



# National Tooling & Machining Association RECORD



**VOICE OF THE \$40 BILLION CONTRACT METALWORKING INDUSTRY • [www.ntma.org](http://www.ntma.org)**

**Contents**

Chairman's Corner ..... 4

2010 NTMA Fall Conference & PMA Annual Meeting..... 5

2010 NTMA Fall Conference Schedule of Events..... 5

Fall Conference Spotlight on Speakers.. 7

Q & A with Harry Moser ..... 8

Calendar of Events..... 9

Members in the News ..... 10

NTMA Announces the 2010 Brock Babb Memorial Scholarship Award Winners..... 12

National Robotics League Competition..... 13

Create a Road Map to Increase the Value of Your Company, and Eventually Reap the Harvest of Your Life's Work ..... 14

Welcome New Members..... 15

BLR: Environmental Safety Resource Center ..... 16

How to Warm Up a Cold Prospect.... 18

The Biggest Constraint We Find Is ... 20

Massachusetts' SkillsUSA Precision Machining Technology Student Brings Home the GOLD..... 21

Sutton Scholarship Endowment Grows..... 22

*The editorial content of the NTMA Record does not necessarily reflect the opinion of the National Tooling & Machining Association or its Chapter affiliates.*

## The Results Are In ... 38th Annual NTMA/NIMS National Apprentice Competition!

The 38th Annual NTMA/NIMS National Apprentice Competition was hosted for the second year in a row by the NTMA Indiana Chapter and Ivy Tech Community College. Regional champions from around the U.S. competed June 9-12 to determine the "Best of the Best" in an intense competition involving projects in lathe, mill, precision grinding and a comprehensive exam.

The National Institute for Metalworking Skills (NIMS) metalworking standards is used as one of the qualifying requirements. Each Regional Champion had to successfully complete the online exam for the NIMS Machining Level I: Measurement, Materials and Safety credential. As part of the NIMS sponsorship, the registration and testing fees were waived and each employer received a \$100 NIMS Credentialing Scholarship.

And, the winners are ...



**1st Place: Walter S. Gasper, III**  
Employer: Hamill Manufacturing Co., Trafford, Pa.  
Chapter: Pittsburgh

As employer of the first place champion, Hamill Manufacturing Company will receive the GRAND PRIZE, sponsored by GF AgieCharmilles for the 20th consecutive year. Depending on the package chosen, the total value of the grand prize can equal up to \$100,000.



**2nd Place: Scott Frombaugh**  
Employer: Rochester Manufacturing, Wellington, Ohio  
Chapter: Cleveland

**3rd Place: Dallas Schloesser**  
Employer: Six Sigma Inc., Louisville, Ky.  
Chapter: Kentuckiana



*(Continued on page 3)*

PERMIT NO. 124  
Platteville, WI  
U.S. POSTAGE PAID  
STANDARD MAIL  
PRESORTED

**The Record**  
National Tooling & Machining Association  
9300 Livingston Road  
Fort Washington, Maryland 20744

# GOT E2?

## With E2, you can:

- Quote fast and accurate
- Schedule the shop floor realistically
- Manage material effectively
- Track jobs instantly
- Ship on time, every time
- Increase profit margins by weeding out those loser jobs...

Since 1984 the E2 Shop System has helped thousands of shops streamline their business and increase profit margins. Most people work hard but the key is working smarter through the use of the #1 shop management system on the market today.

Every day, over 20,000 shop people log into E2 to help manage their shop effectively. E2 equips you to see your shop like never before, and get the big picture on the best way to manage it. E2 creates efficiencies throughout your enterprise; streamlining business processes, empowering employees, increasing productivity and most importantly boosting profits.



A handwritten signature in black ink, appearing to read 'Greg Ehemann'.

**Greg Ehemann**  
Co-Founder and one of the  
E's of the E2 Shop System

See why E2 is the #1 most widely used shop management system on the market today.  
Visit [www.shoptech.com](http://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

**shoptech**  
Software

(Continued from page 1)

Scott Frombaugh placed first in the optional customized CNC assessment, winning a 365-day unlimited access subscription donated by ToolingU. This subscription will allow Frombaugh to further his education with access to more than 400 manufacturing classes online.

In addition to plaques, trophies, cash and a variety of measuring instruments and hand tools, each contestant received a wooden tool chest from H. Gerstner & Son, and a copy of the "Machinery's Handbook" 28th Toolbox and CD-Rom Editions, donated by Industrial Press Inc.

## A SPECIAL THANK YOU TO OUR SPONSORS

The National competition is supported by donations of cash and merchandise, as well as fees from each finalist's chapter or sponsoring employer. Each year we receive the generous support and selfless, behind-the-scenes efforts from NTMA Chapters and members, organizations, schools, individuals, vendors and local businesses from across the country to make this annual competition possible, and a success as well. NTMA and the Indiana Chapter, NTMA, would like to thank our sponsors from this year's competition:

### NATIONAL SPONSORS

GF AgieCharmilles – GRAND PRIZE  
ToolingU  
H. Gerstner & Sons Inc.  
National Institute for Metalworking Skills (NIMS)  
Industrial Press  
Philadelphia/Delaware Valley, NTMA  
Rock River Valley, NTMA

### GRANT DONORS:

NTMF  
PMF

### CHAPTER SPONSORS

Ceramic Circle:  
Major Tool & Machine Inc.  
Overton Industries  
Plano Machine & Instrument Inc.

Manager Circle:  
Ivy Tech Community College  
Sattler Companies Inc.

Journeyman Circle:  
Fredon Corp.  
Haggard & Stocking Industrial Supplies  
Numerical Productions Inc.  
Pittsburgh Chapter NTMA

Apprentice Circle:  
Ahaus Tool and Engineering  
Anchor Danly  
Big Kaiser Precision Tooling  
Cleveland Chapter NTMA  
Draper Manufacturing  
MAG Giddings & Lewis  
Michiana Chapter NTMA  
MSC Industrial Supply Co. Inc.  
Northwestern PA NTMA  
Rochester Tooling & Machining Association  
Wire Cut Technologies

# No Fear of Mill/Turns!

**Is the fear of a costly collision preventing you from getting the most from your mill/turn CNC machines?**

VERICUT's virtual machining environment allows you to simulate and optimize the entire machining process. With VERICUT, you can:

- Prevent crashes
- Increase tool life
- Eliminate prove-outs
- Boost CNC efficiency
- Shorten cycle times
- Be more competitive

View our **FREE Virtual Machining Gallery Today!** (Online or CD)

9000 Research Drive, Irvine, California 92618 ■ Phone: (949) 753-1050 ■ info@cgtech.com

**VERICUT** Visit us at **IMTS** BOOTH E-3846 **CGTECH.com**



## Chairman's Corner

Russ Reschke, NTMA Chairman of the Board

Well here we are in the "Dog Days of Summer." Remember when you were a child, how you would hate to see summer come to an end? School was going to start and your days of fishing, playing ball with your friends, going to the beach or the amusement park were numbered.

I know we should not live in the past, but with this world we live in and the information overload that we deal with day in and day out, maybe we should step back, take a deep breath, relax and listen to an old George Gershwin song from Porgy and Bess ... "Summertime and the livin' is easy, fish are jump'n and the cotton is high. Your Daddy's rich and your Mamma's good lookin', so hush little baby don't you cry."

I can just see people sitting on the front porch with a cold drink in their hands watching the sun set and listening to the crickets chirp.

I realize that this column is supposed to be about the NTMA and what is happening inside your organization. I can tell you that the search for a president is almost coming to a close, and that the transition to Cleveland, Ohio, is proceeding quite nicely. There are some exciting things happening with the NTMA and I will address those in next month's issue. I think I'll title that one "Back to School."

For now I'll leave you with a couple of thoughts that kind of go along with the "Lazy, Hazy, Crazy Days of Summer."

Work like you don't need the money  
Love like you've never been hurt  
Dance like nobody's watching  
Sing like nobody's listening  
Live like its heaven on earth  
May there always be work for your hand to do

May your purse always hold a coin or two  
May the sun always shine on your windowpane  
May a rainbow always follow each rain  
May the hand of a friend always be near you  
May God fill your heart with gladness to cheer you  
And may you be in heaven a half hour before  
The devil knows you're dead.

Have a great end of summer and I'll see you next month.



### NTMA Executive Team

**Russel Reschke**  
Chairman of the Board  
Metal Processors Inc.  
Stevensville, Mich.

**Grady Cope**  
Vice Chairman  
Reata Engineering & Machine Works  
Englewood, Colo.

**Roger Atkins**  
Treasurer  
MIC Group  
Brenham, Texas

**Robert Mosey**  
Secretary  
Mosey's Production Machinists Inc.  
Anaheim, Calif.

**Ron Overton**  
Past Chairman of the Board  
Overton Industries  
Mooreville, Ind.

### Operations & Editorial

**Rob Akers**  
Chief Operating Officer

**Sandy Bailey**  
Managing Editor

National Tooling & Machining Association  
9300 Livingston Road  
Fort Washington, MD 20744  
301.248.6200  
www.ntma.org

Please direct editorial inquiries to  
Sandra Bailey, sbailey@ntma.org

NTMA Record is published for NTMA  
by WoodwardBizMedia  
801 Bluff Street  
Dubuque, IA 52001

### Advertising Inquiries

For advertising information on the Record, or for information on publishing your corporate newsletter or sales literature, contact WoodwardBizMedia at 1.800.977.0474 or sales@WoodwardBizMedia.com

© Copyright 2010 NTMA

Do you use  
**QuickBooks**  
or **Peachtree?**



**REALTRAC** the industry winner in  
real-time job shop management software,  
integrates with both!

With it's unique real-time scheduling, bar code tracking, estimating and job costing, you know up-to-the-second, the status of your jobs, machines and employees. And with Realtrac's easy to use purchasing, inventory control, and bill of materials, it offers the winning combination in real-time job shop management.

**FREE Product Guided Tour**  
1-800-331-8094  
www.realtrac.com

# 2010 NTMA Fall Conference & PMA Annual Meeting

## Amelia Island Plantation Oct. 6-10, 2010

NTMA and PMA are excited to be holding their fall events together for the first time. This joint meeting is a great opportunity for leaders of top U.S. manufacturing companies to network and discuss current industry conditions.

Each organization will hold some "members only" events. For the most part, however, we will meet together for general sessions, round table discussions and social events. See the Schedule of Events below.

We expect this meeting will provide members of both organizations the chance to share their expectations and

challenges in our mutual quest for manufacturing excellence.

### The Resort

Amelia Island Plantation is a beautiful oceanfront resort, just 32 miles north-east of Jacksonville. The 1,350 acre property overlooks the blue water of the Atlantic on the east and the green marshland and Intracoastal Waterway on the west. A mild climate and diverse landscape mean endless options for outdoor activities. Fishing, boating, golfing and beach combing are among the favorite pastimes here. Nature lovers also will find Amelia Island home to abundant wildlife.

Amelia Inn & Beach Club offers 249 deluxe oceanview hotel rooms, as well

as a spectacular two-tiered pool deck. All private balconies face the ocean. The special NTMA-PMA group rate is \$189 single/double occupancy and includes local and toll free access, unlimited high speed Internet access, unlimited on-property shuttle transportation, self parking and unlimited use of health and fitness center.

For reservations, phone 888-261-6165 and reference our group number: 8FB891. The resort must receive all reservation requests by Sept. 13, 2010.

### Register Early

Event registration is available online at [www.ntma.org](http://www.ntma.org), or you may register by mail or fax. Registration information has been mailed to all NTMA and PMA members; you may also download the promotional brochure and registration form at [www.ntma.org](http://www.ntma.org).

**Register by August 20 and save \$100!**



## Schedule of Events

### Wednesday, October 6

7:30 a.m. – 6:00 p.m.	Registration
8:00 a.m. – 10:00 a.m.	NTMA Membership Growth & Retention Team
	NTMA Education Team
	NTMA Technology Team
	NTMF Board Meeting
10:00 a.m. – 5:30 p.m.	Optional Tour – Cumberland Island
10:00 a.m. – 12:00 noon	NTMA Business Development Team
	NTMA Website Development Team
	NTMA Government Affairs Team
	NTMA Budget & Finance Team
1:30 p.m. – 3:30 p.m.	NTMA Next Generation Team
	NTMA Government Affairs Team
	NTMA Robotics Team
1:30 p.m. – 5:00 p.m.	PMA Executive Committee Meeting
5:00 p.m. – 6:00 p.m.	NTMA First Timers' Reception
6:00 p.m. – 8:00 p.m.	Welcoming Reception

### Thursday, October 7

7:30 a.m. – 2:00 p.m.	Registration
8:00 a.m. – 12:00 p.m.	Optional Tour – Kayak Adventure
8:00 a.m. – 11:30 a.m.	PMA Board of Directors Meeting
8:30 a.m. – 10:30 a.m.	NTMA PJAM Team
	NTMA National Associate Members Team
	NTMA Chapter Executives Team
10:30 a.m. – 11:30 a.m.	NTMA Team Leaders Meeting
1:30 p.m. – 4:00 p.m.	NTMA-PMA Opening Assembly Session
	Guest Speakers: Dr. Yaron Brook and Jeff Thredgold
5:30 p.m. – 6:30 p.m.	PMA First Timers' Reception
6:30 p.m. – 10:30 p.m.	Chairs' Theme Dinner – Seaside Spooktacular

(Continued on page 6)

(Continued from page 5)

### Friday, October 8

- 7:30 a.m. – 8:45 a.m. NTMA & PMA Next Generation Roundtable
- 7:30 a.m. – 11:45 a.m. PMA Executive Roundtables:  
  - Session A: 7:30 a.m. – 8:45 a.m.
  - Session B: 9:00 a.m. – 10:15 a.m.
  - Session C: 10:30 a.m. – 11:45 a.m.
 Steel/Materials Update (A, B, C)  
 Challenges and Opportunities for Manufacturers in Washington, D.C. (A, B, C)  
 OSHA Regulations (A, B, C)  
 Dr. Yaron Brook (A, B, C)  
 Women in Metalforming (C)  
 PMA 101 (B)
- 9:30 a.m. – 11:30 a.m. NTMA Industry Roundtables:  
 Precision Machining I, II & III  
 Tools, Dies, Molds & Special Machines
- 12:00 p.m. – 3:00 p.m. Optional Tour – Horseback Riding (beginner or advanced levels)
- 12:30 p.m. Bill Fitzwater Memorial Golf Outing (shotgun start)
- 1:30 p.m. – 4:30 p.m. NTMA Chapter Executives Roundtable
- 4:30 p.m. – 6:30 p.m. NTMA Chapter Executives Mixer

6:00 p.m. – 10:00 p.m. NTMA & PMA Next Gen Social Event

### Saturday, October 9

- 8:00 a.m. – 9:30 a.m. NTMA General Membership Assembly
- 8:00 a.m. – 9:30 a.m. PMA Business Session
- 9:45 a.m. – 12:00 p.m. NTMA-PMA General Assembly Session (Guest Speaker: Jay Rifenburg)
- 12:00 p.m. – 2:30 p.m. NTMA Past Chairmen Luncheon
- 12:00 p.m. – 1:30 p.m. PMA Past Chairs Luncheon
- 12:00 p.m. – 1:30 p.m. PMA First Ladies' Luncheon
- 12:30 p.m. – 4:30 p.m. Optional Tour – Fernandina Tour & Museum
- 1:30 p.m. – 2:30 p.m. PMA Organizational Board Meeting
- 1:30 p.m. – 4:30 p.m. NTMA Chapter Executives Roundtable
- 6:00 p.m. – 11:00 p.m. PMA Annual Banquet & Reception
- 6:30 p.m. – 9:30 p.m. NTMA Networking Reception, Dinner & Fundraiser

### Sunday, October 10

- 9:00 a.m. – 11:00 a.m. NTMA Board of Trustees
- 11:30 a.m. – 1:30 p.m. NTMA Executive Team

[www.bigkaiser.com](http://www.bigkaiser.com)

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

## Misconception #2

### BUYING LESS EXPENSIVE TOOLING REDUCES COST

**The Truth Is:** Less expensive tooling often costs more in the long run. Lower precision, shorter tool life, and increased downtime are just some of the hidden costs that add up fast. The most successful manufacturers invest in superior tooling because the increased performance and reliability reduce overall process costs—lowering your cost per part and enhancing your bottom line.

**Kaiser Balancing Accessories** New radial adjustment insert holders and balance rings achieve optimum tool balance for EWN2-50XL integral heads, guaranteeing higher quality results.



Learn about more common misconceptions and productivity solutions at [www.bigkaiser.com/truth](http://www.bigkaiser.com/truth) or call 888-866-5776.

We'll improve your most demanding applications or we'll take back our products – Guaranteed.



Booth W-1600



HIGHER PERFORMANCE  
GUARANTEED

**BIG KAISER**  
PRECISION TOOLING INC.

# Fall Conference Spotlight on Speakers

## NTMA-PMA Opening Assembly Session

Thursday, October 7  
1:30 p.m. – 4:30 p.m.

### The Recession's Over! Now What?



Jeff Thredgold, CSP  
Economic Futurist

“Entertaining” and “Economist” in the same sentence? YES!! Jeff takes his audiences on an entertaining, informative and humorous “tour” of the U.S. economy, financial markets, education, employment, the global economy, retirement, government and the future. Highlights include:

- Why U.S. economic growth has returned
- The outlook for the global economy
- Why inflation will remain under control
- The direction of interest rates
- Why retirement at 65 will give way to “bridging”
- The competitive position of U.S. companies

### The Heroic Values of Manufacturing



Dr. Yaron Brook, President, Ayn Rand Institute

Yaron Brook is a prominent advocate for Objectivism, the philosophy of novelist Ayn Rand. As president of the Ayn Rand Institute, he is interviewed frequently in the media to debate and discuss current economic and financial news from the Objectivist viewpoint. Dr. Brook is known for

his radical ideas and passionate speaking style. In “Capitalism Without Guilt: The Moral Case for Freedom,” and in numerous other talks, Dr. Brook has explained the moral foundations of capitalism and defended the rights of businessmen to act in a free market unfettered by government regulation.

## NTMA-PMA General Assembly Session

Saturday, October 9  
9:45 a.m. – 12:00 p.m.

### No Excuse! An Action Plan for Success!



Jay Riftenbary, Riftenbary Training & Development Center

If you want to improve the effectiveness of your leaders, performance of your employees and overall atmosphere of your organization, this will be a program worth investing in. “No Excuse!” validates the importance

for all of us that certain principles and skills still matter when it comes to the success of both our personal and professional lives. “No Excuse!” is built on a solid foundation of core values, self-responsibility, organizational accountability, integrity and purpose. Principles such as self-control, personal respect, forgiveness, passion and attitude are just a sampling of other ideas that will be presented. “No Excuse!” will establish for each participant a greater level of personal understanding, leading to a more fulfilling life and productive career.

## Joint 2010 NTMA Fall Conference and PMA Annual Meeting

Amelia Island Plantation  
Amelia Island, FL



# Save the Date

NTMA members  
October 6-10, 2010



PRECISION  
9300 Livingston Road  
Fort Washington, MD 20744-4998  
301-248-6200 | Fax 301-248-7104  
www.ntma.org

PMA members  
October 7-9, 2010



6363 Oak Tree Blvd.  
Independence, OH 44131  
216-901-8800 | Fax 216-901-9190  
www.pma.org

# Q & A with Harry Moser

Reprinted with permission from IMPO Insider

A “re-shoring” effort from the National Tooling & Machining Association and the Precision Metalforming Association is laying the groundwork to bring jobs back to the United States, and two main outlets for this initiative are the 2010 NTMA/PMA Contract Manufacturing Purchasing Fairs. For more than 25 years, the fairs have been assisting precision manufacturers in expanding their customer base, but this year NTMA and PMA have emphasized the benefits customers can find in re-shoring. The next re-shoring fair will be held on Oct. 29, 2010, in Mashantucket, Conn.

In 1985, Harry Moser started as president of Charmilles Technologies. He is now chairman emeritus of GF AgieCharmilles, a producer of EDM and HSM (High Speed Milling) machines. Moser is a national leader in attracting more of America’s youth into manufactur-

ing, in accelerating the trend to re-shore manufacturing jobs, in providing strategies for competing with low wage countries and in the campaign for government policies that support manufacturing.

## Could you provide some background as to what your organization is attempting to do with re-shoring?

From my viewpoint, I describe this as promoting and enabling the re-shoring of work. And that’s not easy. The big companies have policies: ‘You will offshore 30 percent of your work to low-wage countries.’ We’ve had cases where the job shops have said ‘Yes, I can beat that price,’ and they say ‘No, we have to offshore.’ So we’re finding that it’s not easy to get them to make that mental shift.

So what we do is first try to get them to think about what we call ‘total cost

of ownership — TCO.’ Typically if you were the supply chain manager, you’re told to buy castings or something, and you’re rewarded if you can get the ‘purchased’ price of those castings or those machine parts down from what they are now — down by 5 percent. Do what you have to do. It seems that most of the companies do not add up all the costs associated with their sourcing decisions. Many of them just look at that purchased price. Some of them might

throw in duty and freight, so they compare the obvious things, but we believe that very few of them look at the interest for the inventory on the water while it’s coming over.

We’re going to get our information out to the big companies, and I think more importantly, out to the small companies — the job shops, the die makers, the machine shops. When they go into a company and the customer says, “Sorry, the work’s in China,” or he says, “You could probably get that work, if you can match the Chinese cost.” And what we want the shop to say is, “Do you mean the FOB (freight-on-board) price, or do you mean your total cost? Which one do you want me to match?” Our hope is that if enough salesmen from enough shops have that discussion with the purchasing agents or supply chain guys, we’ll soften them up, and somebody in their company will say, “Huh, maybe we should start making that calculation.”

## Obviously, outsourcing is still going on. Whirlpool recently closed down its Indiana plant and sent 1,100 jobs to Mexico. What might have you said to Whirlpool if you were part of their outsourcing discussion?

Grant Thornton did a survey in January 2010, which stated 51 percent of companies say offshoring had no or a negative impact on their ROI. So if I wanted to convince a company why they should reshore, I would say, “More than half of those who offshored said it didn’t do them any good, and yet you’re absolutely committed to doing it. Are you sure?”

In a lot of cases, we can show it’s in the company’s best interest to bring the work back here, but if in the final analysis the cost is close — if the U.S. is 3 percent higher or 5 percent higher, and if all those companies would decide to keep all that marginal work here — then the U.S. manufacturing economy and the U.S. economy would be strong enough that they would sell more just because the markets were bigger. If more people made their gears here, there would be more demand for machine tools. If there’s more demand



Our Solutions make your products better.

# SOLUTIONS

## Metal Finishing

- Plating
- Anodizing
- Electropolish
- Conversion Coatings
- Vacuum Impregnation
- Dry Film Lubrication
- Black Coatings



- Aerospace
- Defense
- Medical
- Mass Transit
- Electronics
- Precision Machine

Member



www.anoplate.com • sales@anoplate.com • 315.471.6143



for machine tools, then there's more machine tools being made, and they would buy more gears. For U.S. companies for whom the U.S. is still their main market, finally it's in their interest that the U.S. market be strong. If all of them keep the marginal work here, all of them will be strengthened by that rising tide.

There is a lot of benefit for the country ... the total trade deficit was about \$800 billion before the recession. If all of that were reversed by having more work done in the U.S. rather than off-shored, that would directly create about 5 million jobs, and for every additional manufacturing job you get, on average, 1.4 other jobs. In principle, you'd pick up somewhere between 5 and 12 million U.S. jobs.

***It's important to calculate beyond the freight on board costs, and that ties into the TCO that you mentioned earlier. Is there a service available that manufacturers can take advantage of if they want to look beyond freight on board? What extra costs should they consider?***

A consultant friend of mine, who happens to work in the outsourcing field, compared the same stainless steel gear sourced in China or sourced in the U.S., and showed that while the FOB price might be 15 or 20 percent in favor of the Chinese, by the time you've added in all these other costs — the duty and the freight and the interest, the quality considerations and travel — the U.S. was 8 percent lower.

It's not easy, because it's 2 percent here, and 3 percent there and a \$1.50 here. And the purchasing agent just wants to say, "Save 20 percent. Next project." Now some of that authority is being taken away from the supply chain manager and given to the line manager or the general manager of that division, and he's saying, "You're screwing up my availability, you're messing up my balance sheet, my quality isn't as good as it's supposed to be. I've got to put three engineers for two weeks or three weeks each over there, which is costing me \$50,000. I'm never sure when I'm going to get the stuff. When you put all of that in, I think I'm better off if we went back to Bill, 5 miles from here."

To help the big companies recognize all of the costs, we have developed a TCO Estimator for parts and tools. The company inputs readily available data, makes a few guesses on the risks of IP loss or impact on innovation, and the Estimator provides the TCO for local and offshored sourcing. The Estimator also projects the cost comparison for the next 5 years, based on expected differences in wage inflation and changes in currency values.

There's a well-researched field called 'clustering' which shows that innovation, especially the interaction between the engineering department and the manufacturing function, occurs much more effectively when they're physically close enough that the people can travel and see each other frequently. When they're close, the engineer can help the manufacturer improve his systems and be more productive, and the two working together can work on DFMA (Designs for Manufacturability and Assembly) so that it is manufactured for the lowest cost, most reliability and easiest assembly.

Everyone says that innovation is the key to the future. We can be an innovation country.

## Calendar of Events

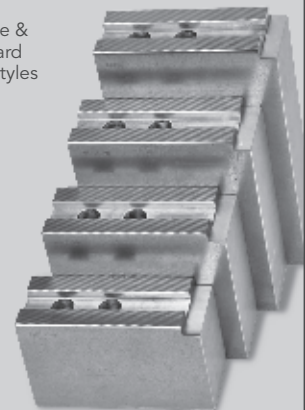
**Joint NTMA Fall Conference &  
PMA Annual Meeting**  
Amelia Island Plantation  
Amelia Island, Fla.  
October 6-10, 2010

**NTMA/PMA Contract Manufacturing  
Purchasing Fair**  
**Bringing Work Back to the U.S.A.**  
MGM Grand at Foxwoods  
Mashantucket, Conn.  
October 29, 2010

**NTMA 2011 Annual Convention**  
**(Super Meeting in conjunction with  
AMT, AMTDA and PMA)**  
March 3-6, 2011  
Sheraton Wild Horse Pass Resort  
Chandler, Ariz.

## Intermediate Height Jaws

- Available in – Serrated, Acme & Square Key, American Standard & Metric Tongue & Groove Styles
- Steel or aluminum heights of 3", 4", 5", 6", 8", or 10"
- Competitively Priced
- Increase tool versatility
- Lower cost versus buying a short and a tall jaw
- Always in stock
- Suitable for 90% of all short and tall jaw applications
- Made in the USA



ISO 9000 Certified QMS

**Dillon Manufacturing, Inc.**

2115 Progress Drive | Springfield, Ohio 45505 | [www.dillonmfg.com](http://www.dillonmfg.com)

Phone: 1-800-428-1133 | Fax: 1-800-634-6480 | Email: [sales4@dillonmfg.com](mailto:sales4@dillonmfg.com)

# Members in the News

## South Eastern Machining Achieves ISO Certification

After a lot of hard work and expense, John Stevenson, president of South East Machining Inc., is proud to announce that the company was certified on May 10 to ISO 9001-2008 by AQA International, in Columbia, S.C. South Eastern Machining was established in 1971 (a member of NTMA since 1987) to service local industry with OEM and replacement

machined parts. They have migrated from a manual shop to almost 100 percent CNC with multi-axis milling and turning. JobBoss software is their ERP

choice and GibbsCam is used to program complicated parts. They now have customers from the Southwest to the Northeast. SEM specializes in low- to medium-production runs (50-10,000+ pcs) in brass, aluminum and steel. SEM would like to be your supplier of machined parts. If interested, contact Roger Burdette (roger@semachining.com) or John Stevenson (johns@semachining.com).

## The Lloyd Company Achieves ISO 9001:2008 Certification



(left to right) Buyer Rusty Kilgore, President Donald Lloyd, Customer Service Lisa Brooks and Quality Inspector Steve Teel.

The Lloyd Company, in Houston, Texas, a leading manufacturer of precision quality machined parts, achieved ISO 9001:2008 certification. This certification covers all aspects of manufacturing, including design capabilities for energy, aerospace, medical and power generation industries. The certificate was awarded by independent registrar ABS Quality Evaluations.

This achievement elevates The Lloyd Company to an elite group of manufacturers that are certified under ISO standards. ISO 9001:2008 requires an organization to demonstrate its ability to consistently provide product that meets customer and applicable statutory requirements. The use of an ISO 9001:2008 certified quality system serves to enhance customer satisfaction through exemplary service attributable to continual improvement.

Company President Donald Lloyd is proud of its accomplishment. "We have long pursued exceptional quality standards, and achieving this certification takes us to the next level by formalizing our dedication to quality and continued improvement. This is just one demonstration of our commitment to operational excellence and customer satisfaction."

**NTMA/PMA CONTRACT Purchasing FAIR MANUFACTURING**

Including Re-Shoring:  
Bringing Work Back to the U.S.

**October 29, 2010**  
MGM Grand at Foxwoods  
Mashantucket, CT

**Face-to-Face, Business-to-Business, Cost-Effective Sales Networking**

Meet face-to-face with buyers and engineers directly involved in the purchasing of contract manufacturing products and services – including OEMs that have been outsourcing offshore but are now looking to bring work back to the U.S.

**Who Should Attend:**  
If you provide any of the following products or services, you will certainly benefit by attending:

- Stamped, Fabricated & Formed Metal Components and Assemblies
- Tool & Die Making
- Mold Making
- Injection Molding
- Special Machines (Design and/or Build)
- Engineering & Design
- Precision Machining/Custom Manufactured Components

**There are two ways to get new business: Wait for it...or go out and get it!**

For additional details and registration information, visit [www.purchasingfair.com](http://www.purchasingfair.com).

**PMA** PRECISION METALFORMING ASSOCIATION  
**NTMA** PRECISION

For more information contact:  
PMA, [www.pma.org](http://www.pma.org) or call 216-901-8800  
NTMA, [www.ntma.org](http://www.ntma.org) or call 800-248-6862

Makino  
**ADVANTiGE**

Visit us at IMTS, Booth # S-8700.  
[www.makino.com/imts](http://www.makino.com/imts)



**5 ways smarter. 4 times faster. 2 times the tool life. Suddenly, titanium's not so tough.**

ADVANTiGE from Makino brings together five advanced technologies that make working with titanium more productive and cost-effective. It's a significant breakthrough in titanium process technology, and it's only from Makino. See how you can overcome the traditional challenges of titanium at [makino.com/advantige](http://makino.com/advantige).



# NTMA Announces the 2010 Brock Babb Memorial Scholarship Award Winners

The National Tooling and Machining Association (NTMA) is proud to announce the first two Brock Babb Memorial Scholarships award winners, Brian Emert and Nathaniel Bowling.

This scholarship was created by the NTMA in support of students advancing their education and pursuing careers in manufacturing. After careful consideration of all 2010 submissions, we are confident that Brian and Nathaniel will do just that.

Brian Emert's involvement in high school courses and activities related to the trade proved him to be a great candidate for the scholarship. In Brian's junior year, he enrolled in a technology course and also joined his high school robotics team. He participated for two consecutive years in the RoboBOTS contests, sponsored by the NTMA NW

Pennsylvania Chapter. Brian continued to demonstrate his interest in manufacturing by participating in a materials camp the summer before his senior year, where he learned about plastics and manufacturing processes.

As Brian moved into his senior year, his enthusiasm toward manufacturing didn't diminish. He enrolled in a drafting and manufacturing class offered through his high school. And as his required senior project, he chose to job shadow at NuTec Tooling Systems Inc., a local tool and die shop in Meadville, Pa., and member of the NTMA. Brian Deane of NuTec Tooling Systems proudly nominated Brian Emert for the Brock Babb Scholarship. Brian's plans to continue his education in pursuit of a career in manufacturing will continue with his

attendance at Penn State – The Behrend College for Mechanical Engineering Technologies.

Nathaniel Bowling's interest in pursuing a career in manufacturing also was apparent. He is enrolled in the engineering program at Indiana University/Purdue University, majoring in Mechanical Engineering. Starting with introductory engineering courses such as Computer Aided Drawing (CAD) and programming, Nathaniel is working hard toward his goal of achieving his degree in Mechanical Engineering. Nathaniel is an exceptional young man with strong academic skills. His mathematical talent enabled him to place directly into a college calculus course. Nathaniel was proudly nominated by NTMA member company, Major Tool & Machine Inc., located in Indianapolis, Ind.

It is the intent of the Association to award up to two Brock Babb Memorial Scholarships to our next generation of manufacturing leaders on an annual basis. Applicants are requested to submit a fully executed application and supporting documentation by April 1st of the applicable year.

For more information on the selection criteria, please contact the NTMA Education Department at 800-248-6862.

*The Brock Babb Memorial Scholarship was named in honor and memory of Sergeant Brock A. Babb, who gave his life defending our country and our freedom. He is the son of one of our longtime members, Terry Babb, of Apex Tool & Manufacturing Inc. in Evansville, Ind.*

## NTMA Customer Value Proposition

*"Your membership in the National Tooling & Machining Association will position your company amongst the best in the industry by providing the resources and tools necessary for world class performance."*

*"Your return on investment is immediate as you leverage the vast knowledge that resides within the Association and apply it to your business."*

*"An advocate for our industry, NTMA leads the charge for precision manufacturing through networking, lobbying, education, procurement, advice and assistance, and focused cost savings programs."*

# Need Speed?

## Go with ceramic ball bearings!



Light weight in nature with superior Rockwell hardness, ceramic balls allow for higher speeds without sacrificing load carrying capacity. Alpine Bearing stocks ceramic bearings from as small as a 5mm bore up to 240mm, in light and medium preloads. These are available in ABEC 7, 7/9, and 9 precisions.

Cut faster, increase productivity, improve your bottom line.



East coast: 800.225.4334  
West coast: 800.360.9234  
sales@alpinebearing.com  
alpinebearing.com

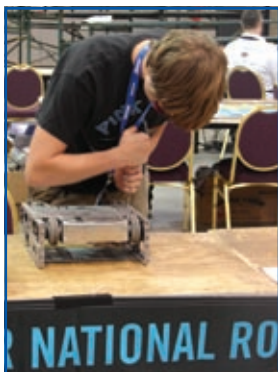
# National Robotics League Competition

The National Robotics League (NRL) held its first annual national competition on June 22nd and 23rd in conjunction with SkillsUSA. Teams came from around the country to the event, held at the Hyatt Crown Center in Kansas City. Twenty-one robots from 10 different schools and 6 regions battled it out in a very exciting competition. There was no lack of action with the top bots from each region.



For anyone not yet familiar with NRL, here's a little about our program. Students design and build a robot to compete against other schools. Some of the processes that the students learn while building their robot includes CAD drawings, machining, electrical, pneumatics and mechanical. During the competition, the students get a chance to troubleshoot in between matches. There's always something that goes wrong when you're pushing your machine to the limit. The energy the students put into the competition is great to see.

As you can imagine, the excitement of battling robots is a big draw for the students.



Many come away realizing how much they like the whole process, and pursue a manufacturing career (which, of

course, is the whole goal of NRL).

Matching up a team with a manufacturing company helps encourage the process, as well as helping the students out and giving the company an understanding of the program.

In the end, Clam Slam, from Williams High School in Williams, Ariz., was the big winner. Rugburn from Dunwoody College of Technology in Minneapolis, Minn., placed second and Atomic Shock from Plum High School in Saltsburg, Pa., came in third. Each team is able to vote once for which robot they think is the coolest. That award went to Requiem from Williams High School in Williams, Ariz. In the precision machine and tool & die industries, documentation is very important. For this reason, the NRL requires each team to turn in documentation, including schematics, drawings, photos, timelines, journals, etc., that show the process of building their robot. Nightmare, from Crawford County Career and Tech Center in Meadville, Pa., won the award for Best Documentation. The creativity award is decided by the NRL staff and it went to Blood In Blood Out from Waseca ALC in Waseca, Minn. Blood In Blood Out is what is referred to as a multibot, which means the 15 lb weight limit is spread out among more than one robot. In this case, they had two robots, with one weighing approximately 7 lbs and the other approximately 8 lbs. The strategy definitely changes when you have two bots against one, but with each bot being significantly lighter than the opponent, this can be a disadvantage. It was fun to see these bots compete. They actually did pretty well.

The NRL would like to thank NTMA members Ron, Andrea and Brian Wosel, from C&R Manufacturing in Shawnee, Kan., for their volunteer efforts, NTMA member Fredon Corporation of Mentor, Ohio, for creating the trophies, YRC for shipping the arena and supplies, Mike Bastoni from Gears Educational Systems for the use of his arena and all his

volunteer work, Tim O'Shaughnessy, Megan Mulcahey and Darrell Songer from LarsonAllen for judging, and Daryl Kehler for taking all the team pictures and compiling the video for teams to purchase.



We'll be posting video and pictures on our website soon. Check out [www.goNRL.org](http://www.goNRL.org) for more information. If you're interested in getting a program going in your area, contact Deb Holmes at [dholmes@goNRL.org](mailto:dholmes@goNRL.org) or call 301-281-8028. Thanks again to ALL NTMA members that support the NRL and their local teams.

## Correction...

### NTMA Safety Award Winners

The following NTMA member companies received the 2009 NTMA Safety Award Certificate; however, their names were not included in the listing in the July RECORD.

- Homeyer Tool & Die Co. Marthasville, Mo.
- RiteWay Industries Inc. New Albany, Ind.
- Anmar Precision Components Inc. N. Hollywood, Calif.

Our apologies for the oversight. Congratulations on your exemplary safety records!

# Create a Road Map to Increase the Value of Your Company, and Eventually Reap the Harvest of Your Life's Work

Many business owners are excited about building their businesses so that they get top dollar when they choose to disengage. Others worry about getting the most from their life's work when the time comes. Most don't know how to organize themselves amid all the day-to-day distractions. Some are losing sleep about how they are going to exit with enough money.

Creating a written Road Map to your future horizon is the key to increasing value and alleviating worry. Communicating the future in visionary terms to the employees of your business is a characteristic of great leadership. Owners who want to build value and relieve their

worries about the future should look out to the horizon and set clear goals. Clarity is essential to a successful disengagement but remarkably difficult to do, so most owners assemble a team of advisors to help them evolve their horizon goals with time. Their "first cut" is usually a starting point which they refine. It isn't a one-time thing for the successful owner. The more clear the vision, the better the chance it will be achieved. The good news is that the mere act of setting objectives changes the way you make decisions about your business – you make informed changes that increase its value.

Daily distractions get in the way of achieving your goals. The organizing principle is to constantly ask yourself whether you are spending your time doing the things only you can do, or being pulled in many different directions by the everyday needs of the business. Every other task in your business will someday be done by someone else, but only you can build the future. You must find a way to focus and take consistent action toward your goal. Just as you have a team of employees that

help you run a profitable business, create a team of advisors to help you disengage on your terms. A team approach saves money and fees, because each advisor is focused on the right specifics in his or her area of expertise. You need a team because no one advisor can do it all. Your attorney is not an expert accountant. Your accountant has a perspective that your attorney doesn't. You can't lead the team because you are too close to the subject and you have a business to run. Pick one of your advisors to be team leader. Your choice to lead the team is critical, because it is the team leader's job to understand your goals and focus the team on cost-effective action to achieve them. These professionals usually call themselves exit advisors and can be found in most large cities. They should help you organize an action plan and a checklist that assigns time frames and responsibilities to you and your team members.

Choose a time horizon of about 5 years. A 5-year time frame works well most of the time because it is far enough out to provide focus on the long term rather than the short term.

Even if you have no actual desire to leave your business, imagine (and write down) what you would want it to be worth and what after-tax income you will need from it to live the lifestyle you want at the end of the time frame. Imagine the culture you want in the business. Describe what your executive team will look like.

Create a wish list of your hopes and dreams – what you would like to accomplish both personally and financially in your business, for yourself and for the people you care about. This usually turns out to be fairly straightforward, because the focus is on a very few threshold issues: When and how do you want to leave your business? (Maybe you never want to leave; you want to work forever in the business you own and love.) Who do you have (or want) to provide for? What are the value drivers for your business and how can they be enhanced, especially the quality and loyalty of your key employees?

## PlanoMachine.com

AS9100B / API / ISO 9001:2008

### PRECISION CNC MACHINING

World Class Manufacturing Technology Facility  
(completely climate controlled)

20 CNC Lathes ranging from  
15" x 21" to 33" x 80"

25 CNC Machining Centers ranging from  
20" x 12" x 21" to 40" x 80" x 28"

48 man shop with 963 years of machining experience

Production runs & prototype capabilities

Machine all materials: steel, stainless, titanium  
and high speed machining of aluminum

Full CAD/CAM programming capabilities with Mastercam X4

"Specialized" quality control equipment including  
Zeiss Contura G2 RDS (CNC) Coordinate Measure Machine

See complete capabilities at [www.planomachine.com](http://www.planomachine.com)  
Email: [joe@planomachine.com](mailto:joe@planomachine.com)



**Plano Machine & Instrument, Inc.**  
2720 S. I-35, Gainesville, Texas 76240  
(60 miles north of Dallas at exit 494)



Phone: 940-665-2814

Fax: 940-665-5130

## Welcome New Members

**Alden Tool Co. Inc.**  
Berlin, Conn.  
Daniel Muravnick

**Collins Machine & Manufacturing Inc.**  
Louisville, Colo.  
John-Paul Dion

**Component Repair Technologies Inc.**  
Mentor, Ohio  
Jim Furman

**Lap Tech Industries Inc.**  
Clover, S.C.  
Ramon L. Guzman

**Micro Fature LLC**  
Mountville, Pa.  
Sandy Abel

**Mictron Inc.**  
Sarasota, Fla.  
Rolf Kopp

**Rae Tech Inc.**  
Phoenix, Ariz.  
Susan Scarla

**Santa Fe Machine Works**  
Fontana, Calif.  
Scott Kelly

**Sibley Machine & Foundry Corp.**  
South Bend, Ind.  
William Voll

**Wysong & Miles Company**  
Greensboro, N.C.  
William Herr

The critical question you must answer for yourself is, "How much after-tax monthly income do I want when I leave?"

Your advisor team should help you understand the nature of the gap between where you are and your horizon goals. Can you get there? If you can, then you've already got the foundation and the framework of a good Road Map. If not, then you may have to consider some trade-offs.

Along the way, as your Road Map takes shape, you'll want to ensure its outcome against the risk of not being there to see that it gets done.

Update the Road Map at least annually — more often if your circumstances really change, or when tax laws do — but try to resist the temptation to tinker with it, micromanage it or change it just for the sake of changing it.

That's how it works. What I can't describe — what you may not fully understand until you experience it — is

the tremendous weight of concern that's lifted from you when you know you have a first-rate Road Map in place. No one can relieve you of the responsibility for increasing the value of your business and a successful disengagement on your terms when the time comes, but a Road Map can take away much of the anxiety and worry involved.

---

*ABOUT TOM CHIAPPETTI: Tom Chiappetti, CEO and Actuary of Thomas More Group, advises private business owners during the 5-10 year period before they disengage on how to maximize their business harvest when they decide to exit. Chiappetti advises owners who are preparing for a family or insider transfer, as well as those who want to attract the perfect buyer. He is widely respected as a business advisor, author and actuary. He can be reached at [tomchia@thomasmoregroup.com](mailto:tomchia@thomasmoregroup.com), 262-240-9698 or [www.thomasmoregroup.com](http://www.thomasmoregroup.com).*

## POWER YOU DEPEND ON

# PHASE-A-MATIC™

Phase Converters to run 3-phase equip. on single-phase

### NEED 3-PHASE POWER?

PHASE-A-MATIC, INC. has the right phase converter for your application.

45 years experience

Run your:

- lathes
- saws
- grinders
- mills
- and more!

**STATIC CONVERTER**      **MADE IN USA**      **ROTARY CONVERTER**

**1-800-962-6976**      **[www.phase-a-matic.com](http://www.phase-a-matic.com)**

# BLR: Environmental Safety Resource Center

## Ventilation

According to EPA, there is growing evidence that, in some instances, air inside buildings and homes is more polluted than the outdoor air in some larger, industrialized cities. This should be a significant concern, considering that research has shown that people spend a majority of their time indoors and exposed to indoor air pollution that might pose health risks.

A growing emphasis on energy efficiency during the past 30 years resulted in buildings that are sealed much tighter to limit the infiltration of outdoor air. This, along with deferring maintenance to save money and the increasing number of consumer products that contain harmful chemicals, has led to deteriorating indoor air quality and more frequent complaints from building occupants.

## Pollutants and Health Effects

The response of the occupants to the indoor air pollutants and other factors, such as climate, noise, light, etc., can be classified into one of the following categories:

- **Acute effects.** Acute effects occur immediately (e.g., within 24 hours) after exposure. The effects typically do not last long and disappear quickly once the occupant is no longer exposed. However, it is possible that exposure to certain microorganisms and other biological contaminants can cause serious, potentially life threatening respiratory diseases that might lead to chronic respiratory ailments.
- **Chronic effects.** Chronic effects are long-lasting responses to long-term or frequently repeated exposures. Cancer

is the most well-known chronic effect of long-term exposure to certain air pollutants.

- **Discomfort.** Discomfort is typically associated with climatic conditions in the building. Occupants might feel too hot or too cold or experience eye, nose or throat irritation because of low humidity. While there are usually no serious health implications resulting from these conditions, absenteeism and employee morale might become an issue if they go unaddressed. In addition, such conditions also might affect work performance. The ability to concentrate or perform mental or physical tasks can be significantly affected by relatively minor changes in temperature and humidity.

Some of the most common indoor air pollutants, the potential sources, and acute health effects as listed by OSHA in the OSHA Technical Manual are listed in table below.

Pollutant	Potential Sources	Acute Health Effects
Acetic acid	<ul style="list-style-type: none"> <li>• Silicone caulking compounds</li> </ul>	<ul style="list-style-type: none"> <li>• Eye, respiratory and mucous membrane irritation</li> </ul>
Carbon dioxide	<ul style="list-style-type: none"> <li>• Unvented gas &amp; kerosene appliances</li> <li>• Improperly vented products of combustion</li> <li>• Human respiration</li> </ul>	<ul style="list-style-type: none"> <li>• Difficulty concentrating</li> <li>• Drowsiness</li> <li>• Increased respiration rate</li> </ul>
Carbon monoxide	<ul style="list-style-type: none"> <li>• Tobacco smoke</li> <li>• Fossil-fuel engine exhausts</li> <li>• Improperly vented fossil-fuel appliances.</li> </ul>	<ul style="list-style-type: none"> <li>• Dizziness</li> <li>• Headaches</li> <li>• Nausea</li> <li>• Cyanosis</li> <li>• Cardiovascular effects</li> <li>• Death</li> </ul>
Formaldehyde	<ul style="list-style-type: none"> <li>• Off-gassing from urea formaldehyde foam insulation, plywood, particle board and paneling</li> <li>• Carpeting and fabric</li> <li>• Glues and adhesives</li> <li>• Products of combustion</li> <li>• Tobacco smoke</li> </ul>	<ul style="list-style-type: none"> <li>• Hypersensitive or allergic reactions</li> <li>• Skin rashes</li> <li>• Eye, respiratory and mucous membrane irritation</li> <li>• Odor annoyance</li> </ul>
Nitrogen oxides	<ul style="list-style-type: none"> <li>• Products of combustion</li> <li>• Tobacco smoke</li> <li>• Welding</li> <li>• Gas and diesel engine exhausts</li> </ul>	<ul style="list-style-type: none"> <li>• Eye, respiratory and mucous membrane irritation</li> </ul>
Ozone	<ul style="list-style-type: none"> <li>• Copy machines</li> <li>• Electrostatic air cleaners</li> <li>• Electrical arcing</li> <li>• Smog</li> </ul>	<ul style="list-style-type: none"> <li>• Eye, respiratory and mucous membrane irritation</li> </ul>



Pollutant	Potential Sources	Acute Health Effects
Radon	<ul style="list-style-type: none"> <li>• Ground beneath building, building materials and groundwater</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> <li>• Chronic exposure may lead to increased risk of lung cancer from alpha radiation</li> </ul>
Volatile Organic Compounds (VOC)	<ul style="list-style-type: none"> <li>• Paints</li> <li>• Cleaning compounds</li> <li>• Glues</li> <li>• Photocopiers</li> <li>• Silicone caulking materials</li> <li>• Insecticides and Herbicides</li> <li>• Products of combustion</li> <li>• Asphalt</li> <li>• Gasoline vapors</li> <li>• Tobacco smoke</li> <li>• Dried out floor drains</li> <li>• Cosmetics and other personal products</li> </ul>	<ul style="list-style-type: none"> <li>• Nausea</li> <li>• Dizziness</li> <li>• Eye, respiratory tract, and mucous membrane irritation</li> <li>• Headache</li> <li>• Fatigue</li> </ul>
Miscellaneous inorganic gases, including ammonia, hydrogen sulfide, and sulfur dioxide	<ul style="list-style-type: none"> <li>• Microfilm equipment</li> <li>• Window cleaners</li> <li>• Acid drain cleaners</li> <li>• Products of combustion</li> <li>• Tobacco smoke</li> <li>• Blueprint equipment</li> </ul>	<ul style="list-style-type: none"> <li>• Eye, respiratory tract and mucous membrane irritation</li> <li>• Aggravation of chronic respiratory diseases</li> </ul>
Asbestos	<ul style="list-style-type: none"> <li>• Insulation and other building materials such as floor tiles, dry wall compounds, reinforced plaster</li> </ul>	<ul style="list-style-type: none"> <li>• None</li> <li>• Chronic effects</li> </ul>
Synthetic fibers	<ul style="list-style-type: none"> <li>• Fibrous glass and mineral wool</li> </ul>	<ul style="list-style-type: none"> <li>• Irritation to the eyes, skin and lungs</li> <li>• Dermatitis</li> </ul>
Tobacco smoke	<ul style="list-style-type: none"> <li>• Cigars, cigarettes, pipe tobacco</li> </ul>	<ul style="list-style-type: none"> <li>• Respiratory system irritation</li> <li>• Eye and nasal irritation, coughing, wheezing, sneezing, headache and related sinus problems in allergic or asthmatic persons</li> <li>• Burning, itching and tearing eyes for people wearing contact lenses</li> <li>• See acute health effects of carbon monoxide, formaldehyde, nitrogen oxides, VOC and miscellaneous inorganic gases</li> </ul>
Microorganisms and other biological contaminants including viruses, fungi, mold, bacteria, nematodes, amoeba, pollen, dander and mites. (Also known as “microbials.”)	<ul style="list-style-type: none"> <li>• Air handling system condensate</li> <li>• Cooling towers</li> <li>• Water-damaged materials</li> <li>• High humidity indoor areas</li> <li>• Damp organic material and porous wet surfaces</li> <li>• Humidifiers</li> <li>• Hot water systems</li> <li>• Outdoor excavations</li> <li>• Plants</li> <li>• Animal excreta</li> <li>• Animals and insects</li> <li>• Food and food products</li> </ul>	<ul style="list-style-type: none"> <li>• Allergic reactions, such as hypersensitivity diseases including hypersensitivity pneumonitis, humidifier fever and allergic rhinitis</li> <li>• Infections such as legionellosis</li> <li>• Chills</li> <li>• Fever</li> <li>• Muscle ache</li> <li>• Chest tightness</li> <li>• Headache</li> <li>• Cough</li> <li>• Sore throat</li> <li>• Diarrhea</li> <li>• Nausea</li> </ul>

# How to Warm Up a Cold Prospect

By John Boe

Successful salespeople understand that making the sale has much more to do with developing trust and rapport than it does with issues of lowest price, highest quality or the largest company. Unfortunately, far too many salespeople unintentionally sabotage their chances of making a sale by skipping the “small talk” and getting right down to business. On the surface, this approach might appear to be an effective use of time, but it’s a huge mistake that will cost tons of money over the long haul! Any architect will be quick to tell you that a strong foundation must be laid first before you can build the walls. Likewise, before you can expect your prospect to buy your products or services, he or she must first like and trust you as a person.

There is no actual set amount of time for the warm-up phase of the appoint-

ment, because some prospects naturally warm up faster than others. Said differently, the warm up period is not determined by a length of time, but rather by the level of rapport established. Your prospect will literally show you, through his or her body language, when rapport has been established and the moment is right for you to smoothly transition into the sales presentation. Make note of your prospect’s body language gestures when you first begin talking and watch for the flow of gestures to move from closed to open. For example, if your prospect begins the appointment by sitting back in his or her chair with folded arms and crossed legs, you must continue the warm up until he or she shows open gestures and leans forward toward you.

Here are 7 proven tips to help you build rapport and quickly warm up your next prospect:

- Make your prospect feel comfortable by offering him or her something to drink ... tea, water, soft drink or coffee.
- Look for common ground and points of mutual interest. Good topics include children’s activities, sporting events, hobbies, vacation plans and the old standby ... the weather. Obviously, you want to stay away from any topics that might be controversial or polarizing, such as politics or religion.
- Pay attention and listen like a homicide detective. Take notes and ask open-ended questions to gain information and get your prospect talking.
- Use open body language, smile frequently and maintain good eye contact.
- Listen more than you talk. Keep the focus of attention on your prospect and not on yourself.
- Avoid the temptation of interrupting your prospect when he or she is speaking.
- Match your prospect’s rate of speech and voice tone. If you speak quickly and your prospect speaks slowly, it’s up to you to make the adjustment.

By focusing on these 7 rapport-building tips, you will dramatically increase your sales effectiveness and strengthen all of your client relationships.

John Boe presents a wide variety of motivational and sales-oriented keynotes and seminar programs for sales meetings and conventions. Boe is a nationally recognized sales trainer and business motivational speaker with an impeccable track record in the meeting industry. To have Boe speak at your next event, visit [www.johnboe.com](http://www.johnboe.com) or call 937-299-9001. A free newsletter also is available on his website.

## 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

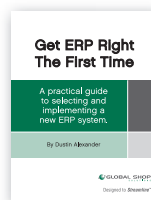


“That’s why we went with Global Shop Solutions. They were in, they were out, and we were seeing major new efficiencies – right from the start. What a tremendous difference their ERP system – and their people – made in accelerating our workflow, lowering overall costs, and setting the stage for unconstrained 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](http://www.GlobalShopSolutions.com).

Visit Us at IMTS2010 Booth #E-4029

Designed to *Streamline*™



**GLOBAL SHOP**  
SOLUTIONS  
©2010, Global Shop Solutions, Inc.

# Stop Wasting Money & Go GREEN with High Torque Retention Knobs!



TAPER SHANK  
TEST FIXTURE



HIGH TORQUE  
RETENTION KNOBS

**No other retention knob has our green advantage!**

**Increases tool life**

**Reduces polishing time  
on dies and molds**

**Increased depth of  
cut and feed rate**

**Increases rigidity and  
stops chatter**

**Improves  
finishes**

Order by phone or write to [sales@jmmachineinc.com](mailto:sales@jmmachineinc.com). To order simply use the part number from your present knob, and we'll cross-match it with the correct High Torque Retention Knob.

Visit us at <http://www.jmmachineinc.com>.



Set Your Course For Quality

**J&M MACHINE, INC.**

1234 High Street | Fairport, Ohio 44077

USA 800-322-7750 | CANADA 440-357-1234 | [www.jmmachineinc.com](http://www.jmmachineinc.com)

Look for us at IMTS Booth W-2459

Request a full  
Product CD!



# The Biggest Constraint We Find Is ...

## Part 4

We have worked with companies around the globe and the constraint is always the same. It's how we think. In particular, it's how the business owner or leader of the company thinks.

You buy the same equipment as your competitors. You hire from the same labor pool. The only difference is how you think. Unfortunately, you and your competitors also think the same way. So you are left to compete in a market where, from your customers' perspective, you're all the same. So they make decisions mostly based on price.

Let me explain some of the common ways our thinking goes wrong and the negative effect this wrong thinking can have on your business.

In Part 1, we discussed the efficiency mind-set and how focusing on efficiency can lead you astray. We made the case that efficiency is NOT a precursor to improved performance, but a by-product. In Part 2 we tackled the allocation mind-set, and instead of allocating we suggested that you consider the  $\Delta T$  vs.  $\Delta OE$  as you decide which jobs to take, how to price and select markets. In Part 3, we made the case that your products/services don't have costs or profits and showed you why we think just concentrating on costs will lead you to miss opportunities. Now, in Part 4, let's cover the forecasting mind-set.

The forecasting mind-set is where we think that the only way to produce, purchase raw materials, stock our shelves or schedule our people is based on a forecast. And if our forecast tends to be off, then we need to add more detail and more complexity in an effort to improve the accuracy.

I've said it before and I'll say it again – if we only know one thing about a forecast, it's that – it's wrong! And, it's not likely to be right given all the sources of variability. So why do we try? Because it is what everyone does. It's just how it's done, and we don't know any better or different way.

For many people the orders that are received are based on their customers' forecast. Isn't it interesting that we view orders as our clients' true needs? But they are NOT our customers' true needs; they are just our customers' best guess of what they think they are going to need.

Do you have customers who call and change their order? If so, they are likely using a forecast. And how do you feel about those calls and having to accommodate all these changes? If you're like most, you don't like it one bit and you blame some of the hiccups in your due date performance on these changes.

Is the same true for you? Do you have to change your orders with your vendors?

And what are the potential effects of a wrong forecast?

- Too much of some inventory, causing high inventory costs and lots of your cash tied up
- Stock outs of fast movers, causing expediting, higher costs and lost sales

Or, if you are a service company or project based companies, they serve to delay the completion of your work or the project.

Now, what if we told you that there is an alternative way to determine how much to order, how much to stock, etc., that does NOT require continual forecasting. Would you be interested?

Wait! Before you say yes, you should also know that, like everything else we do, it will be counterintuitive. You will have to change your mind-set and thinking. So, with that in mind, shall I continue?

We're working on a video answer, because it takes more explanation than we have room for here. If you would like to view it, just send us an e-mail and say you'd like the "video answer to Part 4."

P.S. Group 8 of our Velocity Scheduling System Coaching Program sold out. We are expecting the same thing to happen for groups 9 and 10 later this year. Why? The results are fantastic – 50 percent reduction in time through the shop, substantial increase in due date performance and a substantial reduction in chaos. You can check out some of the results here: <http://VelocitySchedulingSystem.wordpress.com> (click on Testimonials and Case Studies link in the left column).

---

*"Dr. Lisa" Lang is president of the Science of Business. She recently served as Dr. Goldratt's Global Marketing director, and is a member of the Board of TOCICO. She can be reached at [DrLisa@ScienceofBusiness.com](mailto:DrLisa@ScienceofBusiness.com) and 303-909-3343. Brad Stillahn is a business owner that successfully implemented TOC in his own business, exited his business on his terms and is now helping other business owners do the same. Set up a TOC Advisory Board for your company! Brad can be reached at [Brad@ScienceofBusiness.com](mailto:Brad@ScienceofBusiness.com) and 303-886-9939*



**OIL MIST & SMOKE  
IN YOUR SHOP?**

[www.mistcollectors.com](http://www.mistcollectors.com)

Tel: 1-800-645-4174

# Massachusetts' SkillsUSA Precision Machining Technology Student Brings Home the GOLD



Kyle Brodeur, Swansea, Mass., celebrates his Gold Medal achievement in Kansas City.

On Thursday, June 24, 2010, the best Precision Machining Technology students in the nation squared off in competition at the SkillsUSA National Leadership and Skills Conference (NLSC) in



Kyle prepares for the milling portion of the MA SkillsUSA Precision Machining Competition in April 2010.

Kansas City, and once the chips were cleared and the winners announced, the Gold Medal was awarded to Kyle Brodeur, of Swansea, Mass.

Kyle, a 2010 graduate from Diman Regional

Technical H.S. in Fall River, Mass., was the top student in the Commonwealth, and represented Mass. for the past 3 years at NLSC. In 2009, he was the National Bronze Medalist in the PMT Contest and received a citation from the Governor's Office recognizing his achievements. Kyle is a National Honor Society student, was the student advisor on the school's Machine Technology Advisory Board and a Skills USA Chapter Officer. He will enter his freshman year at the University of Massachusetts - Dartmouth, in September. The NTMA Boston Chapter has seen Kyle's progress firsthand through its partnership with MA SkillsUSA, and is thrilled about what he has accomplished. Members of the Boston Chapter assist the Precision Machining Tech contest with technical expertise,



Kyle receives an official citation from Massachusetts Lt. Governor Tim Murray.

volunteers, materials and prizes. It's a great relationship that benefits the students, SkillsUSA and the Association. Individuals from 4 BTMA companies designed, judged and provided stock and materials for the contest. For the third straight year, members' cash donations paid the travel and accommodation expenses for the top high school student to represent the state in Kansas City. In addition to the travel scholarship money, prizes/gifts donated included verniers, watches, T-shirts and hats.

The following members and suppliers gave time, prizes and/or financial resource to BTMA's SkillsUSA effort:

- Admiral Metals
- Boston Centerless Inc.
- The Boston Chapter Custom Machine Inc.
- F.H. Peterson Machine Corp. Inc.
- Fitz Machine Inc.
- Howard Tool Co. Inc.
- MacDermid, Inc.
- Mitutoyo America Corp.
- O-D Tool & Cutter Inc.
- Tucker Engineering Inc.

Announcing...

## Jet Processing is now Premier Precision Group - Special Processing -





**Chemical Processing**

- Anodize
- Conversion Coating
- Passivation
- Painting
- Dry Film Lubricants
- Teflon Coating

**Lab Services**

- Corrosion Resistance
- Taber Abrasion Resistance
- Coating Weight
- Coefficient of Friction
- Solution Analysis
- Millipore Inspection

**Non-Destructive Testing**

- Liquid Penetrant
- Magnetic Particle
- Pressure Test
- Impregnation



**Premier Precision Group**  
2660 W. Quail Ave, Phoenix, AZ 85027  
**623.869.6749**  
623.780.8830 (fax)  
sales@premierprecision.com  
www.premierprecision.com



# Sutton Scholarship Endowment Grows



Roland Sutton, Chairman of the Board and founder of Maine Machine Products Company presents a \$10,000 check to Dr. Scott Knapp, president of Central Maine Community College.

Roland Sutton, founder of Maine Machine Products Company, announced additional funding of \$10,000 toward the Roland Sutton Endowed Scholarship Fund at Central Maine Community College in Auburn. Established in

November 2009 with a gift of \$15,000, the scholarship fund is an investment in the future of the college as well as the company.

“We truly appreciate and recognize this support as critical to growing the Precision Machining Technology program at CMCC” said Scott Knapp, president of CMCC. “From CNC equipment donations over the years to ongoing support of the apprenticeship program, our students appreciate all you have done and continue to do for them and for the college.”

Recipients of a Roland Sutton scholarship must be enrolled in the Precision Machining Technology Program (PMT) at CMCC and are selected in their 3rd semester of course work. Recent 2010 Sutton scholarship graduates Rob Blethen and Caryn Fredsall, selected for their demonstrated excellence in general

academics as well as applied science of the PMT program, are now full time associates at Maine Machine Products.

“The partnership between MMP and the college makes so much sense,” said Roland Sutton. “It gives testimony that metal trades is not a dying industry; rather a viable career path that is available and attainable right here in Oxford Hills.”

A director emeritus of the CMCC Education Foundation Board of Directors, Sutton is chairman of the board and founder of Maine Machine Products Company of South Paris, a family-owned manufacturer of custom precision components and assemblies. This scholarship was established by the Sutton family in recognition of Roland Sutton’s contributions to the industry and his longstanding support of education and the PMT program at the college.

In addition to the newly formed Sutton Scholarship program, MMP awarded 50 full scholarships to students in the PMT program to cover the cost of tuition, books and fees. This state-approved apprenticeship program, in existence since 1974, also includes two years of work experience at the company. More than half of the scholarship recipients are still employed by the company today.

Maine Machine Products Company, a precision machining company certified to ISO 9001 standards, operates more than 60 spindles in a 65,000 sq. ft. temperature controlled facility. Founded in 1956, MMPCo is family owned and professionally managed. Markets served include oil and gas, defense, telecommunications and semi conductor. They operate a class 1,000 hard wall clean room and have an extensive supply chain.

The associate degree program in Precision Machining Technology at CMCC offers broad training experience in the metal products industry. Graduates of the program are employed as machine operators, CNC machinists, tool and die makers, quality control inspectors, machine assemblers, machine tool designers, CNC programmer, or field service representatives.

For more information on Maine Machine’s scholarship programs, visit the company’s website at [www.mmpco.com](http://www.mmpco.com).

## Need More Than ONE Solution?



**Fabricating & Metalworking**  
[www.fandmmag.com](http://www.fandmmag.com)  
 40,000 Readers 10 Times A Year

**Industrial Machinery Digest**  
[www.indmacdig.com](http://www.indmacdig.com)  
 78,000 Readers 18 Times A Year  
 (13,000 x 6)

**Surplus Buying and Selling Guide Insert and Online**  
[www.surplusguide.net](http://www.surplusguide.net)  
 48,000 Readers A Month  
 (Plus 48,000 Additional E-Readers)

**Total Industrial Plant Solutions Card Deck**  
[www.tipscd.com](http://www.tipscd.com)  
 100,000 Circulation 5 Times A Year



**Online marketing opportunities available to help brand your company and services.**

**Custom brochures, Sales Material, Catalog printing of any size and volume.**

**Special NTMA member discount on ALL Advertising**  
**Call William Strickland 866-833-5346**  
**[william.strickland@cygnusb2b.com](mailto:william.strickland@cygnusb2b.com)**

**cygnus**  
 Business Media

[www.cygnusb2b.com](http://www.cygnusb2b.com)



## Manage your shop. Not your IT.

As a small business owner, keeping costs down and profitability up can be a major challenge. The right software system can help you manage your shop efficiently—without being overly complex or costly.

### **Epicor Manufacturing Express Edition – Everyone's ERP**

Epicor Express provides broad, manufacturing-focused functionality, is priced affordably, and it's delivered in a manner that minimizes complexity. Epicor Express is the right software—with no hardware to set-up, no software to install, and no ongoing maintenance. For a low monthly subscription, Epicor manages it all for you. Epicor Express makes IT easy, so you can focus on what you do best...running your shop.

To schedule your **FREE** demo visit  
[www.epicorexpress.com](http://www.epicorexpress.com)

#### **Low Monthly Subscription includes:**

- ✓ Hardware
- ✓ Software
- ✓ Maintenance
- ✓ Upgrades
- ✓ Guaranteed Service Levels
- ✓ System Management
- ✓ Training Resources
- ✓ Data Backup

[www.epicorexpress.com](http://www.epicorexpress.com)

**EPICOR**<sup>®</sup>



Sulzer ERP Solutions

**On-Demand ERP**

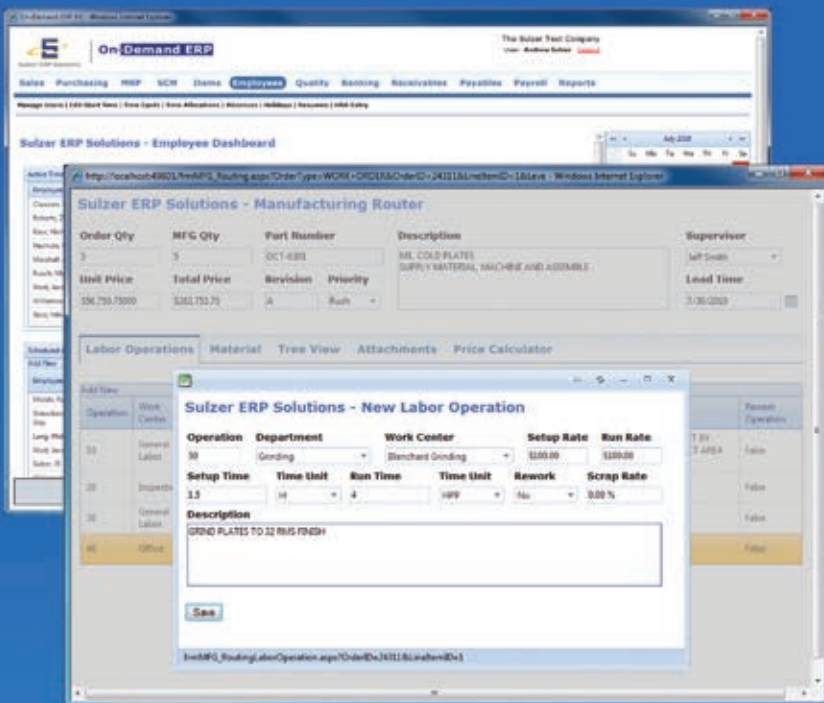
A product of Sulzer ERP Solutions

# IMTS Booth E-3955

Hosted or Installed  
*Your Solution, Your Choice*

# OnDemandERP.com

Starting at a low monthly fee (*hosted*).  
Call us today! +1 262.785.9811



Accounting  
Bills of Material  
Business Intelligence  
C.R.M.  
Data Collection  
Dashboards  
H.R. Management  
Inventory Control  
Job Scheduling  
Manufacturing  
Payroll  
Preventive Maintenance  
Purchasing  
Quality Control  
Sales Management  
Shop Floor Control