



Stronger than ever

Ontario's Olav Haavaldsrud Timber Company was hit by a devastating fire, but with the help of dedicated employees and the recent installation of a new Comact saw line, the mill is now back operating stronger than ever.

By Marek Krasuski

July 11, 2006 was like any other hot mid-summer day for Ken Haavaldsrud, sawmill superintendent at the Olav Haavaldsrud Timber Company in Hornepayne, Ontario. He booked off as usual. Then the phone rang and a gut-wrenching message followed. A fire had started at the sawmill and smoke was billowing into thick plumes that curled high into the pristine northern air. Within 20 minutes, the local fire department arrived at the site, located 10



kilometres from town, doused the flames and did a

Ken Haavaldsrud (above, left): "The company has been here since 1954 so we made a conscious decision to rebuild."

But the fire, which started in the electrical room, caused extensive damage to the mill's large saw line, a TS Manufacturing 30-inch carriage with combination bull edge. By day's end the damage was too extensive to restore the line to pre-fire condition. The owners and 108 employees returned home to consider the impact the fire would have on their future.

Back at the mill, things were not as they appeared. During the night, the fire ignited once again and spread throughout the mill. The next morning workers arrived to find more smoke spewing from the roof. The fire had destroyed the sawmill office which housed important records, the

parts room, the electrical department and further damaged the electrical systems. All told, the fire damage to the building, saw line and other equipment went into the millions of dollars. The Olav Haavaldsrud Timber Company is no stranger to fires. It survived two previous fires in 1962 and 1982. With the 2006 fire, the second and third generation members of the Haavaldsrud family acted with the same resilience and tenacity as their predecessors, choosing to stay and rebuild instead of closing operations and moving on.

Haavaldsrud Timber holds an esteemed position as the second largest regional employer in this remote northern Ontario community 100 kilometres north of the TransCanada highway. But with status also comes responsibility, evident in Ken Haavaldsrud's assessment of the fire's impact on all stakeholders. "People talk in general terms about being communityminded. But here we are literally talking about our next door neighbours and the people we grew up with. The company has been here since 1954 so we made a conscious decision to rebuild."

That decision galvanized the community. Workers rallied behind the reconstruction effort by cleaning debris, repairing the parts of recoverable machinery and performing the numerous odd, dirty jobs necessary to bring the mill back into production. By April, 2007, significant portions of the mill had been rebuilt and partial operations resumed, supported by a \$7.5 million investment that replaced the 18,696 square feet of building space lost to the inferno.



Among the Comact DDM12's many optimization features are the curve sawing capabilities that promise higher recovery. Thinner blades and the capacity to follow the natural shape of logs will ensure that more fibre is used for lumber and less for waste.

Before the fire, Haavaldsrud Timber ran a two-saw line operation. Though the 30-inch carriage line was destroyed, the smaller CanCar Mark II Chip-N-Saw, installed in 1988 and retrofitted by Optimil, was recoverable thanks in large part, says Haavaldsrud, to the determination of mill employees. "Our own crews did a lot of the

equipment renovations, changing bearings and replacing air systems. So the community rallied behind us."

Much of the damage to the Chip-NSaw came from excessive moisture that caused parts to seize up. The sprinkler system ran for 24 hours after the fire, spraying water on equipment and flooding the mill's lower levels. "We had a heavy cleanup of sawdust and chips that floated around in the basement of the building. Heavier materials were removed with wheelbarrows," Haavaldsrud recalls. Accurate Electronics were brought in to replace burnt wires and recondition electrical control motor centres. GR Roy Construction dismantled and reconstructed the building's damaged section. The Timmins-based firm CMA Engineering assumed the role of an independent third party to ensure that the mill would be refurbished to its pre-fire condition and meet the demands of both the mill's owners and the insurance company.

The Haavaldsrud mill has been running at reduced production output since April, 2007, relying solely on the smaller Chip-N-Saw line with two 18-inch debarkers: a Carbotech and Cambio, both on air bag systems which are noted for their easier maintenance versus hydraulic tension systems. Strategic planning and a re-ordering of operational priorities prompted a relatively quick turnaround time given the extent of damage. And again, employees worked in tandem with management to increase efficiencies.

“We made an agreement with the union to work around the clock at straight time with a four-shift rotation. That way we could bring back all our employees, including our woodlands staff, as quickly as possible.”



With the exception of limited amounts of lumber destined for US markets through a secondary manufacturer, the bulk of Haavaldsrud Timber's production is sold in southern Ontario where it is used for pressure-treated decking and roof trusses.

Since start-up, the mill has achieved production levels of 200,000 board feet per day on the smaller Chip-N-Saw line. But anticipation of a 50 per cent production increase was growing as the Haavaldsrud team prepared for the installation of a Comact DDM12 saw line. The new line, slated for full operation by mid-February,

will rest on a substructure that was under construction in the new addition of the mill.

A great deal of work has been done preparing for the larger line. A reinforced cement foundation was laid to support the 150,000-pound DDM12. Its large dimensions—100-foot length, 15-foot height, and 20-foot width—necessitated a clever, more innovative approach to installation. Comact will execute the turnkey installation and Strategic Builders will install a new roof canopy above the new line.

The \$5.5 million investment in the DDM12 was based on the specific needs of the mill. The investment has been secured by a provincial government grant and loan guarantees. In August 2007, the government pledged \$700,000 toward the rebuild and subsequently announced an additional loan of \$2.1 million provided through the Northern Ontario Heritage Fund Corporation (NOHF) and the Northern Ontario Grow Bonds Corporation.

On the equipment side, the existing edger, a CanCar Series 2500, is not large enough or fast enough to handle the significant volume increase that will peak at 325,000 board feet per day. An alternative had to be found. “The DDM12 came with profiling heads, so the majority of wood will be earmarked straight to the sorter with little edging required,” Haavaldsrud says. The circular saw with double profiling heads affixed top and bottom will chip off excess

wane.

Among the many optimization features is the DDM12's curve sawing capabilities that promise higher recovery. Thinner blades and the capacity to follow the natural shape of logs will ensure that more fibre is used for lumber and less for waste. The Comact C1-Scan promises a high-tech, efficient milling process.

“The scanner will enable us to know exactly how long the log is and exactly when and where to place the next log. The optimization package includes an automatic function that controls the orientation of every log,” explains Haavaldsrud. Advanced scanning capabilities enable the operator to see the full graphic display of each log on a screen that will measure anomalies like knots, bumps and holes.

The Wave Feeder that will be installed with the saw line sorts logs and efficiently handles a variety of log shapes. Since the fire relegated production solely to the Chip-N-Saw single path line, larger logs have been stored outside until the DDM12 becomes fully operational, at which time it will process them. It has more than enough power to slice logs up to 18 inches in diameter and 16 feet in length and cut boards ranging in size from 2x3s to 2x10s, from six to 16

feet.

In a highly competitive market visuals are everything, which is why the drying process at the mill is extended at reduced temperatures in their Salton dry kiln.

“When working with pressure treaters, it’s all about appearance. So by running the kiln at a lower temperature we reduce the negative effects of drying,” explains Haavaldsrud, adding that additional cupping and warping caused by more extreme temperatures is harder on the fibre. Charges are heated at a steady 165 degrees Fahrenheit for 48 hours. The kiln, added in 1999, has a capacity of 275,000 feet and is equipped with a 20 million BTU blower and 100 horsepower motor with a ramp-up speed of one minute to reach full power.

Since 1996 when Haavaldsrud implemented a \$6 million modernization program, it has relied on a Carbotech trimmer optimizer with an Autolog sawmill automation control that effectively eliminates the need for human handling. “The computer dictates where the boards are going and tracks the wood along the line,” Haavaldsrud continues.

Haavaldsrud Timber processes only softwoods—both white and black spruce, and jackpine—from the Nagagami Forest, a mixed-wood site of nearly 4,500 square kilometres located in the Boreal Forest Region. With the small exception of limited amounts of lumber destined for US markets through a secondary manufacturer, the bulk of their production is sold in southern Ontario where it is used for pressure-treated decking and roof trusses. Of the 400,000 cubic metres it harvests annually, 270,000 is softwood dedicated to the Hornepayne mill. The remaining hardwood yield is delivered to Columbia Forest Products in Hearst and Weyerhaeuser in Wawa. Woodchips are sent to Marathon Pulp and sawdust is shipped to the Flakeboard Company Limited in Sault Ste Marie where it is used to manufacture composite panel products.

Nestled in the Nagagami Forest, the company has easy access to cutblocks, an enviable feature that translates into reduced hauling costs. “Prior to the fire we were cutting less than one kilometre from the mill and this winter we’ll be cutting directly behind the main office. So we can practically skid the wood to the mill.” The woodlands operations are managed by Ken’s brother, Dave Haavaldsrud. About 30 hourly employees man cut-and-skid crews, road building machinery, and haulers, harvesting about 40 per cent of the mill’s fibre. (see sidebar story on page 9). The company relies on a Tanguay portable slasher to cut tree lengths that arrive in the mill yard. The remaining 60 per cent is harvested by contractors that deliver 16-foot log lengths.

Amid rising difficulties plaguing the forestry sector, the Olav Haavaldsrud Timber Company intends to persist in doing what it has always done: survive by rebuilding and nimbly adjusting to volatile market conditions with the help of dedicated staff, committed suppliers and contractors, and, now, the installation of the Comact DDM12. *Rocky, hilly terrain poses challenges* The Nagagami Forest, noted for its lush woodlands and bejeweled with pristine lakes that attract sport fishermen from across the continent, is also the lifeblood for the Olav Haavaldsrud Timber Company. The forest’s diverse terrain is a product of glaciation, and it sports stunning views and abundant wildlife—but it presents distinct challenges for loggers. “The forest is rocky, hilly and has a lot of water,” explains Dave Haavaldsrud, woodlands superintendent.

Haavaldsrud Timber relies on a fleet of harvesting equipment to cut trees in the most inhospitable places. In addition to running its sawmill, the company operates a stump-to-dump harvesting operation and does its own roadbuilding, while running a full service garage. Haavaldsrud is also a co-op partner in the management of the Nagagami Forest. Timberjack 850 and John Deere 853 feller bunchers, both described by Haavaldsrud as efficient, harvest 40 per cent of the woodlands timber that is dedicated to the mill. The remainder is cut by contractors to yield a total annual harvest of 400,000 cubic metres from the 448,000 hectare forest.

Three John Deere grapple skidders, two 648s and a 748, haul trees roadside where they are then delimbed by a John Deere 230C with a Denharco head. The wood is loaded with a Komatsu 300 and transported by six company-owned Western Star trucks. A portable Tanguay 150 slasher converts tree lengths to log lengths before the wood enters the mill.

Competing claims on the environment have helped shape a flexible corporate strategy for this timber company whose survival has always depended on adaptability. There are about 27 lodges and outpost camps within the sphere of Haavaldsrud's cutting operations. The desire for tranquility and isolation by tourists conflicts with the noise of industrial machinery running deep in the woods. The solution to these divergent interests was found in compromise.

"During the summer there is a three-kilometre buffer zone around all lakes with tourist camps on them," Haavaldsrud explains. A tourism zone restriction extends from May 15 until the end of October when the tourist season closes. Diminished access reduces by one third the total area of forest the company is able to operate in during the summer months. This creates a challenge in order to maintain year-round operations in the woodlands and furnish the mill's needs.