## Using Technology to Develop Actual Costs for Tighter and Smarter Bidding

I t could be described as the "holy grail" of component manufacturing – a single linked data stream from blueprint to component design to bidding to manufacturing to shipping and invoicing . . . and all points in between. We're talking real numbers here, actual-cost data of all labor, material usage, job status and inventory levels captured and reported in real time.

Although the holy grail suggests a distant, all-but-unattainable goal, Custom Component Company in Racine, Wisconsin, is getting very close to achieving that goal by taking advantage of state-of-the-art technology in virtually every aspect of its business.

CCC uses Alpine's VIEW software to design wood trusses, cold-formed steel trusses and wall panels. The fullyintegrated software also lets the user estimate, frame, analyze and cut conventional framing and engineered wood

products. The design data for the jobs resides in Alpine's HomeBASE, an SQL-server-based data engine that produces MS Access reports.

In the plant, CCC uses Alpine's eSHOP, another SOL-server-based management software system that tracks actual labor time and material usage for every piece of every job, from cutting through assembly. Because the data can show production rates for specific components by types of jobs, materials etc., it builds a history that helps optimize

CCC uses Alpine's VIEW software to design wood roof, floor and wall systems and TrusSteel trusses.

costing and, of course, bidding. Finally, data

from HomeBASE and eSHOP flows electronically into a suite of accounting applications in Activant's Falcon business management software. A



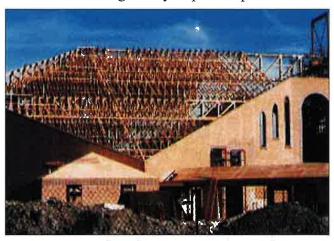
Last year, Custom Component, Big Buck Builders Supply and ProMillwork moved into this modern industrial complex on 20 acres. Company president Valerie Hansen named it the Construction Zone.



full-featured ERP system, Falcon also helps streamline customer order and inventory management, and vendor procurement.

On a recent visit to CCC, we complimented Valerie R. Hansen, the third generation president of the company, on the achievement.

"Just embarking on any step in the process would



In addition to residential component products, CCC specializes in commercial and multi-family projects. For example, this church was constructed for the St. Lucy's Parish in Racine. Its 6/12 roof pitch spans 174 feet and incorporates 115 truss designs. The roof is supported by three girders. The main girder is nearly 91 feet long and all are 10 ply. WTCA featured this project at the National Association of Home Builders show in 1997.

have been a huge initiative," she said. "But we were determined to develop a system that would allow us to bid smarter and tighter. It meant teaming our people with suppliers of both leading-edge and "bleeding-edge" software systems. Jackie has been instrumental in making the process a success."

Jacquelyn (Jackie) Johnson is vice president of finance and technology for the company.

"Linking HomeBASE and eSHOP with Falcon was the key step," she explained. "The challenge was to make the data flow as accurately and



Jackie

seamlessly as possible. We are active in a small beta team of companies working with Activant to develop our use of Falcon even further. The system is very slick right now, though there's still work to be done; lots of details. A major goal is to have eSHOP deliver "actual" inven-

tory data for the General Ledger and invoicing. Eric Goratowski can give you a progress report on that."

As manager of CCC, Eric is a strong proponent of eSHOP. "Workers use touch-screen monitors at each saw and assembly table station to log start and



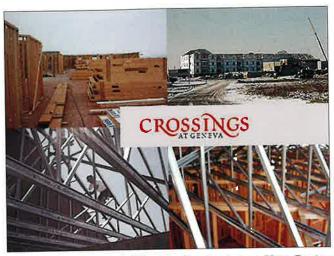
Using eSHOP, trusses can be quickly repositioned on the assembly table.

finish times for each stage of a job. The system follows jobs from station to station throughout the production process, so I can view the status of a job in real-time at any

saw or assembly table from my workstation. Jobs can be redirected or interrupted for a re-cut or rush job at the click of an icon. It's a true shop production management system. To get the actual data Jackie needs requires good preparation at each station before initiating that stage of production whether it's at a saw or table. But that improves productivity. We're getting very close to giving her all the actual data she needs."

Seeing the enthusiasm for technology advances by virtually everyone in the company, we asked Valerie when she first got interested in technology.

"My father was a real tech junkie," she said. "Even in the 1960s, he was tinkering with the newest devices and technologies to see how they



The 2006 winner of "Best in Condominium Unit Design Award" from the 50+ Housing Council of the NAHB, Crossings at Geneva is a beautiful example of hybrid construction. The traditional brick and stone exterior structures were built with Custom Component's pre-fabricated wood wall panels and cold-formed-steel, light-gauge steel roof trusses.

might improve operations in the lumberyard. Our family tended to embrace technology. We were always willing to try new things."

In 1978, Valerie joined the family business and changed its focus from a cash & carry operation to serving professional builders, other lumberyards and industrial accounts. And like her father, she began looking for ways to improve operations through technology.

Today, the company has three divisions: Big Buck Builders Supply, a full-service, full-line lumberyard exclusively serving professional builders; CCC, manufacturer of trusses and wall components for 45 years; and ProMillwork, manufacturer of pre-hung doors and pre-finished mill-



The 8 x 12-foot image projected on the screen behind Plant Manager Eric Goratowski is an integral feature of the eShop system. It provides an easy reference for the table crew. Eric says CCC plans to replace the projector with large flat-panel monitors located above each assembly table station.

work. All are located in a modern industrial complex on 20 acres that Valerie named the Construction Zone.

Results of the company's continuing quest for technologies that improve operations are everywhere. A wireless network ensures that all systems are completely Alpine Linear Saws are among the equipped with PDAs design software.



integrated. Even the manufacturing equipment in the forklifts in the yard are CCC plant that are computercontrolled and driven by VIEW

and component delivery truck drivers use GPSenabled cell phones.

The company keeps up with the latest technologies in the component plant as well. Nearly all the

manufacturing equipment is computer-controlled and driven by output from the VIEW design software, including two Alpine Linear Saws, an AutoMill RS component cutter, Speed Cut Express and two 100-foot RAM systems with AutoSet jigging.

What's next for Custom Component Company? Valerie sees real possibilities in Building Information Modeling (BIM), a design software tool that simulates construction by encouraging collaboration among architects, engineers, component manufacturers and contractors that contributes to faster project delivery, enhanced economics and lean construction. We'll surely hear more about it in the months and years to come.

One thing seems certain, when it comes to the implementation of new and emerging technologies, CCC will be on the leading edge.

## BuyMetrics Helps Lumber Buyers Work Faster, Buy Better

In 1995, Valerie Hansen's daughter and her husband enlisted her in a new venture, a webbased software company called ProBuild<sup>TM</sup>. It's initial product, ProLink®, enables building material dealers to service their professional builders online with access to current pricing for bids, the ability to update model home pricing with a click of a mouse and download price files to builder CAD software for design-on-fly pricing. In December 1999, Information Week magazine recognized ProBuild as a top 100 E-Business Company for its leadership in deploying technology to address real-world supply chain issues.

In 1999 the company launched its flagship product, BuyMetrics®, a patented online service for the professional lumber and panel buyer. Highly customized to the individual buyer, BuyMetrics saves time, reduces cost of inventory and provides tools to help fine-tune purchasing strategies. The platform currently supports billions of dollars in lumber purchases for buyers at industry giants BMC West, Builders First Source, Stock, Pro-Build-Contractor Yards and Universal Forest Products, as well as buyers at leading independents Foxworth-Galbraith, Parr Lumber, Gaster Lumber and, of course, Big Buck/Custom Component. For more information, visit www.probuild.com.

## **Alpine** Equipment **Finance Program**



reliability and profitability. The Alpine Equipment Finance Program makes it even easier to get that equipment. Since 1989, an impressive roster of industry leaders has taken advantage of the

creativity and convenience of the program to acquire equipment worth nearly 100 million dollars. The program covers the full Alpine Equipment and Intelligent Building Systems lines and is available in all 50 states.



Clem Law

- Waiver of Alpine cash deposit at time of order
- 100% financing on one machine or entire package
- Payments structured for your unique situation
- Conserve your working capital and lines of credit
- Financed equipment qualifies for all depreciation allowances



Toll-Free 800-662-5955 • CWLAW@comcast.net