



Compressed bales are bound with steel straps on drum above machine.

Big Bale Compactor Boosts Hay-Selling Profits

"Profits from the hay we sell in Florida were being eroded by trucking expenses," says John Buyers who, along with friend John Hoover, built a heavy-duty compactor for big rectangular bales. It allows them to get up to 7 tons more Timothy hay on each truck load.

The compactor squeezes 8-ft. long bales down to just under 4 ft. They compact as many as 2,000 bales a year.

The men built the frame of the machine out of 6 by 6-in., 3/4-in. thick angle iron. The 20-ft. long, 32-in. sq. compression chamber was fashioned out of heavy steel plate.

A 32-in. sq. plunger, which rides on plastic wear plates, is powered by a pair of 10-in. dia. hydraulic cylinders purchased from a used heavy equipment dealer. The 6 1/2-ft. long cylinders provide up to 9,000 psi's. A 50 hp D-311 Caterpillar diesel engine powers the machine's 70 gpm two-stage hydraulic pump.

Compressed bales are bound with four steel straps suspended on a drum above the machine.

Once a bale is compressed, a 4-in. hydraulic cylinder with 4-ft. stroke pushes it out of the chamber. Then it's stacked or loaded in trucks with a tractor and front-end loader.



Hydraulic-powered compactor squeezes 8-ft. bales down to just under 4 ft.

"One man operates the tractor loader and press and one straps the bales," Buyers notes. "It takes about five minutes to compress one bale."

Typically, half the bales in each truck load of hay sold to Florida horse trainers are compacted, he says. Loads are filled to the legal limit, he adds.

Built four years ago, the machine cost about \$30,000 (Canadian).

Contact: FARM SHOW Followup, John Buyers, Rt. 2, Alliston, Ontario, Canada L9R 1V2 (ph 705 435-7096).

Feeder Holds Up To Six Round Bales At A Time

Up to six round bales at a time fit into this new 20-ft. long, 8 1/2-ft. wide, 6-ft. high rectangular bale feeder, says Peace Land Fabricating And Supply, Hythe, Alberta.

The feeder holds three round bales in a bottom row and three more in a second layer on top. The bottom part of the feeder has bars that slant inward, with another rectangular frame mounted on top of them. The design keeps any loose hay pulled out by cattle from being wasted.

Sells for \$1,350 (Canadian).

Contact: FARM SHOW Followup, Roland Thiessen, Peace Land Fabricating



Feeder holds three round bales in a bottom row and three more in a second layer on top.

And Supply Ltd., Box 331, Hythe, Alberta, Canada T0H 2C0 (ph 403 356-2200; fax 2822).

Versatile Tractor Hitch Doubles As Bale Spear

"Our new quick-tach hitch system for tractors can be used to tow gooseneck trailers, bumper trailers, and pin hitch equipment. You can also slip in two bale spears and use it to haul big bales," says Paul Winkel, Winkel Mfg., Glen Elder, Kan.

The hitch has a gooseneck ball hitch on top and a square receiver tube at the bottom. To move bales you slip the main spear into a bracket just below the gooseneck hitch and mount a short spear in the receiver tube. When you want to tow equipment, you remove both spears and insert a hitch that's fit-

ted with two different sizes of ball hitches (2 and 2 5/16 in. dia.). Each hitch mounts on a different side of the tubing so to switch balls you simply turn the hitch tube.

"The bale spear is a 1 3/4-in. dia., four-sided forged steel shaft that has a capacity of 2,200 lbs. The four sides taper down to a point which makes it easy to release the bale from the spear, says Winkel."

Sells for \$325 plus S&H.

Contact: FARM SHOW Followup, Paul Winkel, Winkel Mfg. Co., Rt. 1, Box 122, Glen Elder, Kan. 67446 (ph 913 545-3606).



An 11-ft. long chain saw mounts in vertical track to slice bales.

They Cut Big Bales Down To Size

"The beauty of our machine is that it offers hay growers the efficiency and convenience of putting up big rectangular bales in summer and the flexibility of being able to offer end-users small rectangular bales in winter," says Don Ast about a big bale saw/compactor his company designed and built.

Ast Hay Co., Aurora, Ore., designed the computerized system for use on Freeman 36 by 48-in. bales and Hesston 32 by 36-in. bales.

It consists of a hydraulically powered, 11-ft. long chain saw mounted in a vertical track. It slices through bales, which are delivered to the cutting chamber from a cart, cutting them twice between strings.

The slabs then enter a compressor where they're typically compacted down to six-tie 16 by 36-in. bales. This large flat bale then enters a slicer box where it's cut lengthwise into a finished product that measures 16 by 18 in. Alfalfa bales weigh between 80 to 100 lbs. with bale density of 14 to 18 lbs.

Designed for high density bales for the export market, a saw and compressor like Ast's can be built for about \$450,000. A low-density version that's being developed for the domestic market is expected to run about \$150,000 to \$175,000.



Saw cuts bales after they're in position on table.



Slabs are cut lengthwise into a finished product that measures 16 by 18 in.

Contact: FARM SHOW Followup, Ast Hay Co., 23283 Hubbard Cutoff Road, Aurora, Ore. 97002 (ph 503 678-5009; fax 2484) or Steffen Systems, 8045 State St., Salem, Ore. 97301 (ph 503 399-9941).

New-Style Sickle Hold-Down Clips

"It's the most efficient after-market sickle hold-down system on the market because the hold-down clips will outlast all others and will never come out of adjustment once they're set," says Jim Puncochar about his new-style sickle hold-down for mowers, windrowers and combines.

Xavier Crop System's hold-down clips will last at least 3,000 acres under normal conditions and they feature an adjusting bolt that's ahead of the clip pivot point so they'll never go out of adjustment, Puncochar notes.

The arch of the clip is made of self-lubricating cast iron and the 4 1/2-in. wide base is made out of ductile iron for extra long life.

Installation is quick, simply by loosening two guard bolts on the header bar and



Hold-down clips feature an adjusting bolt that's ahead of the clip pivot point so they'll never go out of adjustment.

bolting on the hold-down. Comes in high or low arch to fit virtually any cutterbar.

Sells for \$8.95 apiece.

Contact: FARM SHOW Followup, Xavier Crop Systems, 1076 Hardy Road, St. Paul, Neb. 68873 (ph toll-free 888 866-4204 or 308 754-4204).



Unit has gooseneck ball hitch on top and square receiver tube at bottom that's fitted with two different sizes of ball hitches.



To move bales you slip main spear into bracket just below gooseneck hitch and mount short spear in receiver tube.