

New York Air Brake



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KEY FACTS

ORGANIZATION

New York Air Brake

OVERVIEW

- Leading producer of brake systems for the railroad industry
- Approximately \$292 million in sales in 2007

QUALITY CHALLENGE

- Eliminate rust problem on brake cylinders
- Reduce defects and trial-and-error improvement efforts

PRODUCTS USED

Minitab® Statistical Software

RESULTS

- New controls implemented to solve rust problem and reduce waste
- Overall defect rate reduced by 50%

New York Air Brake (NYAB), located in Watertown, NY, has the most technologically advanced air brake manufacturing facility in North America producing brake systems for the railroad industry. The Watertown facility is the home of the engineering "Center of Excellence" for North America, which includes a state-of-the-art engineering research test lab and the Center for Train Control Products.

Challenge

Since embarking upon its Six Sigma journey in 1997, NYAB strives to reduce its overall defect rate by 50 percent on every project and continually trains its employees in Six Sigma methodologies. One project involved eliminating a rust problem that occurred on brake cylinders during hot and humid storage conditions, costing NYAB nearly \$53,000, annually.

How Minitab Helped

To determine the causes of the brake cylinder rusting problem, NYAB used Minitab's DOE functionality. The team was able to evaluate critical to quality (CTQ) factors, develop a corrective action plan and implement new controls in their machining and assembly processes to reduce the defect rate. To that end, NYAB found Minitab's DOE Response Optimizer a great time saver for analyzing their DOE results, eliminating manual steps and the need for a trial-and-error approach.

Results

Minitab remains an essential component of NYAB's Six Sigma program as their engineers rely on the application's rich functionality including proportion tests, Chi-square tests, t-tests, ANOVA, regression and many others. NYAB also relies on Minitab's experienced Trainers to help their staff understand how to use Minitab as well as the practical application of statistics in a Six Sigma environment. Overall, NYAB believes that Minitab makes statistics and statistical analysis easy—especially for the non-statistician.

Learn how Minitab software can help you improve quality at www.minitab.com.

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