



Tie Stall Barn

Equipment Guide



Cow Comfort and Production
for the Family Farm



Welcome to our Tie Stall Equipment Guide. Tie stall barns have been the center of the family farm for many decades. As dairy farming continues to modernize, some dairymen still prefer traditional tie stall barns because it puts them in touch with their cows.

Sturdy Built tie stalls have been designed to enhance both the animal's comfort and personnel convenience. For example, the Generation II Tie Stall System is engineered "from the curblin up" to promote flexible stall and neck rail height, making it easier to fit your tie stalls to your dairy cows. The popular Liberty Loop stall eliminates uncomfortable pressure points while cows are resting.

Table of Contents

- Generation II Tie Stalls 3-5
- Conventional Tie Stalls 6-8
- Tie Stall Options & Upgrades 9
- Replacement Tie Stalls 10-11
- Tie Stall Accessories 12
- Gutter Grates 13
- EuroTech Cow Mats 13
- Maternity Pens and Box Stalls . . . 14-15
- Headlocks 15
- Milker Way Express 16-18
- Curtains and Ventilation 19

"tie stalls designed to enhance both animal's comfort and personnel convenience"



See Page 3

Generation II Tie Stall System



See Page 6

Conventional Tie Stall System



See Page 10

Replacement Tie Stall Systems



See Page 16

Milker Way Units

GENERATION II TIESTALL SYSTEM

Fully Adjustable Neck Rail, Stalls and Waterbowls

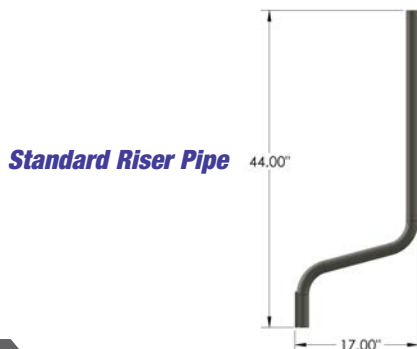
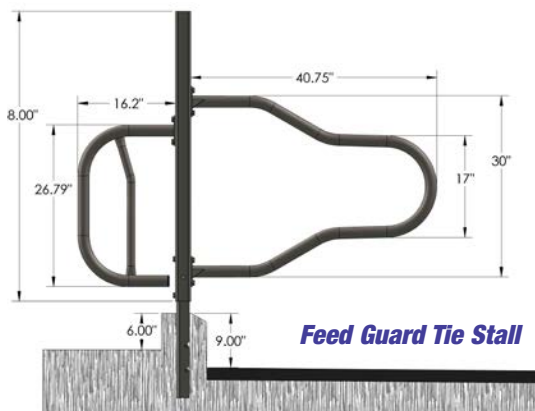
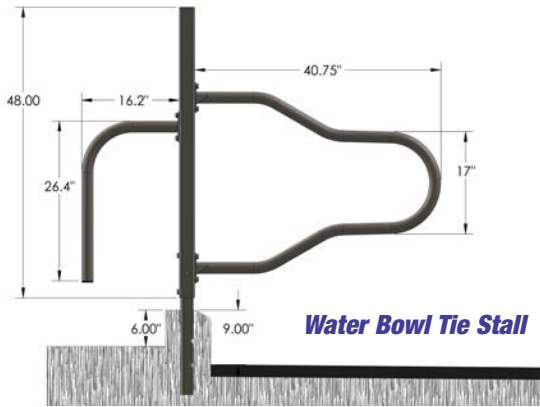
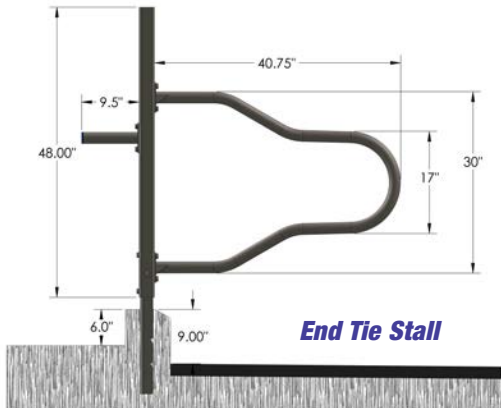


*Secure
Bolt-Together
Installation*

LIBERTY LOOP
Designed for Cow Comfort

- 1 - Galvanized Stall Loops
- 2 - Stall Dividers are Bolted for Adjustable Height
- 3 - Neck Rail is Bolted for Adjustable Rail Height
- 4 - Generation II Liberty Loops
Designed for Cow Comfort
- 5 - 24" Stainless Wet Set Channel
for Durability in Corrosive Areas
- 6 - Channel 14" Deep in Concrete
with Solid Rebar Connections
- 7 - Sturdy Connection (Six Stainless Connection Bolts)
- 8 - Welded Post Caps
for Smooth Finish without Sharp Corners
- 9 - 24" - 36" Tie Chain - Custom Length
for your Neck Rail Height

Gen II Tie Stall Components



- **The flexibility of generation II tie stalls** is designed to keep your herd comfortable in different groups or as the herd changes over time
- **Adjustable neck rail height** offers you more freedom in selecting a height for adequate lunge room.
- **Adjustable height** and **unique ergonomic design** of our generation II liberty loop stalls provide comfort to resting cows by eliminating uncomfortable pressure points
- **Individual components;** attachment posts, divider loops, water bowl attachment loops, feed divider loops, and neck rail supports can be adjusted as needed.



Feed Divider Loops
for individualized feeding



Water Bowl Attachment Loop
gives cows easier access to water bowls



The Generation II Tie Stall System at Work!



Stainless Steel Channel

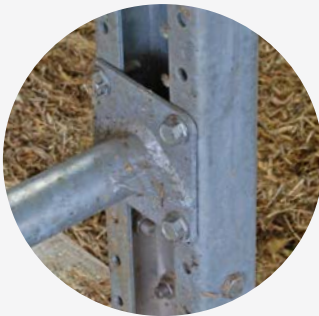
Showing Rebar Installation

• Set Into Concrete 14"



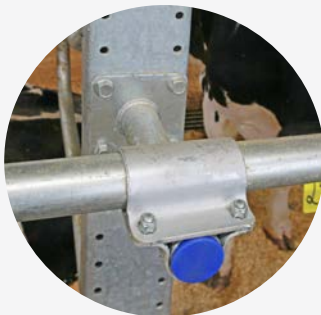
Foundation Channel

Stainless steel channel in concrete



Stall Attachment Plate

for bolt-together convenience



Neck Rail Support and Clamp

a flexible neck rail height adjustment system



CONVENTIONAL TIE STALL SYSTEM

Designed to Enhance Animal Comfort and Personnel Convenience



- 1 - Galvanized Stall Loops
- 2 - 2" Square Heavywall Post for a Strong Stall Foundation
- 3 - Stainless Steel Sleeve for Critical Corrosion Protection
- 4 - Liberty Loop for Greater Cow Comfort (optional)
- 5 - 1.315" Stall Brace for Reinforcement
- 6 - Corner Saver for more Clearance at Corners
- 7 - Durable Hardware is Hot-Dipped Galvanized

Standard Loop



*Mounted
in Concrete
with Stainless
Steel Sleeve*



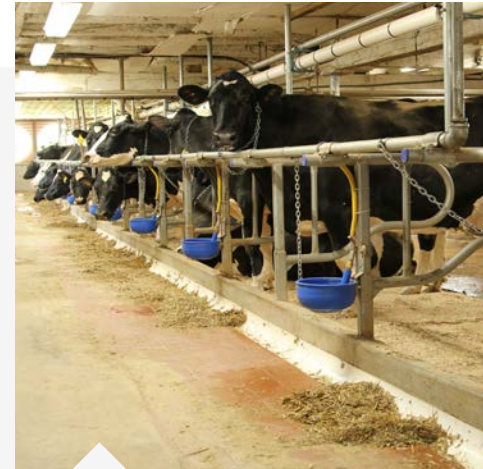
Sturdy Built tie stalls have been designed to enhance both the animal's comfort and personnel convenience. For example, the Liberty Loop stall (at left) eliminates uncomfortable pressure points while cows are resting.



Liberty Loop



Comfortable cows make more milk



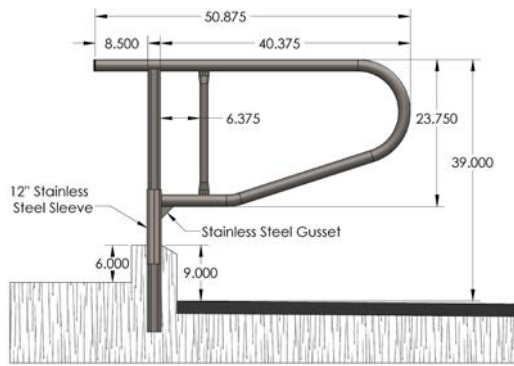
End Stall Divider Loops
provide more open space
for feed carts

Loop Specifications

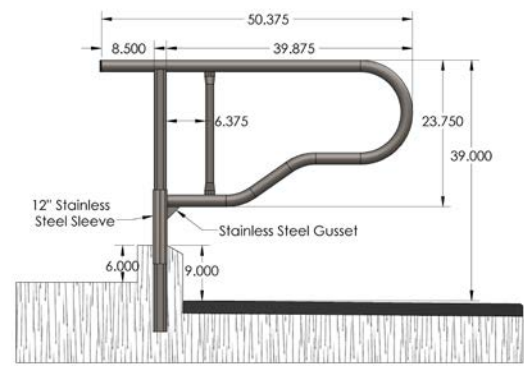


Sturdy Built Conventional Tie Stall Dividers **Resist Corrosion with our Exclusive Triple Coating**

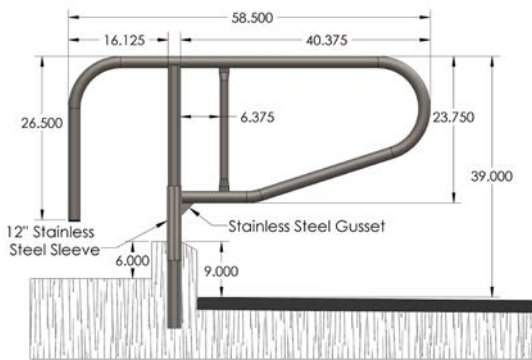
- **1** - Fabricated from tubing galvanized on interior and exterior surfaces
- **2** - Entire dividers coated with ZRC®, a zinc galvanizing compound
- **3** - Premium-grade top coat finish on entire dividers
- **4** - Stainless steel sleeve and gusset



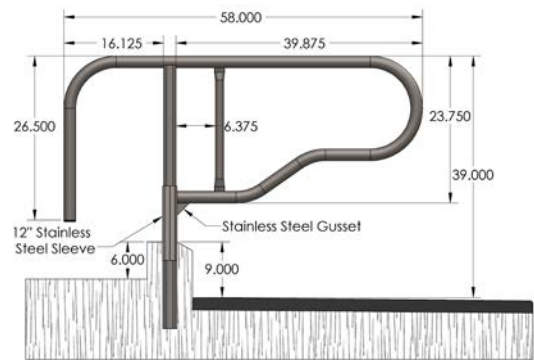
Standard Loop (End Tie Stall)



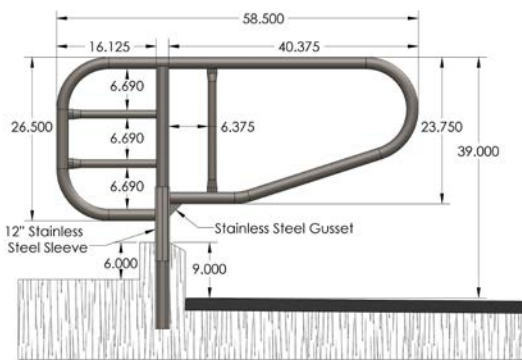
Liberty Loop (End Tie Stall)



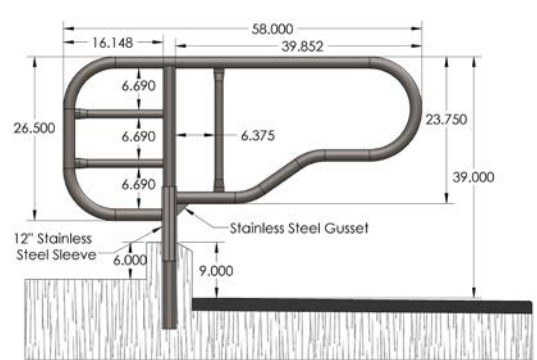
Standard Loop (Water Bowl Tie Stall)



Liberty Loop (Water Bowl Tie Stall)



Standard Loop (Feed Guard Tie Stall)



Liberty Loop (Feed Guard Tie Stall)

1.9" OD x 10 gauge precision formed loops | Custom loop styles and lengths are available

Options & Upgrades



Corner Saver for End Stalls

Provides more clearance at ends of cow bed rows



Tie Stalls with Elevated Neck Rail



UPGRADE to Elevated Neck Rail Brackets

Clamps on for existing Tie Stalls

Pouring Concrete Curbs in New Tie Stall Install



When properly grounded, Rebar can be used to reduce stray voltage



Bolted Channel *Curb Mounting System*



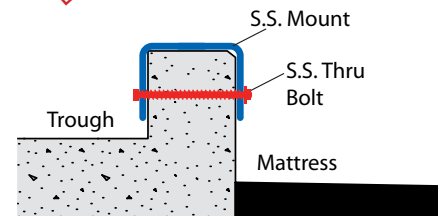
Stainless Channel with Thru Bolts • Grips the Curb Like a Vise!

Our Over-the-Curb Tie Stalls are designed to reduce the frustration associated with milking in older barns. Because there is no need to break out old concrete and pour new concrete, you can easily and economically remodel with new stalls wherever necessary.

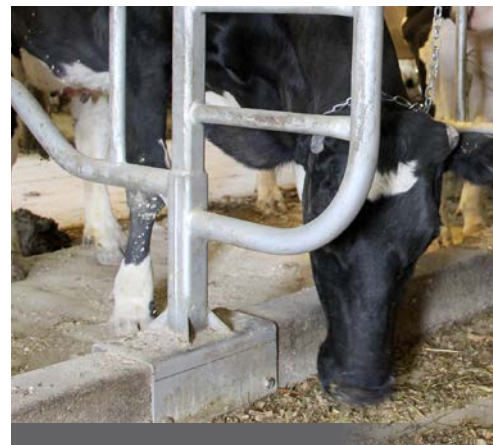
The Bolted Channel system is our original curb mounting solution. It features a stainless steel channel and a stainless steel post sleeve with stainless steel bolts. The bolts run all the way through the curb, and the channel grips the curb like a vise.



Built to Fit Your Barn!



Bolted Channel
Curb Mounting System



Adhesive/Anchor *Curb Mounting System*



**Any
Stall Width!**
No need to match
original post
spacing!

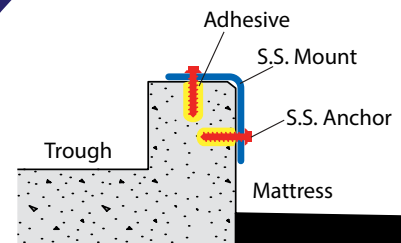
High-Load Adhesive & Stainless Steel Anchoring System



Available for Conventional and Generation II Tie Stall Systems, the High-Load Adhesive & Stainless Steel Anchoring System for Replacement Tie Stall Systems is the answer for an open curb with obstruction-free manger cleaning. **This system does not require mounting on top of original stall posts, which gives the option of any stall width throughout your barn.**

Used and proven in highway and bridge construction, the Adhesive Anchoring System forms a mechanical interlock between the anchor and the walls of the drilled hole. This transfers the mechanical load deep into the concrete curb and floor.

Stainless Curb Mounting Angles and Stainless Anchors will withstand many years of stress in a corrosive environment.



Adhesive/Anchor *Curb Mounting System*

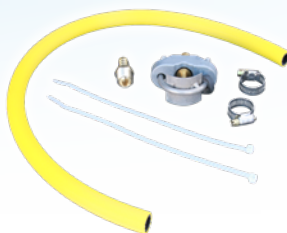


Standard Tie Stall Accessories



(Large) Poly Water Bowl
Super Flow – 5.75 GPM

Plumbing Kit
for water bowl installation



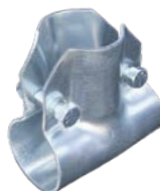
Stainless Steel Water Bowl
Super Flow – 5.75 GPM



4-Bolt Clamp
for securely mounting
water pipe to stalls



Riser Pipe Clamp
for clamping vacuum
support pipe to stalls



Vacuum Line Clamp
for clamping vacuum line to
support pipe



Tie Chain Kit
includes neck rail mounting clamp,
chain, and stainless steel snap



Manger Tile



Hinging Divider
to limit cross-feeding



PVC Manger Corner eliminates feed buildup



Stainless Steel Trough Liner

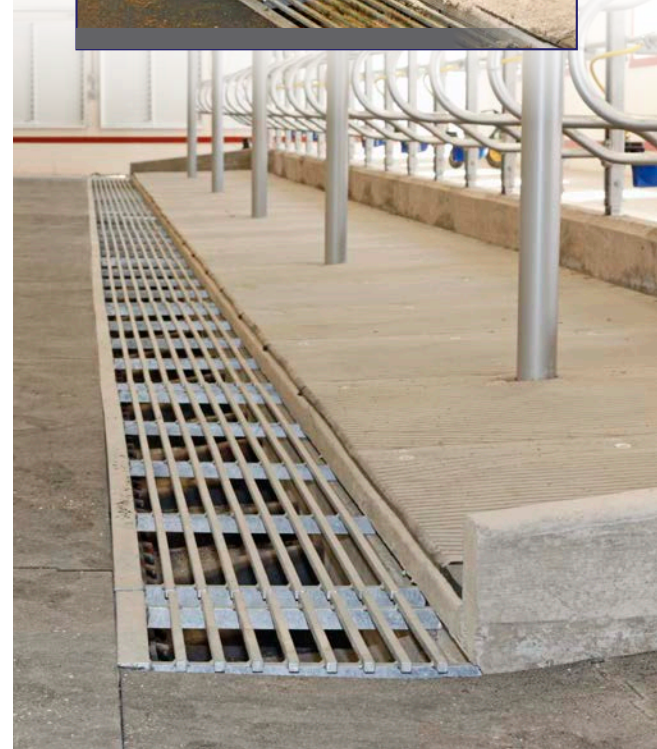


Gutter Grates for Dairy Barns



- Heavy-duty construction
- Consistent cow-friendly bar spacing
- Available in 18" to 30" (6-12 bars) Widths
- Standard 5' and 10' lengths
- Custom sizes & configurations available
- Choice of Uncoated or Galvanized Finish

***Cleaner Bedding and Cows
in the Tie Stall Barn!***



EuroTech Cow Mats

- 1-1/4" thick x 46" x 74" size
- Drive-in anchors included
- Mats can be cut to fit
- **Non-Abrasive** - Unlike rubber cow beds, the surface of the EuroTech Mat is soft and smooth, preventing abrasion to the cows' hocks or knees.
- **Non-Slippery** - EuroTech Mats are made up of a compressible material, allowing the cows hoof to sink slightly into it and form a firm "pocket" that holds her secure.
- **Non-Absorbent** - The millions of tiny closed-air cells that make up the EuroTech Mat create a soft, yet firm, material. The closed-air cells contract and expand as pressure is added and removed.

No More Replacing Top Covers!

**Sturdy
Built**
Manufacturing, LLC

Maternity Pens and Box Stalls



The Right Gates
Make Life Easier!

Sturdy Built Galvanized Gates

Sturdy Built gates are engineered for high-strength and smooth, reliable operation. Standard gates come with adjustable hinges for easier installation and adjustment. Several latching options are also available. We custom manufacture gates to precisely fit your openings as well as help you design gates that can serve in multiple ways. *Ask your representative for more details.*



Signature Series



Portable Extension Gate - Excellent on hoof trimming day



Standard 5-Bar Gates with Rugged Sliding Twin Gate Latch



Telescoping Gate - Allowing gate to latch in multiple positions



Galvanized Headlocks

- Adjustable width for size flexibility
- Individual lockup for operator convenience
- Poly cushioned for quieter operation
- Automatic down cow release for animal safety
- Special hinge design with extended wear bushing in pivot point
- Wide-open design for easy entry
- Square tubing frame construction for strength
- Control latch is clamped on and can easily be moved



Optional lanyard and eyelets offer additional control in maternity pen

Explore our Herd Control & Vet Care Systems Brochure for More Details!



Milker Way EXPRESS

1



Take off Units In Wash Position

2

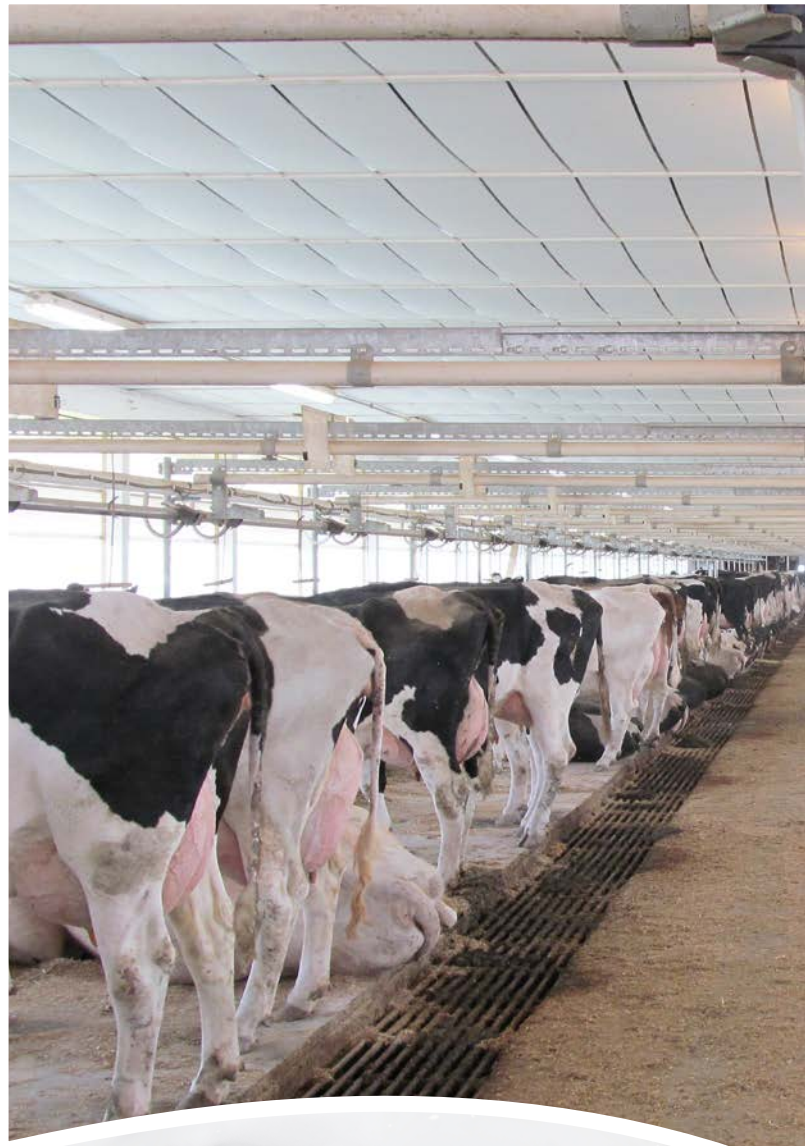


Rolling out of the milkhous

3



12 units traveling quietly



Turn Table Assembly
Allows milkers to change directions with simple rotation



Manufactured by:



Caddy in Turntable



Locked in place and ready for milking



Milking Position

A Quiet Solution to
Comfortable Milking in
Tie Stall Facilities

Components and Specifications



Turn Table Assembly

Allow milkers to change direction of travel



Poly Rollers

with Sealed Stainless Steel Bearings



Auto Latch System

for secure take offs



Bolt-Together Installation

Requires no on-site welding



Single and Double Milker Caddies

with Meter Attachment



Galvanized Strut Reinforcement

PVC track provides quiet, milker transport while strut reinforces and mounts entire system to ceiling braces



Curtains for Tie Stall Barns



Environ-Tech

Automation by Sturdy Built Mfg.

MONITOR & CONTROL

- Temperature
- Wind Speed
- Rain
- Tunnel Fans
- Curtains
- Overhead Fans
- Sprinklers
- Lighting

A properly designed and operated ventilation system is necessary to provide healthful conditions for dairy cattle in tie stall barns. It is important to have sufficient air exchanges to keep the barn air dry and fresh. A flexible system using natural and mechanical ventilation with automated controls will provide the ideal environment for your dairy herd.

Keeps Cows More Comfortable by Automatically Adjusting Ventilation!

Fans

Sturdy Built offers a line of high quality, high efficiency fans for tunnel ventilation in tie stall barns, designed for providing uniform air movement and increasing cow comfort and production in hot weather. Frigid weather and changing seasons require reduced air flow, which is controlled and adjusted with optional variable speed motors.



"Made in America" Quality



See all of our Equipment Guides for more Sturdy Built Galvanized Dairy Solutions!

Calf Nurseries • Curtain Systems • Herd Control & Vet Care • Free Stalls • Gates & Fencing • Headgates & Chutes • Robotics • Tie Stalls



260 S. Muddy Creek Road, Denver, PA 17517
Toll Free: 866-543-5116 • Phone: 717-335-3030
Fax: 717-335-3020 • info@sturdybuiltmfg.net

Dealer: