



SAI Global provides Standards, compliance and business improvement solutions to help you comply with the requirements that shape your business world.

# QUALITYDIGEST

▶ HOME ▶ SEARCH ▶ SUBSCRIBE ▶ CONTACT US ▶ ADVERTISE

May 3, 2006

## Magazine

HOME  
ARTICLES  
BUYERS GUIDES  
COLUMNISTS  
▶ DEPARTMENTS

### Quality Applications

[SPC Guide](#)

[First Word](#)

[Letters](#)

[What Works](#)

[Profiles in Quality](#)

NEWS DIGEST  
SOFTWARE  
BACK ISSUES

## Communities

QUALITY INSIDER  
BIOMED  
METROLOGY  
SIX SIGMA  
STANDARDS

## Resources

QUALITY AWARDS  
FORUMS  
CLASSIFIEDS  
CALENDARS  
ISO DATABASE  
QUALITY LINKS

## Departments: Quality Applications

- [Powerway Inc. Document Manager](#)
- [SofTech Inc. ProductCenter](#)

### CMC Electronics Shortens Design Cycles SofTech Inc. ProductCenter

The recent history of CMC Electronics could be a movie plot: how a newly hired file clerk made it to the heights of business success by shortening design cycles in the engineering department, increasing sales and, in the end, saving the company millions of dollars. In reality, it's not a file clerk, but software--SofTech's PLM file management system--that has achieved all this.

CMC Electronics Inc. (formerly BAE SYSTEMS CANADA Inc.) produces both commercial and military avionics products. CMC supplies The Boeing Co. with flight management systems using global positioning systems. Other big customers, like the U.S. Army and the Marines, look to CMC Electronics for line-of-sight, high-frequency tactical radios.

As CMC Electronics was rapidly adopting more computer-aided design (CAD) tools in the early 1990s, company engineers began grappling with new problems resulting from a huge proliferation of project files. They realized that they needed to effectively manage CAD files and associated information to prevent costly inefficiencies and project delays.

When the company reached the apex of CAD-system proliferation, one could find Pro/Engineer, Mentor Graphics, CADKEY, AutoCAD, and four or five other minor CAD systems in use. The only official tracking system for the bewildering array of files and file structures consisted of jotting down lists on paper. The potential for error started to be actualized with alarming regularity.

"Typically, the files were just spread all over the place with multiple copies everywhere," recalls Mark Hamilton-Piercy, CMC Electronics IT engineering manager. "This caused us all kinds of problems. The time it took just to find drawings, to make sure you had the right ones, and be sure you were not redoing work by picking the incorrect files was costing us a lot of money."

In 1994, managers of CMC Electronics realized that they needed a product life cycle management (PLM) solution to regain control of the engineering process. They sought out SofTech Inc. of Tewksbury, Massachusetts, developers of ProductCenter software. "One of the main driving forces was cycle time in the design phase," Hamilton-Piercy explains. "An awful lot of time was spent effecting changes. There were all kind of issues that just went away when we started working with SofTech."

CMC Electronics chose SofTech's PLM due to its close affinity with its dominant CAD system. "I would say the main driving force was ProductCenter's integration with Pro/Engineer, which was the emerging standard in our company. Although

Ads by Goooooogle

### 2D & 3D CadCam. Free Demo

Powerful & Affordable CNC software Starting at \$495. Try it Free.  
[www.bobcad.com](http://www.bobcad.com)

### Going 3D

Survival Guide for 2D CAD Users Produced by Machine Design Magazine  
[www.solidworks.com/going3d](http://www.solidworks.com/going3d)

### Talent Management System

Free demo. Any size business can hire, develop & retain great talent  
[www.SilkRoadTech.com](http://www.SilkRoadTech.com)

### 3D CAD Program. Free Demo

Full-Featured, Easy To Learn & Use "Top New Product of the Year"  
[www.alibre.com](http://www.alibre.com)

### Project Mgmt. Online-TCN

PMI certified Project Management Certificates Online from Boston U.  
[www.college-net.com/boston](http://www.college-net.com/boston)

Advertise on this site

other vendors had products available for managing the problem, they were far short of meeting our requirements," says Hamilton-Piercy. "After reviewing the product, it was pretty evident that ProductCenter is an extremely flexible product. We saw that it would be an ideal electronic system for gathering and collecting the information we need, rather than distributing paper."

CMC Electronics' engineering configuration department began to store and manage all its core drawings and engineering documentation in ProductCenter. The next step, linking all technical manuals for CMC Electronics product lines to the design documents, made the department project-centered. "Over time, our plan is that ProductCenter will become our full-blown product life cycle management system--handling everything," Hamilton-Piercy says.

All engineering documents are now Web-accessible with the company's custom-built Electronic Document Online Viewing system, an internal program that encourages employees worldwide to suggest improvements to products or processes. The system, which is based on ProductCenter and developed with the ProductCenter WebLink tool kit, won BAE systems' Bronze Award for Innovation. "This is now deployed across the entire organization," Hamilton-Piercy says. "That includes the manufacturing, testing and engineering departments."

The story has a happy ending: CMC Electronics has calculated savings of more than \$313,000 per year, estimated just on the amount of employee time previously spent searching for drawings and information. In the years since ProductCenter's adoption, the savings have accumulated into the millions, doubling the company's original estimates.

CMC Electronics can now accept more new business that requires short design cycles and rapid results. "Using ProductCenter has definitely improved our responsiveness to our customers," says Hamilton-Piercy. "Our increased ability to deliver is bringing us more customer satisfaction and more business."

### **SofTech Inc. ProductCenter Software**

#### **Benefits:**

- Improves cycle time in the design phase
- Integrates with Pro/Engineer and other CAD systems
- Offers WebLink tool kit, which makes all engineering documents easily accessible from the Internet.

[www.softech.com](http://www.softech.com)

[We value your feedback.](#)  
[To comment on this article,](#)  
[note the article title](#)  
[and then click here.](#)

#### **Navigation**

[Home](#) | [Search](#) | [Subscribe](#) | [Guestbook](#) | [Advertise](#) | [Resources](#) | [ISO 9000 Database](#) | [Web Links](#) | [Back Issues](#) | [Contact Us](#)

#### **Current Issue**

[Home](#) | [Articles](#) | [Columnists](#) | [Departments](#) | [News](#) | [Software](#)

Copyright © 2006 QCI International. All rights reserved.  
Quality Digest can be reached by phone at (530) 893-4095.  
[Contact us via Contact Form](#)