



# Dakota Craft Spends Where It Should, Cuts Costs Wherever It Can

by Mary Lynch Cadwallader

**Not only is Dakota Craft becoming more “green,” they are using innovative ideas and solutions to everyday issues to save some green.**

## at a glance

- ❑ Dakota Craft found a solution to mitigate the impact of rising fuel costs: heat its production facilities with wood waste.
- ❑ Cost cutting efforts make it possible to redirect resources toward company growth and exceptional employee benefits.
- ❑ The company invests in well-educated truss technicians because it believes that if you don't start with a quality design, the product will negatively impact the project all the way to installation.
- ❑ In-Plant WTCA QC ensures rigorous internal quality control measurements by helping manufacturers to develop robust manufacturing management information systems.

**D**akota Craft, Inc. is a company that recognizes success depends on superior products and service, long-term employee retention and a high quality work environment. Keeping focused on meeting these goals requires spending in the right areas and cutting costs in others. Using onsite wood waste to heat its manufacturing facilities and joining a materials buying co-op are just two of the important ways they experience significant savings. These cost cutting efforts make it possible to redirect resources toward company growth and exceptional employee benefits.

In 1984, Alan Thornburg made the jump from Plant Manager of a Rapid City, SD company's truss plant to president and owner of the newly created truss company spin-off, Dakota Craft. His new responsibility only heightened his respect for the truss manufacturing business. He realized that a thorough understanding of sales and production was just one aspect of running any successful company. In addition to creating a loyal customer base and producing quality products, it became clear that many decisions made along the way involved developing the company's philosophy and character. As you might expect, a company's values, such as maintaining high product standards and providing a top level work environment for its employees, often becomes intertwined with financial decisions.

For a family-run business, it was important to focus energy and dollars on an environment in which the extended “family” of employees could thrive and feel accomplishment in their work. With only so much money to spend in the beginning, Dakota Craft actively sought the right balance between exceptional employee benefits and cost cutting efficiencies.

### Converting Scrap to Heat

Like in all component manufacturing facilities, Dakota Craft was finding its operating budget being negatively affected by the steady increases in fuel costs. Fuel related price hikes were impacting costs from purchasing source materials and shipping products to heating large production plants.

Thinking outside the box when considering cost saving measures, Alan researched an alternative heating solution that would almost entirely eliminate the fuel line-item in the company's budget. Wood-based heating was the most practical and affordable option because it allowed the company to not only use its wood waste, but it also eliminated the need to dispose of it. Through wood-based heating, they



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have found a means to provide a comfortable environment for their workers and dramatically cut costs.

Fortunately for Dakota Craft, they heat both their truss plants, consisting of over 50,000 sq. ft of production space, with their operation's waste wood. With a winter climate that ranges from below zero to highs of 40 degrees, keeping the plants at a comfortable working temperature of 60 degrees has a positive impact on productivity.

### Shaving Costs Allows for Expansion

The company's cost savings, some of which were through eliminating heating expenses, have allowed for healthy expansion. Since Alan purchased the 20-employee truss business, he and his family have consistently increased the company's size and expanded its product offering. They added a full service lumber yard, Dakota Craft Builders Supply in Rapid City (1991), as well as the recent addition of a wall panel operation in 2003. The Rapid City plant has a relatively large shipping radius of 250 miles, and an increasingly large customer base developed in the Denver, CO area, prompting the need for a new facility. So in 1999, a new 34,000 sq. ft. facility in Cheyenne, WY was built. This division, called Truss Craft, supports customers in Colorado, western Nebraska and Wyoming. Though it services both commercial and residential building markets, most of its business is in custom homes. Most of the production is roof trusses (60 percent), but Truss Craft also manufactures floor trusses and offers I-joist distribution.

The company's new plant carried on the Dakota Craft tradition of minimizing costs in the fuel department by utilizing every possible scrap of wood waste. The Cheyenne plant has two 800,000 BTU per hour industrial shop heaters. "As a truss plant, it is natural to heat with wood because we create an

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abundance of wood scrap fuel every day," notes Shannon Thornburg, Alan's son and current president. "It would be crazy to pay for heating fuel since it is such a significant cost that fluctuates with world uncertainties."

### Going Green

Dakota Craft also made efficient combustion a priority to minimize the impact on the environment and provide installation flexibility. As Cheyenne Plant Manager Tom Allen attests, "The furnaces are right in the shop, and because of their large hoppers they can turn out heat for a long time with very little attention." Not having to use other fuels supports the external environment, too. Shannon takes pride in the fact that their system reduces Dakota Craft's landfill contributions.

### Quality in Design & Production

One of Dakota Craft's defining missions is to be the "go-to" company for design excellence. According to Shannon, clients who may not regularly come to Dakota Craft but have a particularly difficult design, will often solicit Dakota Craft's opinion "just to be sure it is right." This is a great compliment to the talent and expertise of the in-house technical team, many of whom are engineering graduates from the University of Wyoming and the Rapid City-based South Dakota School of Mines and Technology. Design excellence is not a chance outcome, but another indication of Dakota Craft's philosophy. "We try to find the best technical people in the area and give them the experience, training and tools they need to succeed," says Shannon. "If you don't get it right in the design phase, the product will negatively impact the project from production all the way to installation. We care about excellence and quality and any sacrifice in design, materials or production reflects on the company and our family. It just makes sense to find the best people and give them the tools to get things right."

The pursuit of quality is also evident in the production process, as Dakota Craft is one of the forward-thinking truss companies who are pursuing the voluntary In-Plant WTCA Quality Control (QC) certification. As a member of a group of over 70 proactive component manufacturing locations, Dakota Craft is taking the time to focus on improving and



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documenting the production process. The program ensures rigorous internal quality control measurements helping companies develop a robust manufacturing management information system and also comply with the ANSI/TPI quality standard. Both of Dakota Craft’s truss plants are in the final stages of the certification process. “This is one of those situations where we need to look at the long-term benefits. We take pride in what we do, and our customers can trust us to produce a first-rate product. Another benefit of In-Plant WTCA QC is a more educated, qualified workforce and a safer work environment.”

### **Dealing with Limited Labor**

Facing a similar situation as other truss companies nationwide, Dakota Craft has a limited qualified labor pool. Added to this is that Rapid City and Cheyenne are somewhat remote locations, making the location and retention of a quality workforce even more challenging. Rapid City has a population of 65,000 and Dakota Craft employs up to 100 workers in that location. Cheyenne has 60,000 residents with the plant employing 50. Surprisingly, despite the remote site, the cost of living is just about at the national average, keeping compensation a major budget item.

“Our full time employees need to come to work knowing that they and their families are taken care of by comprehensive company benefits, so this is where we spend more,” Shannon explains. “Despite rising health insurance costs, we are committed to paying a significant portion to ease the burden on the employees. We define ‘benefits’ in a broader sense. Of course, it includes health insurance, vacation and sick time, but we take it a step further with company 401(k) plans and annual company bonuses. Often 401(k) plans are a substantial source of retirement income for our workers, so after a year of employment, we have an aggressive matching plan that reflects our commitment to their future and their families.” When asked how he knew that Dakota Craft’s 401(k) plan is the “best” in the area, Shannon chuckles and responds, “When 401(k) salespeople come to sell us their plans, they often remark, ‘Wow, this a generous plan!’ I guess that’s a pretty good indicator.”

### **Sharing in the Success**

With the construction business going so well in the last five years, Dakota Craft is in the position to reward employees through a company profit sharing program. In December 2005, employees received up to six percent of their salary as a company bonus. “I know I’m stating the obvious, but this is a team environment and their success is our success.” The company also has a traditional incentive bonus and plant productivity program, which give employees ample opportunity to benefit from quality production.

Funding these important employee programs requires financially shrewd approaches in other areas of the company. Two years ago Dakota Craft joined a buying group to have a cost benchmarking program for building materials.

Being price competitive is often difficult when small organizations like Dakota Craft encounter the massive purchasing power of the “big box” stores. To level the price playing field, Dakota Craft recently became a shareholder in a non-profit co-op, allowing them to gain insight and purchase materials more competitively. As a member, they leverage the buying power of over 180 independent building material and lumber yards with a combined purchasing power in the billions. Making price less of a competitive factor, Dakota Craft is confident they will succeed with their true strengths: “Quality products, responsiveness to customers’ needs, and depth of experience.”

A testament to its employees, its success and prudent financial decisions, Dakota Craft has once again outgrown its production capacity. In January of 2007, it plans to add an additional 40,000 sq. ft. truss manufacturing facility in Rapid City. To be sure, the new facility’s construction materials will be bought at a competitive price, comfortably heated with production waste wood and will house employees who will continue to be first priority. **SBC**

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