



# Ventilation Systems for Dairy Barns



**SKOV-SECCO**

*United by Dairy*

[skov-secco.com](http://skov-secco.com)

# About Us



At SKOV-SECCO, we understand the critical role of optimal barn ventilation in enhancing dairy productivity and cow well-being. Our innovative, climate-adaptive ventilation solutions, backed by over 40 years of SKOV group's expertise, set us apart in ensuring high-quality milk production worldwide. With our specialized dealer network worldwide, we offer integrated, tailor-made systems for any dairy farm, proving our commitment to sustainability and excellence in dairy farm management.

Over the years, SKOV-SECCO has become one of the leaders in natural and mechanical

ventilation systems intended for modern dairy barns. Through the constant development of new products, SKOV-SECCO can offer you a complete line of ventilation products designed for all types of breeding.

Since the company's establishment in 2000, SKOV-SECCO's state-of-the-art natural and mechanical ventilation systems have been sold and used throughout North America, Europe, the Middle East, and Asia through specialized distributors.



# Natural

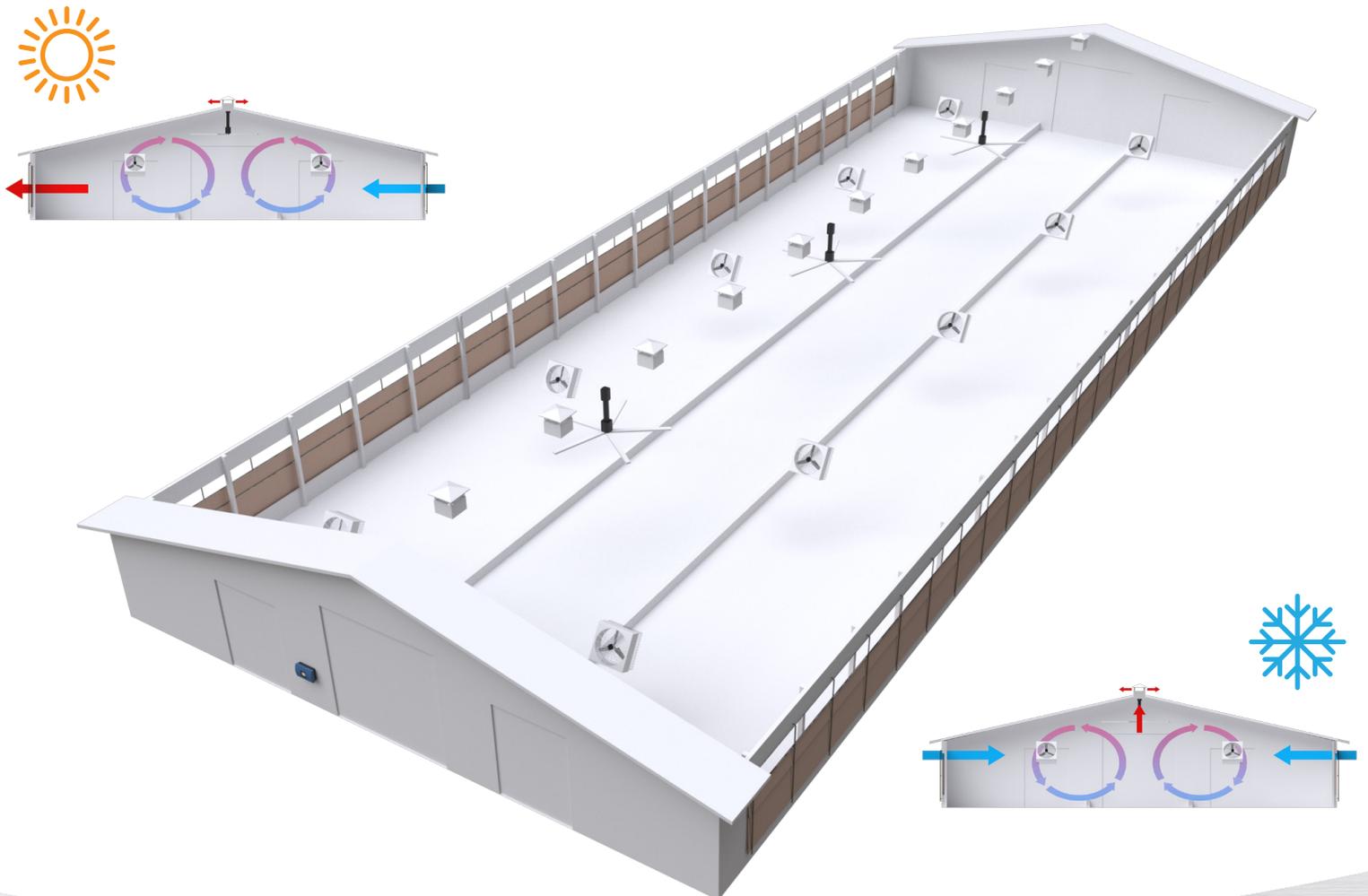


Natural ventilation is most suited for regions with mild or temperate climates. The system relies on the outside weather conditions and indoor temperature variations to create air exchanges in the barn.

During the spring, summer, and fall, the system relies on sidewall openings to allow for adequate air movement in the barn which can

be supplemented with recirculation fans during hot weather. During the winter, minimum air exchanges can be managed through a ridge opening with minimal sidewall openings.

The natural system is restricted to small or mid-sized barns due to the physical limitations of the ventilation principles.



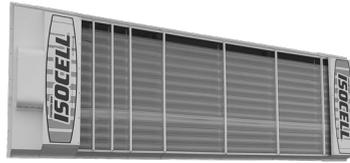
**AIR INLET**



Roll-down curtain



Roll-up curtain



ISOCELL Z-wall



Lumiwall

**AIR OUTLET**



DA 820/600 chimneys



Square chimneys

**RECIRCULATION FANS**



Boreal Flow fans



BF 50 recirculation fans



VHV 55" and 72" fans



Big Air ceiling fans

**COOLING**



DA 2000 cooling pump



DA 2000 nozzle

**CLIMATE CONTROLLER**



BlueControl dairy



DOL 31 speed controller

**DOL SENSORS OFFERING**



DOL 114 Temperature and humidity sensor



DOL 104 Humidity sensor



Radiation shield

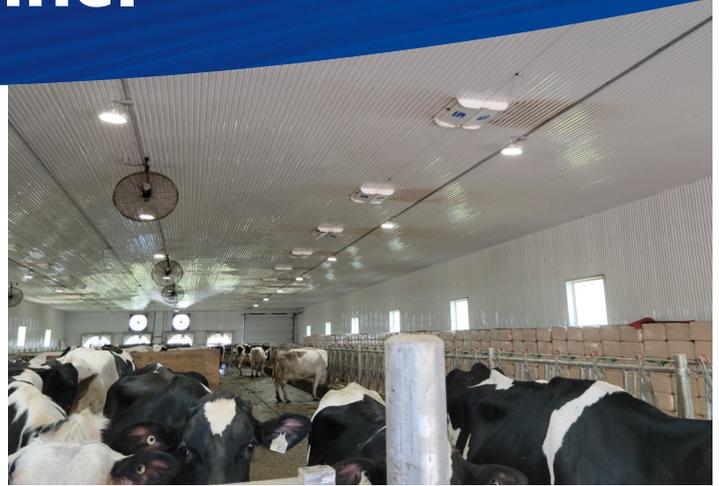


DOL 58 Weather station



DOL 111 Rain detector

# Tunnel

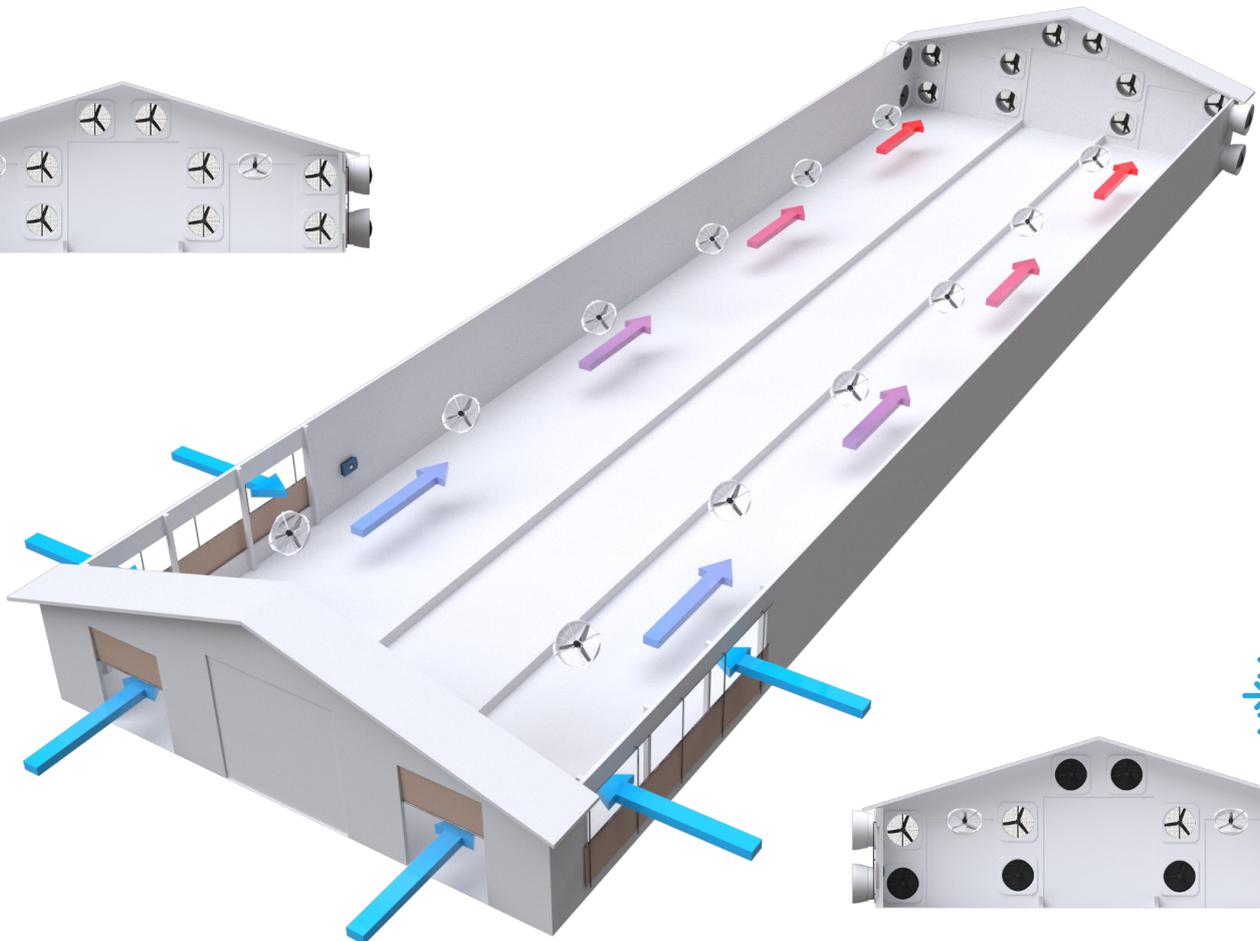


Tunnel ventilation is the ideal solution for hotter climates. The system operates by using negative or positive pressure to create high air speeds and high air exchange rates which produces a desired cooling effect.

During the winter or colder periods, the same concept can be used with fewer air exchanges which is achieved by using smaller curtain openings and fewer fans.

A barn equipped for negative pressure tunnel ventilation will have inlet openings at one end and large exhaust fans on the other end. Fresh air enters the barn through the inlet openings and is removed through the exhaust fans.

Pad cooling or high-pressure cooling can be added to reduce the incoming air temperature.



**AIR INLET**



Roll-down curtain



Roll-up curtain



Lumiwall

**AIR EXHAUST**



BF 55 wall fans



BF 50 wall fans



MegaFan DD wall fans

**AIR INJECTION**



BF 50 with air shutter



BF 50 with motorized shutter

**RECIRCULATION FANS**



Boreal Flow fans



BF 50 recirculation fans



VHV 55" and 72" fans

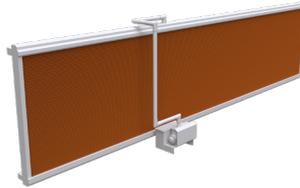
**COOLING**



DA 2000 cooling pump



DA 2000 nozzle



Pad cooling

**CLIMATE CONTROLLER**



BlueControl dairy



DOL 31 speed controller

**DOL SENSORS OFFERING**



DOL 114 Temperature and humidity sensor



DOL 104 Humidity sensor



Radiation shield



DOL 119 CO2 sensor



DOL 53 Ammonia sensor



DOL 18 Sub-pressure sensor

# Cross-tunnel



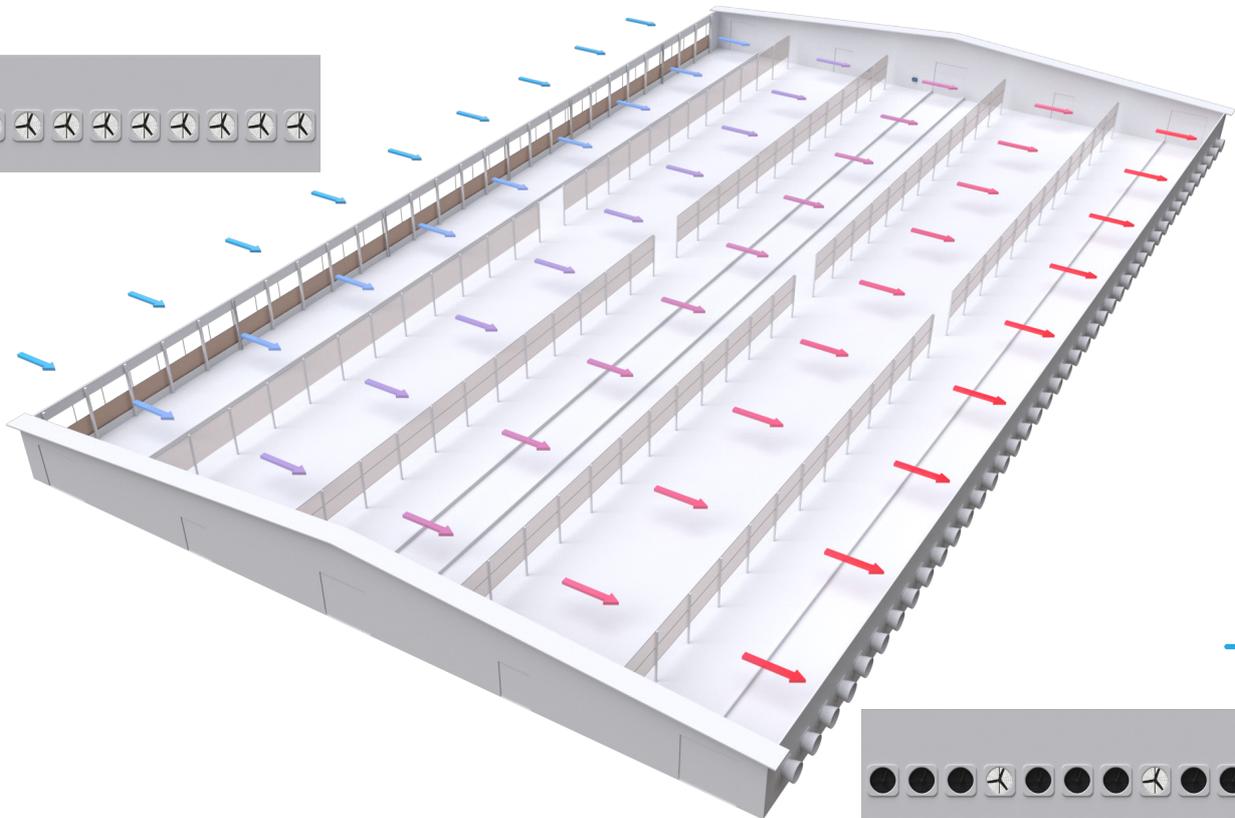
Cross-tunnel ventilation is the ideal solution for large-scale barns in hotter climates. The system typically operates by using negative pressure to create high air speeds and high air exchanges, which produce a cooling effect.

A Cross-tunnel barn will have inlet openings down the entire length of one side while having exhaust fans on the opposite length of the barn. Fresh air enters through the inlet openings and is removed through the exhaust fans. A baffle system can be added over the stalls inside the

barn to achieve a higher air speed without adding more air capacity.

During the winter or colder periods, the same concept can be used with fewer air exchanges which is achieved by using smaller curtain openings and fewer fans.

Pad cooling or high-pressure cooling can be added to reduce the incoming air temperature.



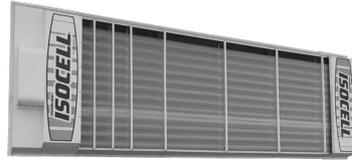
**AIR INLET**



Roll-down curtain



Roll-up curtain



ISOCELL Z-wall

**AIR EXHAUST**



BF 55 wall fans



BF 50 wall fans



MegaFan DD wall fans

**AIR INJECTION**



BF 50 with air shutter



BF 50 with motorized shutter

**RECIRCULATION FANS**



Boreal Flow fans



BF 50 recirculation fans



VHV 55" and 72" fans

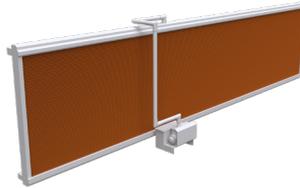
**COOLING**



DA 2000 cooling pump



DA 2000 nozzle



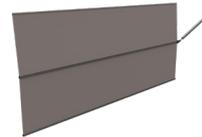
Pad cooling

**CLIMATE CONTROLLER**



BlueControl dairy

**AIR BAFFLE**



Double roll-up curtain



Roll-up curtain

**DOL SENSORS OFFERING**



DOL 114 Temperature and humidity sensor



DOL 104 Humidity sensor



Radiation shield



DOL 119 CO2 sensor

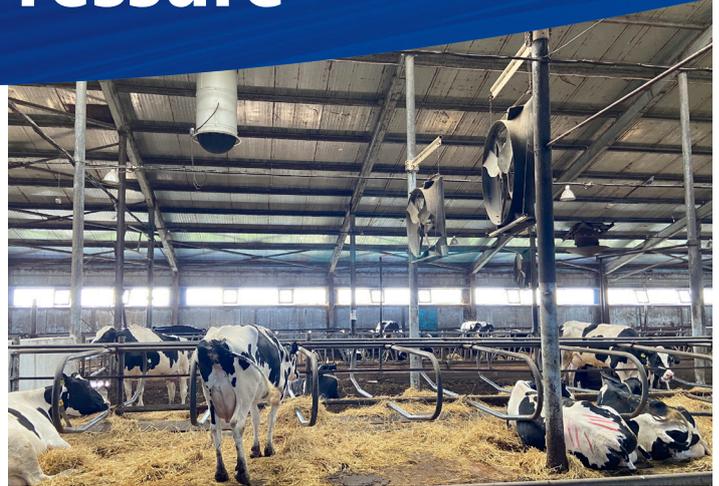


DOL 53 Ammonia sensor



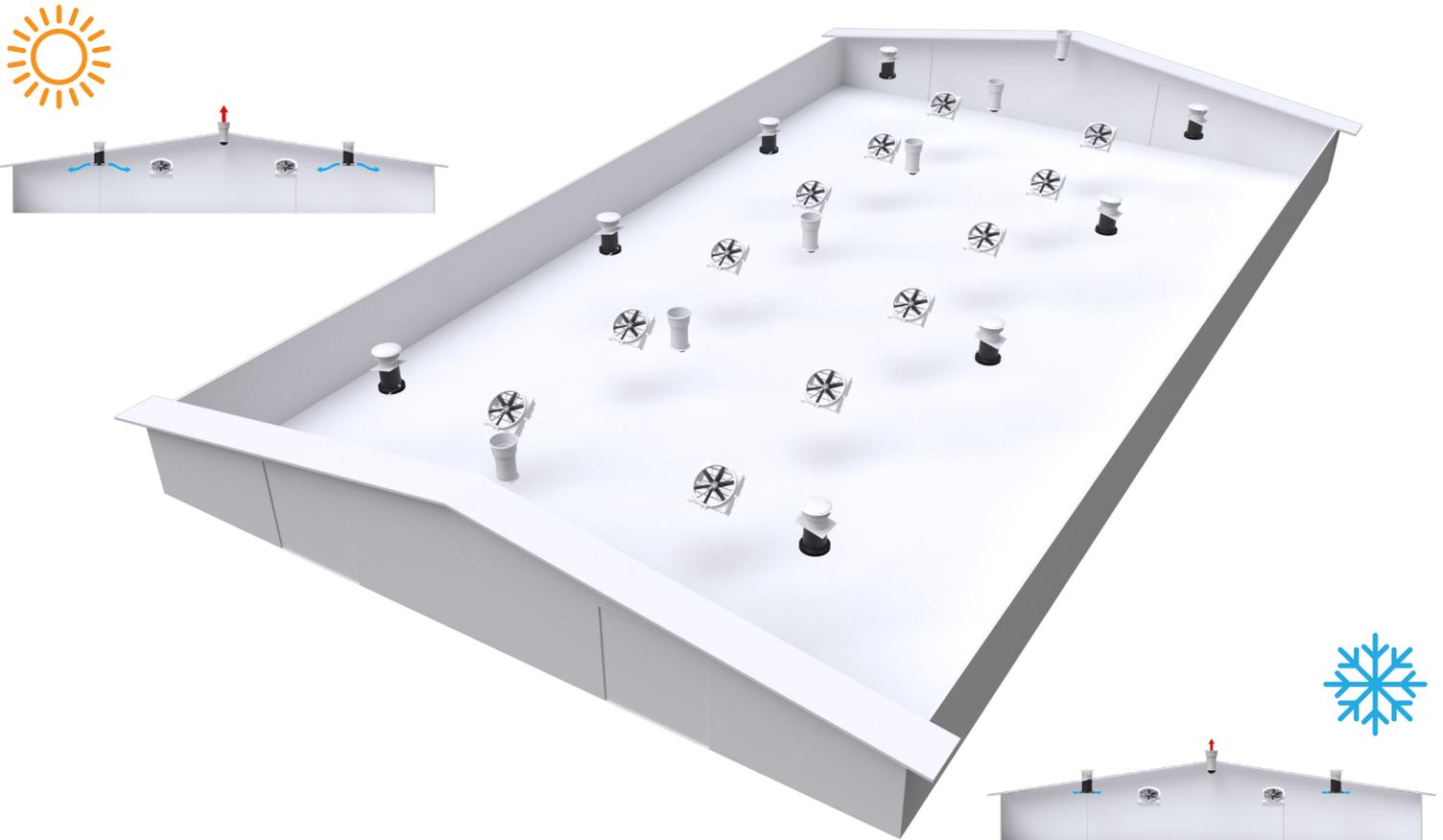
DOL 18 Sub-pressure sensor

# Equal Pressure



Equal pressure ventilation ensures that air is distributed evenly and optimally throughout the barn. The system works well when there are difficulties with air leakage, wind action, location, layout, and so on.

The barn maintains an equal (neutral) pressure by using fans in both the inlets and outlets. The roof inlets will bring air into the barn and remove air through the exhaust outlets. The roof inlets can also be used to recirculate air which helps reduce heating costs during the winter months.



## AIR INLET



Roll-down curtain



Roll-up curtain



Lumiwall



DA 60-820  
roof inlets



DA 40A  
roof inlets

## AIR EXHAUST



BF 55 wall fans



BF 50 wall fans



Square chimneys



DA 820/600  
chimneys

## AIR INJECTION



BF 50 with air shutter



BF 50  
with motorized shutter

## RECIRCULATION FANS



Boreal Flow fans



BF 50  
recirculation fans



VHV 55" and 72" fans

## CLIMATE CONTROLLER



BlueControl dairy



DOL 31 speed controller

## DOL SENSORS OFFERING



DOL 114  
Temperature and  
humidity sensor



DOL 104  
Humidity sensor



Radiation shield



DOL 119  
CO2 sensor

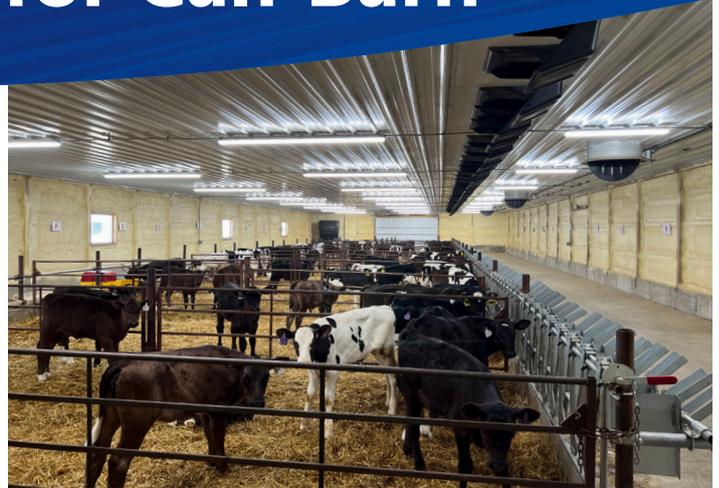


DOL 53  
Ammonia sensor



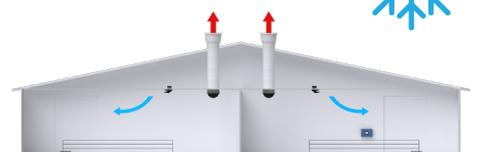
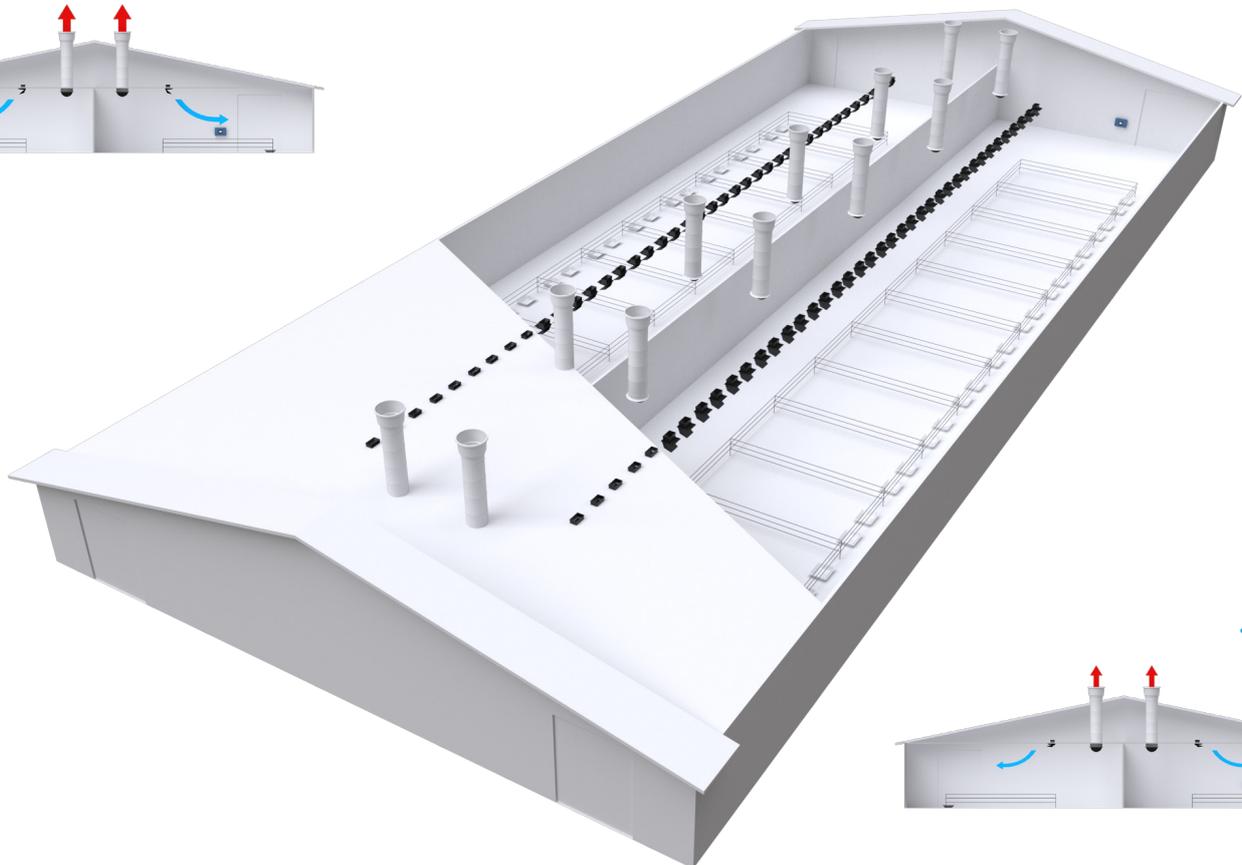
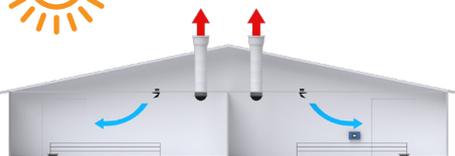
DOL 18  
Sub-pressure sensor

# LPV System for Calf Barn



LPV systems are suitable for calf barns in mild and temperate climates. The system utilizes negative pressure to bring air into the barn through inlets and removes the air via exhaust fans. In the system, wall, ceiling, and roof inlets can be used depending on the application, and will supply fresh air into the barn.

Inlets are adjusted to provide an optimal climate for the calves by maintaining the proper temperature, humidity, and air velocity. During warm periods, the inlet opening is increased, which also allows air to enter at a faster rate and causes air circulation at the calf level. During colder periods, the inlet opening is decreased, which allows the fresh outside air to mix with the inside air before reaching the calves.



## AIR INLET



DA 60-820  
roof inlets



DA 40A  
roof inlets



Square chimneys



DA 1540  
ceiling inlets

## AIR EXHAUST



BF 55 wall fans



BF 50 wall fans



DA 820  
chimneys

## CLIMATE CONTROLLER



BlueControl dairy



DOL 31 speed controller

## DOL SENSORS OFFERING



DOL 114  
Temperature and  
humidity sensor



DOL 104  
Humidity sensor



Radiation shield



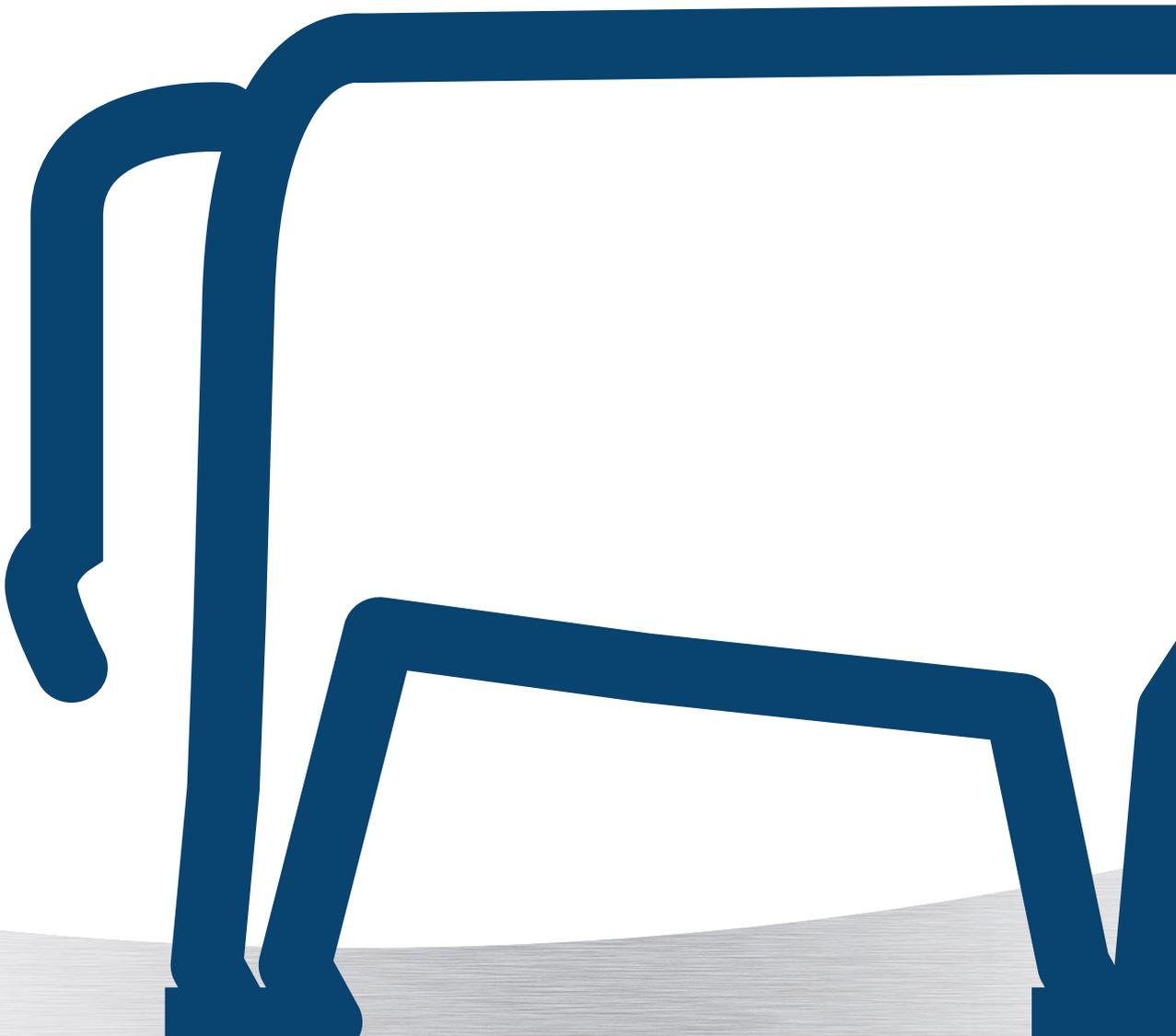
DOL 119  
CO2 sensor



DOL 53  
Ammonia sensor



DOL 18  
Sub-pressure sensor





Hedelund 4, Glyngoere, 7870 Roslev,  
Denmark  
Phone: +45 72 17 55 55

4040, boul. Casavant West  
St-Hyacinthe (Quebec) J2S 8E3, Canada  
Phone: +1 (877) 711-0777

160 Claremont, Avenue, Suite 200,  
GA 30030, Decatur, USA  
Phone: +1 (678) 954-5743

[info@skov-secco.com](mailto:info@skov-secco.com)



[www.skov-secco.com](http://www.skov-secco.com)

