Low Cost Parlors Options and Considerations

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Historic Perspective

1955 Swing Parlors
How do you remodel this......
...into this
or this.......
You have to think outside the freestall!

You need a plan
This might be a project for an owner/producer as a general contractor

- But the producer needs some help:
  - Educate themselves on what can/has been done
  - Find a dealer willing to redesign the milking system
  - Find a building, concrete, plumbing, and electrical contractor willing to remodel a barn
  - Find an engineer willing to do some design work
Existing Stall Barn
Plan View

- Silo
- Silo
- Door
- Posts and Beam
- Center Alley
- Feed Alley
- Pipeline
- Manure Reception
- Pen
- Milk House
- Receiver Group

Existing milk line and receiver
Space Plan in Existing Stall Barn

Parlor Construction Area

Phase 1

Holding Area Construction

Phase 2

Plan View
Existing Tie Stall Arrangement

Milk House
Receiver Group

Existing milk line and receiver

Silo

Feed Alley

Center Alley

Pipeline

Manure Reception

Door

Posts and Beam

Silo
Parlor in Barn
Milk line is reinstalled in parlor
Offset Parlor Layout
Plan View

Silo
Silo

Door

Manure Reception

Holding Area

Milk House
Receiver Group

Cross Over

Return

Return

Milk line is reinstalled in parlor
New Parlor on end of Barn
New Parlor on end of Barn
Plan View

Receiver Group
Cross Over
Personal Alley

Milk line is reinstalled in parlor
Milk line is reinstalled in parlor
Structural Changes

- New Return Lane
- New Entrance/Exit
- Crowd Gate
- New Holding Area
- New Wall with old posts in wall
- Alternate Exit/Return
- New cross beams and posts to replace removed posts
- Milking Center Waste Storage
- Manure Reception
- Holding Area Manure Scraped Reception Tank and Pumped to Storage
- Milking Center
- Reception Tank and Pumped to Storage
- New Wall
- Cross Over
- New Wall
- Remove this row of posts in the parlor area only
- Plan View
- Remodeled Parlor Arrangement
- Silo
- Silo
- New Entrance/Exit
- New Return Lane
- Walkway
- O.H. Door
- Posts and Beam New Holding Area
- Fill Gutters
- Crowd Gate
- Receiver Group
- Milk House
- Plan View
- Remodeled Parlor Arrangement
- Existing beam
- New Wall
- Cross Over
Structural Changes
(1 of 3)

New cross beam placed above existing beams

Cross Section View
Remodeled Parlor Arrangement
Structural Changes
(2 of 3)

New cross beam placed below existing beams

Cross Section View
Remodeled Parlor Arrangement
Structural Changes
(3 of 3)

Remove or Raise Mow Floor and Reframe

Barn wall

Hay Mow Floor

Return Lane

Remove existing Beams and Posts

Operator Area

Cow Platform

Support new beam on wall or posts

Cross Section View
Remodeled Parlor Arrangement
Raise Hay Mow Floor
Raise Hay Mow Floor
Milking Stall Choices

- Home Built Parabone
- Local Dealer Built Parabone
- Economical Manufacturers Parabone
- Used Parlor Stall
- Front exit
- Side (Rapid) Exit
Note*: Bond all steel and reinforcing to form equipotential plane and bond to grounding system.

2-#4 Horizontal Reinforcing Bars run continuously

Vertical #4 Reinforcing Bars @ 18” O.C.

Horizontal #4 Reinforcing Bars @ 12” O.C.

Washed Stone

2-#4 Horizontal Reinforcing Bars run continuously

6” compacted granular fill

Vertical #4 Reinforcing Bars @ 18” O.C.

Horizontal #3 Reinforcing Bars @ 12” O.C. Both Ways

Horizontal #4 Reinforcing Bars @ 12” O.C.

Horizontal #4 Reinforcing Bars @ 12” O.C.

Horizontal #3 Reinforcing Bars @ 12” O.C.

Horizontal #3 Reinforcing Bars @ 12” Both Ways

* Note**: 12” Steel Development Length on all bars

0’ 6” Minimum

0’ 6” Crown

Note**: 12” Steel Development Length on all bars

21’ 0”

22’ 8”

24” minimum

1/2”x8” anchor bolt

0’ 8” 1’ 6”

0’ 2” 3’ 6”

3’ 0” 2’ 0” 3’ 0”

Frames Spaced @ 6’-8” O.C. Typical

Dimensions may vary

2”x2” Square Tube or 2” Diameter Pipe

Adjustable Jersey-Holstein 48” - 54”

0’ 8” 0’ 8” 0’ 8” 0’ 5” 0’ 8” 0’ 8”
Dealer Built
Parabone Stall
Manufactured Parabone “S” Rail Stall
Manufactured
Front Exit
Parabone
Stall
Used Rapid Side Exit Herringbone Stall
New Rapid Side Exit Parallel Stall
New Side Exit Stall
Swing Exit Gate
Chop Exit Gates
Swing Entry Gates
Holding Area
Crowd Gate
(Homemade)
Crowd Gate
(Homemade)
Crowd Gate
(Economical)
Crowd gates
(Economical)
Milking System Design Choices

• Milk Line Location
  – High Line Swing Equipment
  – Low Line Double Equipment

• Receiver group Location
  – In milk house
  – In parlor

• Milking Unit Storage and Cleaning
  – In milk house
  – In parlor

• Automatic Takeoffs
  – Reuse Tie Stall Barn ATO
  – Rope ATO
  – Arm ATO
Low Milk Line
High Line Receiver Group in Milk House
High Line Receiver Group in Milk House
Low Line Receiver Group in Parlor
No Clean in Place
No Clean in Place
Clean in place
Clean in Place
No Automatic Takeoff
No Automatic Takeoff
No Automatic Takeoff
Automatic Takeoff Slider
Automatic Takeoff Swing
Automatic Takeoff Swing
Drainage
Stainless and Plastic Liner
Holding Area Entrance
Curtain
Holding Area Entrance Curtain
Holding Area
Entrance Doors
Lighting
Lighting
Cattle Handling

Stanchion
Parlor Waste
Goodbye!