

The NTMA Education Team shall serve as the selection committee. Only applicants that meet the eligibility requirements will be considered. **MUST BE RETURNED BY APRIL 01, 2013**

APPRENTICESHIP, WORKFORCE DEVELOPMENT, COLLEGE CREDIT

Applicants are requested to read carefully all of the above conditions of this program and submit a fully executed Application by April 1, 2013.

The NTMA Brock Babb Scholarship Fund will be paid upon proof of acceptance into appropriate educational facility as defined above.

Submit all information to:

NTMA

Mr. Ken McCreight, Vice President

NTMA Education Team Staff Liaison

National Tooling and Machining Association

1357 Rockside Road

Cleveland, Ohio 44134

kmccreight@ntma.org

ELIGIBILITY REQUIREMENTS:

- 1.18 years of age at the time of class start
- 2. Be a member of a high school class, and plan to attend an accredited educational facility as a full time student; or be a high school graduate enrolled to continue his / her education in a manufacturing industry related discipline. For purposes of this scholarship, a full time student is defined as a minimum of twelve (12) credit hours per semester.
- 3. Be the son or daughter of an employee of an NTMA Member Company in Good Standing (Owner's family not eligible to apply.)
- 4. Reside within the United States, and attend an accredited college, or University in the United States.
- 5. Hold a minimum High School GPA of 2.5
- 6. Submit a scholarship application and supporting documentation by April 1st of applicable year.
- 7. Must be nominated by an NTMA Member Company that is in good standing.
- 8. Provide a written essay stating career goals and why they should receive the scholarship.
- 9. Provide a resume describing interests, classes, and any work related activities voluntary or paid.
- 10.Provide two letters of recommendation from business professionals who are aware of their desire to pursue a career in manufacturing.

THE EDWIN VOBEDA MEMORIAL SCHOLARSHIP

PURPOSE

The Edwin Vobeda Memorial Scholarship is an annual tuition scholarship created through a charitable donation to the National Tooling and Machining Foundation from the Edwin F. and Mildred Vobeda Charitable Remainder Trust in support of students residing in the Central Time Zone advancing their education in a tool and die apprenticeship program to pursue careers in the tool and die industry. Successful scholarship applicants will receive a minimum award of \$1,000.00 and a maximum award of \$5,000.00 annually. It is the intent of the Foundation to award up to three (3) scholarships annually.

SELECTION

The NTMA Education Team shall serve as the selection committee, and shall make the final selection of the scholarship recipient from a list of those students making application under criteria outlined in the Eligibility Requirements.

ELIGIBILITY REQUIREMENTS: All Applicants Must:

Be at least 18 years at time of class start

Be an employee of and nominated in writing by an NTMA Member Company in Good Standing located in the Central Time Zone and enrolled in a registered tool and die apprenticeship program.

Must be a high school graduate and achieved a minimum high school GPA of 2.5.

Submit scholarship application and supporting documentation by April 1st of applicable year.

Provide a written essay stating career goals, and why they should receive the Scholarship.

Provide a written resume describing interests, classes, and any work-related activities voluntary or paid.

Provide two (2) letters of recommendation from Business professionals (employer, teachers, clergy etc.) who are aware of their desire to pursue a career in manufacturing.

APPLICATION

Applicants are requested to read carefully all of the above conditions of this program and submit a fully executed Application by April 1st of applicable year.

AWARD

The NTMF Edwin Vobeda Memorial Scholarship will be paid upon proof of acceptance into appropriate education facility as defined above.

SUBMISSION: Submit all information to:

Ken McCreight National Tooling and Machining Association 1357 Rockside Road Cleveland, Ohio 44134 Phone: 1.800.248.6862; Fax: 216.901.9190 E-mail: kmccreight@ntma.org

SAN FRANCISCO BAY AREA NTMA CHAPTER WELCOMES NTMA CHAIRMAN ELECT AND EXECUTIVE STAFF



The skies were blue, temperatures crisp, and the enthusiasm high as Chairman elect, Bob Mosey was hosted along with managing director, Emily Lipovan and Director of Membership and Business Development, Jeff Walmsley by the San Francisco Bay NTMA Chapter, January 17-18, 2013.

Chapter Executive and NTMA Member, Thermo Fusion Sales and Marketing Director, Nils Kjell invited the NTMA Team to San Francisco for an opportunity to develop strategies to further develop member participation in the chapter, build capacity for the board of directors, identify a route for strategic planning and review and evaluate existing efforts and structures.

Kjell attended the 2012 Fall Conference in Nashville and had a tremendous take away from the breakout sessions and working with NTMA Staff. He identified his areas of concerns and sent out the invitation. Chairman elect Bob Mosey was only too happy to attend and provide his insight and experience not only from the national perspective, but from his volunteer efforts with the LA NTMA Chapter.



During the visit, Pat Hayes, Major Account Manager for Selway Machine Tool Company and Glenn Van Noy, NTMA Insurance, planned with Thermo Fusion a schedule full of visits with recently rejoined NTMA Members, new, existing and prospectful members. While it was a world wind tour, the results were tremendous.



We visited BHJ and met with Brian and Barbara Clark. BHJ shared with us the pros and cons of NTMA membership and stressed the importance of the One Voice advocacy priority that NTMA gives its members in national politics. We finished off the afternoon meeting with a prospect that survived the latest economic recessesion and identified the R&D Tax Credit, NTMA-U and NTMA Insurance as attractors to membership.

Later that evening at a monthly chapter meeting hosted by Thermo Fusion, Kennametal Regional Offices gave a technical seminar to the members which were followed up with a tour of the company. Friday morning, members of the board of directors of SFOBA NTMA Chapter met with Mosey, Lipovan and Walmsley. At the end of the meeting, the board members were reinvigorating with direction and partnerships with National NTMA Team.

The visit to the region ended with visits to existing members – True-Tech Corporation and Custom Gear & Machine. Between new technology and growth seen at True-Tech and the tour of Custom Gear where the entire workforce is currently enrolled is in NTMA U, it was clear that NTMA was a value add for both

members. A big thank you to Nils Kjell at Thermo Fusion for their hospitality, Glenn VanNoy and Pat Hayes for making this trip successful. We were able to touch 12 members on this portion of the trip.





NCREASED PROL AND PR(**MAZAK'S FIVE LEVELS**

ownership, we bring increased productivity and precision as well as decreased costs and lead times to every type of machining application. BY OFFERING THE INDUSTRY'S MOST COMPREHENSIVE RANGE of advanced, highly versatile Multi-Tasking solutions with the best cost of

WHAT'S YOUR MULTI-TASKING LEVEL

Our Five Levels of Multi-Tasking ensure you have the most relevant machining technology for your needs.



Single Spindle and Rotating Tool Capabilities



Twin Spindles, Y-Axis, Off-Center Machining vith Single or Double Turrets



Independent Milling Spindle with B-Axis ndexing, Full Y-Axis Travels



Full, Simultaneous 5-Axis Capability



Jltra-Tasking with Specialized Machining -unctions and Multi-Tasking Automation



91 Configurations of Multi-Tasking Machine Models



position you as an industry leader by downloading our Five Levels of Multi-Tasking brochure at WWW.MAZAKUSA.COM/MULTI-TASKING. IDENTIFY THE BEST LEVEL OF MULTI-TASKING TECHNOLOGY to maximize your equipment utilization, improve your part quality and



WWW.MAZAKUSA.COM Facebook Twitter YouTube



Committed to productivity-enhancing connectivity, Mazak supports the MTConnect production systems. Currently, 36 Mazak customers are using or implementing the open communications protocol to simplify the monitoring and management of its protocol to improve the utilization of their manufacturing equipment.



YOUR SETUP AND CHANGEOVER TIMES ARE NEXT TO NOTHING. YOU'RE RUNNING 24/7 WITH EASE. NO WONDER THROUGHPUT NUMBERS ARE OFF THE CHARTS.

MMC

Modular, automated pallet systems and 24/7 machining capabilities are opening whole new doors of productivity. And opportunity. With the Makino MMC2 and MAS A5 cell controller, you know you're working with the industry standard for virtually eliminating setup and changeover times. While helping you manage what matters most: production schedules, costs and throughput.

See how the Makino MMC2 system can help you compete globally. MAKINO.COM/MMC2

WHEN YOU MAKE WHAT MATTERS



MERCLYTT

0 1

0 a nx



LAI INTERNATIONAL OPENS NEW MANUFACTURING LOCATION IN ARIZONA

TEMPE FACILITY DESIGNED AS CENTER OF EXCELLENCE FOR ADVANCED MANUFACTURING

LAI International, a strategic supplier of precision components and subassemblies for original equipment manufacturers, today announced the official opening of its new contractmanufacturing location in Tempe, Ariz. The plant expands the company's footprint in the Western United States and increases production capabilities to meet the growing demand for precision-machined components in aerospace, power generation and other industrial markets.

LAI has combined its three Arizona facilities—its manufacturing plants in Phoenix and Tucson, and corporate headquarters in Scottsdale—into the 32,400-square-foot Tempe facility, expanding the size of its production space in the state by one-third. LAI operates additional manufacturing plants in Minneapolis, Minn., Westminster, Md., and Scarborough, Maine.

"Our new center of excellence spotlights LAI's precision manufacturing processes and innovations in advanced manufacturing technology," said Patrick J. "P.J." Gruetzmacher, Chief Executive Officer and President of LAI International. "Plus, we have available space to expand our manufacturing capabilities for producing make-complete components in our strategic markets."

Electrical Discharge Machining (EDM) capabilities have been added to complement the facility's complete-part manufacturing capabilities. The facility features the company's core machining capabilities of advanced waterjet and laser machining in separate production areas, in addition to secondary machining operations, including metal fabrication and finishing areas, tool shop and a larger assembly area.

"The facility is producing product now and will be fully operational Dec. 24, after we complete our moves from the Phoenix and Tucson locations," said Joe Wagner, V.P. of Manufacturing Excellence, LAI International, and Site Leader for Arizona Operations.

"The production floor is configured and workstations laid out for efficient mate-

In Stock - Ready to Ship!

Industrial Magnetics, Inc. offers hundreds of magnetic products that are stocked on our shelves and ready to ship - many can even go same-day.

Our wide product offering covers magnets for holding, lifting, fixturing, welding, sweeping applications and more.

100'S OF MAGNETIC PRODUCTS FOR THE MACHINING & TOOLING INDUSTRIES

Custom Solutions

Industrial Magnetics, Inc. specializes in custom magnetic solutions.

Don't hesitate to contact us if an off-the-shelf product does not fit your needs.

Scan the QR code to find out more about our magnetic products.



INDUSTRIAL MAGNETICS, INC. Making Things Better®

Phone: 888.582.0822 • Fax: 231.582.2704 • WWW.MAGNETICS.COM



(L-R) Roger Atkins, chairman of NTMA, Matt Kalina, strategic marketing director of LAI International, and Gail Houser, western regional sales manager of NTMA, examine precision turbine components manufactured by LAI International.

rial throughput and increased production-line capacity."

Renovations and improvements to the building were started in October, and manufacturing equipment was moved and installed in the facility during the past several weeks. The facility is located at 708 W. 22nd St., Tempe, Ariz. ABOUT LAI INTERNATIONAL, INC.

LAI International, Inc. is a leading contract manufacturer of make-complete precisionengineered components and assemblies for aerospace, power generation, defense, medical and other advanced technology industries. The company's technology, engineering and manufacturing solutions are used to build components for airframes, aircraft engines, power generators, defense systems, medical devices and other industrial applications.

LAI has developed strategic relationships with leading global OEMs and operates four U.S. manufacturing facilities, with locations in Tempe, Ariz., Minneapolis, Westminster, Md., and Scarborough, Maine—all of which are ISO 9001:2008 and AS9100 certified. The company also offers Nadcap-certified conventional and non-conventional machining processes.

LAI has developed innovative applications in advanced machining processes, including waterjet cutting and drilling, laser cutting, drilling, welding and heat-treating, EDM drilling, CNC EDM, high-speed EDM, conventional CNC machining, five-axis CNC machining and precision five-axis grinding. The company also provides gage calibration, tooling production, air-flow inspection and additional manufacturing services.

For more information, see www.LAIco.com. Photographs provided by LAI International.

NTMA

NLRB RECESS APPOINTMENTS RULED UNCONSTITUTIONAL

The U.S. Court of Appeals for the District of Columbia Circuit ruled today that President Obama's appointment of three members to the National Labor Relations Board (NLRB) last year was unconstitutional.

In early January 2012, the President bypassed the Senate and installed three nominees to the NLRB without a confirmation vote. The President has the right under the Constitution to bypass Congress when then Senate is in "recess" or "adjourned", however, Republicans procedurally blocked the Senate from going into recess to avoid the President installing controversial appointees. One Voice is a member of the Coalition for a Democratic Workplace (CDW), who along with other co-plaintiffs, became among the first groups to legally challenge President Obama's unlawful recess appointments of Richard Griffin, Sharon Block and Terry Flynn to the NLRB.

The Obama Administration is expected to appeal the decision to the U.S. Supreme Court. If the Supreme Court upholds the Appeals Court ruling, it would invalidate every decision issued by the NLRB since January 4, 2012. It would also leave the Board with only one member, short of the quorum needed to issue decisions.

The Appeals Court ruling is having a ripple effect throughout Washington today and legal experts are analyzing its total impact. This and other court cases are as a result of One Voice and its supporters repeatedly defeating several proposals in Congress pushed by large labor unions which hurt the employer-employee relationship. The Chair of the NLRB recently stated they would seek to expand their Ambush Election rule to reinsert the Card Check provision if the Court rules against us in that separate legal challenge filed by our coalition.

While the Appeals Court decision is an important victory for One Voice and the business community, we still await rulings in several of our other challenges against the NLRB. One Voice will keep its members updated on our court cases and the next steps on this and other important issues.

NTMA

Helping manufacturers produce results. A Right-From-The-Start[™] ERP success story.

"The busier we got, the more we needed a powerful ERP system up and running. Out here, there's no time for down time."

> Andy Bubulka, Manufacturing Plant Manager H-J Enterprises, St. Louis, MO



"That's why we went with Global Shop Solutions. They were in, they were out, and we were seeing major new efficiencies—right from the start. What a tremendous difference their ERP system, and their people, made in accelerating our workflow, lowering overall costs, and setting the stage for unconstrained growth. Very powerful. Only regret

is that we didn't go with them years ago."

For a **FREE** copy of *"Get ERP Right The First Time™"* call 1-800-364-5958 or visit **www.GlobalShopSolutions.com**.



©2013, Global Shop Solutions, Inc

Designed to Streamline™

MTCONNECT HELPS Getting Data Off Your Shop Floor Much Easier

The NTMA has been working with the MTConnect Institute to help NTMA members take advantage of MTConnect. MTConnect is an open and royalty-free standard that makes getting data off your shop floor much easier. Once this data is easy to get off the shop floor, there are a multitude of shop floor monitoring software packages that can help shops and plants make big improvements in utilization and efficiencies.

One of the best ways to learn about MTConnect is to attend the second annual MTConnect: Connecting Manufacturing Conference [MC]2. This conference is taking place April 10th and 11th in Cincinnati, Ohio and will be focused on manufacturers such as our NTMA members. There will be a variety of attendees ranging from machine tool builders, software companies, distributors, integrators, consultants, professors, students and key thought leaders who are all focused on improving productivity via MTConnect.

This will be a great opportunity to learn from the experts to really understand how MTConnect, as Modern Machine Shop stated, is enabling tremendous productivity gains in manufacturing. There will be presentations, hands-on labs and exhibitors showing off commercially available MTConnect enabled products. Everyone will return with new knowledge and skills so they can engage in a deeper dialogue on manufacturing productivity, as well as a much better understanding on what it takes to compete in 21st century manufacturing.

If you have any questions, feel free to drop Dave Edstrom a note at DEdstrom@ MTConnect.org. Dave is the President and Chairman of the Board for the MTConnect Institute.

Thanks and I hope to see you at MTConnect: Connecting Manufacturing Conference [MC]2!

NTMA

Save the Date!



5th Annual NTMA/PMA One Voice Legislative Conference April 23-24, 2013 Marriott Wardman Park Hotel Washington, D.C.

Have Your Voice Heard in Washington!

Following a monumental election and the swearing in of a new Congress, manufacturers have an opportunity to speak directly with the nation's leading lawmakers at the 5th Annual One Voice Legislative Conference. With tax reform looming on the horizon, Washington needs to hear from manufacturers now more than ever. Join together to speak with One Voice April 23-24, 2013.

<u>Agenda</u>

Monday, April 22, 2013 4:00p.m. – 5:30p.m. – Early Conference Registration 5:30p.m. – 6:30p.m. – Optional Early Arrivals Reception

Tuesday, April 23, 2013 8:00a.m. – 11:30a.m. – Conference Registration 11:30a.m. – 1:00p.m. – Conference Opening Remarks, Briefing, and Lunch 2:00p.m. – 4:30p.m. – Capitol Hill Visits 5:30p.m. – 6:30p.m. – Networking Reception

Wednesday, April 24, 2013 8:00a.m. – 9:30a.m. – Breakfast, Issues Presentation 10:00a.m. – 4:00p.m. – Capitol Hill Visits

Additional information about registration is coming soon. For more information, visit <u>www.metalworkingadvocate.org</u> or contact <u>onevoice@metalworkingadvocate.org</u> or call 202-393-8250.



LA NTMA CHAPTER HOSTS NTMA CHAIRMAN ELECT AT ANNUAL INSTALLATION DINNER

The Los Angeles Chapter came together on January 19th to celebrate the installation of it's 2013 Board of Directors. Former L.A. Chapter President, Chapter Member and incoming National NTMA Chairman Bob Mosey was their special guest. The L.A. Chapter is proud to have Bob represent National NTMA and appreciate all of his hard work and support of the LA Chapter and NTMA.



The event brought together 80 members and their guests and spouses for a fun evening of dinner. networking and enter-

Chairman Elect, Bob Mosey

tainment. A magician, straight from the famous Magic Castle in Hollywood, wooed the crowd. The directors of the Chapter and Officers President Darin Martinez of ATR Sales; Vice President/

Treasurer Mark Osterstock of Q-Mark Manufacturing Inc.; Ben Belzer of TCI Precision Metals; and Past President John Martinez were installed that evening.

Congratulations and thank you to the 2013 Los Angeles Chapter Board of Directors.

NTMA



2013 Board of Directors: L-R Bottom: Mike Kartsonis, Dynamic Fab; Darin Martinez, ATR Sales; Michael Del Medico, Great Western Grinding; Milt Thomas, Wire Cut Company, Inc.; Patricia Szczuka, Computed Tool & Engineering, Inc.; Michael Dochterman, Precision Manufacturing Insurance Services; L-R Back: Ben Belzer & John Martinez, TCI Precision Metals; Jonathan Dean, Accurate Steel Treating; and Mark Osterstock, Q-Mark Manufacturing Inc. (Not pictured: Jack Beggs, Wire Tech EDM & Waterjet; Lee Norton, Edward Jones; Paul Sapra, Upland Fab; Mike Starr, Juell Machine Company, Inc.)



Jason Szczuka, Secretary Ben Belzer (TCI Precision Metals), Emily Belzer & Patricia Szczuka (Computed Tool & Engineering, Inc.)-Past President



Dave Sattler (Sattler Companies), Emily Lipovan (Managing Director NTMA, Jeff Walmsley (Director of Membership and Business Development



Ray Hoyt, ATR Sales (Darin's boss), Darin Martinez, Blanca Martinez, John Martinez, (TCI Precision Metals Immediate Past President)

Save the Date! NTMA Fall Conference October 16th - 19th - Boston, MA



For more information, please call 216.264.2848 or email anamenek@ntma.org

This Chapter Leadership Summit Series is developed to provide comprehensive training and development for Chapter Officers and Chapter Executives. This high-impact event includes vehicles to strengthen the relationship between the local chapters and the NTMA, build strength in local Boards of Directors and grow capacity of Chapter Executives.

This event delivers small group settings with Officers and Executives joined by an industry expert in specific 'tracks'; and have customized 'take-away' for each curriculum aimed at your chapter.

Track 1–-Chapter Organization

Join Us In Indianapolis The Circle City May 17th-18th!

Track 2--Chapter Operations and Practices

ΊM/

- Track 3–Board Development
- Track 4--Promotion and Marketing
- Track 5--Maximizing NTMA Membership



For Additional Information Please Contact: NTMA National Office 1-800-248-6862 Kelly K. Schneider 1-574-220-9111 kschneider@ntma.org ROBOTS BATTLE IT OUT In Indiana at NRL Championships



Experience These National Events While You Are Here...P

THE NTMA OPERATING COSTS AND EXECUTIVE COMPENSATION (OCEC) BENCHMARKS PERFORMANCE!

The OCEC is a profitability or Cost of Doing Business study of NTMA members designed to obtain, understand and analyze "best practices" for precision custom tooling and machining manufacturers. More importantly, the OCEC survey is designed to help NTMA members improve their own financial performance.

NTMA

The American manufacturing sector has defied the tough economy and is on the rise. This manufacturing rebirth in the U.S. comes after decades of news reports about factory closures and manufacturing job outsourcing.

If your costs are too high, however, your shop will have trouble competing in this manufacturing rebirth. One of the best ways to avoid this risk is to know the standard costs encountered by other custom precision job shops—in your chapter, in your industry segment (Tools & Dies, Molds, General Precision Machining, Aerospace Machining & Fabrication, Special Machines, Production Operations) and at similar size companies.

Many owners of closely held businesses believe that they are so closely involved with all facets of their operation that there is no need to participate in an industry benchmarking study. However, if your company wants and to increase profitability and continue to grow in today's competitive environment, you have to realize that sometimes even your best instincts may not be enough (and without an industry benchmark, they are only instincts). It is essential that you take the time to analyze industry best practices and build them into your company's business plans.

From past OCEC results, we know that a "High Profit" group in the industry earned 3-4 times more profit than the typical company. The High Profit group is the top $\frac{1}{4}$ of all NTMA members that participate in the OCEC. If 1 in 4 companies in the industry can achieve those results, it is a reasonable, attainable goal for the other $\frac{3}{4}$ of the companies in the industry. Wouldn't it be huge to earn 3-4 times more profit?

How the OCEC works—The OCEC survey is sent to each NTMA member company in late February. Because that company returns the survey directly to Mackay Research Group, no one from NTMA or its staff has access to specific company data. Participant data is aggregated in a manner that prevents identification of any individual company.

ONE SURVEY: TWO REPORTS

1. Operating Costs Report — This report is a financial analysis of the custom tooling & machining industry. It can help you improve your financial results by establishing "typical" financial performance targets and by analyzing how "high-profit" companies in the industry achieve their success.

2. Executive Compensation Report — Closely-held corporations are often the target of IRS "reasonable" compensation challenges. The Executive Compensation Report examines issues relating to reasonable compensation by analyzing the range of pay, including base salary, bonus, benefits & perks, that executives earn in the precision custom tooling & machining industry.

WHAT'S IN IT FOR YOU?

Individual Company Report — Each survey participant receives an individual Financial Performance Report analyzing your company. This report compares your financial performance to industry standards. In order to protect your confidential data, Mackay Research Group sends this report directly to you. And it's free to you through NTMA!

Manufacturing matters! To ensure a comprehensive report, NTMA needs your participation. Be sure to send in your OCEC response by May 1st.

NTMA

MAZAK INTRODUCES 3D FABRI Gear MK II For Tube, Pipe and Structural Applications

Mazak Optonics has released a new 3D FABRI GEAR Mk II machine for an expanded range of laser-cut tube, pipe and structural applications.

Available in a 220 and 400 model with a 2.5 or 4kW resonator, the 3D FABRI GEAR Mk II cuts a wide variety of tubes and pipes including round, square, rectangular and triangular. It can also process I and H beams, C-channel, angle iron and additional userdefined shapes from mild or stainless steel. This extensive range of capabilities makes the machine ideal for many various industries.

Featuring a powerful, high-precision 6-axis laser, the 3D FABRI GEAR Mk II can handle larger, longer, thicker and heavier material than similar machines. It also has improved processing speeds, tighter tolerances and can be used for drilling and tapping.

The 220 Mk II model can process a round pipe diameter of up to 8.6 inches at a rapid traverse rate of 3,937 IPM. For large material jobs, the 400 Mk II can process a round pipe diameter of up to a 16".

The 3D FABRI GEAR Mk II also offers a 10% faster cycle time due to improved sequencing and simultaneous unit operations for the loading/unloading cycles. Once material is set into the loading station, the machine automatically performs the material handling, 3D laser cutting and unloading of finished work pieces.

In accordance with Mazak's commitment to improving the environment, the 3D FABRI GEAR Mk II features a new eco-friendly resonator to reduce gas and electricity consumption by 50% and 10%, respectively. In addition, all machines are produced in an ISO 14001 certified facility.

NTMA

PIPE SAW PERMITS BETTER END PREPS

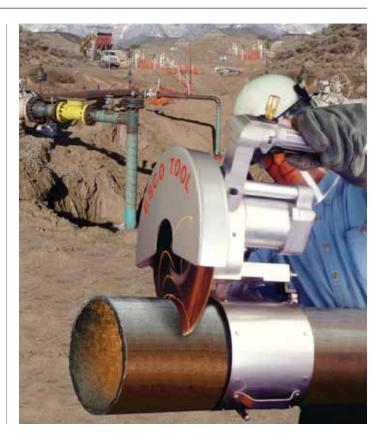
An air-powered saw and pipe trolley system that cuts all materials and pipe schedules up to 60" dia. to produce perfectly square cuts with no HAZ (heat affected zone) is available from ESCO Tool of Holliston, Massachusetts.

APS-438 The Esco Air Powered Saw and WrapTrack® pipe trolley let operators rapidly cold cut pipe with $\pm 1/16$ " accuracy and no HAZ to permit better end prep bevels for welding. Suitable for cutting all pipe schedules of P-91, Super Duplex stainless steel, and other hard materials, the saw comes with fiberglass reinforced abrasive or diamond tipped carbide blades and the stainless steel band assembly clamps around pipe from 6" to 60" dia.

Capable of cutting a 10" Sch. 160 pipe in less than 10 minutes, the Esco APS-438 Air Powered Saw has a 3 HP pneumatic motor and cuts pipe walls up to 4-3/4" thick. Featuring four "V" grooved stainless steel roll guides, the saw mounts rigidly on the WrapTrack® pipe trolley, is fully supported to reduce strain on the operator and glides smoothly around the pipe.

The Esco APS-438 Air Powered Saw sells for \$5,195.00 and the WrapTrack® is priced from \$395.00 up, depending upon circumference.

NTMA



POWERFUL, PRECISE, RELIABLE.

The new generation of mills from Walter

BlaxxTM stands for a reliable system which captivates the user with its absolute precision and stands out through its extremely high productivity. The BlaxxTM F5041 and F5141 shoulder mills are therefore based on a newly developed, incredibly robust tool body, which is fitted with the most efficient of Walter Valenite indexable inserts, powered by Tiger-tec[®] Silver.

Find out more about the unbeatable combination of $\mathsf{Blaxx}^{\texttt{w}}$ and $\mathsf{Tiger}\cdot\mathsf{tec}^{\textcircled{B}}$ Silver now: www.walter-tools.com/us

Blax Powered by Tiger-tec[®] Silver

- UWALTER

Walter USA, LLC N22W23855 RidgeView Pkwy W Waukesha, WI 53188, USA 800-945-5554 service.us@walter-tools.com <complex-block><complex-block>

Working harder and smarter. That's Rodeka[™]. That's **Different Thinking**.



Rodeka[™] double-sided round inserts:

- Three insert ICs: 10, 12, and 16mm.
- Innovative, cutting-edge design increases tool life and reduces cutting forces.
- Also offered, Rodeka[™] 8, a tailor-made solution for turbine blade machining.

Kennametal introduces a new and revolutionary double-sided round milling insert — Rodeka.[™]

It's capabilities span multiple types of milling operations and workpiece materials, providing the latest double-sided insert technology to increase your productivity with the most efficient cost per edge. Now That's Different Thinking. That's Kennametal.

To learn more about Rodeka[™] and the latest machining technologies, contact your authorized Kennametal distributor, call 800.446.7738, or visit **www.kennametal.com.**



DID YOU KNOW?

GUIDE TO MEMBER SERVICES

REGIONAL

CHAPTER

MEMBER TESTIMONIAL

"THE MEMBERS OF THE AKRON CHAPTER

INDUSTRY KNOWLEDGE THROUGH THEIR

CONTINUED, INCREASED PARTICIPATION

IN NATIONAL EVENTS SUCH AS THE LEGIS-

LATIVE AND FALL CONFERENCES. THEIR

ABILITY TO ARTICULATE OUR NATIONAL Industrial Agenda to their Peers

OF NTMA NATIONAL MEMBERSHIP."

LOCALLY HAS REINFORCED THE NECESSITY

Emily Lipovan

Akron Chapter Executive

HAVE GROWN IN SOLIDARITY AND

NTM/

NTMA CHAPTERS STRENGTHEN THROUGH NATIONAL...

GROUP BUYING POWER

- Discount programs offered on business resources, supplies, shipping and technology; available to members, chapters and local associates;
- Member savings benefit;
- Chapter savings, recruitment and retention leveraging, as well as revenue growth through purchases from selected vendors.

GROW NON-DUES REVENUE

- Revenue based on Grainger purchases by members in their chapter;
- New rebate programs coming soon...

NETWORKING/BUSINESS DEVELOPMENT

- Chapter Leadership Summit; providing personal and professional, comprehensive training and development for Chapter Officers/Executives;
- Chapter Executive Roundtables
- Chapter Organizational Excellence Survey and Star Chapter Award Program; provides best practices, recognizes and rewards chapter excellence;
- Chapter Executive Team and Chapter Support Coordinator mentors and supports chapter organization and provides resources for operational challenges.

FOR MORE INFORMATION CALL Kelly K. Schneider, Chapter Executive Support Coordinator At 574.220.9111 or KSCHNEIDER@ NTMA.ORG. MEMBER TESTIMONIAL

"AS A ONE-PERSON, SMALL ASSOCIATION OFFICE, HAVING THE NTMA STAPLE BUSI-NESS ADVANTAGE PROGRAM IS INVALU-ABLE. I CAN PLACE ORDERS AT ANY TIME OF DAY FROM ANYWHERE, BUT HAVING A STAPLES CONVENIENCE CARD IS ALSO AN EXCELLENT BENEFIT; I CAN USE IT TO GET CONTRACT PRICING AT THOSE TIMES WHEN I HAVE TO RUN INTO A STAPLES STORE FOR LAST MINUTE SUPPLIES!" Cindy Zylkuski Norris, Boston Chapter Executive

NEW REX-CUT ABRASIVES WEBSITE INTRODUCES VIDEOS, BLOG AND DISTRIBUTOR LOCATOR

A redesigned website that includes easy to navigate drop-down menus, featuring more detailed product and technical data, videos, a blog, and distributor locator has been introduced by Rex-Cut Abrasives of Fall River, Massachusetts.

The Rex-Cut Abrasives Website features drop-down menus to let visitors find the exact product they are looking for, technical information, videos, news,



a blog, handy distributor locator, and a comprehensive downloadable catalog.

Products include cotton fiber mounted points and Type 1 and Type 27 wheels, quick-change discs, cut-off wheels, flap discs, and Smooth Touch[™] blending and polishing wheels for stainless, mild steel, aluminum, and exotics.

Providing product specifications, application charts, and an MSDS library, the Rex-Cut Abrasives Website offers the metalworking industry high perfor-mance non-woven cotton fiber and other premium abrasive products that offer time-saving grinding, blending, and finishing solutions. Limited e-commerce for popular items, an e-mail signup, and social media links are included.

The Rex-Cut Abrasives Website is www.rexcut.com

NTMA



The MT Focus[®] Adapter/Agent Module One Connection Tool Does it All

SYSCON MT Focus® Adapter/Agent Modules collect, store, translate and display machine status and performance data and make that data available as:

• web-based screenshots on smart devices (PCs, smartphones, tablets and shop floor monitors), *or*

• real-time data for third-party software, using the MTConnect protocol

Make decisions based on accurate data, including OEE, spindle utilization, current cycle times, reject rates, etc. Receive email alerts when machines are down or not operating at targeted rates.

Call us today to schedule a demonstration of the MT Focus solution 574-232-3900, ext. 243



SYSCON International • 1108 High Street • South Bend, Indiana 46601 • www.mtfocus.com





THE RECORD

PRESORTED FIRST CLASS MAIL US POSTAGE PAID WILLOUGHBY, OH PERMIT NO. 58

NATIONAL TOOLING & MACHINING ASSOCIATION 1357 Rockside Rd. Cleveland, OH 44134

CALENDAR OF EVENTS NATIONAL ROBOTICS LEAGUE COMPETITION MFG HAWAII Hilton Waikola Village **IUPUI** Campus March 5-8, 2013 May 17-19, 2013 Waikola, HI Indianapolis, IN HANNOVER MESSA 2013 (TRADE SHOW) **CHAPTER LEADERSHIP SUMMIT** April 8-12, 2013 May 17-18, 2013 Hannover, Germany Indianapolis, IN **BAUMA 2013 (TRADE SHOW)** EMO HANNOVER 2013 April 15-21, 2013 September 16-21, 2013 Munich, Germany Hannover, Germany HHHHH NTMA/PMA ONE VOICE LEGISLATIVE CONFERENCE Marriot Wardman Park Hotel FALL CONFERENCE - BOSTON April 23-24, 2013 Omni Hotel October 15-20, 2013 Washington, DC Boston, MA **OFF-SHORE TECHNOLOGY CONFERENCE** IMX 2013 Reliant Park May 6-9, 2013 November 18-20, 2013 Houston, TX Las Vegas, NV NTMA PURCHASING FAIR May 16-17, 2013 Indianapolis, IN