

avatech solutions

building design

facilities management

civil/survey and mapping

product lifecycle management

mechanical design

“Prior to the implementation of our new data management system from Avatech we spent way too much expensive engineering time just looking for drawings we knew we had, but couldn’t easily locate or verify. Now we are organized. Avatech helped us implement new software, directory structures, and naming, searching, and retrieval standards, so that today we work together better and make use of the significant resources we have already developed.”

— Jason DeVore, Engineer, CPM  
[www.cpmroskamp.com/roskamp](http://www.cpmroskamp.com/roskamp)



**AVATECH**  
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## AVATECH ORGANIZES CPM FOR SUCCESS

Autodesk Vault implementation makes working together easier for industrial processing machine giant.

### THE ORGANIZATION

The world’s leading equipment manufacturer for particle size reduction and pelleting, CPM manufactures a broad range of products including pellet mills, roller mills, grinders, flaking mills, oat hullers, steam chambers, hammermills, rotary feeders, shredders, and crushers. CPM offers world-class equipment and after-market sales and support for particle size reduction, preparation and agglomeration in feed milling, oilseed processing, ethanol, biomass, pet food, cereal, snacks and compounding industries. The company also serves the corn wet milling, extrusion, microbrewery and wood industries, and has more than 500 employees.

### THE CHALLENGE

For years, CPM engineers worked with AutoCAD to design components and assemblies for their sophisticated industrial machines. More recently they implemented Autodesk Inventor to reap the benefits of 3D modeling, reducing interferences and improving communications between engineers and the shop floor. The problem lay with well over 150,000 different drawings—including everything from piece part drawings, to multiple sub-assemblies and full assemblies. The standard Windows Explorer folder structure was not robust enough to help designers find and keep drawings up to date quickly and easily, hampering their ongoing corporate goals of lowering costs, increasing quality, and reducing response times for their customers.

“CPM has three locations in the U.S. and one in Europe. Although we are dispersed geographically, all of our engineers share the same drawings,” said CPM Engineer Jason DeVore. “It was just taking us too long to search the folder structure to make it worth while to locate drawings we knew we had. So we decided to look for another data management solution in order to increase productivity and take advantage of the significant engineering resources the company already had.”

### THE SOLUTION

DeVore turned to the data management experts at Avatech Solutions who recommended Autodesk Vault. The Avatech team implemented Autodesk Vault over the period of a few days and began importing Inventor and AutoCAD drawings.

They helped CPM to develop core Inventor and Vault standards for proper storage and retrieval of information.

“I knew we were in good hands because the team at Avatech are data management experts and the professional services representative we were working with had over 10 years working in manufacturing to improve product knowledge, productivity, standardization, and integrate systems with new workflow processes,” said DeVore.

Another important requirement was for CPM’s non-CAD users to be able to locate and view drawings easily from any one of their offices even though all files are centrally stored on a server in Boston. Avatech filled this gap in their workflow by working with them to create a customized “view-only” application for searching, viewing, and printing files from Vault without having Inventor or Vault Explorer on their computer, through an application custom-built by Avatech’s Software Development Solutions group. To train the 30 people who would use this system, Avatech held onsite training that was then broadcast online to the other locations.

## **SIGNIFICANT REWARDS**

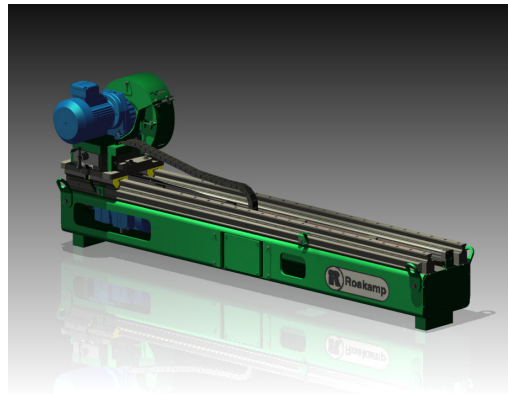
### **Reducing Drawing Access Time to Increase Productivity**

To reduce business risk and costs, CPM houses all drawings at an offsite data center. “The company provides failsafe service and emergency functions we just could not provide in house, said DeVore. “Prior to adding Vault, the problem was that it would take forever to just load an Inventor drawing locally once called from the server. Now, downloading a drawing takes seconds, not minutes.”

### **Protecting Valuable Design Assets**

As product designs evolve, version management in the new Vault system provides protection from unintentional overwriting of reusable designs. In addition, CPM saves

hours of valuable design time every week with the powerful copy and re-use “copy design” capabilities that reduce the time required to begin a new design from scratch.



## **Simplifying Concurrent Engineering Processes**

“We don’t design our machines in isolation,” said DeVore. “We work on several aspects of a machine simultaneously to speed our time to market. Vault allows our engineering team to safely work on the same project simultaneously, using drawing check-in and check-out rules we have built

into the system. Vault Access also shows other departments, like purchasing and tooling, what we are engineering and allows them to get a jumpstart on their piece of the puzzle.”

## **Advancing Collaboration with Assembly and Manufacturing**

“The Vault Access application helped reduce miscommunications between design engineers and line assembly staff because they can look up drawings prior to performing any work.” said DeVore. “Now anyone in any location can quickly call up 3D models to have a look at what the final pieces and assemblies should look like, and how they fit together without having to use Inventor itself.”

## **THE FUTURE**

DeVore plans to continue to work with Avatech to implement Autodesk Productstream in the future. “With Productstream we will achieve true data management with complete, accurate, approved drawings released to manufacturing in a timely and effective manner. Productstream automates the release management process by managing engineering changes and bills of materials, while enabling engineering to maintain complete control over designs.”

One of the significant benefits that DeVore sees is that with Productstream, CPM can achieve much tighter integration of 3D models in Inventor and their material requirements planning (MRP) system to enable better documentation practices.

“We could use the information straight from approved drawings to produce really accurate bills of materials, cost them out more quickly, and actually place orders more effectively with a tighter integration of parts information in MRP and our designs,” said DeVore. “Avatech’s experience with these technologies has been invaluable to me and we will be working with them in the future to stay on top of trends that can give us a real competitive advantage.”

## ABOUT AVATECH

Avatech Solutions is a leading engineering systems integrator, with unique solutions that enable companies to more effectively design, develop, and manage projects, products, and facilities.

We get results with the unique capabilities of our team of industry-experienced professionals—application engineers, consultants and strategists, trainers, software developers, and project managers.

With offices nationwide, we specialize in process optimization, software implementation and integration, standards development and deployment, education, and technical support.

Our expertise is real. And so are the results that we bring to our clients. Avatech can help you succeed, with solutions that align your technology and processes to your organization’s goals—for results the way you define them.



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