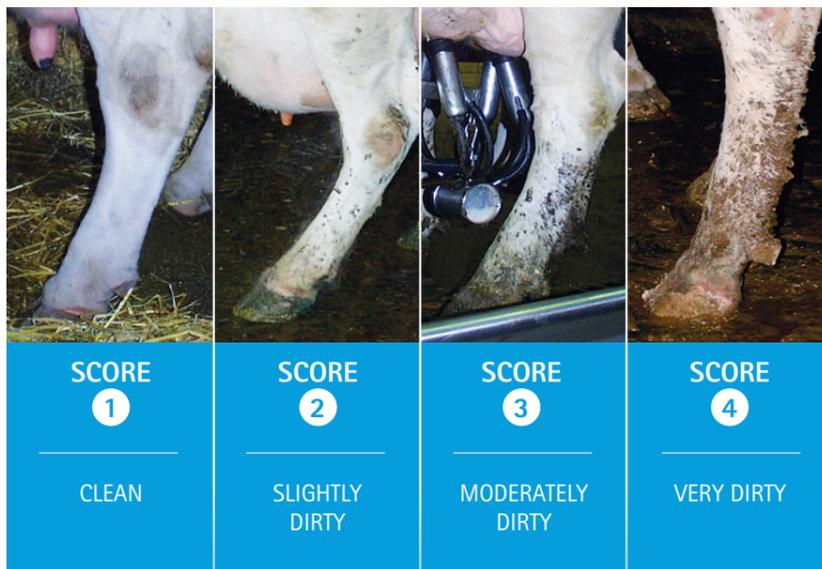


Dairy hygiene starts with clean cows

Many dairy producers rely on footbath programs to help prevent and control chronic infectious claw lesions in their herds. Maximizing the effectiveness of a footbath program hinges on three key factors: 1) hygiene 2) proper footbath design (size, length and depth) and 3) effective footbath management (chemical concentration, cow passes per change and frequency of use).

Footbath regimes are an integral component of infectious foot disease control in confinement dairy systems. The footbath is a simple mechanism for treating large numbers of cattle quickly and efficiently.

Hygiene Scoring



Use hygiene scoring to help determine ideal footbath frequency.

Proportion of cows with hygiene score 3 and 4	Suggested footbath frequency (minimum)
< 25%	As required
25 - 50%	2 days per week
51 - 75%	5 days per week
> 75%	7 days per week

Calculating Appropriate Footbath Volume (12 cm solution depth)

Footbath Length (cm)	Footbath Width (cm)	
	60 cm	100 cm
100 cm	Not recommended ^a	Not recommended ^a
200 cm	Not recommended ^a	Not recommended ^a
300 cm	216 liters	360 liters
400 cm	288 liters	480 liters

^a Footbath must be at least 300 cm in length to ensure rear feet receive at least two immersions in solution.

Calculating Appropriate Quantity of Footbath Chemical/Product to Use

Footbath Volume (liters)	Liters (or kg) Per Footbath ^a			
	2%	3%	4%	5%
200 liters	4	6	8	10
300 liters	6	9	12	15
400 liters	8	12	16	20

^a Based on recommended chemical/product concentrations.

Common Footbath Calculations

Product	Mix with Water to Achieve
1. Determine capacity of a footbath.	Multiply: length (m) X width (m) X depth (m) X 1000 = number of liters
2. Convert liters to kilograms.	Number of liters = kg of water
3. Determine kilograms of dry product needed to achieve the desired solution.	Multiply: kg of water X percent solution desired = kg of dry product to add

Disclaimer: The guidelines for use set forth herein are assumed to be accurate based on common knowledge. However, the accuracy and applicability of guidelines for administration are not guaranteed. Zinpro Corporation disclaims any liability, loss, or damage caused by usage or non-usage of any guidelines set forth herein resulting from improper mixing, handling or the labeling accompanying the product, including serious injury and death.

About First Step

The First Step Dairy Lameness and Assessment program provides the industry's most comprehensive assessment of lameness risk factors on a dairy. It was created by Zinpro Corporation and Dr. Nigel Cook, professor in the food animal production medicine section of the University of Wisconsin-Madison School of Veterinary Medicine.



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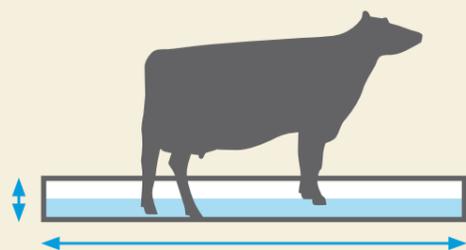
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CREATING & MANAGING
— an effective —
FOOTBATH



Design, location and management are key to footbath effectiveness



A footbath system is a simple way to quickly and effectively treat large numbers of cattle, no matter the type of operation. But a footbath system that isn't properly built and managed can actually do more damage than good.

To increase effectiveness of the footbath and minimize injuries to the animals, it's important to follow proper construction guidelines and – once built – to install a system of management practices.



Assess
your
footbath

The First Step® Footbath Calculator, when used in conjunction with hygiene scoring, helps develop a footbath program for your operation. Make adjustments based on First Step recommendations to create a footbath program that works to optimize your herd performance.

Design and Location **Management**

28 cm HIGH STEP-IN HEIGHT

It has been proven that cows have no problem with a curb of this height. The higher step-in height increases the number of foot immersions in the bath.

10 cm MINIMUM DEPTH

To ensure full immersion of hoof in solution.

LENGTH: 3.0 m - 3.7 m

A minimum length of 3 meters ensures that rear feet receive at least two immersions in solution.

HEIGHT: 1.0 m

Side walls are sloped from a height of 1 meter above the floor of the bath to the upper edge of the bath, and the sides should be enclosed to create a tunnel.

190 - 200 LITERS

The amount of solution needed to fill a properly sized footbath. (see back panel for common calculations)

ANGLE: 70%

Sloped side walls make cows feel at ease, not claustrophobic.

WIDTH: 0.5 m - 0.6 m

Wide enough to ensure that cows can walk through comfortably while minimizing the amount of footbath solution and hence, the amount of chemical needed to charge the footbath.

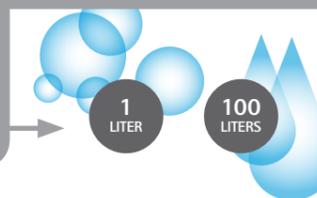
Locate footbath on a level surface, in an area regularly traveled by the cattle.

SCHEDULE

Use footbath at least 3 to 4 consecutive days per week.

Foot and leg hygiene of the herd will help determine the number of days required. Dirtier cows require more frequent footbathing.

On non-footbath days, keep hygiene in check with a soap bath. (1 liter of soap per 100 liters of water)



Cows should enter a clean, dry area after passing through the footbath.

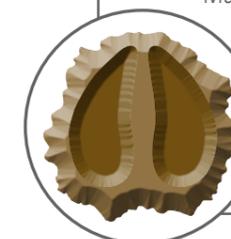
Cows should be able to bypass permanent footbaths on days when they are not being used.

Change footbath solution after every 100-300 COWS

This frequency will vary depending upon cow cleanliness, type of disinfectant or chemical concentration used and weather conditions.

Manure deactivates chemicals used in footbaths.

A poorly managed footbath can become a vector for infectious diseases of the foot.



Alternate times for replenishing footbaths with fresh solution so each group of cows has access to fresh solution.

Thoroughly drain footbath and rinse with water before mixing a new batch of solution.