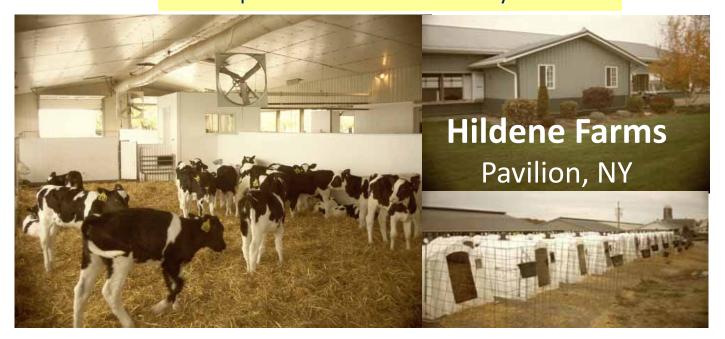
Hutch Start on Milk Replacer to Group Robot Pasteurized Milk System at:



Facility	Retrofitted 120' X 45' barn with arched ceiling and insulation under trusses 4 group pens w/ panel dividers between and central feeding room Milk house for pasteurizer, bulk tank, bucket cleaning and milk replacer mixing
Colostrum	1 gallon offered in bottle, tubed after 1-2 tries, done ASAP at least <4 hours post calving Fresh colostrum if late morning thru afternoon; frozen, warm water thawed colostrum

evening thru early morning. No testing done.

Age at Introduction

Management

All calves are started in hutches before introduction to the robotic group system at 10 days of age on average. Calves are "grafted" from nipple buckets to the robot peach teat. Usually only needs 1-2 days of supervision. Since they are older, few if any problems getting them onto system..

calving.

Nipple buckets, fed 2X daily for 1st 10 days while in hutches Feeding System 2 Forster Technik GEA robotic units, 4 nipples, 4 pens, 25 to group max goal Components 200 gallon bulk tank to chill and hold pasteurized milk

Hutch calves fed 2 qts of 25:20 milk replacer with lasalocid (Bovatec) 2X daily. Group calves fed a combination of pasteurized waste milk (50-75%), fresh cow and saleable **Liquid Feed**

tank milk. Held at 38 °F in bulk tank. Fed at 1.5 gal(6 liters)/day ages 10-20 days, 2.5 gal (9.5 liters)/day ages 20-55 days at 102 °F.

Pasteurizing/ Cleaning

Run 125 gallon Dari-Tech batch pasteurizer 1-2X daily. Bulk tank cleaned (CIP) 2X weekly with milk lines to robots. Auto feeders clean automatically throughout the day. Nipples cleaned 2X weekly.

Nipples changed at least once during group stay.

Clorox water rinse of auto feeder area at least 2X daily.

Hildene Farms, continued...



Pen Moves/ Weaning	Hutches to group pen at 10 days of age; weaning starts at 55 days of age complete in 10 days; gradual step down in milk volume; moved to next housing at 80 days of age.
Resting Area Space	At 25 calves /pen = 38 sq/ft/calf At 30 calves /pen = 31.7 sq/ft/calf
Bedding	Straw over bulk sawdust over concrete Until Sept. 2012 cleaned ~ every other week Attempting built up pack now
Treatments	Scours: 5% rate mostly under 10 days of age, electrolytes first, then Polyflex &/or SMZ pills if needed Respiratory: Since Sept '12 about 10% treatment rate (higher previously) Usually cases average 4 weeks old Variety of antibiotic treatment previously used
Vaccinations (Cow & Calf)	Dry cows: Scourguard 4KC and Endovac Bovi Calves: Inforce 3 as newborns, Vista 5 L5 SQ with post-weaning move
Changes to Make?	Changes just completed in September driven by unsatisfactory respiratory health.
Recommend	All in, all out Look around a many operations before deciding your approach