Workshop Report: Midwestern Region

Working Together the Winning Way

Teamwork helps Chrysler Corporation’s Sterling Heights, MI plant better its customer satisfaction performance.

Floyd Burghard

Partnership among all employees means more than co-leadership of plant floor groups at Chrysler Corporation’s Sterling Heights, MI Assembly Plant (SHAP). As participants in the AME workshop learned, this shared responsibility pays off in performance.

“Doing it right the first time is a basic concept here,” say Chrysler plant co-facilitators James Lawrence (United Auto Workers — UAW) and Bob Schneble. Working side-by-side on problem solving and increasing the use of teamwork (36 teams attack problems in their production areas) throughout the plant boost “first time capabilities” (FTC) on many fronts. The bottom line, Lawrence says, is, “What do we know that is right or wrong in the eyes of the customer? How should the car fit? How should it run? We have people building skills to solve any problems that come along.”

How Total Employee Involvement Strategy Was Built

The Sterling Heights Assembly Plant was built in 1953 as the Chrysler Jet Engine Plant. It never produced one jet engine. Instead, the U.S. Army used the plant to assemble the Redstone missile. In 1980, the federal government sold the facility to the State of Michigan, which sold it to Volkswagen of America. In 1983, Chrysler bought the plant to build the Dodge Lancer and LeBaron models. It was Chrysler’s first new assembly plant in 20 years.

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Plant manager Dur Roller wanted to establish total employee involvement in the plant. To develop this strategy, he and a few key employees (both UAW and management) met off-site for four days. During this off-site meeting, they developed the theme of the “Winning Way” and defined it as working together jointly. The “Winning Way” is based on five principles:

1. Communicating positively
2. Listening and responding with understanding
3. Asking for ideas
4. Building on ideas
5. Checking for understanding.

Roller says the “Winning Way” philosophy requires patience and a willingness to work together to get results, focusing on the long term, not the short term. To communicate to all employees the efforts of the strategic planning conference, a training video was commissioned capturing the principles of the “Winning Way.”

Organization of PQIP

The Product Quality Improvement (PQI) program at Chrysler was established in June 1980 and the Joint Partnership (PQIP) between the UAW and Management at SHAP was formed in January 1988. Chrysler’s PQI allows each plant the flexibility to determine their specific program based on the local needs. The aim of the program is to “do it right the first time,” and to reduce scrap, rework, and repair through more effective means.

The SHAP PQI is managed by a 12-member Steering Committee; six members from the UAW and six members from Management. Serving as co-chairs of the Steering Committee are the local UAW president and plant manager. The day-to-day activities are managed by two full-time facilitators, one from the UAW and one from management. Also serving full-time roles are the PQI communicator, the PQI trainer (both UAW), and the SPC coordinator (management). Part-time efforts are from a shop committee chair, the local UAW vice president, and managers of production, manufacturing engineering, and product quality engineering.

“Our roles are not etched in stone,” Schneble says. “What we’re looking for are common goals and objectives. We’re seeking ways to be creative in developing people — to improve product and quality . . . From the top down, we want to make sure that our people understand quality improvement principles.”
Training for QIP:
Dick Acosta, vice president of Car and Truck Assembly, said, "(Chrysler) success depends on participation and involvement of our people." To date, over 700 employees at SHAP have received training in interaction problem solving, meeting leadership, and SHAP-sponsored quality training.

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Quality training consists of Statistical Process Control (SPC), teamwork, quality awareness, and problem solving. SPC and quality awareness focus on "working together to be better." Teamwork focuses on developing mutual trust through sharing of information. An eight-step quality awareness method addresses joint commitment, quality improvement teams, awareness, measurement, error cause removal, quality council, and "repeat the process."

PQI pilot teams have been formed in the trim, electrical, final, maintenance, paint, body shop, and chassis assembly areas. Data are collected daily from 150 separate manufacturing steps, and over 400 SPC charts are updated weekly. The teams go to work using Pareto charts to identify the top five defects. Through cause-and-effect diagrams and brainstorming techniques, potential solutions are developed and tried. Progress is then plotted for results.

Quality concerns are monitored in real time through a Performance Feedback System (PFS), an on-line communication system of 500 data terminals dispersed throughout the 1000 stations in the plant. Each PFS terminal is networked to the host processor and has a menu of information that can be selected by the operator. This system allows instant feedback to the producing department and the host processor to track a vehicle's progress. Each entry identified a corrective action that must be taken before the unit can clear the area. This information also assists the in-line sequencing program, assuring the vehicle never loses its place during processing.

Results
- The PQI team in Trim improved their product by 48 percent in only eight months, measured by first-time capability using a performance feedback system. Ongoing performance improvements are projected.
- Annual inventory turns exceed 100.
- Eighty-two percent of the daily dollar value of material is delivered on a Just-In-Time (JIT) basis.
- Customer satisfaction, as rated by J.D. Powers, showed Chrysler improved for 47 straight months.

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