



“Our quality management software is now better than ever at meeting our customers’ needs. We are not only more effectively managing quality, we are also more proactively managing risk, an important consideration in the auto industry.

April Dines, Senior Corporate Quality Engineer, Cascade Engineering

CUSTOMER CASE STUDY

CASCADE ENGINEERING

QUALITY MANAGEMENT SOFTWARE UPGRADE IMPROVES OPERATIONS WITH SIGNIFICANT TIME SAVINGS

THE COMPANY: CASCADE ENGINEERING

Cascade Engineering, headquartered in Grand Rapids, Michigan, is a manufacturer specializing in large-scale plastic injection molding. They support multiple brands across eleven strategic business units serving a wide diversity of markets including automotive, commercial truck and bus, solid waste and recycling, furniture, material handling, renewable energy, and RFID asset management.

HIGHLIGHTS	
Company	Cascade Engineering
Location	Grand Rapids, Michigan, USA
Sector / Industry	Manufacturing / Large-scale plastic injection molding
Markets	Automotive, Commercial Furniture, and Containers
Solutions Utilized	QAD QMS (powered by CEBOS MQ1)

THE CHALLENGE: QUALITY MANAGEMENT SOFTWARE GAPS SLOW PRODUCTIVITY

Customer satisfaction is one of Cascade's most important goals. The manufacturing of a wide variety of products for clients in multiple markets requires managing considerable documentation with very exacting specifications, while ensuring all regulations and standards are met.

Cascade's prior quality management software was cumbersome and unable to keep up with the needs of the organization.

"Before we had QAD QMS, we maintained the required quality and service. Our previous process was slow and took too much effort — too many hours were spent doing, redoing, rechecking and locating," comments April Dines, the Senior Corporate Quality Engineer for Cascade Engineering.

THE SOLUTION: A FULLY INTEGRATED QUALITY MANAGEMENT SYSTEM

Cascade examined several quality management systems, and due to its simple interface and breadth of functionality it was determined that QAD QMS was the best choice.

"It was a well-coordinated effort," Dines adds. "Our project manager had a detailed project plan that we adapted to our specific requirements. The process was easily executed and we exceeded our original goals. In only a few weeks the plan was ready and we began making it happen."

The nine-month plan was quickly put into motion. An internal interface was created as a centralized repository for instant access to data and documents, real-time status readings, and notifications of possible problems/needs for internal manufacturing as well as data related to suppliers and customers.

Documentation was the first area to be addressed. Automated workflows were set up and data from the 78 different document types began to migrate into the new system. A comprehensive picture emerged as numerous documents previously held by individual owners became centrally available.

The main areas of the implementation are as follows:

- Document Control — Manual administration and distribution of Cascade's documents was eliminated by electronically automating the entire document control process, including: editing, routing, and approvals. This created one "single source of truth" where all the latest and greatest versions of documents can be found.
- Gage (Calibration) — The performance and effectiveness of Cascade's gage system was improved by capturing and effortlessly generating calibrations, cost, status and trending analysis.
- Audits — Cascade's entire audit process was automated, including: scheduling, notifications, linking to historical information, reporting and escalations.

- APQP — Automation for advanced product quality planning (APQP) methodologies enabled Cascade to create and manage process flows, failure modes and effects analysis (FMEA), control plans, production part approval process (PPAP), product specification management, and other instructions and checklists used to ensure that operations and inspections are done right the first time.
- E-sync — Data input redundancy was eliminated, providing Cascade with automatic data synchronization, ensuring data accuracy and efficiency.

Internal training classes were conducted as each new area was incorporated into the new quality management system. As the 600-plus affiliates and employees at the Grand Rapids campus recognized the benefits, enthusiasm spread leading to active understanding and system utilization campus-wide.

“It is very refreshing that our employees want to use the new system,” notes Dines. “As individuals throughout the campus recognized the benefits, they started requesting implementation.”

“The upgrade of our software with QAD QMS has saved us time and money while seriously improving our quality management — paramount in our customer-driven business.

**April Dines, Senior Corporate Quality Engineer,
Cascade Engineering**

**3,583
MAN HOURS
SAVED ANNUALLY**

THE BENEFITS: TIME IS SAVED, PRODUCTIVITY IS UP, QUALITY IS ENSURED

“Upgrading our quality management software has been a real success for us. The system is now user-friendly and has increased both productivity and morale,” comments Dines. “We continue adding information and refining the system. As we realize additional benefits, we see even more ways to expand and use our new quality management software to our advantage.” Some of the benefits Cascade has experienced include:

- The centralized interface enables cross-company awareness and communication throughout the organization
- Data is readily available
- Managers and workers can access information from the manufacturing floor
- Corrective actions can be sent to suppliers through the interface

- Suppliers can go directly into the system to see their status; 100 are currently using it
- Retyping and redundancies have been eliminated
- Follow-up and notifications are now automated
- The system can be expanded in the future and plans currently include:
 - Adding additional documentation
 - Expanding this system geographically to our family of companies
 - Working with suppliers to add information directly

“This upgrade has been a major success for us. The expertise of our project team and the intuitive interface made the upgrade expedient with few problems,” states Dines.



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