



# SAWCHAIN MANUFACTURER HONES ITS PROCESS WITH ENERGY EFFICIENCY

**UPGRADES AT BLOUNT INTERNATIONAL, INC. SHOULD SAVE MORE THAN \$200,000 ANNUALLY**

In April 2009, Blount International, a global manufacturer of sawchains and equipment for the forestry, garden and construction industries, was searching for ways to cut costs. With a mounting recession and decreasing plant production, management personnel at Blount's Portland and Milwaukie facilities were exploring energy efficiency as an untapped opportunity for operational savings. It didn't take long before Blount's new-found energy management team discovered and took advantage of the Industrial Energy Improvement initiative offered by Energy Trust of Oregon.

Fast forward to late 2010. After participating in the 2010 Industrial Energy Improvement for 12 months and completing seven energy-efficiency projects, Blount expects to save an estimated \$227,805 per year in electricity costs. Combine those savings with production levels that have increased significantly, and the bottom line at Blount couldn't look any sharper.

"The expertise that Energy Trust brought to the table through its Industrial Energy Improvement initiative really helped us to understand where to focus our efforts," said Jason Smith, corporate environmental engineer, Blount International. "We learned which energy-efficiency projects were the most cost effective, and Energy Trust provided more

than \$130,000 in cash incentives, which made the difference in whether several of our projects penciled out."

Industrial Energy Improvement is a year-long behavioral and process-related training initiative in which participants such as Blount work closely with Energy Trust technical service providers. As part of Industrial Energy Improvement, Blount's energy management team learned how to analyze their energy bills and came to understand exactly where and when they use energy on a cost per unit of output basis. Next, they engaged in no- to low-cost energy improvements, particularly related to operations and maintenance in Blount's compressed air system.

Energy Trust arranged for engineers at Portland General Electric's Customer Technical Services to provide free energy studies, such as a compressed air study showing that Blount could save a considerable amount of energy and money simply by repairing leaks. The report also recommended installation of valves that automatically shut off the flow of compressed air when specific pieces of equipment were not in use.



Follow-up energy studies focused on capital improvements and operations and maintenance improvements. Blount achieved savings in the plant's chilled water system through controls improvements. Blount also purchased a new air compressor with a variable frequency drive that adjusts compressor output according to compressed air needs.

Now Blount boasts a well-established corporate-wide commitment to energy efficiency. The energy management team for the Portland and Milwaukie facilities has representatives from manufacturing, purchasing, engineering, management and facilities maintenance—every function that can impact plant energy use. The team has integrated energy management into ongoing decision making and is looking for the next level of “low-hanging fruit” in terms of energy-saving projects.

Because Portland is headquarters for Blount International, the energy-efficiency efforts at its Oregon facilities are now leading the way for Blount's facilities across the globe. Blount's three U.S. facilities have joined The ENERGY STAR® Challenge for Industry, which is a nationwide challenge to improve the energy efficiency of U.S. industrial sites by 10 percent within five years.

“Companywide, we now have a monthly energy conference call with all of our sites participating,” said Smith. “We’re taking the information and strategies that we learned from Industrial Energy Improvement and pushing it out to our other plants. You could say that Energy Trust efforts haven’t just helped our Oregon facilities, but are helping all of them.”



To learn more about energy efficiency for industrial facilities, visit [www.energytrust.org](http://www.energytrust.org) or call **1.866.368.7878**.

## PROJECT-AT-A-GLANCE

### Equipment Installed

#### *Compressed air operations and maintenance*

- Tag and repair leaks
- Auto shut-off valves
- Sequencer optimization
- Motor sequencing

#### *Compressed air upgrades*

- VFD compressor
- Sequencing modifications
- Thermoelectric cooling in electrical cabinets

#### *Chilled water system upgrades*

- Increased chilled water supply temperature
- Optimized condenser water supply temperature

#### *Lighting*

- High-performance T8 lamps, electronic ballasts
- High-efficiency metal halide exterior lighting, electronic ballasts
- Lighting controls

#### *Foodservice*

- ENERGY STAR hot food holding cabinet

### Estimated Annual Savings

- 3,254,359 kilowatt hours
- 1,237 tons of carbon dioxide

### Financial Analysis

- \$160,409 in Energy Trust incentives
- \$227,805 estimated annual energy cost savings
- Applied for 35 percent Business Energy Tax Credit from the Oregon Department of Energy