



# AutoSteering saves bucks, time for center pivot farm

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PATERSON, Washington - A large, vertically integrated row crop farm near here is increasing planting efficiency and lowering operation costs, thanks to a tractor-mounted system.

Watts Brothers 100 Circles Farm, which is located in the Lower Columbia River Basin in South Central Washington, is one of the largest grower-processor-shippers in the Northwest.

The farm, situated on 15,000 acres of both sandy loam and clay soils, grows sweet corn, carrots, potatoes, peas, alfalfa, storage onions, wheat and Kentucky bluegrass.

In May of 2002 farm managers at Watts Bros. began experimenting with AutoFarm's AutoSteering guidance system in some of their 100-acre, center pivot irrigated cornfields.

They quickly became believers in the technology, much of which was pioneered by AutoFarm's parent company, IntegriNautics.

Integral to the AutoSteering system at Watts Bros. is a 12-row, no-till planter, manufactured by Orthman, that attaches to a John Deere 8400 series tractor, which is guided by the AutoSteering unit.

It's easy to sense the enthusiasm in Watts Bros. general manager Blake Hatch's voice as he ticks off the selling points of the AutoSteering guidance system.

One of the features he likes best is that the unit completely eliminates the need for cumbersome marker arms when seeding crops, both no-till and conventional.

That means no more guess rows, no more skips and no more overplanting, Hatch said.

What's more, "One of the problems we had before was that guess rows would be too tight and we could rip out a row with the cultivator."

Watts Bros. plants its corn rows at 34-inch spacings, compared to 30-inch spacings used by most growers.

Another feature Hatch is very high on is the fact that the AutoSteering unit is the only guidance system on the market that allows crops to be planted in circles and contours.

"We plant eight rows of corn around the border (circumference)," Hatch said. "Then we plant in straight lines throughout the field up to the end-row perimeter. We're not wasting any seed because we plant perfectly to the edge of the (center pivot) irrigation pattern."

Hatch said Watts Bros. tractor operators like the AutoSteering unit because now they no longer have to strain at keeping the machine in a straight line. The satellite-guided steering system handles that, allowing operators to pay more attention to the planters behind them without straining their necks back and forth.

"Watching a line all day long and also having to pay attention to what's going on behind puts tension on the operator," Hatch said. "It used to wear our operators out."

With the AutoFarm AutoSteering system, the only time the

tractor driver needs to go anywhere near the steering wheel is when the end of a row is reached and the tractor has to be turned around. Here, all the operator has to do is bring the tractor in the proximity of the correct return path to be traveled. The unit takes over from there.

The AutoSteering unit is not that difficult to master, said Todd Clark, who manages a large section of the farm's close to 200 center pivot circles.

"Initially, the older operators were a little skeptical of it. But once they get used to it they think it's a good thing. Plus we can take a brand new operator working minimum age, put him in the tractor, and he can drive it just as straight as an operator who's done it (manually) for 20 years."

"There are only a few operators who can drive a straight line consistently (without AutoSteering)," Hatch said.

Because AutoSteering is proficient in Spanish, Hispanic operators who know little English adapt easily to it, Clark said.



Watts Brothers 100 Circles Farm managers Blake Hatch (L) and Todd Clark with the business end of the Orthman 12-row planter used with AutoFarm's AutoSteering system to plant corn. (photo taken 9102)



The complete AutoSteering package, which includes a signal-correcting base station, the cab-mounted control monitor,

"Yet another AutoSteering asset is that it's not at all fussy about when it punches in. The unit goes about its business any time day or night and even in soupy fogs, a real Godsend when planting schedules back up for one reason or another.

"You can even shut off all the lights on the tractor (at night) and it would still travel a straight line," Hatch said.

In addition to being able to plant in circles, the AutoSteering unit also works on uneven ground, where valleys can render other units inoperable.

While Watts Bros. hasn't used the feature yet, the AutoSteering unit is also the only system on the market capable of traveling in a perfectly straight line at speeds of less than 0.5 mile per hour, a feature that some nurseries have found very useful when planting field stock.

AutoSteering pays its way not just during planting but in field prep as well, Hatch said.

"It helps save on time and fuel by allowing the tractor and cultivator to lap fields. You can work the ground in one direction and then scoot over two or three passes, head back down the field and then fill in the blanks to the first cultivation or planting line and it comes back perfectly every time."

"You can also do this when irrigating and one side of the field is too wet," Clark said. "You can jump to the dry side of the field while the other side is drying out, come back to the first field after it's dried out and you're right on."

interchangeable steering kit and upgrades, cost Watts Bros. around \$45,000, Hatch said.

Hatch said the initial investment is the most expensive. Addition units will be less because no other base stations are needed.

Hatch was a little skeptical how the AutoSteering unit would perform. But that quickly subsided. "We were a little concerned, but I don't think we had a day when it's been down."

Watts Bros. plans to use the AutoSteering in some of its other crops in 2003.

"It's been one of the best investments we've made," Hatch said.

