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- Insyte Consulting 2009 Annual Report



Going "Green?" —  
Insyte can help  
716.636.3626

## Niagara Specialty Metals Receives AS9100 Certification

Quality system certification is important for improving quality and attracting new customers. AS9100 is a widely adopted and standardized quality management system for the aerospace industry.

Learn how one Akron, NY company achieved AS9100 Certification through the combined efforts of Insyte Consulting and a committed internal team.

### About Niagara Specialty Metals, Inc.

Niagara Specialty Metals (NSM) is a rolling mill that processes highly-alloyed steels into sheet and plate. They also provide conversion processing for titanium, temperature and corrosion-resistant metals, electronic alloys and other difficult to manufacture metals.

In business since 1982, NSM is an ESOP company, 100% employee-owned, with approximately 30 employees. A great workforce and management team have combined to create a culture where many employees of the company have been there for over 20 years.

### Situation - A recognized need for AS9100 Certification

NSM approached Insyte in December, 2008



Photo by Jim Courtney

Catching a plate of tool steel on the rolling mill at Niagara Specialty Metals.

to address the need for AS9100 certification. The reasons for this initiative were: (1) to make business operations repeatable and consistent with a solid infrastructure to support future growth, and (2) to allow the company to expand its business base. This included both new customers who required AS9100 certification as a prerequisite for doing business and existing customers who were establishing new requirements for their supplier base.

Although NSM already felt they had good quality procedures in place, they realized that a better process would further improve their current system. The goal was to

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## Are Priorities at Your Organization Confused?

by Sharon Hilts

### *Being Safety Conscious in a Difficult Economy*

"Toyota's priorities have been first safety, second quality and third volume. These priorities became confused," said Akio Toyoda, Toyota's President, when he testified in front

of the US Congress in February regarding the safety problems which led to a world-

Being Safety Conscious continued on page 6



## Licking the Double Dip

by Benjamin Rand

**B**usiness is improving. The stock market is up. The Purchasing Managers Index for Manufacturing was 59.6 in March, its highest level since mid-2004. Unemployment fell to 8.6% in WNY last month, still too

high, but improving. Orders are up, backlogs are growing, so company owners and presidents should be happy, right? Not quite. Their worries and fears are now focused on the dreaded "double dip."

No, this double dip is not the two scoop variety that normally comes to mind this time of year. This double dip, better known to economists as a W-shaped recession, refers to the possibility that a short period of growth after a recession will be followed quickly (in less than a year) by another recession. The pundits would have us believe that the threat of a double dip hangs over our heads like the sword of Damocles and you can hear that concern behind the cautious optimism of many WNY business owners and presidents.

In reality, double dip recessions are relatively rare events. Of 33 American recessions since the mid-1800s, only three were double dips in 1913, 1920 and 1981 according to Deutsche Bank economists. The last double dip was actually self-induced when Paul Volker raised rates to staunch inflation after the 1980 recession. So there is only a 3%-6% chance of a double dip based on historical precedent according to my calculations. Of course, I'm no economist, as my macro professor used to constantly remind me. Yet even highly trained and experienced economists rarely agree. As George Bernard Shaw famously observed, "if all economists were laid end to end, they would not reach a conclusion." That is certainly the case these days as economic sentiment seems to gyrate from one extreme to another with every new government statistic.

So the bigger question is: why should you care? After all, recessions are a fact of economic life. They show up quite regularly every six or seven years. The wonder is that we are

not better prepared for them when they do come. This past recession left many businesses scrambling to improve their efficiency, jettison under-performing assets and diversify the markets they serve. In reality, many of these actions could have and should have been taken before the recession hit. Running your business well should always be your mantra, in good times as well as bad.

As a business owner or president, you cannot allow fear or anxiety to paralyze your decision making and leave your business in limbo. This clearly occurred during this past recession. Perhaps the one thing all economists DO agree on is that psychology plays an important role in economics. At the start of last year, business owners and presidents were so unsure of where the economy was headed that many of them stopped everything they were doing other than day-to-day business, including many otherwise healthy WNY companies. That inaction clearly made the situation worse for the economy as a whole and for many of those businesses in particular. If we spend all our time wringing our hands about a double dip, there is a real possibility that we will create a self-fulfilling prophesy.

So, instead of living in fear of a double dip, or any recession, learn from our recent experience. First, get your business in shape now, whether you are making money, breaking even or losing money. Second, do not allow fear and uncertainty to shut down your decision making. Follow these rules and you will be ready, if and when a double dip does strike. In the meantime, ignore the pundits and run your business. Life is too short and, to quote John Maynard Keynes, "in the long run we are all dead."

A handwritten signature in black ink that reads "Ben Rand".



## Ask the Business Doctor

**Q**uestion: My company is basically compliant with all the safety regulations yet we still have a very high incident rate. What else should we be doing? *Linda M., Buffalo, NY*

**A**nswer: The problem you are facing is not uncommon. Your incidents are likely to be symptomatic of root causes that may not be related to safety conditions. Assess your organization for unaddressed challenges in the following areas:

**Management/labor relations:** Is the relationship between management and employees strained due to disciplinary actions (perceived as too much, too lit-

tle, or inequitable), supervisory issues, communication problems, etc.?

Employees, believing that they are not being heard, may try alternate courses of action to raise a flag in order to get issues addressed.

**Employee assistance program:** Do you have an effective employee assistance program? Employees may need time off to deal with personal issues such as divorce or financial problems and the emotional challenges that accompany these concerns. In this case, employees could see time off due to a safety incident as providing them with time and finances to deal with these concerns. An effective EAP can help employees to cope while keeping them working.

**Substance abuse:** Are you randomly drug testing your workforce? Are you testing after a safety incident? Substance abuse can affect incident rates because employees need time off

to cope with the symptoms of abuse and may see an incident as an alternative to using 'sick-days.' Also, they may be more 'accident-prone' if the drugs are in their system while they are at work.

**Workplace stress:** What's the work environment like? Are unrealistic due dates, little co-operation between work groups, overtime, or maybe even layoffs creating high levels of stress at work? Employees who need a break from this tension may find safety incidents with their associated time off from work to be an appealing alternative to dealing with this daily stress.

Other non-safety related business challenges can be demonstrating themselves as safety incidents. Assess your organization holistically to identify the root cause.

*Have a question for the Business Doctor? Submit questions to [kdelius@insyte-consulting.com](mailto:kdelius@insyte-consulting.com). ❖*



## Free Engineering Support from SATOP

**D**oes your small business face a technical challenge? The Space Alliance Technology Outreach Program (SATOP) wants to help. SATOP is designed to make the know-how of the U.S. Space Program available to small businesses (up to 500 employees) to encourage economic growth and raise public awareness of the space industry.

SATOP can provide up to 40 hours of FREE technical assistance for qualified requests, utilizing the vast engineering expertise of NASA and participating Alliance Partners. The program is intended to help solve technical challenges that cannot be resolved by the compa-

ny's internal resources, or by commercially available services.

Areas of expertise for SATOP include (but are not limited to) optics, robotics, mechanical, manufacturing, industrial, materials, structural, facilities, chemical, electrical, electronics, and environmental engineering. Please note that SATOP cannot address software or Information Technology requests.

Applying to SATOP is simple—just fill out the short Request for Technical Assistance form on SATOP's web site ([www.spacetechsolutions.com](http://www.spacetechsolutions.com)). SATOP will work to connect your request with an engineer at one of their Space Alliance

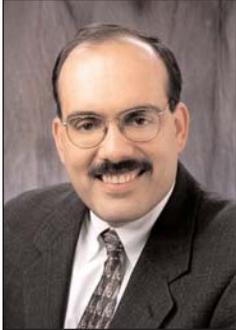
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For more information, please contact SATOP at 315.701.0685 or Karen Delius at 716.636.3626.

**Save the Date**  
**ASQ Conference**  
**"Lean Six Sigma"**  
**October 19-21, 2010**

For more information:  
[www.asqbuffalo.org](http://www.asqbuffalo.org)

### Message from the Chairman and President



**Warren C. Johnson**

2009 was a challenging year economically at every level—locally, nationally and internationally. In concert with the rest of the world, local companies struggled both to understand what was happening and to anticipate what was coming. In many cases, companies whose business was strong, put investments and improvement plans on hold, not because of their business situation, but because of uncertainty and fear about what was happening. In other cases, companies had very real struggles with major financial, operational and strategic problems caused by the economy. Companies that relied on one market or one customer for the majority of their business suffered the most, particularly in the automotive and durable goods industries. The businesses that fared well throughout 2009 were those with unique, differentiated products and those in consumer products, private label food and other recession-resistant sectors.

We experienced many of our own ups and downs in 2009. Many companies chose to look at consulting projects as discretionary expenses, rather than critical investments, despite their desperate need for change amidst their deteriorating circumstances. The message for us is that we must do a better job of demonstrating the economic benefit and ROI that any special project should deliver. So, after a record year in 2008, our bookings ground to a halt in Q1. Our revenue was also off as many of our clients delayed or postponed existing projects. But beginning in March we saw the first "green shoots" and by May the situation had turned around, beginning a steady improvement that lasted throughout the rest of 2009. Our backlog reached a record high in Q3 and our revenue was "only" down 11% for the year, ending with a small surplus.

Despite this economic rollercoaster, we continued to deliver significant, quantifiable benefits to our clients. During 2009, we worked with 71 different customers on 137 distinct projects. According to independent surveys of our clients conduct by Turner Marketing in 2009 for the National Institute of Standards and Technology, our efforts resulted in over \$83 million of impact for Western New York, including over \$36 million in new or retained sales, almost \$10 million in cost savings and over 450 new or retained jobs.



**Benjamin L. Rand**

*Warren Johnson*

Chairman

*Ben Rand*

President

### 2010 Board of Directors

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## Customer Impact

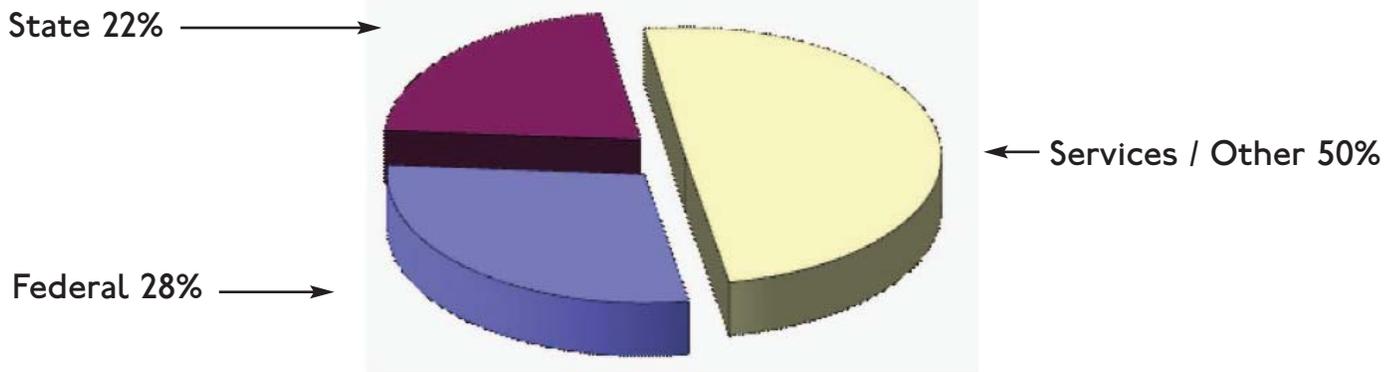
We evaluate our success by the impact we have on our customers. An independent study reported the following impacts in 2009 for customers surveyed\*:

\$36,039,676	Increased and retained sales
\$9,239,650	Cost savings realized
\$16,069,952	New investments in modernization
457	Jobs created and retained

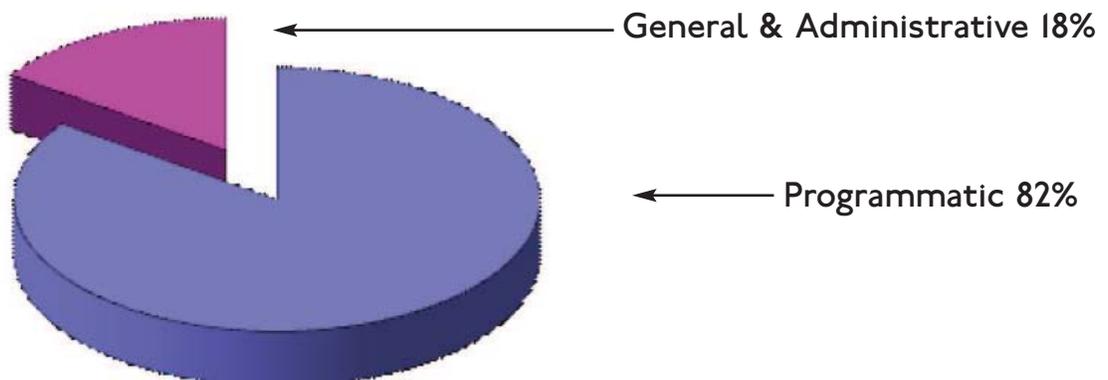
\*Source: Turner Marketing

## Insyte Consulting & TDC Foundation, Inc. Revenue & Expense Distribution 2009

Revenue \$2,169,653



Expenses \$2,072,765



Being Safety Conscious continued on page 6

wide recall of 8.5 million vehicles. With the challenges our businesses face in difficult economic times, it becomes very easy to confuse priorities. We have fewer people in our organizations and, consequently, more work for those who remain. How can we hope to get it all done without sacrificing important priorities like safety?

**“Everything should be made as simple as possible, but not simpler.” Albert Einstein**

The solution to the problem is NOT to take shortcuts. The solution is to simplify the processes that govern our work lives. The result is reduced variation in our surroundings and a much safer workplace.

So where do you start? Begin with the most nagging problem in your organization. When considering safety, it may be the falls in the parking lot, hand injuries, back problems, or ergonomic issues. Whatever the reoccurring difficulty, use a process perspective so that the fall, injury, or pain is considered an outcome of a process. Six Sigma's DMAIC (define, measure, analyze, improve, and control) approach will enable you to identify which process inputs are critical to the outcome of that process. By narrowing the focus to the vital few inputs, improvement activities to reduce the

variation in only these inputs is more manageable. When pressed for time, this is a very practical approach.

**“Today’s standardization...is the necessary foundation on which tomorrow’s improvement will be based.” Henry Ford**

Once analysis of the process is complete in the DMAIC methodology, it's time to implement improvements. Look for solutions that are both effective in having a positive influence on the outcome and those which are the easiest to implement. Again, we're trying to be practical given resource constraints. One improvement activity that frequently meets these qualifiers is Standardized Work. Standardized Work, as we (members of the Manufacturing Extension Partnership) define it, is an agreed upon and documented set of work procedures that establishes the best and most reliable methods and sequence for each process and worker.

**“The discipline of writing something down is the first step toward making it happen.” Lee Iacocca**

Standardized work requires you to look at each element of a process to determine the sequence of steps, how work will be performed, and the length of time required. If a task must be performed in a specific way in order to be done safely, it's included in the procedure, often with pictures. For example, if hand injuries are prevalent in your organization, jobs such as the receiving of incoming goods would be among the first documented. It would show that you must use a safety knife, where the location of the non-cutting hand is on the box being opened, and place an emphasis on cutting away from yourself. It may even describe the placement of the cutting hand on the safety knife. By stan-

darizing how receivers open boxes and including safety specifics, you are reducing the variability in that process thereby greatly reducing the likelihood of a hand injury.

Part of Standardized Work is determining the amount of time it takes to execute each step in a process. This may seem like overkill but it serves an important purpose. It allows you to balance the work tasks amongst employees. So what? How many times have you identified the cause of an accident as 'the employee was rushing?' Why might they be rushing? The time to perform their tasks might be greater than the task time required by their co-workers in adjacent processes. Standardized work will allow you to balance the workload. Overall pacing becomes more achievable by employees so less rushing is required. Less rushing can lead to less variability and fewer accidents.

**“I would like to reaffirm our values of placing safety and quality the highest on our list of priorities.” Akio Toyoda**

Make safety top on your list of priorities by reducing the variation in your processes through standardized work. Not only will employees be safer but you'll also find that your second (quality) and third (productivity) priorities benefit as well.

If you need assistance applying Six Sigma or Standard Work to your safety systems, contact Sharon Hilts by phoning 716.636.3626 or by emailing [shilts@insyte-consulting.com](mailto:shilts@insyte-consulting.com).

*Sharon Hilts is an Insyte consultant. Her leadership focus on safety improvement has resulted in significantly fewer recordable incidents and corporate awards in OSHA's Safety and Health Achievement Recognition Program (SHARP). ❖*



**Don't Miss Sharon Hilts**

**2010 DIVAL Safety Summit**  
**Tuesday, May 11, 2010**  
**Adams Mark Hotel**  
**Buffalo NY**

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achieve certification within a 12 month period. To underscore their commitment to meet their goal, a key employee was promoted to the full time position of Quality Manager to oversee the project as internal champion.

## Solution – A step-by-step process to achieve the goal of certification within 12 months

Insyte began working with NSM in January, 2009, breaking the project into two phases. The first phase included:

- Training the management team on the details of the AS9100 standard and establishing internal roles for the management of the system
- Providing an overview of the standard and expectations for all employees
- Drafting a quality manual
- Developing required procedures
- Establishing regular management review meetings to manage the implementation and ensure compliance with the system
- Establishing appropriate metrics
- Establishing a corrective and preventative action system
- Integrating the existing IT system to support the new quality system
- Developing a method for maintaining and sharing level 3 work instructions
- Auditor training and initiating internal audits
- Creating necessary forms to support required records

Phase two activities involved allowing the system to work through the cycle of establishing various practices, identifying improvements, and updating the system.

During phase two, the focus of management review meetings changed to audit feedback and corrective actions to improve the system:

- Initiating the use of the quality system
- Reviewing audit findings and identification of improvements and needed changes to the system
- Establishing records to demonstrate functionality
- Training appropriate personnel on specific procedures
- Conducting a two day mock audit to

identify any remaining gaps in the system

- Using findings from the mock audit to finalize the system and prepare for certification audit

- Support for the Company during the certification audit

Throughout the project, key internal team members were an integral part of the process to

ensure long-term, sustainable improvements once the project was completed.

## The results – certification achieved within the desired time frame

In addition to the expected benefits associated with achieving AS9100 certification, one significant result of going through the process as a team was improved communications throughout the company and to their customers.

The continuous improvement portion of AS9100 gave NSM the tools to be more disciplined in using root cause analysis. This has led to process improvements that have measurably improved the company's yields.

Niagara Specialty Metals received certification through NSF in late December 2009.



## Firm Benefits

- AS9100 Certification achieved within 12 months
- First pass yield increased to 99%
- Improved communications throughout the company

Photo by Jim Courtney



Hot rolling a plate of tool steel at Niagara Specialty Metals.



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# Affiliates News

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## Insyte Consulting Has Moved!!!

Stop in and see our new offices in the LCo Building.  
 Same street address – different floor.

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## 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, May 19, 2010

**Time:** 8:00 AM - 4:30 PM (coffee & networking 7:30 AM)

**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  
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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. ❖

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