

Waste not, **want not**

Efficiency is the name of the game for Ohio millwork company

By Jeff Crissey



If the nation's power grid ever goes down, chances are good that Baird Brothers Sawmill, Canfield, Ohio, wouldn't miss a beat. That's because the custom and stock millwork company uses natural resources and recycling for its power and heat generation.

"The unusual thing about our facility is that my father, Paul Baird, set it up so that we produce our own natural gas from wells drilled on our property, and we generate all our own electricity using natural gas engines," says Terry Baird. "We take the excess heat off the engine exhaust and off the engine jackets using heat exchangers for our dry kilns to dry the lumber."

To heat the plant, the company recycles about 75 percent of its wood waste into an AFS wood-fired boiler and returns the heat through the facility. The remaining waste is sold to area farmers for animal bedding.

In order to grind its wood waste down before feeding the boiler, Baird Brothers previously used a large grinder that created such a noise problem that the company's wood waste system was relocated outside the building. Looking to eliminate the added material handling steps and streamline its scrap removal process, Baird Brothers replaced its grinder with three grinders from Weima America, located

at various points in the production process.

"The Weima grinders are much quieter and more efficient than our previous grinder," says Baird. "They don't draw as much amperage to operate. The biggest benefit was we were able to move them right in line with the rest of our production."

A three-pronged distribution approach

Baird Brothers started in 1960 as a sawmill. Today, the second-generation family business has evolved into secondary wood products manufacturing, including moldings, handrails, stair parts, tongue & groove flooring and paneling, S4S lumber and more. The company's retail sales amount to roughly 95 percent of the company's business, selling directly to homeowners and contractors. It competes head-to-head with retail lumberyards on its own turf, and has started wholesaling to some yards that are outside its serviceable area, which extends about 120 miles, including Cleveland and Pittsburg. Baird Brothers' newest marketing efforts center on its increasing Internet sales.

"We started out with a run-of-the-mill website like

everyone else, and then we made a decision to spend the money to where customers could actually order products online,” says Baird. “Since we went that route, we’ve been shipping all over the country, everything from single doors to an entire trim package. We’ll bundle up a complete trim package for a home and ship it out. Our Internet sales are focused on the high end of our product line, mainly red oak, cherry and hard maple products.”

Baird says the company’s high-end products amount to 30 percent of total sales, and sales on the lower end



Baird Brothers' showroom showcases the company's expansive product range.

have increased considerably in recent years, especially primed finger-jointed poplar products. The company’s biggest competition comes from off-shore products including primed

moldings and MDF products.

Production

No longer in the sawmill business, Baird Brothers brings in green lumber and dries it in a series of kilns. Production starts in the rough mill with a Yates B26 double rough surfacer/planer which dimensions the parts for thickness. Planed lumber is then ripped on a Mid-Oregon Inter-national PR2002 top arbor rip saw with six infinitely variable fully shifting grinders, an M-Class Tiger horizontal shredder, reduces the scrap edgings

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Wood waste is ground up and routed through the dust collection system to fuel the boiler.

from the saw and feeds the waste into the central dust collection system. A four-sided WoodEye scanner reads the parts for defects and communicates with a Paul Model 14MKL optimizing

crosscut saw. The second Weima machine, a WL-4S single-shaft shredder, grinds up waste blocks produced by the crosscut saw.

Boards are sorted for length: Short stock is routed to a conveyor for turnings or finger-jointing on a CRP 2000 finger jointer from Conception R.P.; Long stock typically goes to the molding department.

“We have four Weinig moulders and one Wadkin moulder in our molding department,” says Baird. “We have a couple Hydromat moulders, but nothing with CNC control. Our moulders are

typically set up with the same tooling. We have an extensive profile library, and we will grind any custom profiles necessary.”

Baird Brothers’ pre-finishing department contains a Makor finish line and a Cefla flat-line reciprocating



A Mid-Oregon International top arbor rip saw with six saws rips planed lumber to width.



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A Weima Tiger horizontal shredder reduces scrap edgings from the saw and feeds the waste into the central dust collection system.

line. The company stocks profiles in certain colors, but the majority of the finished products is order-based.

The third and final Weima machine in Baird Brothers' production, a WL-13 single-shaft shredder with V-Rotor technology, serves as a catchall disposal for everything from scrap boxes to old pallets. Parts ground through the WL-13

pass through a magnet to separate out the steel before proceeding back into the boiler fuel system.

As a manufacturer of largely stock items, Baird Brothers carries enough inventory to serve as an order buffer. This allows the company to fill orders quickly. Special orders typically have a one-and-a-half to two-week turn-around. **MW**

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