



Event conclusion

SUMMARY & RESULTS by Dave Boyt

After a solid start in 2007, the Firewood Competition nearly tripled in size to six wood splitters and 17 firewood processors! Every one of the 2007 models returned to the competition.



Many, such as Timberwolf, Woodbine, and Hakki Pilke, not only came back, but brought along other models of splitters and processors to round out the field. Each firewood processor required 15 logs to cut and split its cord and a half of firewood. That comes to 27.5 cords of oak (counting 2 cords for the splitters), or just over 60 tons of firewood for the competition—all of which was delivered to the wrong place and had to be moved through the exhibit area to the competition area!

In less than an hour (30 minutes for each heat), this wood passed through a variety of machines that reduced it to 16-inch firewood lengths and split it into four, six, or eight pieces with a single push of a hydraulic ram.

High fuel prices seem to bring with them a flurry of interest in wood heat, which, no doubt, was a factor in the terrific show this year. Companies brought their machines from the U.S., Canada, Finland, and Slovenia to see how they would stack up against one other.

The wood splitter competition ran six machines with a 4-foot-high

by 12-foot-long pile of 16-inch wood to reduce to pieces that would pass through a 36-square-inch opening in a target. The small target caused some frustration, especially with the slower, more powerful machines. The times for these machines tell a part of the story, but not all. The fact that a splitter with the most powerful engine had the slowest time is perfectly logical, considering that the greater splitting force from the 5-inch hydraulic cylinder (the largest in the competition) required the longest cycle time. It was simply designed for bigger and rougher logs than we could provide. This is an example of why it is so important to do a little comparing and determine which machine is most likely to meet your particular needs.

There were also a few “curve balls” that affected the results this year. Because our resources were stretched so thin this year, we allowed firewood competitors to move their own wood from the huge pile of logs to their machines. As a result, some of the larger machines wound up with smaller

logs while some of the smaller machines wrestled the maximum size wood that their machines could handle. A second factor was a last-minute decision to load as much wood as possible into semi-truck trailers. Some of the shorter conveyers barely reached over the top of the trailer, and the wood piled up along the edge, blocking the conveyer. Operators had to call several “time-outs” to clear the wood, and lost some time putting their machines back into motion.

It is difficult to categorize firewood processors. Power plants ranged from a 16-hp Briggs and Stratton gas engine to an 83-hp John Deere diesel. As one would expect, more horsepower generally translated to higher production. The smaller machines with engines between 16 hp and 30 hp had production rates between 1.8 and 3.5 cords per hour. The largest firewood processors had comfortable cabs with padded seats, heat, and optional air conditioning and stereo systems (I would settle for an MP3 player and a cup holder). These ran engines in the 30-hp to 80-hp range, and produced between 3.2

and 7.8 cords per hour. These machines barely had time to heat up the hydraulic fluid before the tail end of the last log passed through the splitter, and the operator shut it down. These commercial machines have sound-isolated cabs that resemble an office in which the operator can have a hot cup of coffee and take orders on a cell phone while keeping an eye on the automated controls.

The cutoff saw of choice for most machines was a 0.404-pitch slasher chain saw powered by a hydraulic motor. These tough blades are designed for commercial mechanical harvesters with high bar pressure and chains that keep cutting after making contact with rocks and dirt that would quickly destroy a conventional chain saw blade. These saws are relatively inexpensive, but take a little longer to cut through the larger diameter logs, and require sharpening after cutting 15 cords or so. Four of the machines used a circle saw to cut off the wood. Unlike the chain saw blades, these spin all the time and use momentum to help keep the blade turning. Cutting cycle time is the same no matter what diameter log they cut. Sitting a few feet from a 60-inch-diameter blade must take a little getting used to, but with throughputs of 6 to 7 cords per hour, I'd manage!

I usually take manufacturers' claims with a grain of salt, but there was not a single machine that did not meet or exceed the production claims in cords per hour. Even though we had requested crooked logs of various sizes, there were only a few hang-ups on the conveyers or jams in the splitting chambers, and we got comments from the contestants that the logs were too good, though the size of some of them maxed out some of the smaller machines.

Competitions like this are a great way to test the capabilities of different machines, but the spectators are

not the only ones taking notes. At least three of the machines appearing in this year's Firewood Competition were either designed or significantly modified after the 2007 event. The exchange of ideas with potential customers helped manufacturers determine which machines to build and how to market them. Several manufacturers mentioned a growing trend for families to buy small firewood proces-

sors that they can share. Others are determined to build the biggest, fastest machine out there. We'll keep an eye on all of them. Watch for more firewood processor reviews in upcoming issues—and for those who choose to run their machines in the next Firewood Competition, we will provide plenty of wood to process so that potential buyers will have a solid basis for making decisions about their purchases. ■

OFFICIAL *Firewood Competition* RESULTS

PROCESSOR	Base Cords	Time	Cords/Hr
Blockbuster 14-12	1.5	0 hrs. 25 min. 40 sec.	3.5
Blockbuster 22-22	1.5	0 hrs. 13 min. 0 sec.	6.7
Built-Rite 40SCP-HP	1.5	0 hrs. 19 min. 6 sec.	4.7
Cord King 48	1.5	0 hrs. 11 min. 32 sec.	7.8
Hakki Pilke 1x42 Bill Thoms	1.5	0 hrs. 13 min. 43 sec.	6.6
Hud-Son Badger	1.5	0 hrs. 51 min. 18 sec.	1.8
Hud-Son Beast	1.5	0 hrs. 23 min. 56 sec.	3.8
Multitek 1610EZ	1.5	0 hrs. 34 min. 21 sec.	2.6
Multitek 2040 xp2 SS	1.5	0 hrs. 12 min. 32 sec.	7.2
Palax Power 90S Carl Neutzel	1.5	0 hrs. 22 min. 31 sec.	4.0
Tajfun RCA 380 OESSCO	1.5	0 hrs. 16 min. 44 sec.	5.4
Timberwolf TW-ProMP	1.5	0 hrs. 21 min. 43 sec.	4.1
Timberwolf TW-Pro HDXL	1.5	0 hrs. 27 min. 57 sec.	3.2
Wood Beaver 1x37 Hakki Pilke	1.5	0 hrs. 15 min. 38 sec.	5.8
Woodbine Jr. CRD	1.5	0 hrs. 29 min. 0 sec.	3.1
Woodbine Ultimate CRD	1.5	0 hrs. 26 min. 10 sec.	3.4
Woodbine Rapido Loco CRD	1.5	0 hrs. 16 min. 31 sec.	5.4
SPLITTERS	Base Ricks	Time	Ricks/Hr
Built-Rite 11HPWS	1.5	0 hrs. 28 min. 20 sec.	3.2
Iron & Oak 2202FC	1.5	0 hrs. 44 min. 44 sec.	2.0
Iron & Oak BHH4003	1.5	0 hrs. 27 min. 59 sec.	3.2
Split-Right 225	1.5	1 hrs. 1 min. 38 sec.	1.5
Super Split HD	1.5	0 hrs. 30 min. 49 sec.	2.9
Timberwolf TW5FC	1.5	0 hrs. 44 min. 13 sec.	2.0

Note: A rick is 12-foot by 4-foot stack of 16-inch-long firewood.