



If you've ever stopped at a Subway to pick up a sandwich, visited Taco Bell or Kentucky Fried Chicken for lunch or traveled on a summer's day to Dairy Queen for ice cream, then you've come into contact with Foldcraft Company products. Foldcraft, based in Kenyon, Minnesota, makes furniture for these restaurants and others at five manufacturing plants, one in California and the remainder in Minnesota. The company works with all sorts of material to produce restaurant fixtures, including laminate, wood, steel, aluminum, polyurethane, and plastic.

Foldcraft presents an interesting business model among manufacturers. When company founder Harold Nielsen decided to retire from the day-to-day operations of the company in the mid-1980s, he knew that he wanted the business to stay local. That meant he could continue to be involved and his employees could keep their jobs.

One mechanism that would allow the company to stay in Kenyon and also take care of the future of employees was to sell the company to those employees. So Nielsen sold his company to the employees and Foldcraft became a 100 percent ESOP company. Employees receive company stock allocations based on their salaries and length of employment. Because it's their company, the employees have a vested interest in seeing the company succeed in the marketplace.

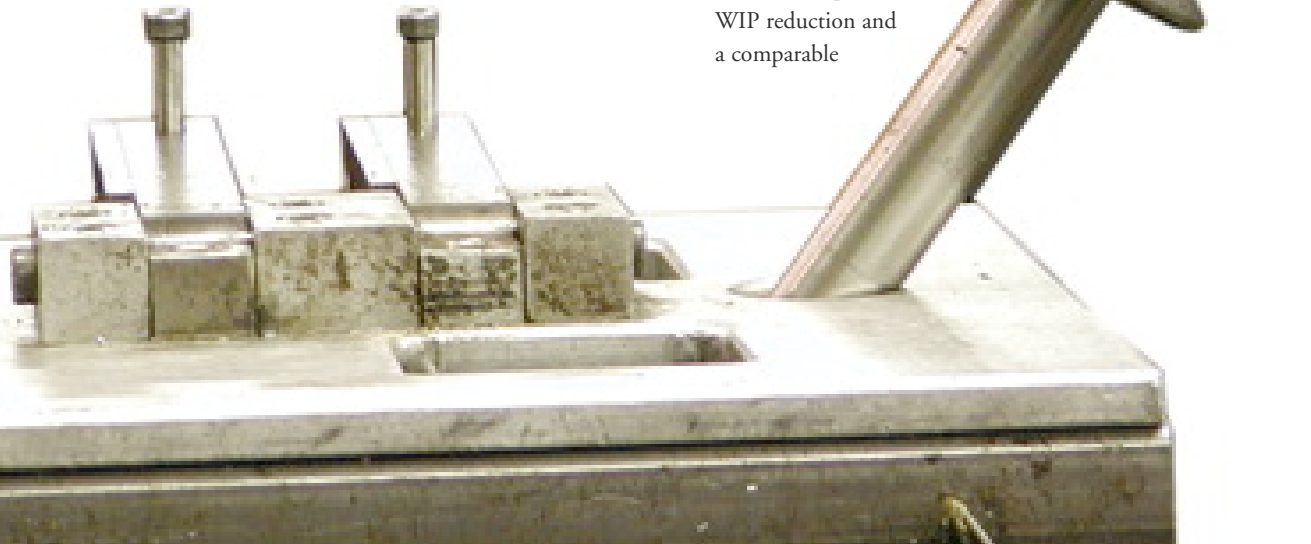
Foldcraft was successful in its market even before beginning its lean journey but was always on a quest to improve the business. When Brian Kopas, currently vice president of operations, arrived at the company in 1993 as the quality engineer, Foldcraft had trained everyone in the Crosby Quality System. "The results were disappointing," says Kopas. "There was a lot of teaching people how to play piano in the conference room without any real practical application."

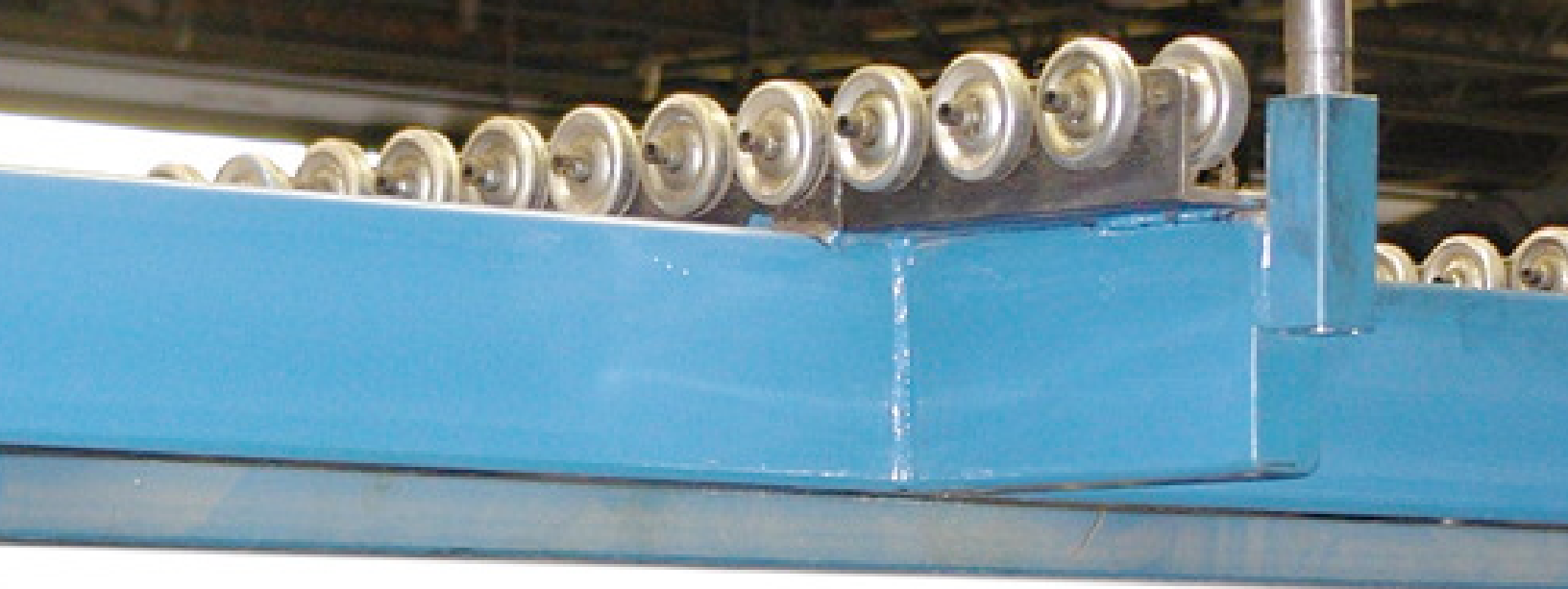
Several years later, Kopas received an epiphany of sorts in the mail in the form of *Industry Week* magazine. "I read with great interest an article called "Kaizen Blitz," I think," relates Kopas. "The numbers were just amazing — something like a 50 percent productivity improvement making aircraft engines in the space of a week." One company mentioned in the article was Pella, which had completed more than 700 events at the time of the article.

Kopas knew the corporate quality manager at Pella, and although they hadn't spoken in a couple of years, he decided to call to ask if he could visit Pella. Kopas was allowed to visit on one condition: he had to bring along a senior manager from Foldcraft. Pella's reasoning was simple: If senior managers didn't buy into the lean process that Pella had such success with, then no amount of interest or work on Kopas' part would make a successful lean transition at Foldcraft.

Foldcraft's President and Chief Executive Officer Chuck Mayhew, who was chief operations officer at the time, readily agreed to the visit and they traveled to Pella in May 1998. They spent two days at the end of a kaizen week touring Pella's facility, talking with people and learning Pella's story. They sat in for the Friday report outs for all of the kaizen teams and were awestruck by the results achieved. Kopas and Foldcraft's vice president of manufacturing then traveled to Pella's Clear Lake, Iowa, site to participate in a kaizen event. That trip solidified Kopas' determination to lead Foldcraft on a lean transformation.

For their first home-grown event, Kopas mirrored everything he had learned at Pella, and the results were fantastic. "We had 66 percent WIP reduction and a comparable





floor space savings, and I think our productivity improvement was 26 percent,” remembers Kopas. “We didn’t make any broad announcements about the event; we just gathered a team of enthusiastic people who were willing to go along with our experiment and flew under the radar.” The very fact of what was accomplished in that first kaizen week brought even more people on board the lean bandwagon. But Kopas and others recognized that companies who were wildly successful with their lean activities, like Pella, didn’t do it alone and so TBM was brought on board.

For their first “official” event in February 1999 Foldcraft chose their table lamination and assembly operation. “We went directly for the core of our business because seeing Pella gave us a tremendous amount of faith, and we decided to just trust in the process,” says Kopas. That event was a resounding success and Foldcraft has continued to conduct regular events on the shop floor.

Like many manufacturers, Foldcraft has struggled with sustainment. To help in that area, the company promoted Kopas to the position of vice president of continuous improvement and recently to vice president of operations. “One of the issues was that the CI group was pushing the rest of the business, which isn’t a model for success,” says Kopas. “So the solution, at least for the operations group, was to make me one and the same.” This commitment from upper management meant that operations was completely synchronized with the efforts of the continuous improvement office.

Foldcraft President and CEO Chuck Mayhew notes that sustainment is also helped by the ESOP.

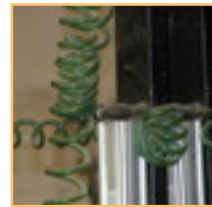
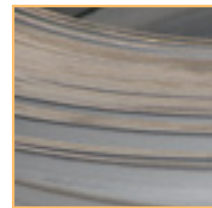
“[ESOP] forces conversation about the company’s book value,” says Mayhew. “How do you influence or change that book value? Well it comes back to the performance of the company. It helps our employees to understand the connection between the two.

“So if we want to really increase our book value on our shares, we must be profitable and grow sales, and at the heart of that is that you’ve got to be better than any of your competitors, and at the heart of that is lean. It’s all directly connected for us.”

Another approach the company has taken to achieve employee buy-in is to change its hiring practices. Mayhew notes that for many years Foldcraft brought in people with experience in specific skill sets. “It turns out that with standard work in a lean environment, you can teach your operation,” he says. “What you really need to do is make sure you’re bringing in people with the mindset to want to continually improve the company, who want to be part of the team and who are competitive. I don’t know that you can teach that — I think that’s in a person.”

The company used a kaizen event to address standard work in the Human Resources Department and the hiring process. “It’s allowed us to look and ask for better people and I think we’ve discovered that it does work,” he adds.

One person who was hired through this process is Jean Sherwin, who is the continuous improvement team leader. Says Sherwin, “Over the past few years, CI has been driving lean, and everyone else has been dragged along. We are trying to define our path forward with people who embrace cultural change, and hiring people with the right attitude is a big part of that.” Sherwin ultimately sees a company with employees who are adept at problem solving and who rely on the CI folks to facilitate rather than drive change.



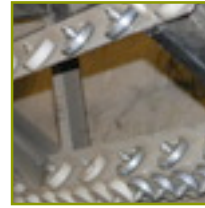
But what has Foldcraft gained from lean? Just five years ago, any chair the company sold was bought from a competitor in Indiana that had longer lead times and quality problems. The floor space that was opened up through lean activities meant that Foldcraft had room to bring work into the plant.

In fact, Foldcraft went from being a buyer of chairs to a world-class manufacturer of chairs after their supplier, who knew Foldcraft had no other options for buying chairs, made it clear that it had no interest in lean. Says Kopas, “I think it’s in our nature as a company to want to control our destiny as much as we can, so the first thing we looked at was all these truckloads of chairs we were bringing in and all the problems we were having with that. We decided we were going to teach ourselves to make chairs.” Through a succession of events, Foldcraft created a true one-piece-flow manufacturing process that can turn steel into a finished chair in just minutes. Now Foldcraft has no equal in its chair production system, which was created by Foldcraft’s own machine build group. The company has created its own manufacturing processes internally for more than four years and has no rival in its ability to create truly productive one-piece-flow manufacturing processes.



This can-do attitude grew out of the successes the company had achieved with its lean efforts. Kopas shares the following story to illustrate this point: “We used to have slightly less than half of Subway’s business, which we shared with one other supplier. Then Subway decided to whittle suppliers down to one.

“While our competitor was saying ‘We want all your business too, but we will need a little time to get ready for that,’ we were confident, thanks to lean, that we were completely up to the task, and we ended up with 100 percent of Subway’s business. Since then we’ve benefited greatly from Subway’s growth. But we didn’t know any of that was going to happen back in 2000.



“Our lean journey has been about creating opportunities, about opening doors. We didn’t necessarily know what was on the other side, but lean gave us a capability that we wouldn’t have had.”

Another example of where the lessons learned from lean have created opportunity for the company is its relationship with International Dairy Queen, for whom Foldcraft has been the sole furniture supplier for decades. DQ recently decided to create a more upscale image by going with upholstered seating in its restaurants. At the time, Foldcraft didn’t have the capability to do upholstery and so it partnered with a local manufacturer. As Foldcraft learned more about that business, it discovered that the product was good but productivity was lacking.

Recognizing a big opportunity for increased profits through lean, Foldcraft acquired that small company. Wanting to quickly set the tone for its newest business, Foldcraft held its first kaizen event there within a month of the purchase. Bringing lean to that small company, where upholsterers worked as individual professionals and did not want to become assembly line workers, was a challenge. Foldcraft approached the problem from the space issue:

“You’re out of space, and we know how to solve that problem.” That incentive, along with a pit crew analogy to dispel the concern about assembly lines, caught their attention. That first event demonstrated 500 percent productivity opportunity by creating one-piece flow. Today, Foldcraft has quadrupled the number of workers at that site and productivity has improved fourfold overall.

More recently, manufacturers have been struggling with rising steel and oil costs. Foldcraft is not immune to these rising costs, but the efficiencies lean has created within its systems and production processes have not only helped offset some of the increased costs but also enabled the company to provide better performance for its customers, which has led to sales growth.

Foldcraft has learned that lean leads to both efficiencies and opportunities, and all it need do is open the door and walk through. ■

