Affiliates News

May / June 2009

Insyte consulting

Inside:

Going "Green?" — Insyte can help 716.636.3626

60% Reduction in Recordable Accidents Seen at Accellent

Safety is a critical factor in any manufacturing environment. The management at Accellent, Inc. became concerned when both recordable accidents and days lost due to injury were exceeding the industry average. "We were having a problem with our safety system that needed to be addressed," said Chad Werts, Director of Operations.

Accellent's Six Sigma Team spearheaded analysis and improvement efforts.

Company Background

Accellent, Inc. is an OEM contract manufacturer of precision parts, particularly titanium and other light metals for the medical and critical-care industries. Its major product lines include surgical probes, bone screws, surgical staples and graspers for a variety medical applications. This business unit was initially founded in 1987 as Hayden Precision. It was sold in 1999 to MedSource Technologies of Minneapolis and acquired by Accellent, Inc. of Wilmington, MA in 2004. Annual sales have grown steadily and have been increasing at about 30% annually for several years. The privately-held company's products are sold nationally and internationally to such high profile customers as Johnson & Johnson, AMO and Bausch & Lomb.

Manufacturing operations are conducted within two modern, single story facilities; one of about 40,000 square feet (machining of titanium on Swiss Machines) and the other of 20,000 square feet (metal injection molding) in Orchard Park, NY. The current employment level is 253 people.

The company has put considerable importance on the implementation of modern manufacturing practices, including Lean Six Sigma, with particular emphasis on product quality. The company was one of the first in

Accellent continued on page 7

Something Old, Something New, Something Borrowed... Six Sigma in Safety by Sharon Hilts

Six Sigma. Everyone's using it these days. From Chris Collins in the county government to, dare I say, the federal government? President Obama has appointed Nancy Killefer to the position of the country's Chief Performance Officer. She is charged with "eliminating what we don't need, or what doesn't work, and improving the things that do," because "there are new and more efficient ways of getting the job done."

So let's borrow Six Sigma's DMAIC approach from the Quality folks and use it to advance

Six Sigma in Safety continued on page 3

President's Message

Change and Opportunity

by Benjamin Rand

There is a new book on the market, ***The Next 100 Years*** by George Friedman, which attempts to apply logic to historical trends and current events to predict the major themes that will shape this century. For example, Mr. Friedman expects that by the year 2100, the United States will replace Saudi Arabia as the number one energy supplier in the world, thanks to space-based solar power generation. If he is correct, then those companies which are positioning themselves to play important roles in space-based solar power could be the Microsofts of tomorrow.

Mr. Friedman may well be wrong about energy, but he is certainly right about change—it is coming. That is good news for anyone who leads a company, because with change comes opportunity, even in difficult economic times. During the 1990-1991 recession, there were about 191 internet users for every 1,000 people. Less than 20 years later, the number is 932 internet users for every 1,000 people. When you consider that explosive growth, it is easy to understand the meteoric rise of a company like Google. Of course, the current downturn is much more severe than previous ones and observers such as Ian Davis of McKinsey see fundamental changes, including reduced financial leverage, increased government involvement and reduced consumer consumption in the USA, as hallmarks of the "new normal" that will emerge.

So, if there are still major opportunities out there and seismic economic changes are in the offing, what are you doing about it? The challenge that CEOs/Presidents/Owners face is similar to Mr. Friedman's—how to peer into the future to identify where the opportunities will be, so that they can position their companies to benefit. Indeed, in most companies, the CEO/President/Owner is the only person in the organization who has both the luxury and the responsibility of looking beyond the daily business issues to think about what could be.

Executive Advisory Services (EAS)

We created Executive Advisory Services (EAS), in partnership with The Kamis Group, precisely to help CEOs/Presidents/Owners identify and tackle the issues which will drive the future success or failure of their companies. These critical issues require skill and experience to address. That is why we have partnered with Russ Kamis, President & Founder of The Kamis Group, UB Business Professor, former President & CEO of AVOX Systems (the old Scott Aviation) and former senior strategist with Fortune 500 Companies including Kraft Foods and Tenneco, to develop and deliver EAS.

To introduce this new service, we are offering a confidential EAS consultation with me and Russ Kamis. These complementary sessions are designed for CEOs/Presidents/Owners or other senior business leaders with P&L responsibility of at least $10 million, to:

- Identify and clarify the major issues confronting your business;
- Assess your alternatives and options;
- Learn about new and innovative business tools and techniques that may apply;
- Leverage the perspective of two experienced Presidents & CEOs; and
- Commit to a path forward for you and your business.

So whether you are trying to steer a course for the next 100 years or just for the next five years, let EAS help you take advantage of the opportunities that are out there for you and your business.

Funding Opportunities

Following is a summary of various funding opportunities that are currently available:

Green Supplier Network

This program includes both state and federal funding for manufacturing companies pursuing various green initiatives including material waste reduction, energy consumption and carbon footprint. The two step process provides cost share reimbursement for both the original assessment and subsequent remediation. The assessment phase will quantify the opportunity for waste reduction and environmental improvement. Where sufficient opportunity is identified, the Green Supplier Network will provide matching funds for the project. There is a required preliminary qualification that is done at no cost to the company.

National Grid

This funding opportunity is available to manufacturing companies within the National Grid service area. Operational improvements (e.g. lean manufacturing and Six Sigma) can be reimbursed at a rate of 40% or $15,000. Marketing projects (e.g. Eureka Winning Ways and top line growth) can also be reimbursed for up to $15,000 at a 50% rate. For companies electing to do both activities the maximum reimbursement is $40,000 at a 60% reimbursement rate.

STEP Grant

This is the latest training grant that is provided through the New York State Department of Labor. Under this program the state will fully reimburse companies for a wide range of training programs that provide transferrable skills to incumbent workers. The maximum grant is $50,000 with a $100,000 limit for companies who had received prior DOL funding. In the past, similar grants have funded specific training initiatives in lean manufacturing, ISO quality systems, Six Sigma and marketing. Although the training is fully reimbursable, participating companies must provide all trainees with a minimum 3% pay raise which is over and above any normal annual increases.

Survive to Prosper

This is a comprehensive diagnostic designed to help manufacturing companies survive the current economic downturn, as well as be positioned to take advantage of business growth opportunities when the economy rebounds. Specific areas evaluated are financial health, operational effectiveness and market growth potential. Insyte Consulting has funding available to help defray the cost of this diagnostic exercise. In addition we guarantee customer satisfaction or the cost of the project will be fully refunded.

Industrial Effectiveness Program

This program provides manufacturing companies with cost share reimbursement of up to $50,000 based on employment for initiatives that improve overall competitiveness. Currently this program is on hold due the state's financial situation. We will report any change in status in future newsletters.

For further information regarding the above funding opportunities, please call Insyte Consulting at 716.636.3626. ❖

Six Sigma in Safety continued from page 1

Safety performance. When striving for improvements in any area following DMAIC simply makes sense. What's DMAIC? It's an acronym for the problem solving methodology of define, measure, analyze, improve and control. Each step requires discipline, time, resources and often some training. The inclination is to skip all that pesky measurement and analysis and jump right into the improvement phase. After all, we just want to just 'git'r done'. So many times we get the wrong things done, get frustrated when we don't see results, give up, and give in to daily demands.

Applying DMAIC to Your Safety Program
Start by thinking of safety as a collection of processes in your organization instead of programs. The overall performance of these processes result in OSHA recordable and non-recordable incidents as well as near misses. Collect and summarize this information.

Peel the onion down another layer (see figure 1 on page 6). Use a Pareto chart to take a more in-depth look. This bar chart categorizes an event by showing the most frequently occurring event first, then the next most frequent, and going on down to the least. For incidents, look

Six Sigma in Safety continued on page 6

World Trade Celebration '09

June 24, 2009

Presented by

World Trade Center Buffalo Niagara

Keynote Speaker

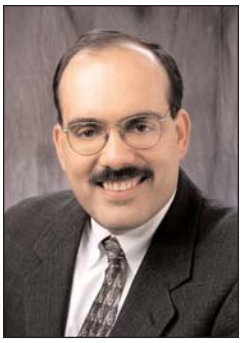
John M. Stropki,

Chairman, President & CEO, Lincoln Electric

For details contact Juan Vazquez at 716.852.7160

2008 Annual Report
Insyte Consulting

Message from the Chairman and President



Warren C. Johnson

Benjamin L. Rand

During 2008 Insyte Consulting's activities provided very positive results for our clients. We completed over 85 projects, delivered almost $59 million in benefits, created or saved over 700 jobs in Western New York and generated an average return of $26 for every $1 invested, according to independent third party surveys of our clients. Our projects addressed sales growth, marketing, strategic planning, product development and operational improvement while spanning our service area of Niagara, Erie, Chautauqua, Cattaraugus and Allegany counties.

Our operating performance was also good. We increased our bookings by over 34% in 2008, setting a new annual record. Our project revenue increased 5.7% resulting in profitable operations for the year, despite cutbacks in state funding. During 2008, our project backlog almost doubled allowing us to enter this year with a strong backlog. However, it is already clear that 2009 will be more challenging for us as many of our clients, especially those in manufacturing, struggle with this difficult economy.

Last year we launched a new strategy to support our mission "to transform our region by stimulating the growth…of dynamic companies. "Over the last 25 years we have worked with many of the preeminent consulting organizations in WNY. Now, we are harnessing that knowledge by partnering with many of those firms to offer our clients a wider range of services and capabilities to help them succeed. Our objective is to become a trusted business advisor for our clients on all the issues that may impact their business. In addition, we will continue our support for innovation and entrepreneurship through our roles with the WNY Venture Association, the Business Development Fund and with the Small Business Innovation Research/Small Business Technology Transfer program (SBIR/STTR).

Warren Johnson

Chairman

Ben Rand

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2008 Annual Report

Customer Impact

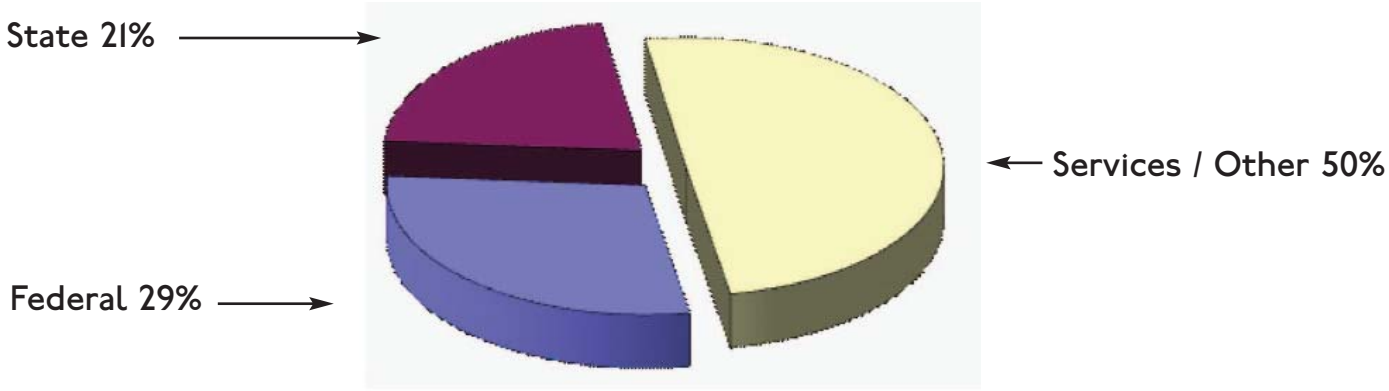
We evaluate our success by the impact we have on our customers. An independent study reported the following impacts in 2008 for customers surveyed*:

$32,957,335	Increased and retained sales
$6,630,830	Cost savings realized
$19,317,600	New investments in modernization
701	Jobs created and retained
4.5 out of 5	Customer satisfaction score

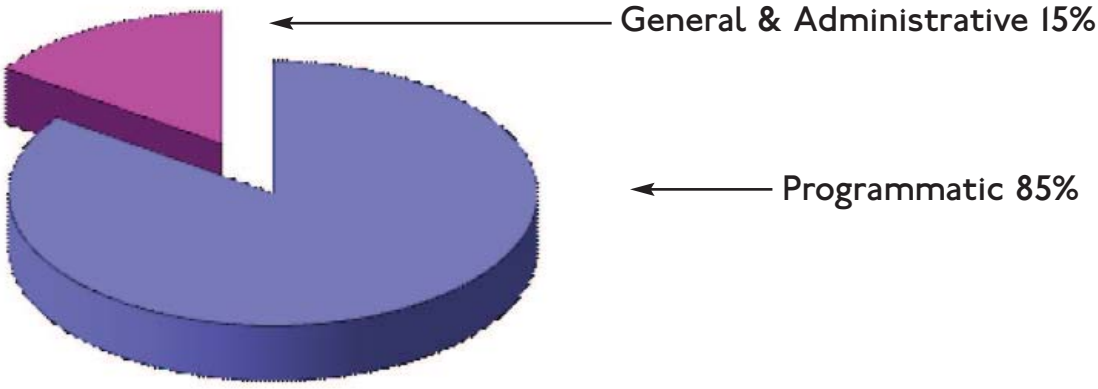
**Source: Synovate/Turner Marketing*

Insyte Consulting Revenue & Expense Distribution 2008

Revenue $2,261,652



Expenses $2,245,960



Six Sigma

Six Sigma in Safety continued from page 3

at it a couple of different ways. Begin with type of incident i.e. slips, hand injury, chemical burn. Next, look at it by job, for example — machining, welding, warehousing. Other ways to categorize may be relevant. What you're looking for is a definable process that results in the highest occurrence of incidents. Let's say you've discovered that burns during welding account for most of your incidents. Now use DMAIC…

Define:

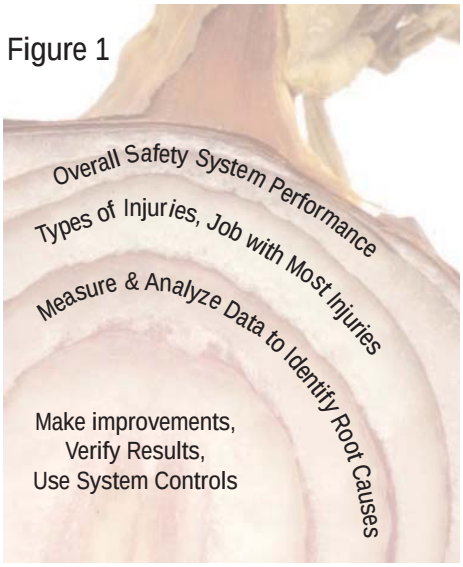
The process is defined from the moment a welder picks up a piece to be welded to the time that he puts it on the shelf for the next process.

Make sure to designate the start and finish of the process to be analyzed. Include the steps in-between. Process diagrams are helpful for doing this. Remember the focus, in this case, is generally on the person and not the product so identify the steps the person performs. Make sure this is based on reality and not what the person 'should' be doing.

Measure:

So what should be measured? Get a cross-functional team together to brainstorm. Ask a question such as "What do you think is causing the burns in Welding?" Also, ask, "Why?" many times (Five Why's) so that you can get beyond the common belief that everyone gets hurt because they are careless and klutzy. Pare down these reasons to the ones that the group thinks are the most likely causes. Now collect data on these causes. When do these causes arise, how frequently, why, etc. Make sure that you collect data in a consistent manner.

Figure 1



Analyze:

Once you and your team have collected the data, the next question becomes, "Can we connect any of these possible causes to the process outcome?" which, in this case, is a burn. There is a collection of statistical tools that can be used to determine the answer. If you've got someone on staff who can do this type of analysis (look in your Quality Department), tap into their skills. If not, take a look at some basic statistics. Excel or a scientific calculator can help you. Consider the average occurrence of possible causes in situations similar to those when burns have occurred. Which have higher averages? Can you correlate the possible cause data to the incident data?

Experiments can be done at this stage. However, safety experiments present special challenges due to the risk. You will need someone trained in Six Sigma to help you with this one.

Improve:

Okay, now you can make improvements. Any causes contributing to incidents, as revealed in the analysis phase, need to be addressed. Prevention activities may include housekeeping, poke-yoke techniques, material substitution, method modifications, standardized work, and/or training. Many of these corrective actions are also used when implementing lean manufacturing concepts. Once improvements are made, verify that they are effective. This may be somewhat challenging since a time lag of weeks or even months may exist between incidents. It may take up to a year or longer to fully verify the effectiveness of improvements.

Control:

Once improvements have been made, controls must be put in place to assure that the process does not slip back into the old way of doing things. Controls such as regularly scheduled audits and training can help. When a method or material characteristic has been improved, Statistical Process Control may be used. Easier tools for controlling process fixes are visual controls where an improperly working system is made evident to anyone in close proximity. If you've used poke- yoke techniques in the prior phase, you've ensured control by making it impossible for the cause to exist.

If you need assistance applying Six Sigma to your quality systems contact Sharon Hilts at 716.636.3626 or by emailing 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). ❖

Have a Six Sigma or Safety Question for Sharon Hilts?

Stop by the Insyte Consulting booth at the

W.N.Y. Safety Conference & Trade Exhibit
May 13, 2009
Holiday Inn, Grand Island

Case Study

Accellent continued from page 1

the WNY area to become both ISO-9001 and ISO-13485 (medical products) registered as well as GMP compliant.

Although Accellent competes against numerous major domestic manufacturers, most of the company's primary competition is offshore, particularly in Mexico and Asia. Furthermore, as a contract manufacturer, the company must also provide product to its customers at a lower cost than these major accounts can produce internally. In effect the company's major customers are also its primary competitors.

> "Insyte was the essential element we required to improve safety at Accellent..."
>
> Chad Werts, Director of Operations

Situation—Our Safety Record Needs to Improve

Despite an apparently good working environment, senior management was concerned about the overall safety record of the two facilities. Both the number of recordable accidents and the number of days lost due to injuries exceeded the industry average. Furthermore, it was observed that excessive fires were occurring in the production areas. It was believed that this situation was attributable to insufficient structure within the organization safety systems. Specific areas of deficiency included accident investigation, job hazard analyses, inadequate lock out/tag out procedures and limited capability to perform self-audits. Accellent's management subsequently engaged Insyte Consulting to help address and resolve these issues.

Solution—Identify the Cause & Implement System Improvements

The first step was to perform a Gap Analysis, which assessed the existing safety systems relative to best practices in manufacturing. The results were reviewed with the company's safety committee and a formal program was developed to implement the required improvements.

The first phase concentrated on building and enhancing the internal safety structure within the two facilities. By formalizing elements of accident investigation, job hazard analysis and internal auditing, the joint Insyte/ Accellent team was able to identify and prioritize major issues and opportunities for improvement.

The second phase emphasized the establishment of new programs and procedures as well as upgrading existing procedures in order to resolve the major problems that had been identified previously. Specific actions included the enhancement of emergency evacuation procedures, fire prevention, lock out/ tag out and more effective hazard communication. A hand injury prevention program was also created when it was identified as one of the primary types of incidents.

The final phase addressed the problems associated with the frequency of fires in the production area. Although the number was known to be excessive, the specific causes were unknown. A Six Sigma approach (utilizing the DMAIC method of define, measure, analyze, improve and control) was used to uncover the key contributing factors to the frequency of fires. This methodology, including the design of experiments, identified coolant, ventilation and feed rates as significant contributors to the problem. A plan was formulated to address each of these factors and expeditiously implement them within the production areas.

Results—Recordable Accidents Reduced by Over 60%

Accellent, Inc. has experienced several major benefits as a result of the upgraded safety program. "Insyte Consulting was the essential element we required to improve work safety at Accellent. Without them we would not have achieved the results we needed," according to Chad Werts.

The number of recordable accidents has been reduced by over 60%. In addition annual cost savings of over $125,000 has been projected. Also the capabilities of the internal Safety Committee have been enhanced to the point where continued improvement is being realized on an ongoing basis. Finally, the structure that was introduced into the Orchard Park facilities is being introduced into other Accellent, Inc. plants throughout the country. ❖

Project Benefits

- 60% reduction in recordable accidents
- >$125,000 projected annual cost savings
- Safety Committee continual improvement realized
- Safety structure rolled out nationally to all Accellent plants

Accellent staff discuss turning process of titanium components for surgical instruments.

Insyte consulting

726 Exchange Street
Suite 620
Buffalo, New York 14210
web: insyte-consulting.com

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Insyte Directory

726 Exchange Street, Suite 620
Buffalo, New York 14210
Phone: 716.636.3626
Email: info@insyte-consulting.com
Web: insyte-consulting.com

Karen A. Delius | Editor, Affiliates News

Benjamin L. Rand | President

For information contact

Erie, Chautauqua, Cattaraugus Counties
John W. Murray
716.864.8675

Niagara, Allegany Counties
Bill Shepard
716.984.7949

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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, September 23, 2009

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: $250.00
(includes lunch & training materials)

For more information or to register visit www.insyte-consulting.com or call 716.636.3626.
Special pricing available for new clients — call us for details

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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