

Operational Benefits and Design Considerations for HVLS Fans



By Rick McBay Natural Ventilation Specialist

Cow comfort benefits and placement recommendations for HVLS fans in dairy barns.

Over the last 10 to 15 years, we have seen the introduction of large-diameter ceiling fans into the design of freestall dairy facilities. High-volume, low-speed (HVLS) fans were originally

designed and used in large commercial warehouses and production plants, and the first livestock application was for riding arenas in the large equine markets of the U.S. From there, HVLS fans were experimented with in dairy barns and proved to be quite effective at improving cow comfort.

The purpose of HVLS fans is twofold depending on if it is operating in forward or reverse. When the fan is set to run in the forward direction, it creates a column of air the same size as the fan diameter directly downward, which then radiates a wave of air approximately 4 feet high out from the fan in a 360-degree pattern. Due to the large size of the fan blades – up to 24 feet in diameter – the air moves at high speeds, creating a velocity cooling effect for the animals as it passes over them.





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Operational Benefits

For hot-weather operation, HVLS fans are operated on a variable-speed basis with an automatic temperature controller. This will start the fans at a set interior temperature and speed them up or slow them down based on changes in the interior temperature. This is especially helpful during the spring and fall, when outside temperatures can vary dramatically over a 24-hour period.

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The Pacalaca Project

Custom Solutions for own Valued Customers!

Ensuring our customers are satisfied is what drives us at Canarm AgSystems. We understand that each customer requires unique solutions. When our Territory Manager Nicholas met the owner of Pacalaca Alpaca Farm at a tradeshow, he was presented with a challenge. They needed something with an opening for the alpacas to walk through while the curtains were closed for the winter.

After a meeting with one of our designers and a visit to the barn, our team came up with a custom solution. Our Mid Tube Rollup with special cut outs were installed. The curtains of each pen could be opened or closed independently, and the animals were able to go in and out through some simple clear, freezer strips. The owner was very pleased. The alpacas had protection from the cold and had a new way to access the paddock.

"The new curtains have stopped the swirling snow we were getting inside the barn. We really like that we can roll the curtains right up and take advantage of the open south side outside of winter. We appreciate Canarm working with us to find a solution."

Owner – Pacalaca Farm







Pacalaca Alpaca Farm is located near Ailsa Craig, Ontario. You can learn more about them and these wonderful animals herehttps://bit.ly/3M4TDua

Featured Product

SHOULDER STALLS

The new Canarm Shoulder stalls are designed to provide the ultimate space for different parity sows to consume their feed in a loose-sow-housing environment. They require a low capital investment and provide the farmer with higher levels of management. Feed is distributed in equal amounts to each stall through a wet diet or using a trickle feed system set to the eating speed of the slowest sow in the group. Partitions around each stall provide protection for the head and shoulders of the feeding sows reducing aggressive behaviour and injury. Our stall is made from a combination of 7/8" and 9/16" rod, a stainless foot, and comes galvanized or bare metal. Drop tubes and stainless trough are included.



EASY CHOICE STALLS

Protection for loose-housed sows.

The Easy-Choice sow stall gives a gestating sow protection while feeding in a loose sow-housing environment. The sow enters when she wants to eat or remove herself from the group and a gate swings shut behind. When she is done feeding, or wants to rejoin the group, she backs up and the gate swings open. The stall is simple and strong, with only one pivot point. Built from solid steel that is then galvanized for additional long life.



So How Do You Install a Waterer?



Our latest How To video is a collaboration with Kathryn Laframboise of The Raspberry Roost Farm in Cooks Creek, Manitoba. It explains exactly how to install a Canarm heated waterer.

Recent Farrowing Install



The last farrowing crates being installed at Yorkland Farms Ltd. in St. Thomas, Ontario

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