EQUIPMENT REVIEW



Salsco Shaving Mills

In past issues we have discussed the manufacture and marketing of sawdust and chips. But now let's consider a higher-grade product that can be made from cull material—wood shavings.

BY BILL GOVE

here aren't many manufacturers of wood-shaving mills, but there is one with an outstanding machine that caught my attention—Salsco Inc., of Cheshire, Connecticut.

Wood shavings have a healthy market acceptance with most livestock farms, particularly with horse and poultry farms. In fact, most of the Salsco shaving mills are actively in use in the South and mid-Atlantic, in horse country. But I managed to find a couple at work in the Northeast.

A New York Operation

Mike Smith, of Berlin, New York, owns and operates the larger of the two available Salsco models, and has had it in operation for about one year. Mike operates a logging business, but mixes in a firewood operation with the use of a Multitek 2040 firewood processor and a wood shavings operation. His shavings mill is operated two or three days a week, making about two loads per day with a load containing a compact 30 cubic yards of shavings.

I found Mike busy in his log yard, feeding cull pine logs into the shaving mill. Most of the logs had laid around for a while and as a result had tough strips of bark. He said that the old bark tends to dull the knives and he has considered the installation of a debarker. At least, that's part of his business plan. Included also in the plan is the purchase of a rotochipper for the manufacture of mulch, as well as the addition of a knife grinder. The shaving mill knives are usually sharpened once a week.

Mike's shaving mill is situated in

the open and the chips are blown out onto an unprotected pile. He acknowledged that his present arrangement is not the best and that the construction of a shed is a toppriority item. Shavings obviously need some protection from the rain and snow, as well as the wind, which sometimes scatters shavings over the neighbors' landscape.

Smith praised the rugged construction of the Salsco mill, stating that "it has done me well." To feed the mill, the wood material is placed into a steel-reinforced box, 8 feet 6 inches long. In operation, the box passes back and forth over a cutting shaft equipped with hardened steel knives. There are either 10 or 15 knives depending on the model, and they are positioned to cut shavings in either direction the box is moved. The box is moved by a chain and sprocket drive, and there are sensors

EQUIPMENT REVIEW

at each end to automatically reverse the direction of movement.

The machine works best when full-length material (8 feet) is fed into the box, and I noticed that the quality of the shaving was better also. Noting that some of the logs had been lying around the yard for some time, I inquired about the difference with green logs. Green material will chip better, I was informed, and the mill can be operated a little faster than with dry material. On the other hand, dry material handles a little better, and the pine bark doesn't plug the exhaust system, as it sometimes does with green logs. Plus, it's great to have a way to dispose of those old cull logs, which always seem to accumulate in a log yard.

Green shavings will partially dry in a short time, but Mike mixes green and dry shavings in the pile. Shavings are normally cut about 1/32 inch in thickness, but the thickness is easily changed by adjusting the height of the cutting shaft.

The market for Mike's shavings is with the horse and dairy farms in the area, some of which specify a thin shaving. Though he shaves most any species of wood, most of the production seems to be pine and hemlock. Future plans may include producing for the wholesale market, packaging the shavings in 41/2-cubic-foot burlap bags. Burlap is said to be a material which assists in the drying process.

A Massachusetts Operation

Over in central Massachusetts, Orin Sisco, of East Brookfield, operates a one-man operation offering landclearing, firewood, sawmilling, and wood shavings. His Salsco shaving mill, which he has had for 1 and a half years, is now operated about one day per week, producing product for sale to local horse and dairy farms.

He considers white pine the best product for his market. He seldom cuts hemlock or spruce, stating that those species are too abrasive on the knives. He will cut poplar, the shavings being a pleasant white in color,

SPECS **Salsco Shaving Mills** Model 30 in. 20 in. Power 83-hp Cat diesel 43-hp Cat diesel No. of Knives 15 10 Wood Box 8 ft. 6 in. long 8 ft. 6 in. long 30 in. wide 20 in. wide 30 in. high 30 in. high Axles Dual Single Double chain and **Box Drive** Single chain and sprocket sprocket Frame 6 in. x 2 in. x 3/8 in. wall, rectangular steel tubing **Directional exhaust blower** Stabilizer stands—4 on 30 in. model Price \$56,000 \$39,000

Address of Manufacturer

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but smelly. His market brings \$13 to \$15 per cubic yard, delivered.

Although his customers vary in their preferences for shaving thickness, Orin tries to avoid making thickness adjustments. He finds that when he makes changes in the height of the cutter shaft, it often requires other adjustments. A thickness greater than 1/32 inch also tends to produce more of the unwanted sawdust; the same is true when shaving dry wood.

Another problem that Orin has experienced with dry wood is that it lacks the necessary weight to properly press down against the cutting shaft and instead might ride up over the knives a little. His remedy for that situation is to place some heavier green material on the top of the load in the box unit, which carries the wood back and forth. And also a mix of dry and green wood works best for producing good-looking shavings.

Logs up to 20 inches in diameter can be placed in the box. Lengths cannot be longer than 8 feet 6 inches, preferably slightly shorter. Orin was shaving some pieces a couple of feet long, but I noticed that they did not remain stationary in the box and didn't cut as well.

The only problem that Orin has experienced is a little metal break-



Orin Sisco's machine inside the sawmill building.

EQUIPMENT REVIEW

age in the motor mounts and a couple of the guards. As standard maintenance he keeps some extra chain links on hand for the drive chain on the wood box. Salsco recommends operating the machine at about 2,500 rpm, but Orin chooses to increase the speed to 3,000 rpm. It sure increased the noise level.

A Virginia Operation

Many of the Salsco shaving mills have been marketed in the southern part of the nation, indicative of the prevalence of the horse farm market in that region. Park Hill Farms and Lumber, in Charlottesville, Virginia, has operated a Salsco shaving mill for three years, operating one or two days per week.

Co-owner Theresa Pace stated that they have had no problems whatever with the machine. Most of



Salsco's 30-inch shaving mill.

the material that they feed into the machine is cull posts from a nearby post mill and the posts are already dry before they receive them.

The posts are primarily pine, which are preferred for a number of reasons, including the pleasant smell in the stables. Poplar has been used, but it tends to turn black when soaked with urine. They find oak to be too hard for good production. The poultry farms also prefer pine for their shavings.

When I asked why they began operation of a shaving mill, Theresa stated, "The shavings and residues from the sawmills contain too much sawdust and sawdust makes the horses cough."

Recommendation

Establishing markets for wood residues and cull material is important in

this competitive world, both environmentally and financially. If you have suitable markets, consider the application of a shaving mill. And as Mike Smith proclaimed as I was leaving, "The Salsco shaving mill is rugged and has done me well."

Bill Gove is a regular contributor to Sawmill & Woodlot *magazine.*

