High-tech robotic milker frees up time for Franklin County farmer

By JIM HOOK Senior writer

Milking twice a day has gone the way of the rooster's crow.

Just as the sun continues to rise without chickens in the barnyard, the cows get milked even when farmer Vernon Horst is fast asleep.

"If he wants to stay in bed until 7 a.m., he can," said Gary Walton, whose firm installed a robotic milker on Horst's farm in Greene Township.

Horst's cows milk at their own pace. The robot milks 24-7.

"This farm used to be animals and Homo Sapiens," Horst said. "Now we have a third dimension, robots, and so far the robot is winning."

Horst's cows are milked 2.8 times a day with an average production of 65 gallons per cow per day. His herd's production has increased since Fisher and Thompson Inc. of Chambersburg cranked up the A-3 Astronaut a month ago.

It's the first robotic milker in Franklin County and a Chambersburg area dairyman has one on order, Walton said. More than a dozen farms in south central Pennsylvania, the heart of the state's dairy industry, have robotic milking machines.

The device looks more like a Detroit robotic welder than an R2-D2 droid. A cow steps into a stall on one side of the stainless steel wall. The milking arm, electronic screen and milk jug are on the other side.

The farmer or technician doesn't have to be there. But if he is there, he can see a cow's legs and teats as the robot prepares to milk. The machine reads an electronic chip around the cow's neck and identifies the cow. The farmer can access the cow's production and health at a touch of the screen or from his office computer.

The cow gets a snack of grain during milking, then moves on. The next cow steps up.

Horst is building up his herd to the robot's capacity, about 65 cows a day.

"It's doing a better job than a person can do it," Horst said. "Cows are creatures of habit. They like to do the same thing day-in and day-out."

The machine uses the same technique every time. A laser helps position the milker. The machine memorizes the anatomy of each cow, so successive milkings are easier.

The robot also checks milk for impurities. If the milk is unsuitable, it's diverted to the drain.

"It treats every cow the same, and it cares," Walton said. "It shows up every day, not like..."
some employees."

"If you're hiring labor, it will pay for itself in a couple of years," said Horst's wife, Luanne.

"We're paying for our labor up front," Vernon Horst said. "It's increasingly difficult to find skilled labor."

Dairy farms offer year-round employment to about a third of the 3,000 farm hands working more than 150 days. Franklin County with $184 million in annual milk sales and 43,900 cows is Pennsylvania's second leading dairy county. Most of the grains and hay grown in the county go to feeding local cows and other livestock.

Vernon Horst said he relies on a custom outfit to do his field work, so he could afford to spend a couple hundred thousand dollars on a milking robot rather than on a combine.

"You'll never run a tractor like you run a robot," he said.

Vernon Horst trained his cows to walk into the robot stall by making it part of the exit path from the old double-six milking parlor. The cows got used to it before the robot began milking.

Like all machines, the robotic milker isn't perfect.

Cow No. 29 and the robot went into a loop during a reporter's recent visit. The cow stepped up to be milked again. The milker attached. No milk. No grain. The machine detached. The cow didn't move. The robot tried again.

Vernon Horst explained that a cow can be excluded electronically from the stall if she returns too often for milking. Cow No. 29 is something to work on.

When something goes wrong, the robot calls Horst's cell phone with the nature of the problem.

"I don't have to be up 24 hours a day," Vernon Horst said. "The cows are well-trained now, and I'm able to get more sleep. I'm very satisfied. I'm not going back to the old system."

And it sure beats Vernon Horst's early days in the business, bending down at 4 a.m. on his father's farm to do the milking.

"I spend my time doing other things," said Vernon Horst, a member of the Pennsylvania Dairy Promotion Program. "Promoting milk is very important to me."

----------

Jim Hook can be reached at 262-4759 or jhook@publicopinionnews.com.

What you can do

Lely Corp. manufactured the robotic milker on Vernon Horst's farm. To see the milker, call Gary Walton at Fisher and Thompson Inc. at 352-7606. Visits are by appointment only.