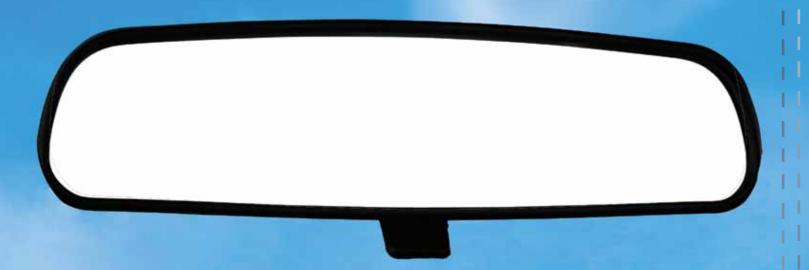


Your Resource Driving Manufacturing Innovation



A LOOK BACK... TO THE FUTURE

Celebrating 25 Years of Service 1988 - 2013

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LESSONS LEARNED IN 25 YEARS

For MANTEC 2013 is a banner year! It was 25 years ago in 1988 that the Pennsylvania General Assembly created the Industrial Resource Centers to promote success and stability in the Commonwealth's manufacturing sector. MANTEC was incorporated to serve nine counties of South Central PA.

So much has changed in the last 25 years; however, MANTEC remains committed now, as it was then, to do everything within our power to drive manufacturing success. In 1988 manufacturing was the #1 economic sector in PA and it remains #1 today. Now, as it was then, small and medium sized firms represent the backbone of manufacturing with more than 95% of the total.

Lessons learned over our 25 years serve as valuable reminders of the challenges manufacturers face today and in the future. Looking back we can see companies, and in some cases entire industries, that have lost their competitive advantage and fallen into the commodity trap. As some companies have struggled, progressive forward-thinking companies have prospered.

Throughout our history we have worked with companies to drive efficiency through continuous improvement and Lean manufacturing. We have promoted quality programs like ISO 9000, TQM and Six Sigma which are as relevant today as they were in 1988. But in today's complex manufacturing environment companies need to do much more to remain competitive. Innovation and growth strategies are examples of critical elements which companies need to incorporate into their strategic plans.

Looking out over the horizon, working with our federal partner, the Manufacturing Extension Partnership, MANTEC has identified six key elements essential for future growth:

- Continuous Improvement
- International Trade
- Supplier Development

- Sustainability
- Technology Acceleration
- Workforce/Talent Management

For each of these Next Generation Manufacturing Strategies MANTEC has developed service offerings designed to help companies integrate them into their business plans.

Manufacturing has a bright future in Pennsylvania. We have endured the greatest economic downturn since the Great Depression and we are now seeing work which had been outsourced overseas coming back to the U.S. We have great companies here in South Central PA which are investing in their people, new technologies, new products and new markets as well as the communities in which they reside.

Our team at MANTEC is bullish on Pennsylvania manufacturing and we intend to be here for the next 25 years to help our clients face the inevitable challenges and realize the ultimate success. Our mission is to "drive strength in manufacturing through continuous innovation and growth," and we cannot begin to accomplish that without the trust of the companies we serve. We appreciate the opportunities you provide us to be a resource contributing to your successful future.



MANUFACTURERS RECOGNIZED

MANTEC wishes to congratulate the manufacturing companies and partners we work with that were recently recognized as fastest growing, best places to work, and impact award finalists.

Central Penn Business Journal's Top 50 Fastest-Growing Companies 2012

Advanced Cooling Technologies in Lancaster AquaPhoenix Scientific in Hanover Greiner Industries, Inc. in Mount Joy Marine Tech Wire and Cable, Inc. in York MGS, Inc. in Denver NRB (USA), Inc. in Ephrata PeoplesBank in York Schaedler Yesco Distribution, Inc. in Harrisburg

Central Penn Business Journal's 2012 Best Places to Work in PA

HydroWorx in Middletown MXL Industries in Lancaster McKonly & Asbury in Camp Hill

Manufacturing Institute 2013 STEP Award Nominee

Janis Herschkowitz of PRL Industries in Cornwall

Governor's ImPAct Awards Finalists

Community Category

E&E Metal Fabrication in Lebanon The Hershey Company in Hershey Pennex Aluminum Company in Wellsville

Jobs First Category

Advanced Scientifics Inc. in Millersburg Dutchland, Inc. in Gap

Small Business Category

American Products, Inc. in York Astro Machine Works in Ephrata Electron Energy Corporation in Landisville Tex Visions in Carlisle AquaPhoenix Scientific in Hanover

Export Category

Klinge Corporation in York Z-Band in Carlisle HydroWorx in Middletown Zeigler Brothers in Gardners

NONPROFIT INNOVATION AWAR

MANTEC has been honored as the winner of the 2013 Nonprofit Innovation Awards in the category of Management Operations.

In an event with 420 people hosted by the Central Penn Business Journal, MANTEC was selected #1 for its proven internal innovation system, rolling out services to benefit its clients and fulfill its mission of "driving strength in manufacturing through continuous innovation and growth." 100% of MANTEC staff has been trained in the Innovation Engineering Management System. MANTEC is currently implementing Innovation Engineering at multiple client companies.



Michael Warfel of Highmark, John W. Lloyd of MANTEC, Janice Black of The Foundation for Enhancing Communities and Dana Nonnenmocher of Brown Schultz Sheridan & Fritz.

BUSINESS GROWTH CONFERENCE

On March 14, MANTEC hosted the first annual Business Growth Conference. Over 175 attendees gathered to identify ways to elevate their businesses toward profitable growth. The day included 21 sessions, 2 keynotes and a workshop. Plans are underway for the next conference in spring 2014.



(l-r) Ron Staub and Louis Smith of SAY Plastics located in Hanover network with MANTEC Professional Business Advisor, Brad Kreidler.



WHEN A BAND-AID WON'T CUT IT

If a machine or a process breaks down, you fix it. If product quality is off, you fix it. And when it happens again, did you really fix it? A "bandaid" was applied to fix the immediate problem and get production running again. The problem will occur again until the root cause is discovered and fixed.

Until the problem is addressed differently and a structured, disciplined thinking is applied, it is likely that the process will keep generating the same results. Without a standard problem solving process that uses proven tools to identify, measure, and fix the root causes, the problems will repeat over and over again costing time, energy, and money.

Six Sigma is one of several disciplined problem solving processes that requires the collection and analysis of data in a structured method before solution exploration. The technique follows a defined process:

- 1. Clearly define the problem in measurable terms
- 2. Uncover potential root causes
- 3. Measure & analyze process inputs and outputs
- 4. Test & prove true cause(s)
- 5. Develop implementation plans
- 6. Monitor key performance indicators & control to ensure the problem stays resolved

Many organizations use Six Sigma and have a Green or Black Belt trained champion responsible for solving problems. Belts work most effectively with teams which include process owners, engineers, and maintenance. Having team members training on the Root Cause Problem Solving (RCPS) tools increases the effectiveness of the RCPS effort in time and end results exponentially.

Many area managers previously exposed to RCPS request training for their direct reports and front line supervisors to encourage and empower them to get data and start working through the problem. This should result in a culture shift in which the organization improves process quality and ultimately the bottom line.

MANTEC now offers RCPS which is customized for your organization's needs- from basic RCPS tools through Yellow Belt training which includes Process Capability. Through the use of simulation and the use of your problems to practice using the tools, participants can be held accountable to a new level of performance.

To learn more about RCPS contact your Professional Business Advisor directly or MANTEC at 717-843-5054.

UPCOMING CLASSES



LEAN Certification- Starts August 15, 2013

LEAN Certification- Starts January 23, 2014

LEAN Champion- Starts January 28, 2014

Details at www.mantec.org/events.cfm

Classes are forming for Six Sigma Green and Black Belt for Fall 2013.

If interested, contact Leigh Ann Wilson: wilsonla@mantec.org



SAFETY AWARDS

Dutchland, Inc. in Gap and Tekgard, Inc. in York were two of only seven employers in PA to be honored with the 2012 Governor's Award for Safety Excellence. The award recognizes successful employer-employee safety programs that produce tangible safety improvements. In the history of this award, only 140 companies in PA have won this prestigious honor. The awards were presented at each location. "The Governor's Award for Safety Excellence recognizes employers that have achieved the highest standards in the workplace" said Labor & Industry Secretary, Julia Hearthway.



Ben Kauffman, President of Dutchland, accepts the Governor's award from Stephen Fireoved, Director for Bureau of Workers Compensation.

NOT A HAZARDOUS ARTICLE!

OSHA has adopted new hazardous chemical labeling requirements, bringing it into alignment with the United Nations' Globally Harmonized System of Classification and Labelling of Chemicals (GHS). These changes will help ensure improved quality and consistency in the classification and labeling of all chemicals, and will also enhance worker comprehension. As a result, workers will have better information available on the safe handling and use of hazardous chemicals, thereby allowing them to avoid injuries and illnesses related to exposure to hazardous chemicals. Major changes include:

Hazard classification: Chemical manufacturers and importers are required to determine the hazards of the chemicals they produce or import. Hazard classification under the new, updated standard provides specific criteria to address health and physical hazards as well as classification of chemical mixtures.

Labels: Chemical manufacturers and importers must provide a label that includes a signal word, pictogram, hazard statement, and precautionary statement for each hazard class and category.



Safety Data Sheets: The new format requires 16 specific sections, ensuring consistency in presentation of important protection information.

Information and training: To facilitate understanding of the new system, the new standard requires that workers be trained by December 1, 2013 on the new label elements and safety data sheet format, in addition to the current training requirements.

The complex and ambiguous rules and regulations are a nightmare for compliance. Allow MANTEC to help you sort through important deadlines and requirements for training your employees, updating your product labeling to new standards, or other health and safety documentation standards that may apply. Contact your Professional Business Advisor directly or MANTEC at 717-843-5054. Content from http://www.osha.gov/dsg/hazcom/HCSFactsheet.html

Know safety, no injury. No safety, know injury. ~Author Unknown



GOING BEYOND THE LIGHT BULB

October 22, 1879 was an important day in history. It was the first successful trial of Thomas Edison's electric light bulb. Since that day, the image most thought of when someone has a new and bright idea is the light bulb. On April 11, 2013, MANTEC set out to change that image to a black belt- an Innovation Engineering Black Belt to be exact.

Innovation does not come easily. It takes tremendous dedication to think differently about a problem or determine the next problem and work on that. Even when a solution is reached, developing something new is costly and the risk is unknown. However, innovation is critical to continued growth.

Innovation Engineering transforms innovation from a random event into a reliable, scientific system for profitable growth. MANTEC's Director of Operations, Fred Botterbusch, was awarded the Innovation Engineering Black Belt certification. The certification is a rigorous process which requires years of training plus homework, projects, a patent application, a final exam and a thorough understanding of the 48+ Innovation Engineering tools.

Fred is currently working with two local manufacturers implementing Innovation Engineering in their operations. The cultures of the organizations are shifting to focus on top line ideas. Not every idea will make it to production. The system of Define, Discover, Develop, Deliver breaks down the barriers and clearly identifies innovations that have a high likelihood of success to commercialize.

Fred is the first to be Black Belt certified in Pennsylvania. Local manufacturers can benefit from:

- A local coach available to assist your organization with innovation for profitable growth
- Black Belt coaches conducting more projects with a valuation that is 28 times greater than introductory training
- Creating a culture to increase innovation speed (up to 6x) and decrease risk (30 to 80%)
- An <u>affordable</u> way to build a <u>sustainable</u> system for driving growth and profitability

Take advantage of the black belt, contact your Professional Business Advisor directly or MANTEC at 717-843-5054.





Your sales team is out selling. What are they leaving behind? Where can the potential customer go for additional information? What are your customers saying about you? Marketing tactics should play a role in your sales and marketing plan, however it doesn't require a full-time employee. MANTEC has the resources needed to assist you in your marketing tactics, without breaking the bank.

Make a note to contact Leigh Ann Wilson at 717-843-5054 x223 or wilsonla@mantec.org.



IT'S ELECTRIC

You only make money if the machines are running. And once a month you pay the electric company for all the time the machines ran. Wouldn't it be nice to have the machines running the same amount (or more!) and pay less in electric costs?

The SP 1000 system is the latest technology in smart power management and control. The computer-based system monitors and corrects power quality issues that you may not realize exist. Through artificial intelligence and a neural network the system makes efficient power management decisions. The real-time energy use and performance data can be monitored with an online dashboard.

Benefits include:

- Reduced KWh and KW demand
- Guaranteed reduction in electrical cost
- Monitoring energy use 24/7
- Fully automated reliable energy management
- Protecting against power surges and spikes
- Reduced Harmonics impacts
- Reduced wear on electrical equipment

Die-Tech in York Haven is a progressive company that utilized energy saving opportunities and incentives to install LED lights in its office space, install T-8 lights with reflectors in the plant and upgrade to a VFD compressor. With the low hanging fruit gone, it was time to look at an electrical optimization system to further reduce costs.

Electric bills were analyzed to look for peak or demand fees and usage. Additional research was conducted to understand the flow and need of electricity in the plant as the machines operated. The data collected indicated a good energy profile to benefit from the SP 1000. The system was installed in September with a manufacturer's guarantee of a minimum 7-17% reduction in electricity use for the entire facility, with a return on investment in most cases, in less than 2.5 years.

Die-Tech is exceeding the projected 10% savings year-to-date and has reduced the two-year return on investment. Additionally, Die-Tech's plant engineer is monitoring the data to assist in future energy conservation business decisions.

For more information, contact your Professional Business Advisor directly or MANTEC at 717-843-5054.

ENVIRONMENTAL AWARD

SPX Cooling Technologies in York received the 2013 Governor's Award for Environmental Excellence. The award recognizes organizations that created or participated in the development of a project that promotes environmental stewardship and economic development in the state. SPX's LEAN and Clean project focused on reducing the waste stream through recycling, waste removal and reduced energy consumption. Pictured to the right Glen Comegys and Barry McKinley (center two) proudly accept the Governor's award.









MEP Affiliate

The Industrial Resource Center Network is supported by the Commonwealth of Pennsylvania through the Department of Community and Economic Development, Office of Policy and Technology.

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With us from the beginning...

Flinchbaugh Engineering, Inc. in York
Henry Molded Products, Inc. in Lebanon
I. Auman Machine Company, Inc. in Lebanon
McClarin Plastics, Inc. in Hanover
National Bearings Company in Lancaster
Three M Tool & Die Corporation in York
Trans/Air Manufacturing in Dallastown

Thank you for believing in our mission!