

AM&T

Alliance for Manufacturing & Technology

HELPING MANUFACTURERS PLAN, PERFORM, PROFIT & GROW

www.amt-mep.org

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*Holiday Greetings
from your friends at AM&T
Many Wishes for a Successful
and Rewarding 2013*

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Kathy Peacock



Alliance for Manufacturing & Technology

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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MEP • MANUFACTURING EXTENSION PARTNERSHIP



Empire State Development
Division of Science, Technology & Innovation

Loans Available for Real Estate, Machinery, and Equipment

The New York Job Development Authority recently announced a program that provides direct loans for the growth of manufacturing and other eligible New York businesses. This funding is to assist in financing a portion of the cost of acquiring and renovating existing buildings or constructing new buildings or for purchasing machinery and equipment (“M&E” projects). Funds to make loans are derived from the sale of state-guaranteed bonds.

Program Highlights

In most cases, JDA Loans can be for up to 40% of the total project cost of new buildings (“Real Estate” projects) or for M&E projects, or up to 60% for projects located in Empire Zones or economically distressed areas. The combination of a bank loan and a JDA Loan allows up to 90% financing of a project with a typical financing structure that might consist of:

- 50% Bank Loan
- 40% JDA Loan
- 10% Borrower Equity

A JDA Real Estate Loan is normally a second mortgage loan, subordinate to a first-mortgage loan provided by a bank; M&E Loans are secured by a first lien, co-equal with the bank’s lien, on the M&E being financed.

Real Estate project costs include the cost of an existing building and renovations, purchase of land and construction of a new building and soft costs normally associated with a real estate transaction. M&E project costs include the cost of the machinery and its delivery, installation costs solely attributable to the machinery being purchased and soft costs related to the M&E acquisition.

Eligibility

Facilities to be used for manufacturing, distribution, warehousing and certain service businesses are eligible for JDA Loans.

Loans for retail facilities, which customers must personally visit in order to obtain the goods or services being sold, are not eligible for JDA Loans, nor are loans for hotel or residential facilities.

JDA does not make loans for motor vehicles, nor does JDA make Working Capital Loans.

Requirements

The Borrower must secure a letter of commitment from the bank providing the 50% financing portion of the project cost.

The Borrower must provide at least 10% of the project cost as an equity contribution to the project.

Personal guarantees are required from any person owning 20% or more of the Operating Company for whose benefit the JDA Loan is being made.

To explore how this loan program might help your company grow, and to learn how to apply, contact Jim Cunningham, 607-725-1225.

The Importance of Goals & Direction for Growth & Profitability



"Would you tell me please,
which way I ought to go from
here?"

"That depends a good deal
on where you want to get to"
said the cat.

"I don't much care where"
said Alice.

"Then it doesn't matter which
way you go" said the cat.

Lewis Carroll

Are you like Alice or do you care about the future and the direction you want to take?

2012 is winding down already and it's time to prepare for 2013.

If you don't take the time to define your future,
someone else will.

AM&T has helped hundreds of Southern Tier manufacturers
develop and implement meaningful Strategic Plans.

Give us a call and let's discuss how we can help you:

- Examine your current state
- Define your desired future
- Develop a roadmap and actions for growth & profitability
- Develop the right metrics to monitor progress

Contact Jim Cunningham at
607-725-1225 or jcunningham@amt-mep.org

Excellent Quotes on Collaboration

"The strength of the team is each individual member. The strength of each member is the team." - Phil Jackson

"Alone we can do so little; together we can do so much." - Helen Keller

"If two men on the same job agree all the time, then one is useless. If they disagree all the time, both are useless." - Darryl F. Zanuck

"If everyone is moving forward together, then success takes care of itself." - Henry Ford

"Many ideas grow better when transplanted into another mind than the one where they sprang up." - Oliver Wendell Holmes

"If I have seen further it is by standing on the shoulders of giants." - Isaac Newton

"It takes two to speak the truth — one to speak, and another to hear." - Henry David Thoreau

"If you have an apple and I have an apple and we exchange these apples then you and I will still each have one apple. But if you have an idea and I have an idea and we exchange these ideas, then each of us will have two ideas." - George Bernard Shaw

"Politeness is the poison of collaboration." - Edwin Land

"I never did anything alone. Whatever was accomplished in this country was accomplished collectively." - Golda Meir

Four Reasons Why Questions are a Leader's Best Friend

By Art Petty

The best leaders I know wield questions like a surgeon wields a scalpel...carefully, precisely, respectfully and always with an objective in mind.

Four Reasons Why Questions are a Leader's Best Friend:

1. Questions teach. They encourage those around us to think through and around issues. Helping people see things beyond their role or their function...and encouraging them to look at the bigger picture is best accomplished through deft questioning, not lecturing.

2. Questions promote innovation. I was on the receiving end of this one after spending a considerable amount with my team working through a problem to arrive at a solution: If it turns out that this approach is not acceptable, how else might you solve this problem? The new solution...a very different one turned out to be a much better approach.

3. Questions promote performance. Just the knowledge that the boss asks tough, non-judgmental questions motivates people to think harder and deeper about their ideas and approaches. A good boss wants as much gray matter of his/her team as possible!

4. Questions promote improved decision-making. Similar to the question for innovation above, effective leaders ask questions that encourage their team members to reframe situations when evaluating a decision. Something perceived as a problem might well be approached in a different manner when framed as neutral or even as an opportunity.

The Bottom-Line:

Learn the art of asking questions, but remember to wield them like a surgeon: carefully, precisely and respectfully. Emphasis on the "respectfully" portion, or, you risk crossing the line from positive to intimidating.

"Twenty years from now you will be more disappointed by the things you didn't do than by the ones you did. So throw off the bowlines, sail away from the safe harbor, catch the trade winds in your sails.

Explore. Dream. Discover."

Mark Twain

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



To have this class delivered at your facility, call Jim Cunningham at 607-725-1225

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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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

Associates' Corner



Incodema is a prototype and short run sheet metal stamping provider that produces prototype sheet metal stampings, intricate metal forming, short run production stamping, laser cutting, photo chemical machining (PCM), CNC machining, and wire EDM (electrical discharge machining).

According to Sean Whittaker, CEO, the Ithaca company uses complex 3D designs from client-supplied CAD files to transform those ideas and designs into reality. "Our reputation hinges on our team's ability to produce high-quality, sheet metal prototypes with very rapid turnaround times. We have redefined "rapid" by offering same business day delivery of prototype metal stampings. Customers can routinely request and receive an E-Quote in minutes and receive the parts in five business days or less."

Whittaker said the company's success and growth is the result of optimizing ordering and production processes, focusing on quality, being innovative, and expanding capabilities.

Incodema redesigned and renovated its 30,000 sq. ft. facility to better accommodate lean manufacturing principles and 5S procedures, and

to accommodate expansion with a capital equipment acquisition program. Whittaker explained that Incodema has selected tools and methodologies that assist in identifying and eliminating waste. This, in turn, improves quality reduces production time and costs.

5S (Sort, Set-in-order, Shine, Standardize, Sustain) is a method for organizing a workplace and keeping it organized. Whittaker said that Incodema's entire workforce has become committed to the principles of Lean and 5S, with the result that work centers are running more efficiently, tools are always available when needed, and pride in the workplace and products is self evident.

One example of innovation at the company is the first U.S. commercial installation of a new European-developed precision water jet cutting technology. The MICRO CUT process was specifically designed to machine two-dimensional, high precision and micro parts with a substantially smaller kerf width (0.012 in.) compared to traditional cutting processes (0.045 in.). This cutting process quickly and accurately removes material to produce a finished piece with little to

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Associates' Corner

INCODEMA

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no burr and no heat deformation. This makes it an ideal solution for soft materials such as rubber, plastics, or silicone, and it works equally well with hard alloys.

Incodema's capabilities have also increased with the acquisition of a 22-employee company in Newark, NY that specializes in photo chemical machining (PCM). PCM is the process of fabricating sheet metal components using a photoresist and etchants to corrosively machine away selected areas, and can produce highly complex parts with very fine detail accurately and economically. Whittaker explained that the PCM process can offer economical alternatives to other machining processes for thin gauge

precision parts. The tooling is inexpensive and quickly produced, thus the process is useful for prototyping and allows for easy changes in mass production.

PCM can be used on virtually any commercially available metal or alloy, of any hardness. It is limited to materials with a thickness of 0.0005 to 0.080 in (0.013 to 2.0 mm). Metals include aluminium, brass, copper, inconel, manganese, nickel, silver, steel, stainless steel, zinc and titanium.

Leveraging expertise that remained from a company that left Syracuse, Whittaker recently created a subsidiary called IwinRP that specializes in Stereolithography (SLA), an additive manufacturing process which employs a vat of liquid ultraviolet curable photopolymer "resin" and an ul-

traviolet laser to build a part's layers one at a time. For each layer, the laser beam traces a cross-section of the part pattern on the surface of the liquid resin. Exposure to the ultraviolet laser light cures and solidifies the pattern traced on the resin and joins it to the layer below.

Incodema and its new sister companies are registered under the U.S. Department of State's International Traffic in Arms Regulations (ITAR), which allows all three locations to fully support all military and homeland security projects in the U.S.

The company now employs 52 people in Ithaca, 22 in Newark, and 5 at the new start-up group in East Syracuse. For more information visit www.incodema.com

Around the Southern Tier

Dec 07	Federal Health Reform for Small Business - Tompkins County Chamber - 607-273-7080
Dec 11	Eggs & Eight - Social Media - Watkins Glen Area Chamber - 607-535-4300
Dec 19	Business After Hours - Watkins Glen Area Chamber - 607-535-4300
Dec 13	SBC Network Luncheon - Greater Binghamton Chamber - 607-772-8860
Dec 13	Networking at Noon - Tompkins County Chamber - 607-273-7080
Jan 09	Small Business Training Part 1 - Small Business Development Center at Binghamton University 607-777-4024
Jan 16	Small Business Training Part 2 - Small Business Development Center at Binghamton University 607-777-4024

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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 reported impacts of:

- 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.