

TECHFORAG LLC

PRESENTS:

'AMERICAN MADE'
ALL-AIR, ALL-STAINLESS
SWING PARLORS

PROJECT # 37
GORDON KLIMEK DAIRY
DBL. 8 BLUE DIAMOND PARALLEL
WITH TECHFORAG SWINGLINE AUTOMATICS



TAKING A NEW LOOK AT SWING PARLORS:

Rock Solid American-Made Equipment
All-Air Pressure Operated - No Electronics
All-stainless Sheet Metal
With Rapid Exit *and* Automatic Indexing

PROJECT # 37
GORDON KLIMEK DAIRY, PESHTIGO, WI
INSTALLED NOVEMBER 2006

Background

It's always the same story: after milking for 40 years in the old stanchion barn the knees are shot. For Gordon the choice was clear - either get into a parlor or get out of dairying. But how to pay for a new parlor with the milk from just 90 cows?

Gordon took a couple three years to study parlors. HerringBones, Parallels, ParaBones, SideOpeners, Lo-Line Parlors with double units and Swing Parlors with single units down the middle. In the end, he worked out a plan together with Jim Kudick of Modern Dairy Service, Luxemburg, WI (920-845-5725) and decided on a dbl. 8 Blue Diamond parlor with Germania Model Es, converted to SwingLine Es by Technology for Agriculture.

End Result: "It used to take us three hrs to milk 90 cows with two people switching groups twice (15 cows/man/hr). Now I milk them by myself in about an hour and a half (60 cows/man/hr) and if I want to take a couple of days off, impossible before, my son Dan can look after the cows - it's strictly a one man operation."

Life is Good!

At What Investment?

About for \$49,000 for the equipment and may be \$30,000 for the building and holding pen. There's no crowd gate, instead a couple of swinging gates keep the cows together.

Gordon kept the cost down by utilizing the existing milk house and CIP System, as well as the original utility room and vacuum system. He added a small air compressor and replaced the old glass with a new stainless receiver.

HerringBone, ParaBone or Parallel?

It's the most often asked question. In principle, SwingLines can be adapted to any stall configura-

- Herringbones are the cleanest way of milking and cows adapt to the parlor after a just couple of days. You can see more of the cows, bump them for pregnancies and inject Oxytocin when needed. You have a choice of Conventional or Rapid Exit.
- ParaBones are the least costly, but incoming cow traffic needs to be smooth and orderly or heifers will turn around. You can choose Conventional or Rapid Exit.
- Cows are more difficult to train into a Parallel and you have to make peace with the blessings that come from above. Large cows, those weighing 1,800 and 2,000 lbs have a very difficult time getting into and out of Parallels. Conventional Exit not available.
- HerringBones and Parallels stalls cost about the same. HerringBones take more steel because they are longer. Parallels require the additional Sequencing Gate, which also make cow entry more difficult and require maintenance as time goes by.
- There's no difference at the rate cows kick in either configuration. Whether or not cows kick depends on how they are treated. Injuries are rare in any case and occur at about the same rate in all parlors.
- There's no difference in the size of buildings. After all whether you park 20 cows this way or that takes the same space. They require 2 ft x 7 ft or 14 sq ft either way. Buildings for HerringBones are longer and narrower (28 to 30 ft), shorter and wider (38 to 40 ft) for Parallels. Besides, you'll pay slightly more for wider rafters.

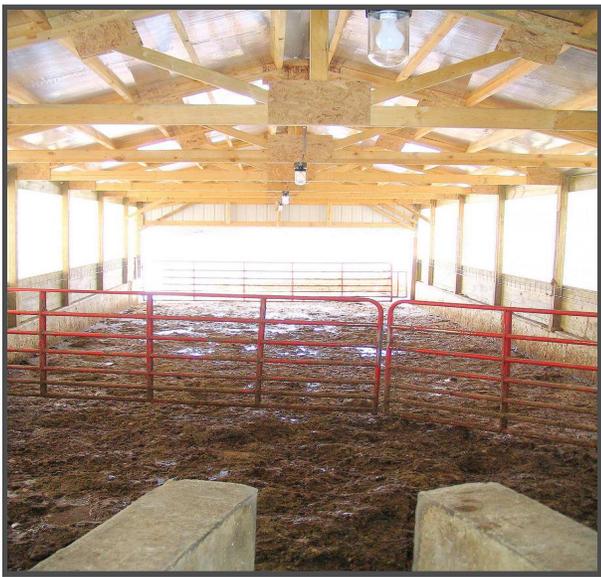
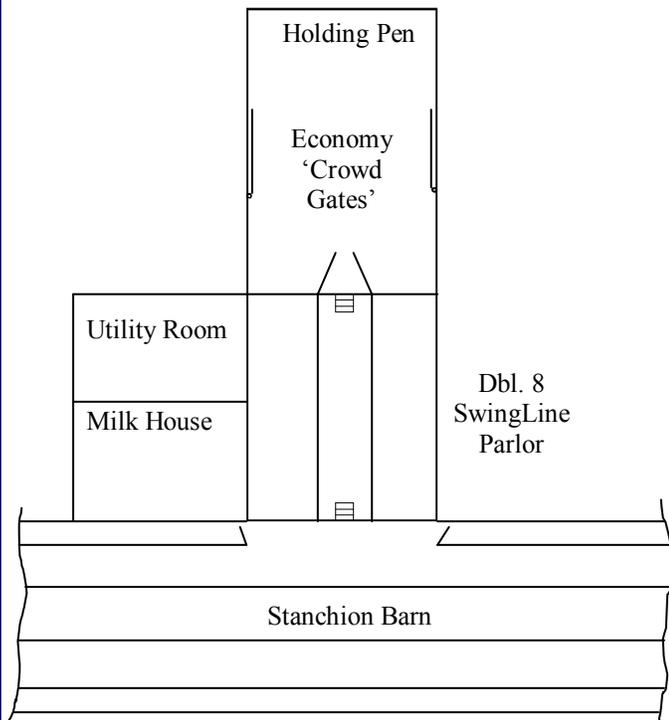
Bottom Line:

For the cleanest, most civilized way of milking choose a Rapid Exit HerringBone.

For the absolutely, positively lowest cost go with a Conventional Exit ParaBone.

Parlor Planning

Where to put the parlor? Into the center of the stanchion barn? Up on the hill? Gordon decided on a small building off to the side of the stanchion barn with the holding pen at the far end. When the cows leave the parlor (with teats wet from post dipping) they walk right back in the stanchions, no worry about freezing teats.



*Simplest Possible Holding Pen
(In February 2007 Gordon couldn't move manure for a couple of weeks)*

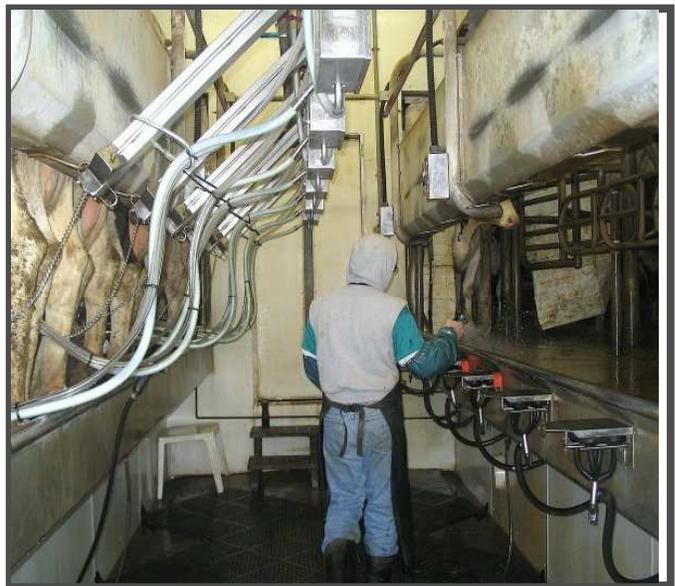
New From Technology For Agriculture **Germania Model Es Converted to SwingLine Es**

The best ideas always come from Dairymen - some time in 2006 Lee Ratachyk, milking 140 cows thru a dbl. 6 SwingLine parlor near Green Bay, was looking for Automatics, hopefully less costly to maintain than the all-plastic, electronic units he had been milking with for some years and wondering whether the all-air, all-stainless Germania Model E could be adapted to his situation. Can do....

Design Details

- *Open Center of Pit*

We install the Automatics in the center of the pit. Control Box remains stationary at all times. Like a pendulum, only the cylinder swings from side to side. Much easier than moving the entire unit.



Wide open center - only the retract cylinder swings across the pit. Hoses swing with the cylinders

- *Rest Hook Supports the Cylinder at the Udder*
There's a 'Rest Hook' at each station, supporting the cylinder. At the end of milking a chain pulls the claw out and up, rather than horizontally half-way across the pit.

- *Start Button at Your Fingertips*

Better yet, there's no need to reach up to the box to start the unit.. We integrated a remote button into the end of the cylinder, right at your fingertips.



A Stainless Hook Supports the Cylinder



Remote Start Button at Your Fingertips

What's In the Box?

Essentially the very same air and stainless components we have been using for the Germania Model B Arm TakeOffs since 1974, no less, with some improvements along the way.

- **Start-Up Timer** - (the larger chamber on the left) overrides the End-of-Milking Timer for the 2 minutes at the beginning of milking
- **End-of-Milking Timer** - (in the center) initiates retract so many seconds after milk flow has stopped. Adjustable from 3 to 15 sec., no tools required.
- **Reset Valve** - (in the lower left hand corner) let's you override the 2-min. Start-Up Timer after reattaching, for example.



Legendary Reliability - All-Air, All-stainless Control Box, no electronics what-so-ever. From 32 years experience, you'll spend a couple of bucks a month maintaining one of these units.

- **Flow Sensor** - (on the right) works on the pendulum principle. The milk coming in from the right moves a pendulum suspended in the lower chamber, opening and closing a 'Whisker Valve' the little brass part on top, which in turn determines when the cow is milked out
- **Manual-Automatic Valve** - (the black switch on the left) for when you don't want the machine to come off automatically.
- **Stop Valve** - (in the upper left corner) for when you want to stop the machine for whatever reason at any time.
- **Main Valve** - (in the center above everything), the valve that controls the works

Installation Crew

Jim Kudick's installation crew, Senior Installer Cory & Co., did a great job installing the parlor - professional, clean, accurate. One detail: they could have used plastic lines or galvanized pipes for air supply, but they used stainless instead. And they could have saved time and money running the lines kiddy-corner this way and that. Instead, all lines run straight and square, no 45s or other odd angles anywhere. Professionals at their best.

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