Mike Bauman

Getting laid off from his old job opened up a door to a new and rewarding career.

That's what went through Mike Bauman's mind back in 2002 when he was laid off from his construction job. After the initial shock wore off, he began to see it as an opportunity. "I was tired of construction," he says. "I wasn't sure what my next step would be, but it was time to check out my alternatives."

That attitude led him to the biofuels technology program at Minnesota West. The A.A.S. degree earned him a fresh start and a rewarding new career at Granite Falls Energy, a state-of-the-art ethanol production plant. In fact, the company was so impressed by Bauman's training that it made him one of its first hires before it started production in November 2005.

Bauman is a shift supervisor at the plant. This role puts him in the center of the action. Ethanol is manufactured by milling and cooking corn, adding enzymes to ferment the sugars, distilling the resulting alcohol, and finally dehydrating it to create pure ethanol. Bauman oversees the processing operation. "I'm in charge of a four-person crew. We make sure everything is correct in terms of creating the alcohol, monitoring the conversion of alcohol and the water content, and making sure we have proper controls on bacteria growth," he explains. "We keep track of the process by performing tests and running samples. I make any needed adjustments on the system that controls the entire plant."

It's a big job. "One of the most important things is the process control. If something happens and you lose your boiler or steam, you have to put the entire plant in recycle," he says. "I feel fortunate because I have a great crew working for me. One of the guys recently graduated from Minnesota West's program. Another has previous experience at a corn plant, and my boiler operator has 25 years experience."

Bauman credits Minnesota West with preparing him for the job. The biofuels technology program grounds students in mechanical and instrumentation basics, chemistry and biology, safety fundamentals, process optimization, and more. Bauman has also given back to the college by helping develop a computer-based ethanol plant simulation program. It is now a staple of the biofuels technology program. "One of the program's instructors, Duane Carrow, asked me to use my knowledge to help debug the simulator and make sure that it was a realistic training tool," he
says. "It prepares future plant operators for process control scenarios they'll face on the job. I have a tremendous amount of knowledge that I was taught at Minnesota West. It feels good to give something back." Bauman adds that he feels fortunate to have found a rewarding career. "The best part of my job is knowing management feels comfortable counting on me to make the right decisions that will make the company more efficient and profitable," he says. "I went from a job and career I didn't like to one that I love. You can't ask for more than that."