



Intelligent Solutions for Compressed Air Systems

Founded in 1900, Weyerhaeuser has developed into one of the largest integrated forest products companies in the world, with annual sales of \$18.5 billion. The Coburg, Oregon facility, which opened in 1962, contains several independent operations, including log sorting, veneer drying, and a sawmill.

COMPRESSED AIR CONCERNS

The Coburg facility was plagued with a number of problems, resulting in unstable pressure and excess compressed air generation. In addition, repairs to the air treatment equipment were needed to improve the mill's air quality and further reduce compressed air waste.

COST-SAVING SOLUTIONS

Weyerhaeuser personnel worked with a DOE/CAC Qualified AIRMaster+ Specialist from Pneu-Logic Corporation. They formed a project team to evaluate the system for efficiency gains and possible energy savings.

"Before we installed the Pneu-Logic system, we used a mill-constructed system that simply reacted to pressure differences—a simple cascading system that didn't allow the compressors to talk to each other. We've noted significant productivity gains because the system is more stable and it saves money."

**- Doug Woodward,
Efficiency Engineer at Weyerhaeuser**

With a Pneu-Logic control system in place, the mill was able to more accurately match its air supply with its air demand. Energy is being saved because the system no longer generates excess compressed air. The Coburg mill's annual energy **savings for compressed air are \$55,000 and 1.3 million kWh**. In addition, the mill's **throughput increased by 1.5%** because of consistent air pressure.

Because of the success of the Coburg project, other Weyerhaeuser facilities in Oregon have installed the Pneu-Logic system, including Cottage Grove, Santiam, Warrenton and Sweet Home.



Success Story:
Weyerhaeuser



“We are very pleased that Weyerhaeuser has not only seen the value in our systems, but has been able to successfully reduce their carbon footprint through energy savings.”

- J. Ned Dempsey, Chairman and CEO of Pneu-Logic

PNEU-LOGIC SYSTEM INSTALLATION AND INTEGRATION

(Source: The Department of Energy Best Practices Case Study.)

In the first phase of the Coburg facility’s two-phase project, the mill installed a multiple compressor network control system to modulate the compressors more efficiently. The new controls package was linked to a remote-monitoring device that allowed the system’s performance to be supervised by Pneu-Logic. Several simulations were then performed to determine the most appropriate control strategies to maximize the system’s efficiency.

To stabilize and lower the system pressure, the team installed a pressure/flow controller with 2,500 gallons of additional storage capacity. Once these devices were in place, the baseline measurements were retaken and the system pressure was lowered from 97 to 85 psig.

In the second phase, the mill’s personnel addressed many of the other issues that were discovered in the evaluation. Of the mill’s leak load, 25% was repaired.

Several items were replaced, including the following:

- ▶ Ineffective condensate traps with electronic, no-loss models
- ▶ The defective timing board in the dryer
- ▶ The oil cooler serving the 200-hp compressor
- ▶ The inlet-modulating valve on the 200-hp unit.

When all of these measures were completed, the baseline measurements were retaken and the system pressure was further reduced to 76 psig.

About Pneu-Logic

Pneu-Logic is a privately owned company located in Portland, Oregon, with Authorized Resellers located in the US, EU, and South Africa. As the industry leader in advanced compressed air energy efficiency management systems and control technology, Pneu-Logic helps companies 1) substantially reduce industrial compressed air electrical energy consumption and costs through improved operational management and control efficiency, and 2) increase industrial net productivity by reducing process latency periods between demand and supply for air through “real time” compressed air flow management. Pneu-Logic also offers best-in-class compressed air engineering services and assessments.

Contact Pneu-Logic

If you’re interested in learning more about our advanced systems and engineering services designed to decrease electrical energy costs and improve system performance, contact us today. Call us toll-free at 866.348.5669 or visit us on the web at www.pneulogic.com.

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