

New pellet plant

Maeder Bros. branches out to take advantage of byproduct from sawmills

By IAN PATRICK GRAY
Sun Staff Writer

Despite the reluctant and fitful first month of winter in Michigan, heating costs and fuel supplies usually dominate residents' thinking for nearly six months of the year.

A local business is seeking to capitalize on those needs and also dispose of a pesky waste product from its other operations at the same time.

Maeder Bros. Sawmill in Weidman originally opened in 1952 and has provided custom cut lumber, rough sawn beams for timber frame houses, logs for log homes and other products for 55 years.

The one constant in the business has always been wood chips.

As the powerful saws and resaws bite into the huge logs harvested and shipped from around Michigan, clouds of wood chips and sawdust fly like snow in a Michigan blizzard.

A natural byproduct of every sawmill, wood chips and sawdust accumulate in huge piles that must be disposed of in any way possible, costing operators time and money.

Previously, sawmill owners around the state would ship their waste to paper manufacturing plants, General Manager Rick Maeder said.

But with the recent closing of two paper plants, one in Muskegon and the other in Oshtemo County, the market for chips dried up.

"We sat down and talked about what we could do," Maeder said. "We talked about waiting to see what would develop, but decided to make something happen ourselves."

What the board of directors, consisting of four of the children of the two founders, Gerald and Russell Maeder, decided was to invest in a growing trend in home heating: wood pellets.

Beginning last year,

Maeder Bros. built a 9,000-square-foot steel complex on a portion of the original 10 acres of land purchased by the founding brothers.

Set off by itself, the complex consists of two buildings, one for raw material to be stored and readied for use and the other to house the machinery that creates the pellets and packages them for retail sale, Maeder said.

Maeder Bros. produces about 20 percent of the raw material the new plant requires and imports the rest from local sawmills.

Belching forth clouds of steam and wood smoke when in operation (not as much as you'd think, however), the process to make wood pellets is simple in theory, but surprisingly complex in practice, Maeder said.

Wood pellets contain no additives or chemicals, but are merely ground wood chips, dried out and compressed into short, shiny rods, looking like nothing so much as Guinea Pig pellet food or variegated dowels, which are then cut to size. No glue is required because the raw wood contains lignin, a natural adhesive.

Raw wood chips and sawdust are fed into a cyclone machine that separates the larger pieces of wood from the dust-like particles. The dust is burned as fuel for a huge rotating kiln that dries out the wood chips before they are ground to a consistent size and fed into the machine that shapes and compresses the pellets.

The product that comes flowing out on the conveyor belt is roughly 140 degrees F and must be passed through a cooling tank before packaging.

Although the filling station is automated, with machines dumping pre-measured 40-pound quantities into plastic bags that are then heat-sealed, the operation requires 14 or 15 employees or the 24-hour day operation, Maeder said.

"You've got to bring in the



Troy Shull loads a pallet with wood pellets in the steamy pellet mill at Maeder Brothers on Thursday.



Maeder employee James Osborn holds a handful of wood pellets fresh from the mill during his shift Thursday.



Brien Maeder, left, and electrician Bryan Clare of Brighter Concepts Inc. insulate parts of the Maeder Brothers Sawmill's pellet mill Thursday.

Brien Maeder, left, and electrician Bryan Clare of Brighter Concepts Inc. insulate parts of the Maeder Brothers Sawmill's pellet mill Thursday.

raw product, grind it, dry it, screen it and iron it," Maeder said. "It's more than I would have thought involved. There's almost an art to making pellets. You have to keep a steady flow, but not too much. You have to time it just right to supply enough raw material and heat for the dryer."

Employees also stack and ship the product as well as providing quality control by weighing and checking consistency.

"You've got to make a high quality product or people will not come back to buy again," Maeder said. "If you put out junk, people will notice it and stop buying. We put a lot of hardwoods into our pellets and the BTUs (British Thermal Units) come back way higher than

the minimum. We are also under on ash content and sulfur."

Pellets are sent out to a laboratory once a month to test for quality, Maeder said.

Plant production goals are about 100 tons a day, he said. The plant is rated for 4-6 tons per hour.

A single pallet of Maeder Brothers Quality Wood Pellets weighs one ton. It consists of 50 40-pound bags, and will heat an average home for about 24 hours per bag, Maeder said.

Although the plant just went into operation around the first of the year, if sales grow fast enough, the Maeders are ready to step up with the foundation and infrastructure for another plant already in place, Maeder said.

Maeder Bros. Sawmill

What: Maeder Bros. Sawmill

Who: Board of directors includes Rick and John Maeder (sons of co-founder Gerald Maeder) and Jane Atkinson and Tom Maeder (children of co-founder Russell Maeder). Jim and Tom Maeder (sons of Gerald Maeder) work in managerial and supervisory roles at the business.

Where: 5082 and 5180 W. Weidman Road

Employees: 32 full-time employees, plus close to 20 other cut log haulers and truckers.

Contact: 989-644-2235, 989-644-3500 or www.maederwoodpellets.com

Established: 1952

"With the ethanol plants going in the price of corn skyrocketed, so a lot of people are rethinking corn burners," Maeder said. "We're pretty central, so we save a lot on freight costs. It just made good sense to do it. If we get 50 pellet mills in Michigan, then that would sour that up. You just do what you have to do to keep going."