

Training Institute Provides Six Sigma Success to Local Companies

By Ron Tozydlo

Each year the ASQ Chicago Section Institute for Quality Control Training's Six Sigma II: Laboratory class divides into teams to perform Six Sigma projects at local companies using the methodology and tools learned in Six Sigma I: Theory. As in past years, teams formed in the 2002-2003 winter term helped companies realize profitable gains.

Two teams were established in the first week of class in December 2002; one team would work at Courtesy Corporation in Wheeling, Illinois, a plastic injection molding company, and the second team at Elkay Manufacturing Company, a stainless steel sink manufacturer in Broadview, Illinois. Teams were formed based on student preferences and individual expertise. After the initial team-forming class at Harper College, each team met at its respective company for the rest of the term until project completion. Both teams utilized Six Sigma's Define-Measure-Analyze-Improve-Control (DMAIC) methodology.

The Courtesy team utilized many tools during the DMAIC implementation in investigating the scrap rate of a particular molded product. These included Pareto Charts, t-test statistical analyses, multi-vari charts, probability plots, and run charts, to name some. Conclusions drawn from these analyses indicated that the tool repair request procedure should be enhanced to list more descriptive information, to attach examples of defects, and to measure the effectiveness of the repair; the accuracy of recorded information of defects must be improved; analyze trends of daily scrap rates; and tool alignment should be checked periodically. A design of experiment (DOE) for the analysis of cycle checklists was also recom-

mended. The project recommendations that were implemented reduced the scrap-rate by 20% with an estimated annual savings of \$60,000.

Elkay's project investigated the defect rate of a welding operation using the DMAIC approach. First the types of defects were measured and charted on a Pareto Chart. This indicated that the defect occurring most frequently was a "burn-through" which literally occurs when the weld burns through the stainless steel and creates a hole. The project then focused on lowering the incidence of burn-through. Many of the

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Comments from the Section Chair By Peggy Bowling

It is hard to believe that Fall is almost here. It seems like just yesterday I was in Kansas City at the Annual Quality Congress. I hope that you all have had a great summer and are gearing up for another exciting year in ASQ. The Chicago Section's 2003-2004 Executive Board has been very busy this summer setting goals and objectives, planning exciting topics for our general meetings, finding new locations for our general meetings, and developing new Training Institute courses.

As we begin a new fiscal year, I want to share with you the results of our strategic planning sessions last spring. This year we have identified five goals and five service areas.

Goals:

- Promote ASQ services and activities
- Attract new members to the Chicago Section of ASQ

- Provide career development, education, networking, and leadership opportunities
- Measure and improve customer satisfaction
- Maintain fiscal responsibility

Service Areas:

Career development, education, networking, leadership opportunities, Internal Board operations

Each Board member has developed objectives for the year, which are linked to these goals and service areas. As always we want to hear from you. We welcome your suggestions, comments, and questions. The Board is committed to serving the members of the Chicago Section of ASQ, and we welcome your input and feedback. I hope to see you all at this month's general meeting. I will be introducing the Board members during the mini-session, and you can find their contact information on our website, www.asqchicago.org.

ASQ Mission Statement: The American Society for Quality advances individual and organizational performance excellence worldwide by providing opportunities for learning, quality improvement and knowledge exchange.

(Training Institute...Continued from page 1) same tools that the Courtesy team used were utilized at Elkay as well as measurement system analysis (gage R&R), failure mode and effect analysis (FMEA), and the planning of a five factor – two level DOE to be run in two blocks. Recommendations to the process included amongst others: follow work instructions carefully; utilize data gathered on forms to enhance the process; change tungsten electrodes after a fixed number of operations and perform a reliability study on electrode wear; and perform preventive maintenance on the shear blade which is used to cut the steel before welding. The Elkay project has realized an estimated annual savings of \$20,000 by reducing scrap rate from the welding process by 70%.

As indicated above, the Training Institute's Six Sigma projects have helped companies, but students benefit

greatly also. The Six Sigma projects are great hands-on learning tools for students. Students are able to observe the actual process, perform measurements and analyses from data generated, interview key personnel involved in the process, all while learning Six Sigma implementation. The Courtesy and Elkay projects, as well as other projects implemented in previous Six Sigma II: Laboratory classes, involved a student that was also an employee of that company. So, if you would like your company to benefit from Six Sigma, you or one of your employees should enroll in Six Sigma I: Theory that begins this fall (see pages 6 and 7 for TI information). Perhaps you will request that a project be performed at your company for Six Sigma II. After all, who would pass up the opportunity of obtaining free consultancy from quality professionals?

Attention Readers:

Subscription to the newsletter is provided as long as your membership is registered with the Chicago Section. Your address and other contact information is maintained at the ASQ headquarters. Please contact them with any changes at:
ASQ
P.O. Box 3005
Milwaukee, WI 53201 or call
Customer Service @ 800-248-1946.

It is important to provide your current information so you can receive the materials and benefits of membership. Please do not contact the newsletter staff in the event of an address correction. Printing is scheduled for eight copies during the 2003-2004 year: September, October, November/December, January, February, March, April/May, and June.

RECERTIFICATION by Ed McCarthy

Reminder: If you have not already done so....All Chicago Section Members with certifications expiring anytime in 2003 be sure to contact (me), Ed McCarthy, your Recert Chair at emccarthy@methode.com for assistance on completing your package. NO EXCUSES, contact me !!!

ASQ Co-Sponsoring Organizations:
Chicago Section, Fox Valley Section, Heart of Illinois Section,
Illiana Section, Northeastern Illinois Section, and
Advanced Manufacturing Interest Group

Present

Northern Illinois Quality Conference (NIQC 2003)

3 days of learning, discovery and networking

Holiday Inn Select, 1801 Naper Boulevard, Naperville, Illinois, 630-505-4900
 (1 Block South of I-88, Naperville Road Exit)

Pre-conference Workshops – Sunday, September 28, 2003

One Day Conference – Monday, September 29, 2003

Post-conference Workshops – Tuesday, September 30, 2003

		Conference & Workshop Selections 3 Outstanding Keynote Speakers on 9/29/03 Morning			
Pre-conference Workshops Sunday, September 28, 2003		Conference – 1.0 RU Monday, September 29, 2003 8:45 am - 4:15 pm Conference \$125 (\$150 After September 12, 2003) Conference with Workshop(s) \$100 + Workshop fees (For PM Breakout Sessions, you choose ONE from each column below)		Post-Conference Workshops Tuesday, September 30, 2003	
SUN-101 Lean Simulation 8:30 am – 5:00 pm	\$295 <u>1.0 RU</u>	T-1A Lean and Quality	T-1B Lean and Teams	TUE-201 Value Stream Mapping 8:00 am – 12:00 noon	\$150 <u>0.5 RU</u>
SUN-102 Employee Value Creation in a Global Economy through Participa- tion, Motivation and Develop- ment 1:00 pm – 5:00 pm	\$150 <u>0.5 RU</u>	T-2A Optimizing Workflow Processes in the Healthcare Environment	T-2B Adopting the Electronic Auto- mation of Health Records	TUE-202 Time Management 8:00 am – 12:00 noon	\$150 <u>0.5 RU</u>
		T-3A Support the Process with Recognition – It's MORE than Money!	T-3B Emphasizing Respect for People While Improving Produc- tivity	TUE-203 Kaizen Blitz 1:00 pm – 5:00 pm	\$150 <u>0.5 RU</u>
		T-4A TS-16049 and Lean Manufacturing	T-4B Using Access Database to Support ISO 9001:2000		
		T-5A Business Performance Sustainability: Fantasy or Real- ity?	T-5B Using Quantitative Tools to Predict Corporate Distress		
Includes Lunch		Conference Fee (Full or Partial Day) includes: Continental Breakfast, 3 Keynote Speakers, Lunch, Break Snacks, 2 Selections from 5 Tracks and Networking Opportunities		Includes Lunch	

Refund Policy:

Cancellations made before September 12, 2003 will be charged a \$25 processing fee. No refunds after September 12, 2003. Substitutions will be allowed.

For more Information and Registration Form, visit: <http://www.asqchicago.org/>

**ASQ Chicago Section Announces the
Executive Board and Committee Board Members.
Meet them September 10th at the Wellington of Arlington Heights as we
begin the 2003-2004 year of General Meetings**

The following individuals will take on the responsibilities of the board and carry out the strategic plan for the section affairs...they will be investing many hours for the success of your section. Please come and thank them for their efforts. Your support is requested.

Peggy Bowling-Chair, Jayne Leone-Vice Chair, Ed Banas, Boyce Grier, Bill Lieberman, Rama Shankar, Tricia Case, Ron Tozydlo, Norm Peplow, Homero Garza, **Lisa Royal-Vice Chair**, Dominick Scumani, , George Alukal, Dave Buettner, Ed McCarthy, Shankar Hegde, Ed McCarthy, Hari Soni, Luke DiSilvestro, **James Persaud-Vice Chair**, Danny Aguilar, Dave Gottel, Lela Pertee, Sam Makwana, Phil Catrintza, Manu Vora, Maury Maurer, **Michael Barclay-Secretary**, Christopher Trent, Jim Walker, **Mark Ehrlicher-Treasurer**, Andrea Lutian, **Jack Blazejak-TI Director, Bill Lieberman, Maury Maurer, Ray Wick-Section Directors.**

The September Meeting Main Topic Lean Manufacturing: ASQ Advanced Manufacturing Interest Group, presented by Tony Manos. Registration information on page 5 →

ABOUT THE SPEAKER:

Anthony Manos, CQM, CQE, CQA, CQT, CMI

Senior Member of ASQ, Mr. Manos has served: as Section Chair, held board positions at both the section and division level, and taught at the Training Institute. He is trained and certified by the United States Department of Commerce, National Institute of Standards and Technology (NIST) in Lean principles. He has instructed, trained and implemented a substantial number of Lean projects.

THE TOPIC: Starting Your Lean Journey

In today's business environment, where global competition and constant price reduction demands from customers impact heavily on management decisions, lean manufacturing concepts have helped organizations to remain competitive, innovative, and profitable. "Lean" implementation results in enhanced cost and cycle-time reduction, customer satisfaction, and standardized high quality. This presentation will focus on lean methods that can be used to minimize all forms of waste, maximize value for the customer and discussions on how to start your Lean Journey.

**The Six Thinking Hats by Norm Peplow
(Part One of Two)**

Did you ever have a meeting that was out of control – going all over the map? Where attendees had their own agenda. People playing "devil's advocate" to put down others ideas or trying to earn points with the boss.

Many organizations, such as IBM, NASA, and Du Pont, recognized these problems, and implemented Dr. Edward de Bono's Six Thinking Hats methods to improve performance. These methods will help: separate ego from performance, encourage parallel thinking, and encourage full-spectrum thinking

Parallel Thinking

First, lets look at *parallel thinking*. The purpose is to ensure everyone present is looking at a subject from the same direction or point of view at the same time. The following is paraphrased from an example by Dr. de Bono,

'When looking at a large and beautiful house one person is standing in front, one in back, and one on each side of the house. All four are arguing that the view they see is the correct description of the house. In contrast, using parallel thinking the observers view each side at the same time, in parallel and from the same point or direction. The house is then fully explored by all.'

The Six Hats of Thinking?

You may remember being asked to put on your thinking hat. This concept is expanded into the Six Hats of Thinking to allow for full spectrum thinking and identification of the thinking direction. Each of the Six Hats serves a specific purpose.

(Please join us next issue when Norm describes the Six Hats and we see our very own members wearing hats and the story behind their hats)

MILWAUKEE - The ASQ Customer-Supplier Division (CSD) announces its upcoming conference in Orange County, California on October 6-7. The pre-conference tutorial takes place on Sunday and the post conference tutorial takes place on Wednesday.

Registration information can be found on the CSD website at www.asqcsd.org, or contact SG Meeting Services (Erika or Susan) at (254)776-3550. Conference sessions cover the following topics: Supplier Performance, Lean Operations, and Customer Satisfaction.

September 10 General Meeting Agenda:

5:30-6:30 p.m.	Check-in
6:00-6:30 p.m.	Advanced Session
6:00-6:45 p.m.	Section business meeting
7:00-8:00 p.m.	Dinner
8:00-9:00 p.m.	Main program

Location:

WELLINGTON OF ARLINGTON
2121 S. Arlington Heights Rd
Arlington Heights, IL 60005
Tel: 847-439-6610

Directions: 294 North to 90 West. Take Arlington Heights Road exit. Travel south 0.32 miles.

Cost: *Preregistered members, \$25; preregistered nonmembers, \$30;*
(Price night of the dinner for walk-ins: members, \$30; nonmembers, \$35)

- **Registration by phone:** Make your reservation by calling 847-358-7000 by *Friday, September 5th before 5:00 p.m.* Leave a message as directed if no one is available to take your call. Please include your name; company name; whether or not you are an ASQ member; a return phone number; whether or not you are bringing guests, and if so, their names and membership numbers if applicable. You can also save some time at the registration table by including your credit card number with your phone registration. Visa, MasterCard, and American Express are accepted. *The Discover card is not accepted.*
- **Registration on-line:** Go to <http://asqchicago.org/onlinereg.htm> and complete the required information.
- **Registration by FAX:** Use form below.

Registrations received after the deadline are subject to availability. No refunds will be made for cancellation after the deadline or no-show at the meeting. If you wish to attend without dinner, there is no charge. Additionally, special provisions are available for unemployed members.

Please address questions to James Persaud at 630-766-0340, or by e-mail at jpersaud@precisionx.com.

Fax Registration Form for Sept. 10th General Meeting at the Wellington of Arlington

Name: _____ Company Name: _____

Return Phone Number: _____ Membership Number (if applicable): _____

Number of Reservations: Member _____ Non-member: _____

Additional Requirements (vegetarian meal, etc.): _____

Fax your form to ASQ at: 847-202-0590