J Schanbacher has milked in his fair share of milking systems, but there is one design that has met all his expectations as a dairy producer. “A low-cost parlor is a model we’ve found to milk cows efficiently and for the parlor not to slow down with its focus all on cow flow,” Schanbacher says. “I’m just flabbergasted there are not more out in the countryside. I think it’s the industry’s best-kept secret for milking cows.”

Schanbacher is an Iowa dairy producer who milks in a swing-20 parlor he built in 2017. Prior to the dairy’s current low-cost parlor, Schanbacher Acres used three other milking system designs. The first was the farm’s original stanchion barn that required switching the cows three times during one shift, then a swing-10 low-cost parlor, followed by a double-10 parlor before reverting to an extended swing design.

“The whole point of any system is to make milking more efficient, right?” Schanbacher says. “At the end of the day, it’s about cows per hour or milk pounds harvested per hour. We’ve gotten there and are totally happy with it.”

Low-cost parlor designs first entered the scene of the U.S. dairy industry in the early 1990s, influenced by milking systems popular in New Zealand. A decade later, the term “TRANS Iowa Low-Cost Parlor” was established and promoted as a solution to transform the Iowa dairy industry.

Today, the design is present in more than 30 states and is a popular option for producers looking to upgrade their milking system without creating additional financial stress to the dairy operation. The relatively inexpensive design is also touted for its milking efficiency as well as milker ergonomics and safety, with some having the ability to push up to 80 cows per person through in an hour while maintaining foot and back comfort of the individuals using the system.

“This design seems to be most popular with grazing and organic producers who are keener on low-cost concepts,” says Larry Tranel, dairy specialist for Iowa State University Extension and creator of the TRANS Iowa Low-Cost Parlor. “It’s often one-tenth the cost of a new parlor and can be adapted especially well in old stall barns or attached to an existing building.”

Tranel built his own low-cost parlor on his farm, including purchasing the milking equipment and using his own labor, for $12,000 in 2002. Many swing-8 or swing-10 parlors can still be built for $25,000 to $50,000 if needed, Tranel says.

Schanbacher first turned to the design in 2001 when he was looking for a solution that was efficient and would not break the bank. “At the time, we were milking 90 cows in the stanchion barn,” Schanbacher says. “The design was proposed, but I was adamant on building a real parlor.”

After touring facilities in Wisconsin and having the opportunity to milk in a swing-parlor, Schanbacher’s attitude toward the design positively changed.

The farm’s first low-cost parlor was built within the existing stall barn, and the back half of the barn was retrofitted to a holding pen. Schanbacher estimates that $75,000 was put toward the swing-10 milking system with cement and carpentry work hired out.

In the eight years that followed, Schanbacher and his family and the herd seemed to benefit from the design, but a growing herd size required a larger parlor. They proceeded to milk in a double-10 parlor for almost a decade before taking those 20 units and creating a swing-20 for the dairy’s 300 cows.

Now, the milking shifts are about two hours in the morning and afternoon with 120 cows moving through the parlor each hour.

“I love this parlor from a business standpoint,” Schanbacher says. “You can get into it for not much money.”

Schanbacher says the little financial investment he has into the parlor allows the farm to be more efficient.

**Are low-cost parlors the industry’s best-kept secret?**

*Progressive Dairy Editor Jenn Coyne*

**AT A GLANCE**

For more than 20 years, the low-cost parlor design has been a staple for speed and efficiency when it comes to milking systems. As the design has been fine-tuned, it has put more emphasis on ergonomics and safety while milking cows.

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The herd at J Schanbacher’s farm is milked in a swing-20 parlor built in 2017.
flexible in meeting its goals in the future.

“We put in this milking system almost 10 years ago now, and if we want to go with robots or we have a child come back and need to make changes, we’re not sitting on this investment,” he says. “Even if we were to ever sell the cows, this facility would be 30 cents on the dollar.”

Fellow Iowa dairy producer Scott Wiedemeier has seen a similar return on investment with his low-cost parlor.

Wiedemeier milks in a swing-15, a milking system he was able to put up for less than $150,000 in 2010. The dairyman says the facility has given back an hour and a half to his day, which has added up to five years of labor over the last 20 years.

“I had plans like everyone else where I wanted a new parlor, until I saw the price tag,” he says. “I bought new equipment and decided I could build the rest. It was affordable. It was really efficient. And, it’s been really safe.”

Wiedemeier’s parlor, with a recent rise in pit depth, allows him, his children and smaller-statured employees to milk the cows in a comfortable position. When standing behind the cows, their elbows are out from the ribs with hands in front. The pit depth coupled with improved genetics that have naturally increased udder height have had a positive compounding effect on milking experience.

“We all feel so much better,” Wiedemeier says. “My back no longer hurts after milking for two hours, and my employees are happier with the design too.”

Tranel agrees. “[With] the ergonomics of less back bending [and] reaching for udders, foot and back comfort can outcompete many brandname parlors,” he says. “And also, a well-designed and positioned kick rail limits the ability of cows injuring a milker due to kicking.”

Like Schanbacher, Wiedemeier has also milked with multiple systems. The herd was originally milked in stanchions. Then in 1996, a double-4 step-up parlor was installed and used for the following 14 years before the family decided to build a swing-15 parlor.

“It took us the same amount of time to milk on one side of the swing-15 as it did to milk with the double-4,” Wiedemeier says. “Within a month of having the parlor complete, we were milking about 80 cows in an hour.”

The parlor is located on the north side of the barn. Cows enter the parlor through two large garage doors and exit in a single return alley to the right to optimize cow flow. The parlor, while slightly different than Tranel’s proposed design, accommodates Wiedemeier’s ideal cow with the stalls at 27 inches.

“The herd is milked twice daily, once at 4 a.m. and then again at 2 p.m. “We’re almost on a two-12s schedule but with a lot more flexibility and more family time,” Wiedemeier says. “Our first milking was in the fall of 2010, and this parlor has done 1.4 million milkings since then. It continues to check all the boxes of why we put it in in the first place.”

Tranel agrees. “These are simple to build, and the design tends to have the lowest cost of milking per hundredweight of milk that goes through in a given hour,” Tranel says. “Yet, we have to recommend a design that best fits each farm and the farm goals.”

More information on this parlor design can be found online (www.extension.iastate.edu/dairyteam/milking-systems).