

PROCESSOR



Machine Operator
Nevin Wenger

Log Handler
Chris Duval

Time
26 min. 10 sec.

Cords Processed
1.5

Cords/Hour
3.4

Woodbine Ultimate

WITH HIS BOSS AT the controls of another Woodbine firewood processor next to him, salesman Neven Wenger made a solo run on the original Woodbine model, now called the "Ultimate." This machine made its debut at the 2007 Firewood Competition, and was back for another run. The biggest change is that the PTO drive had been replaced by a 50-hp John Deere engine tucked neatly alongside the infeed conveyer. For those wishing to use their own tractor, PTO power is still an option.

With all 15 logs loaded on the 14-foot live deck, there would be no need to stop and reload during the event. In spite of his limited experience on the machine, Neven operated it like an old hand, demonstrating how quickly one can learn to put it to work.

All controls are hydraulic, with two levers on the left for splitting, and three on the right for the live deck, infeed conveyer, and clamp/cutoff

saw. Neven was able to keep a constant flow of wood running through the machine. The trick, it appears, is to develop the coordination to run the cutoff cycle at the same time as the splitting cycle so that the wood falls down into the splitting chamber just as the hydraulic ram retracts. Another time-saving technique with the Ultimate is the "multiblock" splitting feature. The design allows the operator to cut four pieces off smaller logs before initiating the splitting cycle. The 8-way wedge splits all four pieces in half in a single pass.

Using an 8-way wedge when some of the other heavy machines were using 4-way wedges did not bother Neven, who says he was just trying to demonstrate the machine the way a commercial firewood producer would use it. Neven noted that there were no timeouts due to wood jams. "Just one 6-second timeout when the engine died, but it started right back up."

The "Ultimate" uses a conventional 0.404-inch pitch industrial har-

vester chain saw, powered by a hydraulic motor. Initiating the cutting cycle sets the chain in motion, drops the clamp into place, and forces the chain saw through the log. Releasing the hydraulic lever automatically returns the saw to its standby position and opens the clamp. If the operator could keep up with the splitter, the machine would cut and split 10 pieces per minute.

A flow control valve allowed Neven to apply the necessary pressure of the cutting bar on the wood. This makes it possible to adjust for different sizes and species of wood, as well as dulling of the chain between sharpenings. Industrial harvester chain saws are designed for heavy use in dirty conditions. Company owner Chris Duval says that chain sharpening is not a major issue with these bars and

chains. "If the logs are clean," he says, "you can cut 30 cords between sharpenings."

Unfortunately, there were not enough trailers to catch the fire-



A PARTICIPANT IN



wood from all the machines, and the cord-and-a-half from the Woodbine "Ultimate" made the 30-foot trip up the outfeed conveyer only to drop back to the ground. With split firewood dropping at an average rate of 40 pieces per minute, it took just 26 minutes for the machine to convert the 15 logs on the live deck to a cord-and-a-half of split wood. According to Neven, "this is a good average performance for this machine," although he found the logs a little smaller than optimum. He says, "You make your best time with 18-inch- to 20-inch-diameter logs." At a rate of 3.4 cords per hour, the performance is consistent with Woodbine's claim of 3 to 4 cords per hour production rate—but not quite as high as 4.1 cords per hour Chris managed with the machine two years ago. ■