

LEAN AND KEEN

When Net Safety Monitoring embraced lean manufacturing processes, it decreased production costs and time and increased profitability - *Alberta Advantage Report*

In a very big way, Net Safety Monitoring Inc. has caught the lean bug. The Calgary-based manufacturer supplies continuous safety monitoring equipment for petrochemical plants, refineries and compression stations across Western Canada. Since 1996, the firm's in-house engineered technology of industrial gas and flame detectors has grown to reap annual sales in the multi-million dollar range. Today it has 95 employees. Net Safety targeted international markets as a path to further growth, but its domestic business was growing too fast for the manufacturing process to keep up. "Our company had been experiencing double-digit growth in Western Canada," says Director of Organizational Excellence, Kevin Falenda.

With the production line becoming stretched to the limit, the vision of expansion into the United States, the Middle East and Asia was fading. Anticipating the production crunch, the company tackled the issue with a series of traditional management strategies to increase quality and reduce costs. This plan included spending 5% on in-house research and development to increase compactness, sensitivity, versatility and reliability of its product. Net Safety also turned to outsourcing components to specialist manufacturers. However, increased productivity and reduced delivery times were elusive. Something more was needed and the answer came in late 2003.

Falenda attended a lean manufacturing workshop sponsored by Canadian Manufacturers and Exporters, National Research Council and Alberta Economic Development. "It's so simple, it shook me to the roots," he recalls. **"You could build faster and reduce labour."**

Net Safety joined a lean consortium, a working support group of companies pursuing lean processes. The company began to re-organize manufacturing operations through value stream mapping. "We looked at the gas and flame lines and got a large hit-list of improvements," Falenda explains. "For instance, we used to test run a new unit for 24 hours, [but] we realized we could reduce that time to 15 minutes."

In addition, the company reduced travel on the manufacturing line from 1,200 feet to 250 feet. On the procurement side, Net Safety reduced the number of vendors, developed strategic alliances and instituted lean inventory and supply management practices.

Continuous improvement became a focus for employees and management. "We have a big board and we list all the parts and processes," he outlines. "Then we sit down and say, 'if we didn't do this, we'd save a lot of time and fuss.'"



The results are impressive. **"The deliveries used to be four to six weeks, now it is two to four weeks – a 50% improvement,"** Falenda says. "Inventory has been cut in half, and we hope to cut that in half again," he adds. "Floor space has decreased by 35% and it will be 50% by the time we're done." And profits are way up. "Our revenues per employee have increased by 40%. Our goal is to increase this by another 30% by year end," he says. "Overall, our staff hasn't increased – we're far more efficient."

While Net Safety's lean manufacturing experience is a success, the company is only part way through. "We are now engineering a new lean product design and we are going to get the financial department to do lean accounting," Falenda adds. "Then we'll go outside to the supply chain and help clean them up." He now sees the company on track to achieve the 10-year goal to become export weighted. "Today sales are predominantly Western Canadian," Falenda says. "We're now positioned for it to go the other way; 80% export, 20% domestic."

For those considering lean manufacturing, he recommends workshops or conferences. "That's where I saw the light," Falenda says. "You see the successes that people are having. It's really common sense – that's the beauty of it. It's so simple, it's embarrassing."