

## Eight-Step Problem Solving Workshop

Manufacturing today is under tremendous pressure to find new and innovative ways to improve performance and reduce costs. Recognizing the need for Continuous Process Improvement (CPI) is crucial. The effectiveness of any CPI effort is only as good as the problem solvers implementing and executing the plan, and the need is recognized for the majority of all personnel to be schooled in a disciplined, proven problem solving methodology.

In this one-day session, AM&T will train participants in a modified 8-Step Problem Solving process, adopted from the Toyota Production System and tied directly to the Six Sigma DMAIC model -- Define, Measure, Analyze, Improve, Control.

### WHO SHOULD ATTEND?

Personnel charged with project management, process improvement, Lean initiatives, and anyone else interested in problem solving.

### KEY PARTICIPANT BENEFITS

- Learn how to utilize 8-step problem solving process
- Learn why objectivity, alignment, coherency, and distilling data down to the most salient points is important to successful problem solving
- Solve problems faster using a proven methodology
- Attain lasting results by using sustainment tools
- Gain in-depth knowledge to identify and resolve true root causes instead of symptoms
- Provide the organization with methods to share best practices
- Learn to understand the nature of a problem before jumping to solutions
- Learn to set clear objectives and metrics
- Understand the importance of cause and effect analysis in problem solving
- Create a culture of logical problem solving



**Date:** Thursday, October 25, 2012

**Time:** 8:00 am to 4:30 pm  
sign-in and continental breakfast at 7:30  
Lunch also included

**Location:** Treadway Inn, Owego, NY

**Cost:** \$250 (\$200 for AM&T Associates)

**Registration Deadline: October 18th**

Register on-line at [www.amt-mep.org](http://www.amt-mep.org)  
or contact Kathy Peacock at  
607-774-0022 x308

**Meet your Instructor:** Carol Miller has over 25 years of experience in the manufacturing and service sectors. She has a B.S. in Industrial Engineering from the State University of New York, College at Buffalo, and an M.S. in Management of Technology from Polytechnic University. She is a member of the Association for Manufacturing Excellence (AME) and the Project Management Institute (PMI), is a NIST-certified trainer and implementer of Lean Manufacturing techniques, and has received certification as a Lean/Six Sigma Black Belt from Villanova University. Carol leads AM&T's Lean effort.



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## HOW WE HELP

- Business Assessments
- Strategic Planning
- Lean Enterprise
- Supervisory Training (TWI)
- Project Management
- ISO/AS Quality Systems
- Sales and Marketing
- New Opportunity Identification and Growth — Markets, Products, Services, Customers

AM&T is a not-for-profit economic development organization that receives significant financial support from the New York State Foundation for Science, Technology and Innovation (NYSTAR), and the National Institute of Standards and Technology (NIST) Manufacturing Extension Partnership (MEP). AM&T is a NYSTAR® designated Regional Technology Development Center for the Southern Tier and is one of nearly 50 MEPs located across the country. AM&T works directly with regional companies to increase their competitiveness and profitability.

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Division of Science, Technology & Innovation

## How We Help

- Completed a 4-day, office-centered, value stream mapping event on a quarterly financial performance review process. Implementation is targeted to be complete within three months and will result in a significant reduction in rework and overtime.
- Completed a multi-day 5S and Visual Workplace event. The team created a workplace where everything is visually clear and controlled. As a result, the workplace will produce fewer defects, less waste, fewer injuries, and fewer breakdowns. These improvements will translate into lower costs and improved quality.
- Completed a multi-day Pull / Kanban event. The team established a Pull system for purchased parts, work-in-process and finished goods. The system will result in a simplified process, fewer stock-outs, less inventory, lower space requirements, higher productivity and greater flexibility.
- Assisted a company in qualifying for a TAAC grant focused on website development with a website development company and company growth project with AM&T. Worked with the company to create a business growth plan and am continuing with Performance Benchmarking and Transformation Planner, Sales Training and implementation assistance, and guidance in content and focus of website development.
- Assisted a company in creating a Strategic Plan, pursuing funding required for survival and growth, provided guidance in project pricing and quotation management, and leveraged AM&T Lean specialist in maximizing workflow. Project is expected to expand into significant work once funding has been secured.
- Conducted series of meetings with Economic Development Agencies and Chambers of Commerce in eight counties to highlight the importance of manufacturing to the Southern Tier economy and to encourage those organizations to focus on providing services that are needed by that sector.
- Conducted an ISO internal audit at one company in preparation for their upcoming compliance assessment by an ANAB Registrar. With AM&T's support, the company has developed and implemented an effective Quality Management System that will allow them to become ISO certified.
- Conducted a Training-Within-Industry (TWI) Job Instruction workshop at one company to train their trainers in using a simple 4-step method to provide effective on-the-job training to employees.

# Solutions Fair - Southern Tier

**Take advantage of regional and statewide resources.  
Meet one-on-one with technology & business experts  
who can help your company**

- **innovate**
- **fix processes**
- **solve problems**
- **accelerate growth**

This happens at a Solutions Fair, a series of state-wide workshops that match manufacturers with a broad range of technical, educational, and economic development resources – experts who can help identify and solve an existing problem in your company.

Solutions Fairs have been held in Binghamton, Albany and New York City, and the success of these events is built on a simple idea – eliminate the boring presentations and cut to the chase. In other words, as part of the event registration process, attendees complete a brief questionnaire to identify one or more specific problems needing solutions. The event organizers use the responses to assign short, one-on-one meetings with representatives of the organizations listed below. The discussion focuses on the pre-identified problems, enabling the attendees to quickly assess the solutions available and decide how and when to follow up.

## **Participating Resources:**

- Cornell Center for Materials Research
- Cornell Center For Technology Enterprise and Commercialization
- Cornell Nanoscale Science & Technology Facility
- Cornell Institute for Biotechnology and Life Science Technologies
- Cornell Kevin M. McGovern Family Center for Venture Development In The Life Sciences
- Cornell Johnson School Consulting (BRC), Legal Counsel (BRL), and Capital (BRV)
- Binghamton Small Scale Systems Integration and Packaging
- Binghamton Strategic Partnership for Industrial Resurgence and Industrial Outreach
- Rensselaer Polytechnic Institute Center for Automation Technologies and Systems
- Syracuse Center Of Excellence in Environmental and Energy Systems

- Syracuse Clean Tech Center
- Alliance for Manufacturing & Technology
- Center for Economic Growth
- Hudson Valley Technology Development Center
- High Tech Rochester

## **Available Solutions** in Ithaca will include:

- Analytical Services
- Product and Process Improvements
- Complex Modeling Capabilities
- Technical Expertise
- Innovation Engineering
- Strategic Planning
- Business Analysis
- Workforce Training
- Funding and Grants
- Access to Student Interns

<b>Solutions Fair - Southern Tier</b>	
<b>Date:</b>	October 18th, 2012
<b>Time:</b>	8:00 am to 12:30 pm
<b>Location:</b>	Cornell University - G10 Biotech Building
<b>Cost:</b>	No cost to attend
<b>Registration Deadline:</b>	October 5, 2012
<b>More Info &amp; Registration:</b>	<a href="http://www.amt-mep.org/index.php?cid=130">www.amt-mep.org/index.php?cid=130</a>
<b>Questions:</b>	Call Michael Meador (607) 342-3208

## Innovating for Growth

Mention the word "innovation" and most people will think of extraordinary inventions created by solitary geniuses.

However, the majority of business innovations today are quite the opposite. The companies that generate them thrive on collaboration, a free exchange of ideas and regular interactions with customers and other stakeholders.

They innovate not necessarily to revolutionize their industry but to meet specific objectives and carve out a competitive edge.

Perhaps most important is that innovative companies do not outsource this function to a department or committee. Nor do they hastily come up with an innovation plan when the corporate strategy calls for it. For them innovation is a way of life. It is what they do.

To do it well, companies change whatever needs to be changed including:

- Organizational structure
- Business processes
- Core products or services

This doesn't happen randomly: leading companies do follow a process to innovate. Our research has found that this tends to be a spiraling, iterative approach. This approach embeds innovation in every aspect of the organization.

It is not enough just to be innovative. It is essential to be innovative all the time.

by: Maria Pinelli

## Manufacturing Day - October 5th

**"IT'S TIME TO LET ALL THE PEOPLE THAT YOU KNOW,** including the people in your business, that manufacturing is cool. What we do is really cool. We don't think about it because we live and breathe it every day. But start getting your neighbors, your teachers, your political leaders, your government officials, your county officials into your facilities and show them how much you contribute to the economy. Show them how important manufacturing is not only to your community but to the county, the state and the federal government. It's time to re-educate the people that what we do matters, in a big way."

~ Grady Cope, chairman of the National Tooling and Machining Association, Feb 14th at the North American Manufacturing and Invention Expo in Cleveland

### Promote Your Company With An Open House

To help boost awareness of the importance of their businesses, manufacturers are encouraged to host tours and open houses on October 5. Please consider participating in this opportunity to showcase your manufacturing plant. Manufacturers can sign up at [www.mfgday.com](http://www.mfgday.com).

The goal is to have as many open houses as possible around the country on October 5 to raise awareness about what modern day manufacturing looks like and to spark interest in manufacturing careers.

The initiative is being produced by the Fabricators and Manufacturers Association, NIST MEP, and the National Association of Manufacturers.

It is sponsored by several MEP Centers, SME Foundation, and The Reshoring Initiative.

For more information, visit [www.mfgday.com](http://www.mfgday.com) or contact Zara Brunner at 301-975-2001.

**"CONTRARY TO PUBLIC PERCEPTION,** the manufacturing industry is leading the economic recovery," says Carlos Cardoso, CEO and chairman of Latrobe, PA - based Kennametal.

"It is time for our industry to reintroduce itself to the American people in a manner that encourages them to understand the vitality and importance of U.S. manufacturing to the global economy."

At the National Press Club in Washington, D.C., Cardoso implored executives to speak up about the good things happening in U.S. manufacturing.

# The Benefits of Obtaining ISO 9001 Certification

What can you expect in return for your investment in an ISO 9001:2008 Quality Management System (QMS)?

Feedback from ISO 9001:2008 Registered companies shows what you can expect as the payoff from all of your hard work.

Because of the responsibilities called out in the ISO 9001:2008 Standard, organizations often see an increased involvement of top management with regards to the Quality Management System.

This starts with the setting of the Quality Policy and Quality Goals and Objectives. It continues with Management Review looking at data from the QMS, and taking actions to make sure that Quality Goals are met, new Goals are set, and continual improvement is achieved.

In a study conducted by researchers from UCLA results showed that "U.S. publicly held companies traded on the New York Stock Exchange that receive certification under the ISO 9000 Quality Standard show significant improvement in financial performance compared to those companies that have not pursued the standard."

## When ISO 9001:2008 is implemented in an organization:

- Well defined and documented procedures improve the consistency of output
- Quality is constantly measured
- Procedures ensure corrective action is taken whenever defects occur
- Defect rates decrease
- Defects are caught earlier and are corrected at a lower cost
- Defining procedures identifies current practices that are obsolete or inefficient
- Documented procedures are easier for new employees to follow
- Organizations retain or increase market share, increasing sales or revenues

## Top reasons given for registration:

- Internal operational efficiency
- Lower production costs because of fewer nonconforming products, less rework, lowered

rejection rates, streamlined processes and fewer mistakes

- Access to new markets
- Some markets require ISO 9001 Registration, some markets favor companies with ISO 9001 Registration
- Customer request
- Many organizations are asked by a customer to obtain registration as a requirement to continue or to start doing business with them.
- Reducing costs
- Organizations are recognizing that an effective Quality Management System leads to reduced costs and greater operating margins

## What will ISO 9001:2008 do for my organization?

A well designed and implemented Quality Management System, based on ISO 9001 has been shown to provide organizations with the following benefits:

- Reduced costs
- Improved product reliability
- Better process control and flow
- Better documentation of processes,
- Greater employee quality awareness
- Reductions in product scrap, reworks and rejections

## Why do companies want ISO 9001:2008

- Market Pressure
  - Many organizations decide to Implement ISO 9001 and obtain registration because it assures customers that the company has a good Quality Management System (QMS) in place. An organization with an effective QMS will typically meet customer expectations better than an organization that does not have an effective QMS. Many organizations require their suppliers to have ISO 9001 Registration.
- Internal effectiveness and productivity benefits
  - Other organizations implement an ISO 9001 QMS because it has proven over the years that it leads companies to better operations, improved performance, and improved profitability

**If you're considering certification to the ISO Standard  
Call Jim Cunningham at 607-725-1225**



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## Benefits of Becoming an AM&T Associate

- Four free hours of consulting services
- Your company's profile will be featured in the "Associates' Corner" of our monthly newsletter, which is distributed throughout eight counties: Broome, Chemung, Chenango, Delaware, Schuyler, Steuben, Tompkins, and Tioga. Also, the newsletter is featured on our website giving your company worldwide exposure
- Discounted fees at AM&T sponsored seminars & workshops
- A free Performance Benchmark and Transformation Planner (\$2,500 value)
- A link to your company's website from ours
- Assistance with Technology Transfer, Funding Sources, Venture Capital Investment, Networking, Research & Development Programs, etc

Call Jim Cunningham at 607-725-1225 to ask about becoming an associate.

More information at [www.amt-mep.org](http://www.amt-mep.org)

## Associates' Corner



C&D Assembly is an electronics manufacturing services company located in Groton, NY. Founded in 1992, C&D specializes in low to mid-volume, high-mix production requirements that rely on the company's core manufacturing services:

- Turn-key Surface Mount Technology (SMT) assembly
- Thru-hole assembly
- Mixed Technology assembly
- Box Build, and
- Functional Testing

Services such as product programming, burn-in, and adjustment/calibration are also available. A complimentary prototyping service includes a Design For Manufacturing review that enables customers to facilitate product realization from concept through production while optimizing manufacturability.

C&D serves a range of markets including Industrial Controls, Fiber-optic Telecommunications, POS Printers, Peripheral Devices, Refrigeration/HVAC Controls, Lighting Controls, Bio-Science, and Coin-Bill-Card

Control Systems.

According to company president Jeffrey Cronk, "The key to C&D's 20 years of success is their dedicated workforce that embraces a do-whatever-it-takes attitude while maintaining focus on product quality and customer satisfaction. C&D's customer service philosophy is to treat the customer as they would expect to be treated." Each C&D customer has a dedicated contact who follows through on quotations, new order confirmation, and current order status.

Cronk explained that continual re-investment in manufacturing technology and company infrastructure has enabled C&D to meet the changing demands of the industry. The company is currently in the process of implementing a new ERP software system, and recently had all manufacturing personnel trained as Certified IPC Specialists.

AM&T was instrumental in C&D's 7,800 sq ft facility expansion in 2005, providing project planning assistance and integration of Lean manufacturing principles. C&D is currently working with AM&T on Quality Management System review and improvement with plans for ISO 9001:2008 certification by the first quarter of 2013.

See the company's capabilities and facility at:

**C&D's 20th Anniversary Open House**

9:00am – 4:00pm, Thursday, October 18th, 2012

107 Corona Avenue, Groton NY

Phone: (607) 898-4275 [www.cdassembly.com](http://www.cdassembly.com)

## Associates' Corner



Audiosears is the premier manufacturer and supplier of handsets, headsets, and components for the telecommunications industry, including handsets, cradles, handheld microphones, acoustic elements and a variety of components including cordsets, switches and custom circuitry.

Their extensive knowledge and experience in the industry allow them to provide innovative solutions that meet the changing needs of their

supported by outstanding customer service, they have earned the respect and loyalty of their customers.

In-house capabilities at Audiosears include engineering, machining, custom fabrication, and electronic/mechanical assembly. Strong relationships with industry partners enable them to offer turn-key solutions for their customers.

For over fifty years Audiosears has gained increasing

customers. By consistently delivering high quality products

recognition and acceptance as a leading domestic manufacturer of high quality telecommunications.

Located in the small village of Stamford, NY in the northern foothills of the Catskill Mountains, Audiosears currently employs a staff of 72. The plant is certified to the ISO 2001:2008 Standards and is in the process of implementing lean manufacturing processes throughout the facility.

For more information, visit: [www.audiosears.com](http://www.audiosears.com) or contact Shawn Hartwell at 607-652-7305 or 1-800-533-7863

## Around the Southern Tier

Oct 04	Tioga Business Show 2012 at Owego Treadway Inn - Tioga County Chamber 607-687-2020
Oct 09-10	2012 Electronics Packaging Symposium - Binghamton University <a href="http://www2.binghamton.edu/ieec/symposium2012/index.html">http://www2.binghamton.edu/ieec/symposium2012/index.html</a>
Oct 10	Business After Hours - Tompkins County Chamber - 607-273-7080
Oct 11	SBC Network Luncheon - Greater Binghamton Chamber - 607-772-8860
Oct 11-12	Pursuit of Operational Excellence (OpEx) Conference - Binghamton University <a href="http://www2.binghamton.edu/ssie/about/opex/index.html">http://www2.binghamton.edu/ssie/about/opex/index.html</a>
Oct 18	Solutions Fair - Southern Tier - AM&T - See Page 3
Oct 24	Annual Labor & Employment Law Update 2012 - Greater Binghamton Chamber 607-772-8860
Oct 24	WBO Roundtable - Small Business Development Center at Binghamton University 607-777-4024
Oct 25	Business After Business - Chemung County Chamber - 607-734-5137
Oct 25	8-Step Problem Solving Workshop - AM&T - See Page 1

Please add [mailbot@amt-mep.org](mailto:mailbot@amt-mep.org) to your address book or safe list to receive AM&T e-News. To subscribe to electronic or paper versions of our newsletter or to update your mailing address visit: [www.amt-mep.org](http://www.amt-mep.org) then select News and Events from the menu.

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## HELPING MANUFACTURERS PLAN, PERFORM, PROFIT & GROW

We are a team of experienced, skilled consultants and trainers dedicated to helping manufacturers in the Southern Tier of NY plan, perform, profit & grow. Our goal is to have manufacturers remain, grow and prosper in the Southern Tier.

AM&T uses a comprehensive, overall business approach to create significant and long-lasting business improvements. Our experience is that individual improvement methodologies will provide some measurable benefits on their own, but it is the combination of them across the whole value chain that will lead to dramatic gains.

### WE CAN HELP YOU:

- Assess your current state
- Articulate and define the desired future state
- Train your workforce in improvement methodologies
- Implement process improvements across the whole value chain
- Identify new opportunities
- Achieve and sustain growth and breakaway results

### AM&T DELIVERS:

A third-party survey for 2005-2012 found:

- 3,005 jobs created or retained
- \$634 million in increased or retained sales
- \$15.5 million in cost savings
- \$41 million in investments
- \$818 million total impact
- 4.7 out of 5.0 Customer Satisfaction

### OUR SKILLS:

- Business Assessments
- Strategic Planning
- Lean Enterprise
- Supervisory Training (TWI)
- Project Management
- ISO/AS Quality Systems
- Sales and Marketing
- New Opportunity Identification and Growth — Markets, Products, Services, Customers

Our integrated, comprehensive approach, applied to the whole value chain, can make a difference. We are "hands-on", roll-up-your-sleeves people and we're passionate about manufacturing.

**Call Jim Cunningham at 607-725-1225 to ask how we can help.**