

## High Tech Sprayer Built For Less Than \$16,000

Leon Becker and Norbert Meyer of Conway Springs, Kansas, wanted a 4-WD self-propelled sprayer like a Ro-Gator, but couldn't justify the expense. So they bought a used, semi-mounted, 60-ft. spray boom, then bought a used International Harvester 3588 articulated, 4-WD tractor equipped with a 3-pt. hitch and pto and mounted the boom on it.

They fitted the tractor with dual wheels, a pair of 300-gal. saddle tanks, a Raven 440 controller with Ag Leader guidance, a Raven 3-boom valve assembly, a Squibb Sky-Track SK100 GPS receiver, and a Trimble E-Z Guide Plus automatic steering system. The tractor's pto is used to operate a sprayer pump.

"It has many of the same high tech features found on high dollar, self-propelled sprayers, yet cost less than \$16,000 to build," says Becker. "The high tech equipment brings this sprayer up to today's standards and also makes the sprayer fun to operate."

The boom is a modified Service Systems Engineering model (Jackson, Minn.). It's built in three sections and rides on a pair of big gauge wheels. A spray nozzle is located at both ends, allowing the men to spray into fence lines.

They converted the tractor's gas tank, located behind the seat, to a fresh water tank that has a hose reel on it. The tank can be used to wash off the boom, provide water for a foam marker system, and for washing their hands.

"We spent a lot more on technology than we originally intended to, but it was worth it," says Becker. "We've used it on about 15,000 acres during the past five years with no problems. We bought the spray boom from a Kansas farmer, who had recently bought a Ro-Gator and put the tractor-mounted boom up for sale.

"The IH 3588 tractor isn't the best field tractor in the world, but it makes a fantastic sprayer tractor because it's 4-WD and relatively lightweight. We can go right through low spots and over terraces with no problems. There are a lot of these tractors out there that aren't being used any more and they're reasonably priced. The only limitation is that with an articulated tractor we have to be care-



"It has many of the same high-tech features found on expensive self-propelled sprayers, yet cost less than \$16,000 to build," say Leon Becker and Norbert Meyer about their home-built, 3-pt. mounted sprayer. It's mounted on an IH 3588 articulated, 4-WD tractor.

ful we don't turn too short and over-correct, which snaps the heavy boom around and stresses the 3-pt. hitch.

"The boom is built heavy, and the gauge wheels help it float over the ground. We don't have to worry about raising and lowering the boom on our terraced ground."

The E-Z Steer guidance system was originally designed to mount on a tractor's steering column, which doesn't work on an IH 3588 tractor. So they made mounting brackets and mounted it on the cab's frame.

They get multiple use out of the guidance and steering systems. "We use the same Ag Leader guidance and E-Z steer systems on four different tractors for planting, spraying, anhydrous application and field work," says Becker.

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The boom (above) was built in three sections and rides on a pair of big gauge wheels which help it float over uneven ground. Tractor cab is fitted with an E-Z Steer automatic guidance system. They made special mounting brackets to mount it to the cab's frame.



## Bale Wrapper Fits Any Skid Steer Loader

"It frees up a tractor, and the driver has a clear view in front of him without having to look back," says Bob Clapper, Ag Nation Products, East Canton, Ohio, about his big bale wrapper for skid steer loaders.

The Ag Wrap bale wrapper has been on the market for several years as a 3-pt. unit that operates off tractor hydraulics. It was invented by a Maryland farmer in 1993. Clapper has been a dealer for the bale wrapper for many years and bought the manufacturing rights two years ago. He recently came up with a new universal quick-tach adapter plate, which allows the wrapper to be quickly mounted on any brand of skid loader. It installs with three pins.

"As far as I know it's the first skid steer-mounted bale wrapper on the market," says Clapper. "A lot of farmers use skid loaders to move bales to the edge of the field where another machine wraps them. Now you can move them and wrap them at the same time. By the time you get to the edge of the field, the bale will be already wrapped. It takes only about two minutes to hook up the adapter plate."

The machine is built heavy and will last a long time, says Clapper. "We bought the fifth

machine ever built 12 years ago for use on our own farm. It wrapped more than 37,000 bales before we sold it, and it's still going strong today."

Less wear and tear is a big benefit, he says. "On a stationary bale wrapper, the table that holds the bale rotates rapidly which causes a lot of wear on the center bearing. And much of the bale's weight is on the arm that holds the plastic, which causes the bearing in the arm to wear out prematurely. On our bale wrapper the arm does the work by slowly rotating around the bale. Every pin, pivot point and bearing has a grease fitting on it."

The only disadvantage, he says, "is that you don't want to turn around real quick or you can tear up the field. You want to make gradual turns."

Two different models are available, to wrap bales either 4 to 5 1/2 ft. or 4 to 6 1/2 ft.

An optional skid steer wheel assist kit can be used to take the weight off the skid loader. The kit consists of a pair of caster wheels that extend out to the end of the bale wrapping arms and help support the weight of the machine. "Some smaller skid loaders can have a hard time handling the extra weight out front. This wheel assist kit solves the



Universal quick-tach adapter plate allows bale wrapper to be quickly mounted on any brand of skid steer loader using just three pins.

problem," says Clapper.

Also available is a handheld remote valve control that's used to adjust plastic overlap and wrapper speed.

Sells for \$9,200. The adapter plate sells for \$300. The remote valve control sells for \$500.

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