

impact!



Eight Complete Missouri Enterprise Six Sigma Black Belt Training



Bill Burke, President and Chief Operating Officer, Nordenia North America (third from left) Richard Doerr, (sixth from left) Master Black Belt, Missouri Enterprise (fifth from left) and Clare Urhan, Supervisor, Human Resources, Rubbermaid, (far right) presented certifications of completion to new Six Sigma Black Belts (from left) Lance Hughey, Michael Garnett, Tom Sawyer, Rafesh Suryanarayanan, Tim Mouser, Curtis Gunn and Kip Brockett. Not shown Black Belt Frank Steinert.

Cape Girardeau

Columbia

Ft. Leonard Wood

Kansas City

Kirksville

Park Hills

Rolla

Springfield

St. Louis

West Plains

Eight employees of two Missouri companies have completed an intensive classroom and on-the-job Six Sigma Black Belt Training Program provided by Missouri Enterprise in conjunction with Mineral Area College.

Participants receiving certificates of completion from Missouri Enterprise and Mineral Area College were Tom Sawyer, Rubbermaid, Inc.; and Rajesh Suryanarayanan, Curtis Gunn, Lance Hughey, Michael Garnett, Kip Brockett, Tim Mouser, Frank Steinert all employees of Nordenia USA.

There are three levels of Six Sigma achievement, designated by belt color as in the martial arts. The beginning level is the green belt. The next level of competence is black belt. And, finally, with experience in mentoring and/or training, black belts can earn the Master Black Belt designation.

Participants were required to attend four weeks of classroom training and are now completing an in-plant continuous improvement project.

Six Sigma is a systematic, scientific, fact based, data driven continuous improvement methodology

that enables companies to evaluate and enhance the way in which they meet their customers' expectations.

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Don't Miss the Missouri Enterprise Pig Races at the Missouri State Fair!

Six Sigma Black Belts

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Six Sigma helps a company create a corporate culture committed to eliminating waste and product variations.

Today, it is helping companies like Caterpillar, Bank of America, Ford Motor Company and Quest Diagnostics save billions of dollars in non valued added activities. Even smaller companies like Nordenia and Rubbermaid save proportionately and improve quality when employing Six Sigma methodology.

Nordenia USA, Jackson, is a subsidiary of Nordenia International, which manufactures co-extruded film, prints rotogravure, generates adhesive laminates and produces sophisticated specialty bags in an ultra-modern plant. Its customers include many recognized leaders in the consumer products marketplace

Rubbermaid Closet and Organizational Products is a leading manufacturer and marketer of wire and wood organizational products.

One of the major elements of the Six Sigma system is the DMAIC process. This stands for Define, Measure, Analyze, Improve and Control, each of which have a variety of technical and cultural tools that a Six Sigma black belts can use to solve problems, improve productivity and meet customer needs.

Define includes selecting and proposing projects, building a team, creating a sense of urgency and clarifying customer requirements and processes.

Measure means selecting the key indicator of project success, collecting and displaying the necessary data and calculating sigma (a measure of process variations).

In **Analyzing**, many possible causes are identified, statistical calculations are made to help determine one or more actual root causes and expected results and savings are quantified.

Improve includes using both technical and cultural tools to identify, test, refine and implement a plan of action with effective solutions.

Control means development and deploying systems to make sure that solutions implemented remain effective.

After effective control is in place, the Six Sigma team turns the improved process back to the appropriate department or individual.

At this point, the Six Sigma Black Belt will be assigned to work on other processes throughout the enterprise.

Missouri Enterprise Six Sigma Black Belt training also includes facilitation skills and change management which are used by black belts to help companies transform existing corporate cultures dedicated to continuous improvement and the relentless elimination of waste.

Those interested in more information or in becoming proficient in Six Sigma methodology or in implementing the methodology should contact Master Black Belt Rich Doerr at 314-291-2121 ext 238 or at rdoerr@missourienterprise.org or Bev Hickam, Mineral Area College, at 573-986-6827 or bevcape@hotmail.com.



Six Sigma Black Belt training participants taking part in a Lean Manufacturing simulation

Six Sigma Training Helps Solve Problems

At Nordenia USA, Six Sigma Black Belts are assigned projects to improve quality and reduce waste. The following is an example of typical Six Sigma Black Belt Projects.

Project Title: Reduction of Customer Complaints in Extrusion

Project Description: Stretched film is a major customer complaint in the Extrusion Department. Process Engineer Chris Simmers was assigned to project of reducing/eliminating stretched film complaints. Using the DMAIC process (Define, Measure, Analyze, Improve and Control), it was determined for which key customers and specific film formulations this occurred. Key variables that have a potential impact were identified and Design of Experiments (DOE) controlling these key variables were used to understand the impact and determine centerline settings. A confirming DOE was conducted to insure appropriate machine settings were in place and could be controlled.

Project Result: Customer complaints were reduced by 75 percent.