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## Oak Market Prompts Change at Gebhardt



Missouri Sawmill Adds Dry Kiln from Kiln Direct to Preserve Green Inventory, Add Value

*Kiln Direct modular dry kilns feature design, construction and equipment found in large industrial lumber kilns, including all-aluminum construction, a well insulated chamber, computerized controls, integrated moisture meter, heat recovery on vents, and more.*

By Carolee Anita Boyles  
Contributing Author

GLASGOW, Missouri — Smart companies pay close attention to the marketplace and adapt to changing conditions. Michael Gebhardt, owner of Gebhardt Timber Management in Glasgow, Missouri, is one of those business owners who knows when he must alter the course of his business and is willing to adapt and change.

In order to maximize profit potential, Michael decided to begin lumber drying operations. He recently installed a Kiln-Di-

rect dry kiln at his sawmill, and in just a few months he began reaping the benefits.

In the region where Gebhardt Timber Management is located, the primary timber species are oaks and walnut with some soft maple, cherry, sycamore and hickory harvested as well. Saw logs are processed into furniture grade lumber and high grade veneers while cants and low-grade logs are processed into industrial lumber products and pallet cut stock. Gebhardt Timber Management specializes in walnut, both veneer and lumber.

“That’s the primary species I cut,” said

Michael. “I also cut red oak and white oak as well as some soft maple.” His company sells grade lumber to domestic and foreign markets, including the furniture industry and cabinet makers.

Michael is part of a large family, many of whom are involved in the forest products industry. His father, Robert Gebhardt, now deceased, was well known in the industry.

“My dad got us started in the timber industry when he started sawmilling in 1957,” Michael said. “In the early 1960s he went to work with a hardwood veneer company from Indiana and was their head log

buyer for 15 years in walnut. He ran six or seven states and kept a \$2 million standing inventory in walnut. In those days, that was a big deal.”

The Gebhardts were a large family; Michael has four brothers and four sisters. “We all worked in the family business as we were growing up,” he recalled. “Besides the nine of us, my cousins got into it, and my uncles helped my dad as he progressed in the business. Some of us stayed in the business all along. By the time I was 10 years old, I was helping my dad with rolling veneer logs and scaling. By the time I was twelve, I was separating the veneer logs for him. And during my teens, it was my job to entertain veneer buyers while he was calculating numbers on deals.”

Through the 1970s, the Gebhardts primarily cut walnut. By the 1980s, oaks and other hardwoods were taking over the woodlots where the Gebhardts had harvested walnut timber. “Seeing that is what eventually pushed me into managing timber and why we started cutting other species,” said Michael.

When he was 23, Michael was ready for a challenge outside the forest products industry. He moved to Colorado and worked in the ski industry for seven years.

“I lived in Glenwood Springs and worked in Aspen from 1987 through 1993,” he said. “I was a supervisor at the Aspen Ski Company over lift operations. It was a great job.”

Michael moved back to Missouri in late 1993. “My dad had had a couple of heart attacks and was ailing,” he said. “I moved back to take over the business. I got back into the sawmill business when I put in the sawmill here in 2000.”

Since he took over the company, Michael said, lumber production has doubled compared to the volume the company cut in the mid-1980s. “I cut maybe a million board feet a year,” he



*Michael Gebhardt*



*Michael Gebhardt, owner of Gebhardt Timber Management, with dry kiln supplied by Kiln Direct; Michael's company installed its first lumber kiln this year.*

said. “We’re more concerned with quality than quantity.”

Gebhardt Timber Management employs loggers to cut timber. Michael seeks to hire workers he can train to manage timber, not just cut wood. He is passionate about managing forests as a sustainable resource rather than just harvesting the trees and moving on.

“What moved me in that direction has been seeing regions just destroyed,” he said. “For instance, in Oregon, if they had selectively cut and managed timber there, it would have been a never-ending source of wood. This area is the same. If we selectively harvest, we’ll have timber forever. In any timber that we’ve cut since the late 1960s and early 1970s, that’s the way we’ve done it. By utilizing a selective cut harvest, you can increase the volume of timber produced by an area of woods tremendously. If you do it right, you can grow 15 to 20 trees in the same place where you would grow only one otherwise. Besides, it makes a prettier forest and a better quality of wood.”

Michael’s love of walnut goes beyond the way he makes his living. He is planning a special home improvement project with walnut in mind.

“My wife, Denise, and I are getting ready to put new cabinets in our kitchen,” he said. “I took some large walnut logs — with a 36- to 40-inch diameter — and I cut the crotch areas where the limbs split off and there’s a burl. We’re going to make our

cabinets out of those burls.”

At Gebhardt Timber Management, incoming logs are sorted and stacked according to size and grade. Logs are processed in the sawmill according to size, grade, and market conditions. The company typically makes 4/4, 6/4 and 8/4 lumber.

“Obviously, the thicker stock and the better quality are of more value,” Michael noted, “so we try to cut as much upper grade lumber as we can. We prefer to cut FAS, #1 face, and #1 common.” Low-grade material typically is cut into 4/4. “Right now the flooring industry is consuming a lot of that,” said Michael.

After logs are squared up on the head rig, the boards go to a transfer deck, then to an edger. Ross Sanders grades the company’s walnut and oak lumber. “Walnut graders are hard to find,” said Michael, “and he’s a good one.”

Lumber is sorted by length and grade. “Ross sorts them into #1 common, #2 common and #1 face and better,” Michael said. “That makes for a multitude of piles.”

After the lumber is stacked and bundled, the packages are moved outside into temporary storage areas. Some lumber is sold green. Lumber to be kiln dried is stacked with stickers between the boards for air drying first.

“That’s an energy conservation measure,” said Michael. “You can go straight into the kiln with the green lumber, and it will produce a good quality board. But if

you remove some of the moisture with air drying, you'll only need to put the boards in the kiln for 10 to 14 days for maple and 14 to 20 days for oak. If you go straight into the kiln from fresh sawing, it is more like 20 days for 4/4 maple and 30 days for 4/4 oak. You just can't take #2 or #3 oak straight to the kiln and make any profit on it."

Until early this year, Gebhardt Timber Management did not have dry kilns. "We just handled our wood green," said Michael.

However, the mill often had to keep lumber in inventory for an extended period of time, particularly in the summer, which could result in staining of the wood. Michael wanted the capability to dry lumber so he could keep it in inventory without staining and losing value – and to add revenues to the business.

The current market for red oak is "horrible," Michael acknowledged. "I have between 250,000 and 300,000 feet of red oak on hand, and about 65 percent of that is upper grade. I didn't want to sell it for almost nothing."

Michael decided to add a dry kiln so he could dry his large inventory of grade red oak, which will enable him to warehouse it indefinitely and wait for the market to improve. He invested in a dry kiln from Kiln Direct.

"On the first load we dried fresh sawn 8/4 hard maple in about 30 to 35 days and used about \$45-50 of gas and \$15-20 of electricity per thousand board feet," said Michael, "which probably would be similar to 4/4 oak. The direct heating system, well insulated walls and heat recovery on the venting help keep the drying costs down."

Kiln Direct can supply a kiln that is already assembled and is installed on a concrete slab. "You can put it on a truck and take it down the highway," said Michael. "So 12 feet, 4 inches is as high as they can go." However, Kiln Direct designs and supplies extensions.

"Niels (Kiln Direct owner Niels Jorgensen) had worked it out and thought a 6-foot wall would work, but they hadn't installed any kilns like that," said Michael. "The kiln they put in for me is one of the first ones to use a 6-foot wall. I wanted the 6-foot wall to increase the volume of the kiln." The 6-foot extension increased the kiln capacity from 20,000 board feet to 30,000 board feet.

"It's a very good quality kiln," said Michael. "What I'm really impressed with is the structural design. For example, where the aluminum sheeting on the outside over-

laps, there are rivets every three or four inches around the whole thing. I told Niels, 'I think it's overkill, but don't stop doing it!'"

Kiln Direct has been very responsive when Michael had questions. "If I need anything at all, I can just call them and say, 'I can't figure this out,' and they'll help me," he said. "So there is plenty of support. I can invite Kiln Direct to connect via the Internet to the kiln computer."

Kiln Direct introduced the modular lumber kiln design about 6 months ago. This line of small kilns — 8,000 to 30,000 board feet — with modular design placed on a 6-foot raised foundation allows small sawmill operators to gradually install kiln capacity and add value through lumber drying, noted Niels. As it began developing these small to mid-size kilns, Kiln Direct wanted to produce an industrial kiln on a smaller scale without escalating the cost per board foot capacity, which can happen when regular kiln construction is applied to small units.

"I think we succeeded in building these small kilns with all the specifications found on large kiln projects," said Niels, "such as an all aluminum construction, a very well insulated chamber with four to five inches of foam, a computerized and networked control system, integrated moisture meter, heat recovery on the vents, and an electrical powered bi-fold door system. We are really excited about this product."

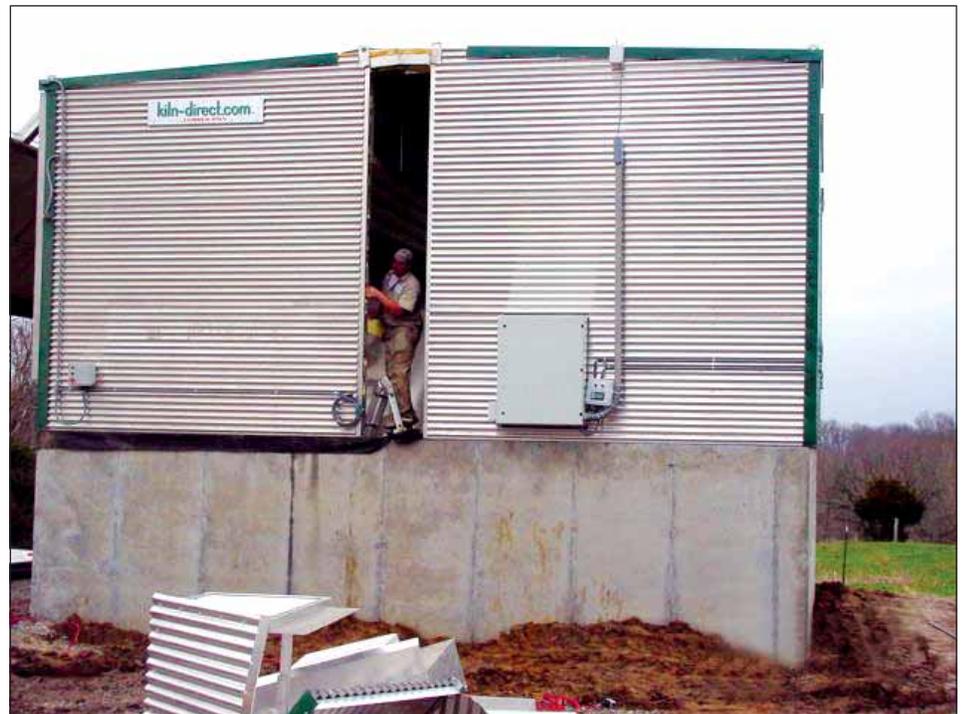
Although a number of Michael's relatives still are involved in the timber industry in the region, most of them either have their own companies or are employed by businesses other than Gebhardt Timber Management.

"My younger brother, Rusty, oversees my field production," he said. "And Ross, my walnut grader, is my step-son."

Three months ago, Michael was elected to the Glasgow City Council. "My sister-in-law encouraged me to run because she thought it would be beneficial to the town for someone in business to be on the Council," he said. "Maybe I can teach them something about business and they can teach me something about patience!"

Michael does not envision Gebhardt Timber Management changing very much in the next few years. "I'm almost at a maintenance level as far as growth is concerned," he said. "I'm sure we'll continue to grow, but I probably won't increase production very much."

The dry kiln from Kiln Direct is enabling Michael to have greater control over adverse market conditions. "It means I can hold a particular type of board and sell it when I want to sell it," he said. "It also opens me up for more local marketing. That means I can make a higher profit per board foot, which ultimately improves the profitability of the entire business."



**Installation of Kiln Direct lumber dry kiln at Gebhardt Timber Management. Kiln Direct recently introduced this modular design for a line of lumber dry kilns ranging in capacity from 8,000 to 30,000 board feet; placed on a 6-foot raised foundation, it enables small sawmills to install kiln capacity gradually.**

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