

# Peter C. Herman Continues Trend of Self-Reliance by Heating with Wood

## *Wood Furnaces from Biomass Combustion Systems Prove Effective*

MARION, New York — Peter C. Herman, Inc., a wood pallet manufacturing business in Marion, New York, considers self-reliance a critical component for delivering quality products and customer service.

The challenge for a business owner is to control supply and overhead costs under the pressure of a sometimes less than attractive market price. Without sacrificing its commitment to quality products and customer service, Peter C. Herman has been able to exert greater control over operating costs by milling its own lumber and installing waste wood furnaces.

As with any family business, creativity, persistence and hard work are building blocks for success. The company, originally started in the family garage by Peter Herman in the early 1960s, is now run by his sons, Joe and Matthew. Peter, as a former truck driver, saw an opportunity to recycle used and broken pallets that were left over from his deliveries. With an entrepreneurial spirit, he took them home, repaired the pallets, and sold them.

The company gradually prospered and also added new pallet manufacturing operations, purchasing its first Viking nailing machine for automated pallet assembly in 1980.

One of Peter C. Herman's first steps to gain control of operating costs was to invest in electrical generators. Although located within 25 miles of Rochester and 60 miles of Syracuse, Marion is in a rural area. As the business grew, it was clear the company would need more electrical power, so it now has three diesel-fueled generators.

It proved to be a good investment. A recent New York Department of Labor report indicates that charges for electricity rose 19.9% in 2005, the sharpest year-end increase since 1974. Fortunately for Peter C. Herman, such sharp increases in electricity rates did not impact the company's profitability until



*Peter C. Herman Inc. has four wood furnaces (similar to one above) from Biomass Combustion Systems; company burns its waste wood material for fuel.*

the recent price increases for diesel fuel.

Another way to help control costs and take advantage of existing resources is Peter C. Herman's focus on "using everything," as Joe puts it. "We have tons of wood waste, and not one scrap of it goes to 'waste.' Five years ago we bought our first wood-fired industrial furnace from Biomass Combustion Systems. This first 800,000 BTU powerhouse provided continual heat to our workers in the nailing building. The BCS system burns green wood, which is also a real plus. We wanted to use our wood waste and not be vulnerable to fuel increases, and, of

course, the heat is free once you make the investment." The company's previous wood furnace required a great deal of maintenance and also generated smoke.

Being in the wood business, Joe wanted to be certain the BCS furnace design was safe. He was satisfied. "I have no fear in my mind," he said.

Peter C. Herman now has four BCS wood furnaces and plans to convert all its buildings to wood fuel eventually.

Biomass Combustion Systems offers two models of wood furnaces, one with an output of 450,000 BTU and the other, 800,000 BTU. Two external hand valves

regulate air flow and heat. The furnaces generate heat from a fan on top of the furnace, which blows the warm air through ducts to heat a building.

The number of square feet each model will heat effectively is based on a number of factors, including the desired temperature, ceiling height, how often loading doors are open, etc. Converting to a wood furnace can save up to 100% of heating costs, according to Biomass Combustion Systems.

The furnace, which also can be used outside a building as long as it is enclosed in a shed, is manually loaded with wood up to 60 inches long, depending on the model. An optional system feeds wood automatically to the furnace. It is equipped with an air induction system so smoke cannot escape when the door is open and also a temperature monitor.

Biomass Combustion Systems furnaces feature all-steel construction and a patented after burner. Flue gases pass through the after burner which re-burns them. When operated properly, this design virtually eliminates smoke and sparks coming out the stack.

Using scrap wood for fuel is just one way the company puts residuals to good use. The majority of waste wood provides the raw material for two other businesses: mulch and firewood. Peter C.

Herman grinds wood that is sold for mulch and also animal bedding, and other scrap material is sold for firewood.

"There is little adjustment to using a wood fired furnace," said Joe. "The guys keep it going by putting the wood on the skids and then take it to the stoves. I like to run the stoves as hard as I can so the buildings maintain a comfortable 58 degrees. At midnight, we simply shut off the blower, and the building stays warm enough 'til morning. The maintenance is minimal, too. I know this firsthand because we still have an old custom-built system that takes continual maintenance."

Peter C. Herman manufactures about 3,500 new pallets daily. The company began manufacturing pallet lumber years ago in order to control the supply and cost of cut stock. The head rig used for breaking down low-grade logs is an HMC 42 saw.

The company is situated on 20 acres with five buildings — the sawmill, cut-up shop, pallet assembly plant, and two warehouses. All total, they have approximately 50,000 square feet of space.

Customers are within a 150-mile radius and include businesses in Rochester, Buffalo and some in Canada and include some Fortune 500 businesses. "They are very concerned about pallets meeting their in-house quality standards," Joe said of some customers. In addition to meeting and exceeding requirements for pallet quality, Peter C. Herman is able to respond quickly for orders of custom pallets. The company manufactures nearly 100 pallet sizes.

With a sawmill and cut-up line to make cants and process them into lumber, generators to produce electricity, and using waste wood for heat, it seems like Peter C. Herman has reached total control of its operations. "Well, never total control," Joe said with a laugh. "We're still looking for a way to have our customers pay net 30 days."

For information about Biomass Combustion Systems wood furnaces, call the company at (508) 798-5970, or send e-mail correspondence to, [info@biomasscombustion.com](mailto:info@biomasscombustion.com). You can visit the company Web site at [www.biomasscombustion.com](http://www.biomasscombustion.com). 

