

# Affiliates News

July / August 2008



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## Insyte Honors WNY Businesses

Insyte Consulting recognized Accellent Inc., ATTO Technology, Inc. and Empire State Development Corporation - Western Region as part of a celebration of 25 years of supporting technology development and manufacturing excellence in Western New York. The event took place June 19th at the Buffalo and Erie County Historical Society.

"We are pleased to honor these companies. In doing so, we recognize their commitment to improve their global competitiveness and position themselves as the "next generation" manufacturing and technology companies in our community," according to Insyte president Benjamin Rand.

### Accellent Inc.

Accellent is an OEM contract manufacturer of precision parts, particularly titanium and other light metals, for the medical and critical-care industries. Major operations include both machining and metal injection molding. The company's products are sold nationally and internationally to such high-profile customers as Johnson & Johnson, Arthex and Bausch & Lomb. The current employment level is nearly 300 people at the two local manufacturing operations. Accellent has put considerable emphasis on the implementation of modern manufacturing practices with particular emphasis on product quality. The company was one of the first in the WNY area to become ISO-9001, ISO 13485 (medical products) and cGMP-certified.

### ATTO Technology, Inc.

ATTO Technology is a storage connectivity and infrastructure solutions provider for data intensive computing environments. ATTO designs and manufactures high-performance products including host and RAID adapters, interface bridges, RAID storage controllers,



Ben Rand, Insyte Consulting (2nd from left) presents awards. Accepting for ATTO Technology - Jim Masiello (far left), Empire State Development Corp. - Brian Sampson (2nd from right) and Accellent Inc. - Chad Werts (far right).

virtual tape appliances, and management software with storage interface connectivity to SCSI, SATA, iSCSI, SAS and Fibre Channel. ATTO Technology was founded in 1988 as a two-person, start-up technology company at the UB Foundation Incubator, managed by Insyte Consulting (formerly the Western New York Technology Development Center). The company is located in Amherst, NY and currently employs more than 135 people.

### Empire State Development Corporation - Western Region (ESD)

ESD has been a partner and sponsor of Insyte Consulting for twenty-five years. The staff of ESD has worked collaboratively with Insyte personnel with many manufacturing and technology start-ups throughout WNY. In addition, this organization has helped fund numerous business expansion and retention projects through its various lending and grant programs. In recent years ESD has also contributed significantly to work force development through its training grant programs, the Industrial Effectiveness Program (IEP) and the Environmental Investment Program (EIP). ❖

Our experience improves your business



## Going Green by Benjamin Rand

What is the business case for going green? Most business owners and managers equate green with more recycling, more restrictions and more paperwork for our people and all the time, expense and even liability that entails. When I was running manufacturing businesses, I looked at it that way

myself, even though I recognized, like most manufacturers, that waste means lost profits. Still I never took the time to figure out what going green, beyond simple compliance, could mean to the bottom line. It was easier to keep doing what I had been doing. Then I heard Ray Anderson, Chairman of the Board of Interface Inc. speak at a recent conference and I learned that there is in fact a practical, profitable and compelling business case for going green.

### Interface Inc. — a compelling example

Interface is a textile company that manufactures carpet tiles and other petroleum intensive products. In 1994, in response to customer inquiries, Interface convened an internal environmental task force to respond. That group asked Anderson to kick-off their efforts by laying out an environmental vision for Interface. The only problem — he had no such vision. "I did not want to give that speech," says Anderson, now "my only vision was to comply, comply, comply" with environmental regulations. In searching for inspiration he read *The Ecology of Commerce* by Paul Hawken and had an epiphany. Anderson committed Interface to becoming "the first fully sustainable industrial enterprise anywhere." The plan that emerged to make this petrochemical-based business 100% environmentally neutral by 2020 is known as Mission Zero.

What happened next was a rational, practical, incremental but enterprise-wide effort to build environmental considerations into every aspect of the business. In an interview with *INC. Magazine*, Paul Hawken cites Anderson's practicality as the key. "He took it step by step. Interface is in the details, at least a thousand small substantive initiatives that accumulate into a system." For example, Interface has installed more efficient furnaces to reduce emissions (and utility costs), widened and straightened piping in order to downsize pumps, used landfill methane to run some facilities, designed "random" style carpet

to reduce wastage, and replaced traditional wet-dye processes with spray technology to drastically reduce water usage and dye effluent. Interface is now looking to pioneer a carpet leasing program aimed at reclaiming and recycling its own carpet.

### The Results

Since introducing Mission Zero, Interface reduced their total waste to landfills by 66%, energy use per unit of output is down 45%, renewable energy is now up to 27% of consumption from 0% in 1997, recycled and bio-based materials now comprise 25% of raw material from 0.5% in 1996, greenhouse gas emissions are down 33% and water consumption per production unit is down between 45% and 75%. Anderson has created a sense of mission at Interface. "We feel like we're saving the earth...it's a great thing. We don't just make carpet. We have a vision. I love it." What are those sentiments worth for companies fighting to find and retain talent?

Naturally, Interface and Anderson seem to have won every environmental award in existence. Interface was ranked Number 1 in Corporate Social Responsibility by GlobalScan's 2006 Survey of Sustainability Experts, ahead of companies like Toyota, BP, DuPont and General Electric.

Those figures are great for the environment. They have also been great for Interface's bottom line. During that same period, Interface realized over \$370M in cost savings from waste elimination alone. Sales have grown over 49% to over \$1 billion while operating income is up 155% and share price is up 128%. Companies like Wal-Mart and Boeing have sought out Interface for everything from advice to joint ventures on sustainable carpeting for airplanes.

Anderson's approach is compelling because it demonstrates a strong business case for going green — dollars and cents out of environmental sense. The profitability of Interface's program does not make going green hypocritical, it makes it essential. Interface's practical and incremental approach seems to me to be a model for reconciling a company's social responsibilities with the profit imperative. Can the environmental assessment that we describe in this newsletter turn your company into Interface? No, only you and your people can do that. But it would be a good first step.



## Smith McDonald Completes Facility Relocation in Expedited Time Frame

**M**oving is never a pleasant thought... Relocating an entire manufacturing operation is an even scarier thought... Planning to move an entire manufacturing operation in a short period of time without interrupting ongoing operations is enough to test the best of us. Learn how one WNY manufacturer successfully met this challenge.

Smith McDonald Corporation (Smith McDonald) is a manufacturer and distrib-

utor of the world's broadest offering of metal and leather office accessories, including desk pads, waste receptacles, planters and many other products for executive office suites. The 20 person company, comprised of the former Smith Metal Arts and McDonald Products companies, has been a pioneer in the design and production of desk and office accessories for the con-

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Mike Foegan completes the polishing on one of Smith McDonald's quality products.



## Green, if it isn't your favorite color... maybe you should reconsider

by Steve Diloia

It seems like you can't escape the word "green" anymore. Unless you have been living secluded away from all humanity and are not aware of the reference, green means "green environment." It's everywhere! Articles seem to be written in newspapers, magazines, the internet, and even newsletters on a daily basis. The news media consistently reports on it. Even Hollywood has pushed green, with celebrities paving the way, showing it is "hip" to be green.

It doesn't matter if you deny the theories of global warming. You can even deny the fact that we need to take responsibility for the way we damage the environment. There is one thing you cannot deny; becoming green is real. It is on the mind of people and that group is growing. It is growing so much that it is influencing business through consumer choices. Companies know this and are racing to the market showing that they are environmentally friendly and green. You may have seen the commercial from SC Johnson talking about

how they are reducing the impact their household chemical products have on the environment. Wal-Mart, once harshly criticized by environmentalists, is winning praise for its efforts to reduce waste and its carbon foot print (amount of harmful green house gas emissions), and increasing its usage of renewable energy sources. The list goes on — corporate giants like Hewlett-Packard, Dell, Toyota, Harley-Davidson, Home Depot, and Procter & Gamble, just to name a few, have jumped on board. In a global economy where competition for the market is fierce, having another edge on the competition by proclaiming your company is green helps you gain market share.

If you are still not convinced that "going green" is the right thing for your organization, perhaps this is something to consider. Studies show that approximately 20% of Fortune 500 companies are requiring their suppliers to be environmentally sustainable. This is the larger picture for green. This picture includes

energy use reduction, renewable energy, waste reduction, and decreasing green house gas emissions. It is estimated that in 5 years the percentage of all companies requiring their suppliers to be sustainable will grow to 80%. This, combined with further talk that environmental regulations will increase in order to reduce green house gas emissions and conserve energy, might start you thinking about going green.

The belief that "going green" is expensive or adds cost is dying away. At the time of this article a gallon of gas just went over the \$4.00 mark. Reducing energy usage and employing renewable energy sources are ways organizations are finding big savings. Heading into the summer, utility companies, worried about supplying the energy to meet demand, are offering incentives towards efforts to reduce energy consumption.

At this point you may be feeling over-

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## SBIR/STTR ~ Federal Funding for Innovative R&D

**M**ost companies have come to the realization that sales growth from new products or new applications of existing products is a necessary condition for long-term success. Cost-cutting may have short-term benefits, but cost reduction alone is not a viable long-term survival strategy.

Cost and risk are two key factors that prevent companies from investing time and money in the development of innovative, technology-based products that can spur sales growth. The federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer Research (STTR) programs provide funding to reduce the cost of high-risk, innovative R&D that might otherwise not be performed by U.S. small businesses.

### What does SBIR/STTR fund?

SBIR/STTR funds innovative R&D with strong commercialization potential. Eleven federal agencies issue solicitations that specify the topics for which they will accept proposals.

### How much money is available?

SBIR/STTR provides funding in two phases. Phase I awards fund six-month feasibility projects and typically range from \$70,000 - \$100,000. Phase II awards are used to develop a new product or service up to the commercialization stage. Phase II projects typically run for

two years and receive funding up to \$750,000.

### Do I need to repay the awards?

No, SBIR/STTR awards are grants or contracts that do not need to be repaid.

### Who is eligible for SBIR/STTR?

Awardees must be for-profit small businesses (less than 500 employees), located in the U.S. and at least 51% owned by U.S. individuals.

### Do I need to be a "high-tech" company?

No, but winning proposals must provide innovative solutions to a need or problem specified by the agency. This could involve development of a new technology or the application of an existing technology in an innovative way. SBIR/STTR gives high priority to manufacturing-related research and development in areas of manufacturing processes, equipment, systems and workforce.

### What if I need additional technology capabilities or resources?

Collaboration with universities, research institutions or other companies to add required technical capabilities or resources is strongly encouraged. Up to 33% of a Phase I SBIR and up to 60% of a Phase I STTR award may be subcontracted.

### How do I apply?

Proposals must be submitted in response to solicitations issued by the eleven participating federal agencies. Proposals must follow the required format and are typically limited to twenty-five pages in length. Each agency has its own specific rules and deadlines.

### What are my chances of winning an award?

The program is highly competitive and proposals undergo a rigorous technical review. Proposals are evaluated based on their fit with the solicitation, degree of innovation, technical merit and capabilities, and commercialization potential. Award rates vary by agency and topic area, but generally one award is granted for every 7-10 proposals submitted.

### What help is available to increase my chance of success?

Well-planned and well-written proposals have a significantly higher success rate. Insyte Consulting is the NYSTAR-designated SBIR/STTR specialist for the Western New York and Finger Lakes regions. Insyte provides information and assistance to local companies including help identifying appropriate solicitations, proposal development coaching, proposal reviews and commercialization assistance. **Because of NYSTAR's financial support there is no charge for this assistance.**

### Have local companies been successful winning SBIR/STTR funds?

Small businesses in the Western New York region were awarded more than \$4.6 million dollars in 2007 through

## SBIR/STTR Websites

The following websites provide information about the SBIR/STTR programs including links to the participating agencies, scheduled solicitation dates, and search engines to identify solicitation topics.

[www.zyn.com/sbir](http://www.zyn.com/sbir)  
[www.sbirworld.com](http://www.sbirworld.com)

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## Buffalo-Area SBIR/STTR 2007 Award Winners

Company	Topic	Awarding Agency
Eensors Inc.	Multi-channel smart strain sensor system	Dept. of Defense
First Wave Technologies, Inc.	Metabolic engineering of isoflavonoid biosynthesis in eschericia coli	National Science Foundation
Immco Diagnostics	CTL2 ELISA: A diagnostic test for autoimmune hearing loss	Health & Human Services
Innovative Biotechnologies International	Improved Rapid Detection of Viable Waterborne Pathogens	Environmental Protection Agency
Integument Technologies, Inc.	Automated delivery of pigmentation for camouflaging patterns for composite	Dept. of Defense
Janya, Inc.	Customizable text extraction for warfighters	Dept. of Defense
	Advanced time-stamping of events from unstructured text for battlespace	Dept. of Defense
	Adapting information extraction technology to computer-mediated dynamic text data	Dept. of Defense
Lam Design Management, LLC	A 3-D robot design to overcome arm dysfunction in stroke	Health & Human Services
Radiant Aviation Services, Inc.	Nonfluid transportable aircraft deicing system	Dept. of Defense
Tactus Technologies Inc.	The virtual cadaver lab: an innovative platform to supplement medical education	Health & Human Services
	The Tactus immersive learning environment	Dept. of Education
Therex, LLC	5-Naphthoylsalicylanilides as improved anti-acne agents	Health & Human Services
United Environment & Energy, LLC	Intensified process for biodiesel production	Dept. of Energy
	High Efficiency low cost nitrogen fertilizer production from fly ash	National Science Foundation
	Heterogeneous catalytic system for biodiesel production from Alaska fish oil	National Science Foundation

SBIR/STTR continued from page 4

SBIR/STTR. Over the past three years, local companies have received more than \$9 million in grants and contracts through these programs.

As detailed in the table above, eleven Buffalo-area companies received sixteen

SBIR/STTR awards in 2007. Award amounts ranged from \$99,948 to \$750,000 and covered a wide range of technologies. The data in the table was compiled by Insyte Consulting from the websites of the eleven government agencies that participate in SBIR/STTR.

If your company's strategy includes development of innovative products, processes or services, SBIR/STTR may be a very valuable tool. Contact us at 716.636.3626 for more information or to be added to our SBIR e-mail distribution list. ❖

## Don't be a tree hugger...

Be a tree squeezer and squeeze the waste out of your company!



Is your company throwing money into landfills through excessive scrap and defects?

Is the cost of your waste hurting your bottom line?

Are you feeling pressure to start leaning up your waste stream due to potential environmental impact?

Let us help you through our Environmental Investment Program.

Over the past 2 years Insyte Consulting has helped 12 local companies save \$1 million and reduce their annual waste by over 600 tons.

Insyte Consulting is again partnering with the Empire State Development Corporation to offer the Environmental Investment Program (EIP) to local manufacturers. We are aiming for even greater savings over the next 2 years!

If you are interested in participating in this program and exploring how we can impact savings in your company, contact us at 716.636.3626. ❖

## New Tax Incentives for Small Manufacturers

Act Now to Get Higher Depreciation, Expense Write-offs

The Economic Stimulus Act of 2008, passed with bipartisan Congressional support and signed into law by President Bush on February 13, contains two provisions that can be of immediate benefit to small manufacturing companies.

The stimulus package includes a provision to double the section 179 small business tax deduction. Current law allows business owners to write off up to \$125,000 in expenses immediately rather than depreciating these expenses. The stimulus act allows a \$250,000 deduction for 2008 only.

A second provision of the stimulus package provides 50 percent "bonus" first-year depreciation for capital equipment purchased and placed in service during 2008.

John Murray, Insyte Consulting, said that the impact of these provisions "will be significant for the companies who can take advantage of them. It equates to putting up to \$250,000 on the net income line in one fiscal year instead of \$25,000 per year over 10 years, as an example. The intent is that a company will choose to buy a piece of equipment or other qualified asset now rather than later, and that the increased profits will be plowed back into the business." ❖

Green continued from page 3

whelmed with the challenge of going green. You may be convinced it's the right thing to do, but where do you start? Do you start with the whole organization or just a small area? Do you focus on waste, emissions, energy... which comes first? Do you have anyone on staff that can even evaluate your situation and tell you what improvements can be made or what programs might be available to assist your efforts?

Insyte Consulting can help you through this process. Through a partnership with the National Institute of Standards and Technology, the Green Supplier Network (<http://www.gsn.gov/gsn/home.gsn>), the Empire State Development Corporation, and New York State's Pollution Prevention Institute, we can assist local companies assess how sustainable they are and where they can make improve-

ments. Using lean manufacturing and pollution prevention assessment tools, Insyte Consulting will perform an assessment working with your organization. Upon completion of the assessment, Insyte Consulting can also help you implement solutions to solve the problems identified.

If you would like to learn more about how to move towards Green Sustainability, please contact Insyte Consulting at 716.636.3626.

*Steve Diloia, an Insyte consultant, has over 14 years experience in manufacturing, focusing in the areas of continuous process improvement, lean manufacturing, manufacturing/quality systems improvement and implementation. Steve is Insyte's Green Sustainability consultant. ❖*

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tract furniture market for over a century. To this day, Smith McDonald is considered to be the pre-eminent manufacturer of these products by leading architects and designers worldwide.

## Situation - "We Have to Move"

A transfer of the company's ownership led to the decision to relocate the manufacturing operations from leased space in Cheektowaga, NY into the new owner's facility in Buffalo. It was critical to complete this relocation within two months due to the expiration of the lease at the old facility. In addition, it was also important to complete the move without adversely affecting ongoing operations in manufacturing and shipping of customer orders. The situation was further exacerbated due to the unavailability of current engineering drawings at either facility. Because of limited internal resources and the tight time constraints, Smith McDonald hired Insyte Consulting to support this expeditious relocation of the business.

## Solution

The joint team of Insyte Consulting and Smith McDonald personnel focused on several key initiatives to accomplish the above objectives. The first step was to field check the measurements of all current equipment including production machinery, processing equipment, storage racking, material handling equipment and ancillary support materials. Similarly a field checking exercise was completed at the new facility; this included building measurements, column and utility locations, stairwells and all interior rooms. Subsequently AutoCAD templates were developed for all of the existing equipment as well as the drawings of the new facility.

Once these measurements were verified and entered into AutoCAD, an analysis of current

product families, routings and projected volumes was completed. This information provided the basis for developing alternative layouts that could be evaluated with Smith McDonald personnel to minimize the inherent wastes within the current manufacturing process and provide improved work flow within the eventual selected layout. The

**"Without the timely response of Insyte Consulting's experts, we could not have relocated the operations and set up a good material flow in the allotted time."**

**Bill Breeser, President**

improved work flow and manufacturing processes would be supported through the implementation of various lean manufacturing techniques including 5S/ workplace organization, pull/ Kanban, visual controls and cellular manufacturing.

Finally, the joint team selected and detailed the agreed-upon layout to support the relocation and installation process. This information was then provided to the appropriate construction, utility and rigging contractors.

## Results

Detailed layouts of the new facility were completed within two weeks. Smith McDonald successfully transitioned into their new facility within the time frame established by their existing lease, with minimal disruption to customer orders and manufacturing operations. This was a result of using a team-oriented process that led to greater communication, a smooth transition in re-starting operations and a sense of ownership by front line employees.

The timely move also saved the company \$175,000 in lease payments. Additionally, the movement of material throughout the facility was refined and there was a 15% decrease in typical material handling distance. Duplicate or dated equipment was eliminated and visual controls were established where appropriate. The company is now well-positioned to profitably expand its business base due to the operational improvements that were introduced. ❖

## Firm Benefits

- Detailed layouts of the new facility completed within two weeks.
- 15% decrease in typical material handling distance within the new facility
- \$175,000 savings in lease payments
- Team-oriented process led to greater communication, smooth transition in re-starting operations and sense of ownership by front line employees



The relocation allowed Smith McDonald to position required equipment close to each other.

# Affiliates News

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ly reflect the views of NYSTAR.

## Principles of Lean Manufacturing

Join Insyte Consulting for a fast-paced, information-packed session that will show you how to reduce costs, speed up delivery times and improve quality in your manufacturing operations.

**Date:** Wednesday, September 24, 2008

**Time:** 8:00 AM - 4:30 PM

**Site:** LCo Building, 726 Exchange Street,  
6th Floor, Barton Room, Buffalo NY 14210

**Cost:** \$75.00  
(includes lunch & training materials)

For more information or to register visit  
[www.insyte-consulting.com](http://www.insyte-consulting.com) or call 716.636.3626.

This interactive workshop introduces the basic concepts of lean manufacturing and demonstrates the tools and methodology necessary to implement "lean" on the shop floor by combining a comprehensive classroom presentation with hands-on simulation of a production facility. ❖

## Our experience improves your business



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