



2 0 0 2 MISSOURI TEAM QUALITY AWARD RECIPIENT

PIT VIPER TEAM

at Dana Corporation in Columbia



PROFILE

Dana Corporation is a global leader in the design, engineering, and manufacture of value-added products and systems for automotive, commercial, and off-highway vehicle manufacturers and their related after-markets. The company employs approximately 70,000 people worldwide - all dedicated to achieving innovation through close collaboration with customers. Founded in 1904 and headquartered in Toledo, Ohio, Dana operates hundreds of technology, manufacturing, and customer service facilities in 34 countries. The company reported sales of \$10.3 billion in 2001. The Columbia facility was erected in 1988 and currently employs 277 people. Our customers stretch around the globe as we assemble front and rear driving systems for Ford, GM, Isuzu, Land Rover, Daimler Chrysler, and in 2003, Nissan. Columbia won the Missouri Quality Award in 1994 and was also the recipient of the Missouri Team Quality Award in 1998.

OPPORTUNITY FOR IMPROVEMENT

Requests for additional units each week from Ford, improving quality ratings with Daimler Chrysler, and making the assembly line more ergonomically friendly were three excellent reasons for selecting this team project. As demand increased for the popular Ford Escape vehicle, it was obvious that we would not be able to meet production requirements set by Ford with a line changeover during the week to assemble Dodge Viper axles. To address this, the Process Improvement Teams (PIT Teams) set forth on a mission to determine how Ford production requirements could be satisfied as well as exceeding Daimler Chrysler quality expectations while providing our operators with a safe place to work.



TEAM ACTIONS

The infrastructure within the Columbia facility is built around teamwork. Specifically, each customer has a PIT team that focuses on areas of quality, productivity, and safety. The Daimler/Chrysler Viper PIT Team was responsible for determining the best alternative that would exceed our customer's expectations. The cross functional team consisting of a process engineer, quality engineer, maintenance personnel, line technicians, and the PIT facilitators determined that a production cell for producing Dodge Viper axles would be the most viable solution.

As the Viper production was moved off the Ford line, the Viper PIT Team utilized flow diagrams, documented cycle times, formulated action plans, and used fishbone diagrams for problem solving and brainstorming activities. Team progress was monitored weekly with status sheets during the PIT meetings.

RESULTS

By constructing the Viper production cell, the team was able to reduce PPM's to 0 from 6113, eliminate work in progress by 80%, reduce scrap and rework by 20%, and increase the Overall Equipment Effectiveness (OEE) by 46%. By eliminating changeovers on the assembly line, production requirements were reached without working overtime. A cost savings of \$102,600 was realized by the facility. In addition, accidents dropped to zero from four.

FUTURE PLANS

Process Improvement Teams, or PIT Teams, will always be a way of life at Dana Columbia. Emphasis will continue in the areas of safety, quality, and productivity. The results that were achieved with this specific project will be monitored and measured each and every week by the Daimler/Chrysler PIT Team. The lessons learned during this project will be shared with the other customer PIT teams at Columbia and other Dana plants in order to achieve similar results.

For more information, contact:

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