

Carrier Speeds Shade Hoop Set Up

The Hoop Carrier from GK Machine speeds setting up shade and tarp hoops over berry beds. Powered by a 35-hp. Vanguard engine, the gantry design lifts, transports and places hoops in the field.

"The alternative is a trailer where the workers grab the hoops and run down the field," says Scott Grossen, GK Machine.

"That's labor-intensive. With our carrier, two guys can do as much at a casual pace as five guys at breakneck speed with the trailer. What would take a crew of workers three weeks with the trailer can be done in 2 1/2 days with our carrier."

GK Machines specializes in custom-designed machines for agriculture and non-ag markets. When a customer shared a crude prototype and asked them to improve on it, they created the Hoop Carrier.

The gantry design works like a framework mounted on two motorcycles with independent steering. Mirror image sides are connected at their tops by tubes that slide into and rotate inside a center tube.

"The rotation prevents wheels on one side rocking off the ground when the other travels over uneven terrain," says Grossen. "We can also adjust row width by changing out the center pipe."

All four wheels drive and steer independently for omnidirectional and swerve steering. When the Hoop Carrier reaches the end of one row, the operator turns the steering wheel to move it laterally to the next row.

"Originally, we used joystick control of the wheels, but if you aren't a video gamer, you may not be comfortable with joystick steering," says Grossen. "We had developed proprietary software that could allow a steering wheel to do the same thing for another piece of equipment. We adapted it to the carrier."



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The operator's control station can be rotated 90 or 180 degrees to match the direction of travel. A monitor screen indicates travel direction, and a joystick controls speed as well as forward and reverse movement.

The Hoop Carrier utilizes load sense technology and hydraulic components paired with a network of sensors to lift and place hoops. It can carry up to 140 hoops (3,640 lbs.) in a single trip.

"The Hoop Carrier is priced at around \$142,000 to \$148,000, depending on material costs, but the payback is fast given reduced labor costs," says Grossen. "It has hydraulic functions that can be used with other tools, but most of our customers are interested in using it just for hoops."

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They Keep The Water Flowing

"The Freeze Guard Waterer is an insulated animal waterer that farmers can use year-round," said Freeze Guard company owner Nathan Frey.

"It has a string heater that goes through a copper line," Frey says. "A replaceable heating element sits at the top of the unit."

"It also has baffling inside," he says. "It's a circulation baffle in which the hot water circulates with any cold water, so there aren't any cold spots that could cause it to freeze."

One of the most convenient parts of having a Freeze Guard is the ability to hook up a small thermostat to as many as six Freeze Guard units. That thermostat can be set to automatically turn on at a certain temperature.

The Freeze Guard is shaped like a tube and comes in different heights. "A farmer can have a Freeze Guard with two drinking nipples at the same height. It can also be set up with four nipples at two different heights."

"We can also set up an eight-nipple Freeze Guard," he says. "All we would have to do is double-stack them to get to eight. The height differences would probably allow 10 to 20 head to drink out of each nipple."

Freeze Guard sizes can range between 2 1/2-ft. and 7-ft. tall and can weigh anywhere from 7 lbs. to 31 lbs.

He says a Freeze Guard waterer can be installed two ways. A farmer can pull the water up from below the frost line.

"Or you can install it like an energy-free type of waterer and put it in either a 12 or 14-in. heated tile," he says. "I always say it's like putting a candle on a cupcake because you cement the very top of it in the ground."

The Freeze Guard waterers have to be durable to last around livestock. Most of the ones he replaces for customers have been around anywhere between 25 to 30 years.

Frey says the unit is made from pvc pipe and has stainless steel piping. There's also



Freeze Guard Waterer offers clean, reliable water delivery. Its simple design works well for hogs, sheep, goats, and even dogs.

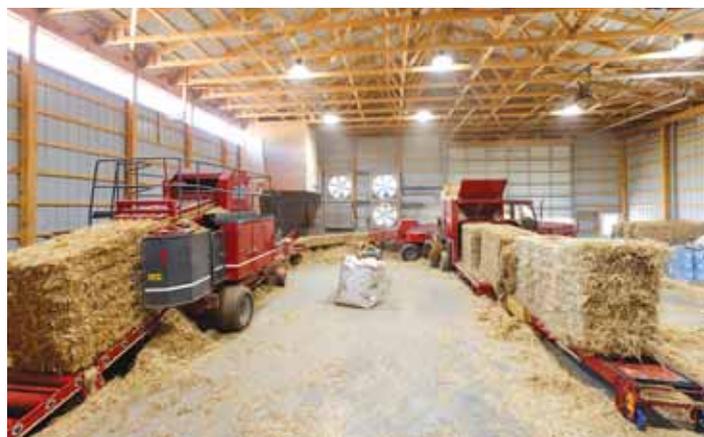
brass inside each unit and copper in the heat line.

"We also have a foam machine to fill them with insulation," he says.

Frey says the Freeze Guard waterers work well for hogs, and sheep and goats can learn to drink from them with training nipples. He says farm dogs can also drink from the waterers with a little training.

The Freeze Guard waterers range from \$310 for the smaller models up to \$525 for the larger ones. They also offer different sizes of heaters, ranging from \$26 to \$50, as well as several accessories.

Contact: FARM SHOW Followup, Nathan Frey, Freeze Guard Waterers, 7387 Township Highway 104, Upper Sandusky, Ohio 43351 (ph 419-294-0400; freezeguard@outlook.com; www.freezeguardwaterers.com).



Large square bales are slowly fed from the adjustable speed conveyor into pickup tines which rake the face of the bales apart. Loose material then moves into the hopper to fall into an auger feeding the small baler.

Machine Converts Large Bales To Small

"Farmers want to make hay when the sun shines in the summertime," says a Black Rock Repair spokesman. "They need to get in the field and bale quickly when they're able. Our Bale Converter lets them break their big bales into small 40-lb. bales later when they have time."

The unit consists of a large hopper, hydraulic pickup, and a chain-driven conveyor where up to four large square bales can be set. A tractor and small baler are positioned at the exit point of the hopper and power both the converter and the baler.

Large square bales are slowly fed from the adjustable speed conveyor into pickup tines which rake the face of the bales apart. Loose material then moves into the hopper to fall

into an auger feeding the small baler.

Available options include an electric eye system on the hopper to start and stop the chain conveyor when it fills or the bales move too fast, a torsion axle for extended towing, and an in-floor auger clean up system to continuously collect and feed generated chaff into the baler.

Depending on the size and density of the large bales, the Bale Converter can handle about 10,000 lbs. of hay per hour on average.

The units are manufactured in Kirkwood, Penn., with the base model selling for \$45,500 plus options and S&H.

Contact: FARM SHOW Followup, Black Rock Repair, 858 Pumping Station Road, Kirkwood, Penn. 17536 (ph 717-500-6553).



Magnetic Lifter is one of the strongest magnets sold by Applied Magnets of Plano, Texas. It's capable of lifting up to 4,400 lbs.

Industrial Magnets Great For Lifting

By Chad Smith

Applied Magnets of Plano, Texas, knows how valuable magnets can be on a farm and they've got a lot to choose from.

"We sell a lot of magnets, but there are three different types," says Russ Colburn, marketing manager for Applied Magnets.

"We have ceramic, which makes up many older style magnets people might be more familiar with.

"We also have Rare Earth magnets with Neodymium, which were invented in the 1980's," he says. "They're much more powerful than ceramic."

A 1-in. dia. Rare Earth magnet has a 100-lb. pull force. A 3 in. has a 600-lb. pull force. He says they're "extremely powerful" and you have to be careful using them.

The company also carries Samarium Cobalt Magnets.

Colburn says other styles that may be useful on the farm include the Neodymium

Short Neck Eye Bolt Hook Fishing Cup magnets that can lift up to 2,200 lbs.

Applied Magnets also has industrial-strength magnets for really heavy lifting. The strongest ones can lift up to 4,400 lbs. and require no electricity to operate. Turn the handle on one end to turn the magnet on and start lifting.

The ceramic magnets range from 19 cents to \$19.99, depending on the size and strength. The Neodymium magnets have a wide price range, starting at a nickel and running to \$2,399 for the largest industrial magnet.

The cobalt magnets range in price from 32 cents up to \$28.99.

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