Waste Tire Processors feeds whole scrap tires into its home-built baler, which compresses them and uses galvanized 9 ga. wire to hold them together.

1-TON BALES USED FOR EROSION CONTROL

New Machine Makes Bales Out Of Tires

A first-of-its-kind machine that compresses whole tires into compact square bales may be just the best tool yet for disposing of the millions of tires discarded every year.

The baler compresses car and truck tires into bales that measure 30 by 60 by 36 in. and weigh about 1,200 lbs. Each bale contains about 50 tires and is tied by galvanized 9-ga. wire. The bales can be handled by front-end loaders. The baler can also make bales that measure 30 by 60 by 48 in. and weigh about 2,000 lbs. Each bale contains about 100 tires.

The company that built the bale processor, Waste Tire Processors of Mason City, Iowa, says they've already come up with a number of uses for the big bales. They've been used to control soil erosion, make watershed diversion barriers, stabilize stream banks, terraces, levee control berms, reduce mud problems in feedlots, etc.

In the future, the company hopes to use the big bales to put up buildings, using them as big bricks to form the sides and then stuccoing them over.

In a typical waterway project, bales are placed side by side at intervals in the waterway where they act as "check dams" to reduce the velocity of the water as it flows along the waterway. The ground is excavated partially below grade, then the bales are installed, covered with a layer of soil, and seeded with grass to create the same effect as a speed bump in a highway.

Big tire bales measure 30 in. wide, 60 in. long, and either 36 or 48 in. high. They're shown here stacked together for storage.

Bales placed side by side at intervals in a waterway act as "check dams" to reduce the velocity of water.

"Baled tires provide a long term solution compared to other methods of erosion repair and disturb much less surrounding topsoil than conventional erosion control methods," says Don Hess. "They also reduce the amount of new soil needed to make the repair. As a result, it costs only a fraction as much as cost-share government programs. Unlike concrete containment structures, baled tires aren't affected by freezing, chipping, and cracking or by corrosive fertilizer. Water flows through the bales like it flows through drainage tile, yet the soil remains in place. Grasses establish well in the soil-covered tires because the roots have excellent access to moisture trapped in the crevices of the baled tires.

"However, the biggest advantage of using waste tire bales over conventional methods is cost. Projects in our area that traditionally cost $4,500 to $5,500 have been successfully completed for less than $800.

"The 2,000-lb. bales work great to keep cattle high and dry in feedlots. The ground never freezes under the tire bales so rain can filter through them all year long. Bales can also be placed alongside the concrete feeding area and covered with 8 to 10 in. of aggregate limestone to keep everything stable.

"The machine makes about 4 bales per hour. We can also bale semi truck tires."

A 1,200-lb. bale sells for $5 FOB Charles City and the 2,000-lb. bale sells for $7.50.

Contact: FARM SHOW Followup, Waste Tire Processors, L.L.C., 103 East State Street, Suite 425, Mason City, Iowa 50401 (ph 888 421-8473; fax 515 424-6869).

Row Crop Sprayer Rides On Rubber Tracks

"It has only about half as much ground pressure as a conventional sprayer of comparable capacity which greatly reduces compaction," says Boris Horodynsky, Churchill, Ontario, about the 75-ft. wide sprayer he built that rides on 15-in. wide rubber tracks.

Horodynsky built the entire sprayer from scratch except for the 50-in. long Goodyear tracks and the tires that the tracks wrap around. There are two 20.8 by 38 tires on each side, with a wheel width of 36 in. from wheel hub to wheel hub. He used 2 1/2-in. sq. steel tubing to build the sprayer frame. The boom hydraulically folds forward for transport. A ladder at the front leads up to a platform on top for loading chemicals. The sprayer pump is pto-driven.

"I built it because I wanted a narrower footprint and better flotation, and that's what I got," says Horodynsky. "V-shaped guide blocks hold the tracks on the tires. The tracks provide great flotation and 'bridge' bumps and gaps to help smoothen the ride. They're narrow enough to go right through row crops."

Contact: FARM SHOW Followup, Boris Horodynsky, Rt. 1, Churchill, Ontario, Canada L0L 1K0 (ph 705 456-2461; fax 0344).

The 75-ft. wide sprayer rides on 15-in. wide, 50-in. long Goodyear rubber tracks that wrap around two 20.8 by 38 tires on each side.

Repowered IH 756 Starts Easy, Runs Cheap

When Daniel F. Zinke repowered his 1967 IH 756 tractor last fall, he hoped it would start easier and run cheaper.

"I wanted a bigger engine than the original German-built IH 5-liter diesel the tractor was equipped with and something that would use less fuel," says the Tomah, Wis., farmer. "I guess I succeeded because the old engine used 5 1/2 to 6 gal. of fuel per hour, while the new one uses only 3 1/2."

He fitted the tractor with a 5.9-liter 6-cyl. turbocharged Cummins diesel out of a 1990 Dodge Ram pickup he bought at a salvage yard for $3,000. The engine had 83,000 actual miles on it.

He bought a new Case-IH 1066 flywheel from Link Implement for $650 (Hwy. 25 North, Ridgeland, Wis. 54763; ph 715 949-1795). The flywheel was already machined with a bigger hub to fit the Cummins engine, Zinke says.

The engine and modified flywheel fit well in the frame and adapted easily to the transmission of the 756, he says.

Zinke repowered the tractor with a 5.9-liter, 6-cyl. turbocharged Cummins diesel out of a 1990 Dodge Ram pickup, then added a new Case-IH 1066 flywheel. The flywheel was already machined with a bigger hub to fit the Cummins engine.

"I plowed snow with it all winter and it never failed to start on even the coldest mornings," Zinke says. "It has real good power."

Out-of-pocket expense was about $5,000.

Contact: FARM SHOW Followup, Daniel F. Zinke, 8439 Ellsworth Rd., Tomah, Wis. 54660 (ph 608 372-2693).

He used the tractor to plow snow last winter and says it never failed to start.