

ENGINEERING UPDATE

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*AC Delco Systems
Wins National Award*

AC Delco Systems Benchmarking's



Benchmarking has been defined as the search for, and implementation of, best practices. Benchmarking supports the evolution of an organization that continuously improves. Benchmarking is also a Quality Network Action Strategy and a key AC Delco Systems initiative.

AC Delco Systems won a national award for its work on benchmarking automotive fuel pumps (detailed in June 1992 issue of *Engineering Update*). A paper describing AC Delco Systems' benchmarking success story was recognized as an outstanding example of both the process and potential of benchmarking. The authors, Orrin Woodward and John Predmore, presented their work on Technical Competitive Analysis (TCA) at a benchmarking conference in June 1994.

AC Delco Systems' two year study of competitors' fuel pumps pinpointed major differences among the motors of the various pumps, and revealed some interesting trends and correlations. "Best-in-class" test results were summarized as targets for all future pump designs. Engineers were able to implement this new-found knowledge and incorporate several major improvements in both current and future generation fuel pumps. These improvements resulted from a better understanding of motor technology, not direct copying. The new

generation AC Delco Systems fuel pump will leapfrog the best of the current competition in several key product attributes.

Some of the improvements that resulted from this project were: durability of motor brushes was doubled, motor efficiency was doubled, and vibration (which contributes to noise) was reduced by a factor of five.

The non-profit agency sponsoring the Benchmarking Awards, the American Productivity & Quality Center, works with business, labor, government, health care and academia to improve productivity, quality, and quality of work life. The Center's International Benchmarking Clearinghouse, which began operation in 1992, provides a number of products and services to assist organizations with their benchmarking efforts.

The purpose of the Benchmarking Awards is to provide criteria for self-assessment, recognize teams and organizations that provide models of excellence, and extend the state-of-the-art by encouraging and communicating new techniques and the results of on-going research.

Criteria for the Benchmarking Awards include overall benchmarking approach, implementation of findings and documented savings. In 1993, the inaugural



John Predmore (right) and Orrin Woodward (center) accepting Benchmarking Award from Carla O'Dell, Director of the International Benchmarking Clearinghouse, the sponsor of the award.

year of the Benchmarking Awards, there were seven finalists but no awards were given (a reflection of the high standards set by the judging committee). This year, AC Delco Systems was one of seven organizations nationwide receiving an award. Other functions benchmarked include: maintenance, customer satisfaction measurement, coolant recovery, and education planning.

For more information about competitive product benchmarking or the Technical Competitive Analysis Quality Council, contact John Predmore at 8-387-8553. Training and support materials for product teams and TCA champions include a videotaped summary of the fuel pump analysis.