

SUMMARY & RESULTS *by Dave Boyt*



It is amazing how all the **challenges** of this year's Shoot-Out were forgotten once the sawdust started to fly! It was wonderful to see our old friends from Wood-Mizer, Baker, Logosol, Peterson, and Lucas. Watching the Mobile Dimension mill run was a real treat—it is a unique machine that has remained remarkably unchanged over the last 30 years. It was also a pleasure to welcome three new mills—EZ Boardwalk, Norwood, and Hud-Son to the event. It must be a little unnerving to participate for the first time on a field with so many seasoned veterans, but they all gave **outstanding demonstrations**.

**O**wner pride and loyalty are always evident. Every manufacturer had customers to cheer them on, and many held “family reunions” for owners to swap stories and cutting tips. And the families continue to grow. The best part is that they all felt like part of the much larger family of sawyers—not to say that there isn't a bit of friendly “sibling rivalry” between owners of different machines.

The economy was on everyone's mind. The manufacturers have seen

the price of steel and other raw materials fluctuate and they are trying to match production to uncertain future sales. Potential buyers are keeping an eye on the markets and wondering whether this is a time to buy equipment or cut back. Auctions of sawmill equipment from companies going out of business are listed weekly. I talked to a lot of people about these issues, and found surprising optimism. When a large sawmill goes out of business it leaves a void that smaller mills can fill. With their flexibili-

ty and low investment, small sawmills are finding niches and prospering. Interest in mills ranges from individuals wanting to cut lumber for their own projects to small businesses that are expanding production to meet the needs of their customers.

The Great Portable Sawmill Shoot-Out is the only place where people could watch band saws, circle saws, and a chain saw mill cut lumber at the same time. Spectators watched a variety of machines—ranging from 6 hp to 60 hp—run side by side. Band mills dominated the field in number, with production rates ranging from 300 board feet per hour to over 1,100 board feet per hour. Bare-bones manual mills provided entry-level and small-scale milling appropriate for woodworkers and individuals looking for a low-investment entry into sawmilling for home and farm use, and willing to use muscle to push the blade through the wood and to load, turn, and clamp the logs. The larger mills achieved these tasks through hydraulic or electric motors, freeing the sawyer to focus on the job of sawing logs, and could easily keep a crew of three or four people busy offbearing, edging,

sorting, and stacking.

Peterson, Lucas, and Dimension showed portable circle mills that have the ability to work logs of nearly unlimited diameter.

Although we were unable to provide the 5-plus-foot-diameter logs that these mills could handle, they showed their versatility in cutting the yellow poplar logs with very respectable cutting rates and yields.

The sawyers were as diverse as the mills themselves. They included the designers and builders, company owners, sales representatives, and customers who use them every day. Some were professional athletes, while others spend most of their time behind a desk.

While “numbers don’t lie,” they tell only part of the story. While we tried to give each mill the same amount of lumber to cut, there was far too much variation in the logs to make this possible. Each mill was provided four logs ranging from a total of 316 board feet to 460 board feet, based on the international 1/4-inch scale. This calculates the theoretical yield from a log, based on a saw blade with a 1/4-inch kerf, minus deductions for defects such as crook or sweep.

We tracked two basic production statistics for the Shoot-Out. The production rate was calculated in board feet per hour. This was the board feet of acceptable boards

divided by the amount of time to produce them. Boards outside the tolerance range (1-1/16 inch to 1-1/4 inch) or with too much wane on the edge went on a reject pile, and did not count toward production. As one might expect when it comes to engines, size does count, with the more powerful (and more automated) mills achieving the highest production rates.

Lumber recovery is the ratio of acceptable boards to the predicted yield from the log. A lumber recovery factor of 100% indicates that the mill produced the amount predicted by the international 1/4-inch scale. While one would expect the thin-kerf band saws to outperform the circle saws, the results indicated that the experienced eye of the sawyer is more important to yield than the thickness of the saw blade. A thick slab that could have yielded one more board, the loss of a few boards due to a cutting or edging mistake, or edging a little more than necessary had more of an effect on performance and yield than the mechanics. This was especially true this year, since many of the sawyers had never cut to the target hardwood thickness of 1-1/8 inches.

All this makes it impossible to use numbers to determine “winners.” As one participant put it, “I just cut like I do every day out in

the woods.” We have tried to show some of the many machines that fill a variety of needs. If you were present at the Shoot-Out, you had a chance to visit the manufacturers’ booths and kick the tires in person. Many exhibitors put a log on the deck and allowed attendees to cut a few boards to get a feel for the machine. For those of you who could not make it out to West Virginia this year, I have tried to put into words the excitement and camaraderie that has been a hallmark of every Shoot-Out, as well as the personal stories of the individuals running the machines.

I have also tried to provide some insights into the machines and the men who ran them (no ladies, this year) so that you can draw your own conclusions about who the “winners” are. If you’re looking to get started kicking out a little sawdust of your own—or looking for a machine that will kick it out faster—use the contact information provided in this issue to find out more. Whether you talk with a sales representative or the company owner, you will find someone who is willing to take the time to help you and answer your questions. Nearly all participants have excellent websites with videos, and I encourage you to check them out. Welcome to the family! ■

## OFFICIAL SHOOT-OUT RESULTS

SAWMILL	Log scale	Hrs	Time	BF/HR	Net Yield	%scale	%over run
Baker 18HD	358	0	39 min. 53 sec.	554	368	103%	3%
Baker Blue Streak	403	0	27 min. 53 sec.	979	455	113%	13%
EZ Boardwalk	365	1	3 min. 24 sec.	365	386	106%	6%
Lucas 1030K	316	0	35 min. 35 sec.	583	346	109%	9%
Hud-Son 360	348	1	4 min. 35 sec.	362	390	112%	12%
Logosol Woodworker’s Mill	192	1	57 min. 36 sec.	73	143	74%	-26%
Mobile Dimension 12XLS	336	1	10 min. 56 sec.	261	309	92%	-8%
Norwood LumberMate 2000	370	1	23 min. 35 sec.	264	368	99%	-1%
Peterson WPF	372	0	36 min. 28 sec.	528	321	86%	-14%
Wood-Mizer LT15G25	414	0	46 min. 24 sec.	504	390	94%	-6%
Wood-Mizer LT28G25	419	0	47 min. 26 sec.	598	473	113%	13%
Wood-Mizer LT50HDD47-RW	348	0	34 min. 2 sec.	638	362	104%	4%
Wood-Mizer LT70HDD55-RX	460	0	26 min. 4 sec.	1,144	497	108%	8%