



Dairy catalogue

Applications for ventilation systems

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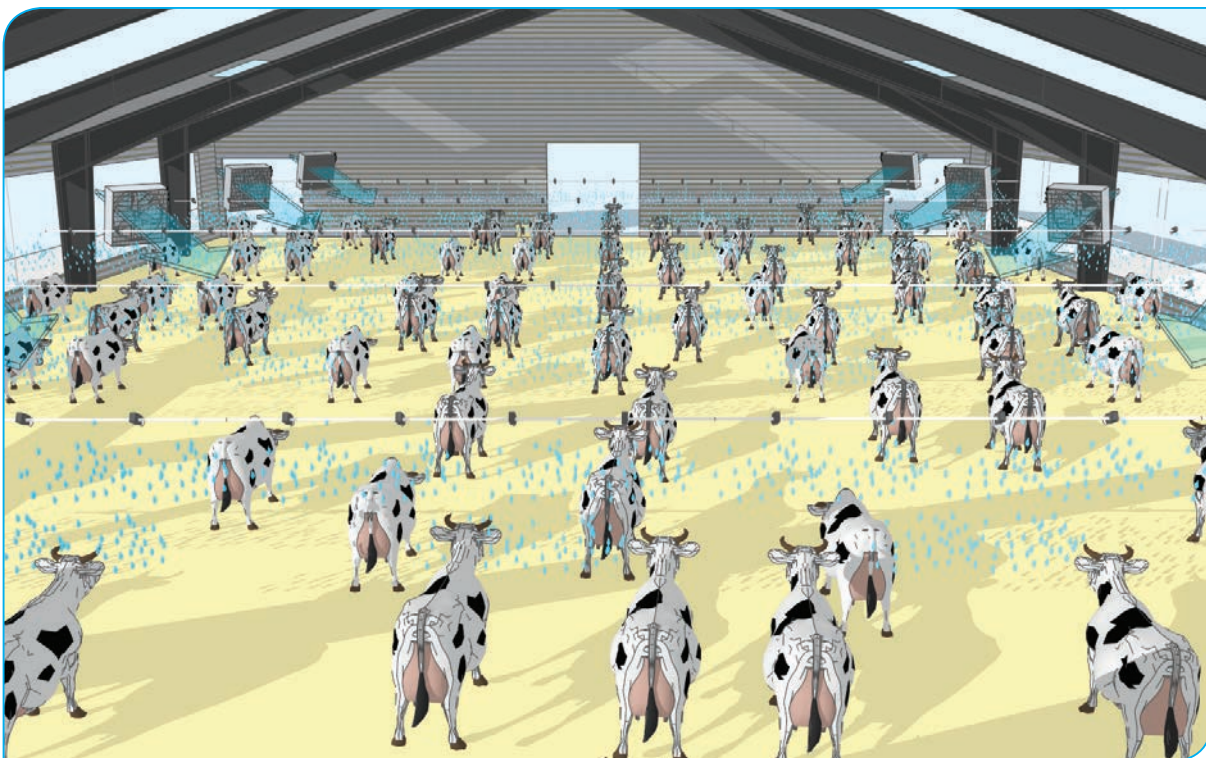
INTRODUCTION

Direct cooling is working on the principle of wetting the cow, evaporating the water from the cow, again, and again and again.

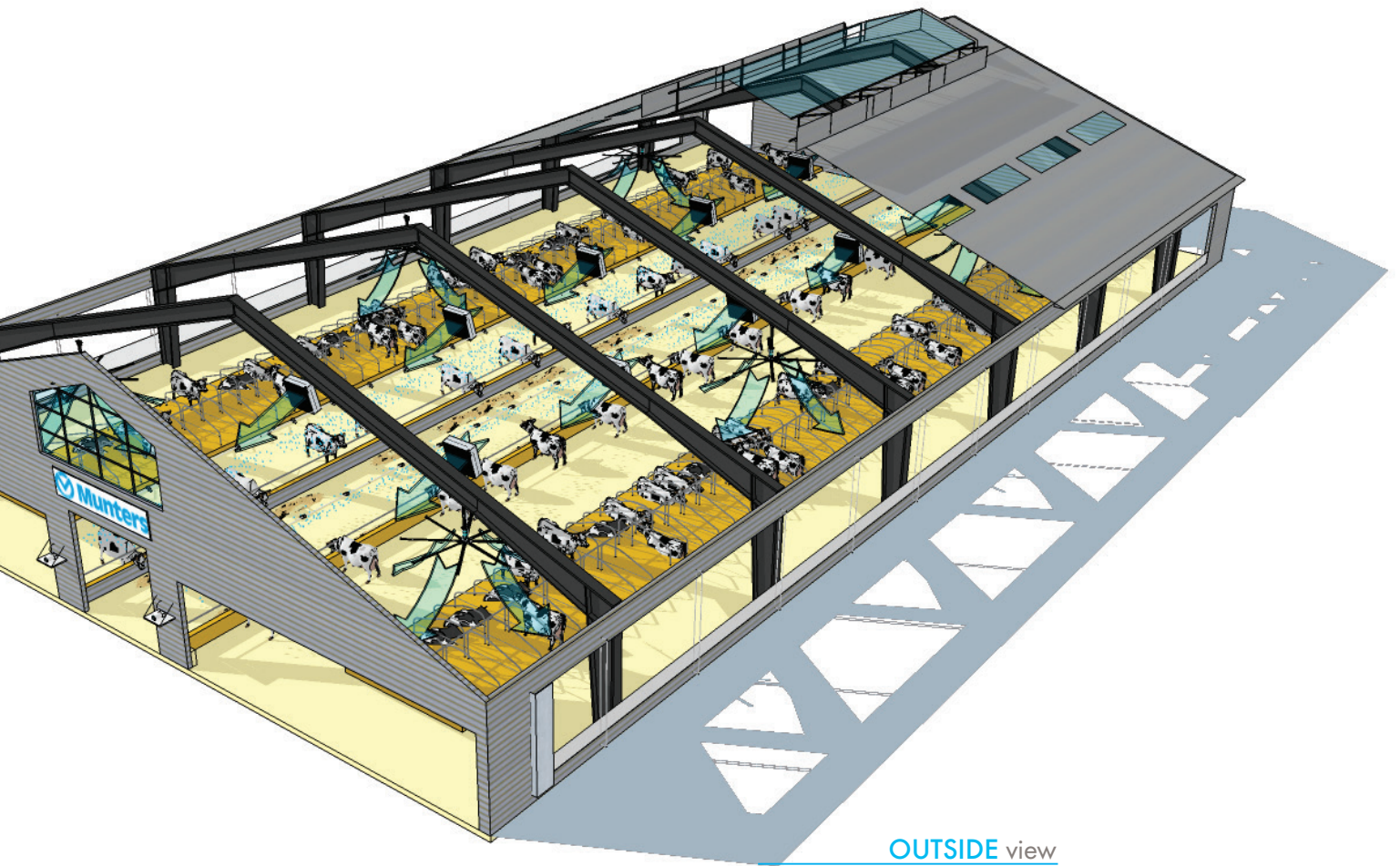
Evaporating the water from the cow's skin is the most efficient way to reduce the cow's body temperature.

In the modern dairy farm in warm countries it is common to use this application at the feed lane, waiting area before milking and in designated cooling yard.

Munters has a full product list for this application including small medium and big size fans, sprinklers system and support accessories.

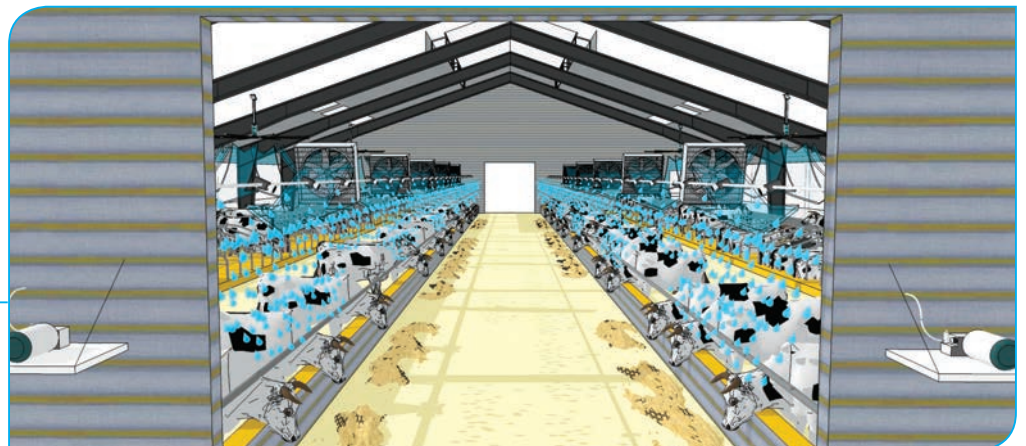


VENTILATION CONCEPT

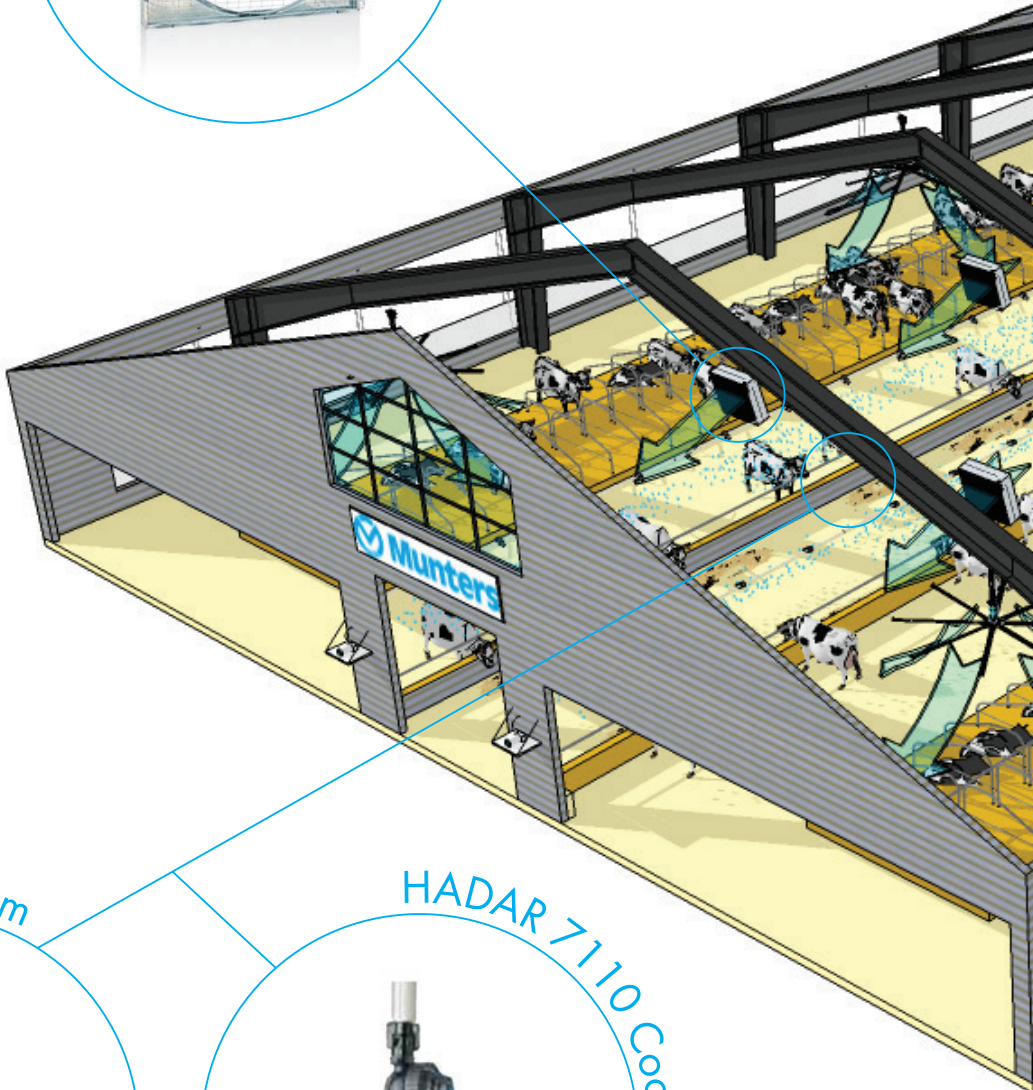
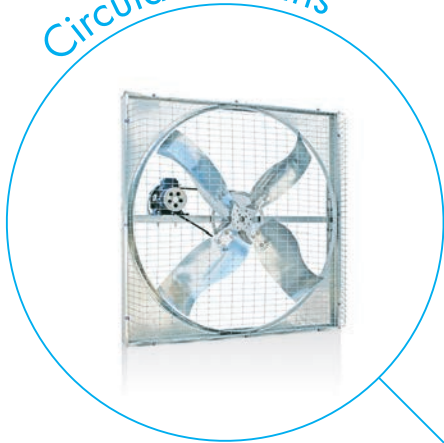


OUTSIDE view

INSIDE views



Circulation Fans

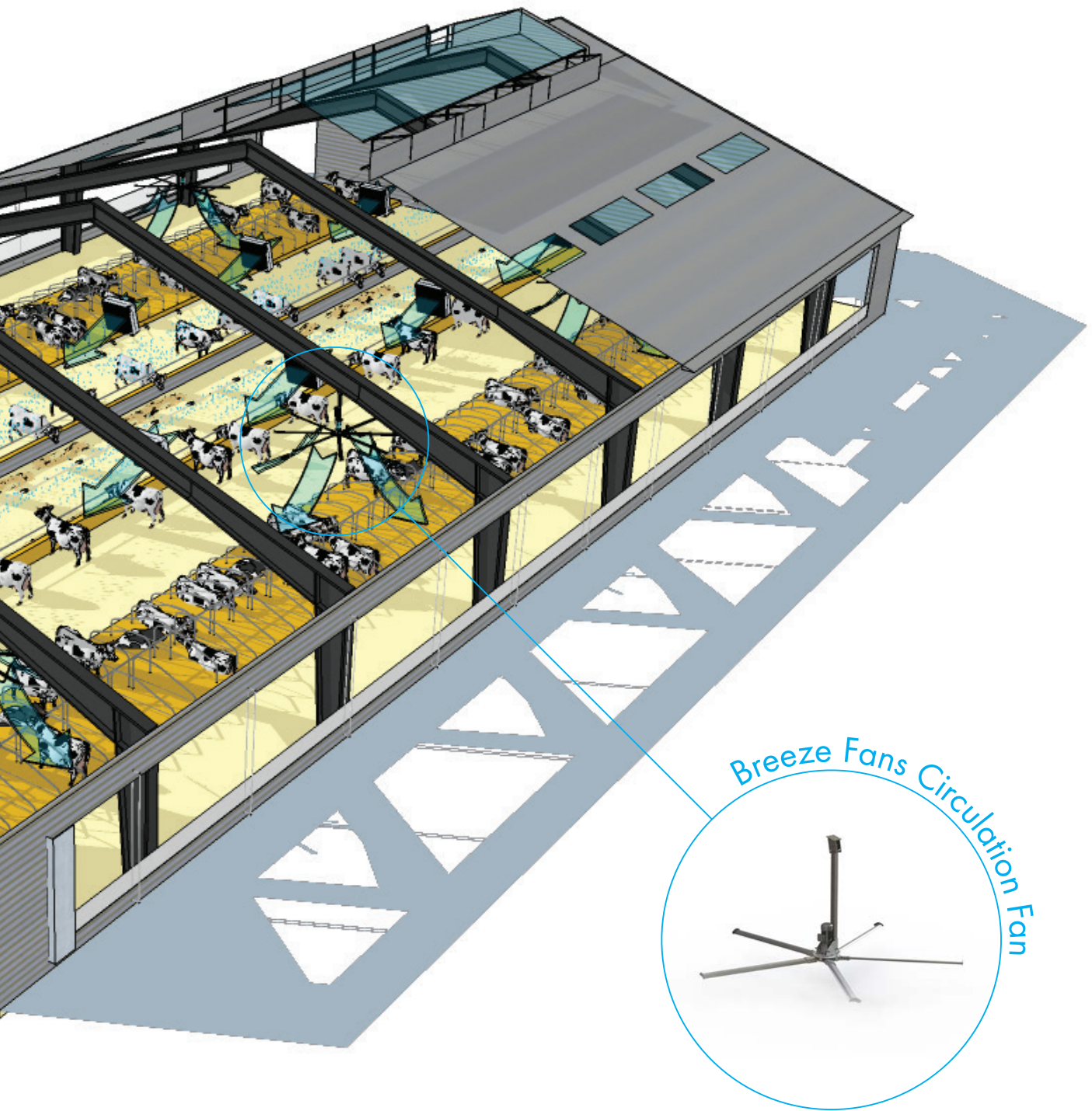


WDP MIST Cooling System

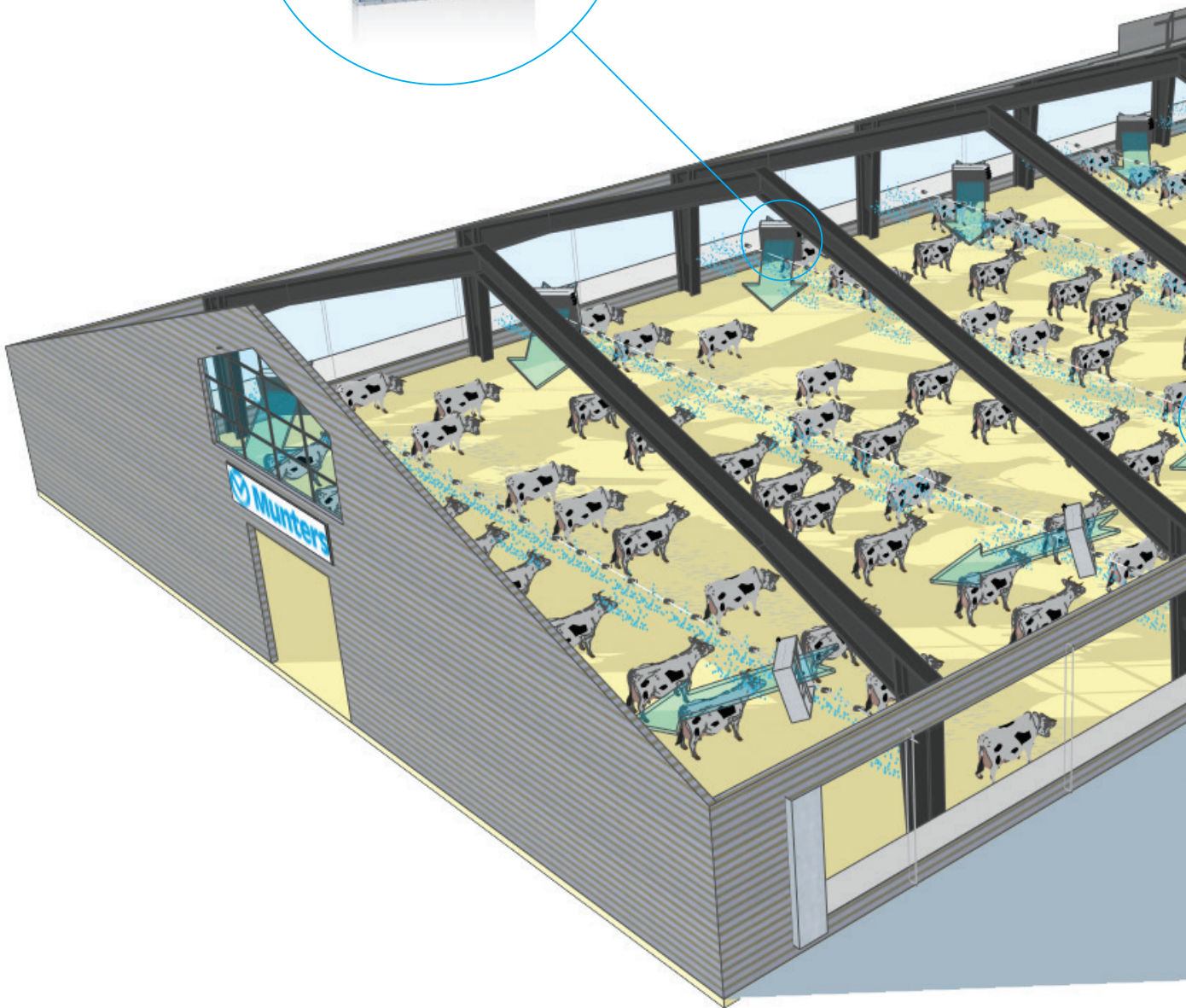


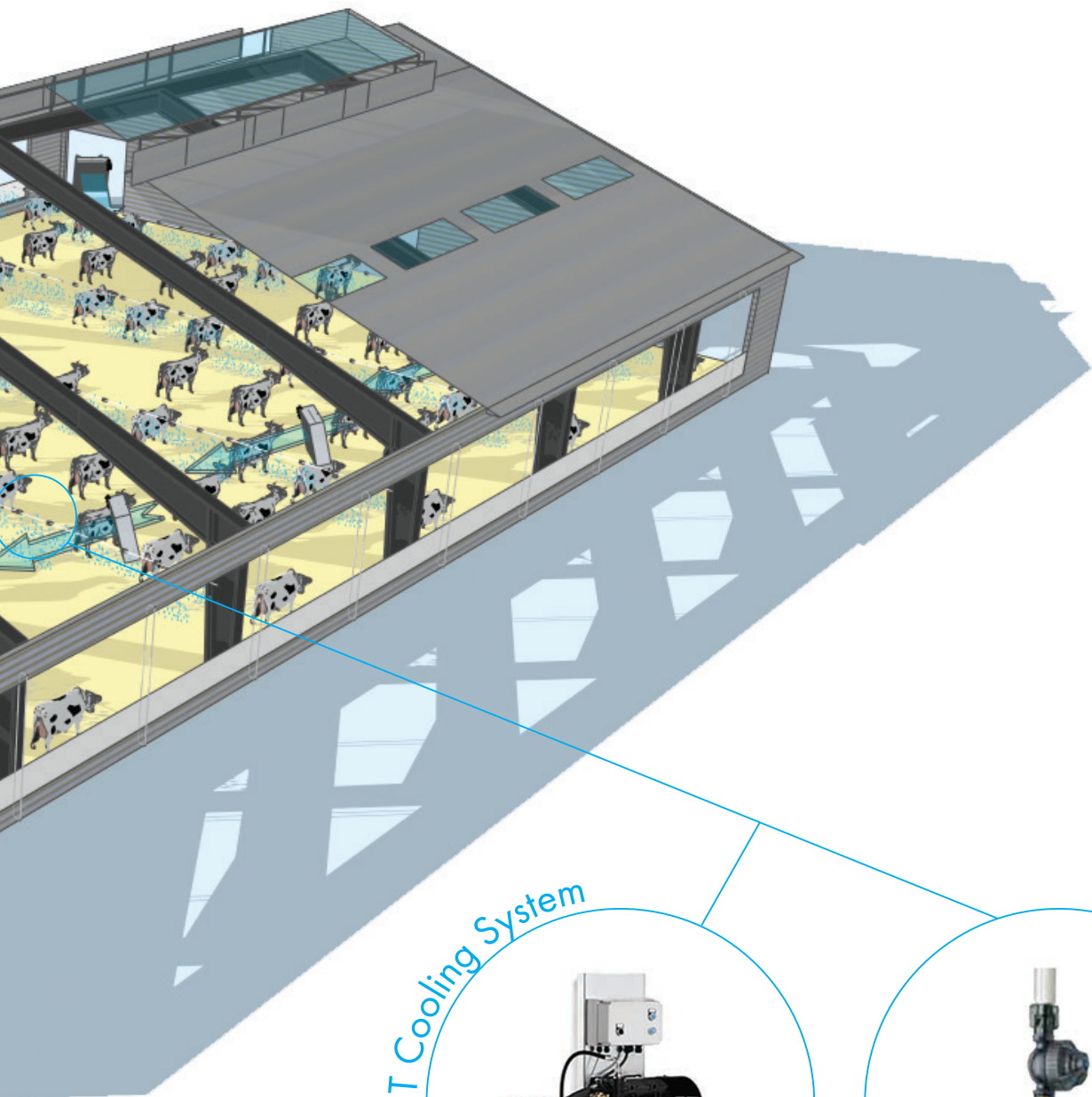
HADAR 7110 Cooling System





Circulation Fans





WDR MIST Cooling System



HADAR 7110 Cooling System



EUROEMME® MFS36



- Family member of the time proven Euroemme® fan range
- Large cooling footprint
- Statically and dynamically balanced propeller
- Cast aluminium propeller hub for the best bearing protection
- Horizontal support bar reduces stress on fan housing when mounted overhead
- Motor positioned in air stream for maximum cooling
- Mounting kits for ease of mounting
- Optional belt tensioner
- Stainless steel blades (optional)

COUNTRY OF ORIGIN		UNIT	DESCRIPTION	CAN BE USED IN:
Italy		Unit	Air blower with Munters Protect	EMEA, Asia, Central and South America
PERFORMANCES				
Motor			0.5Hp	0.75Hp
Airflow at 0 Pa	m ³ /h [cfm]		16,740 [9,853]	19,770 [11,636]
Specific performance at 0 Pa	m ³ /h/W [cfm/W]		33.3 [19.6]	26.7 [15.7]
				1.0/1.2Hp
				21,973 [12,933]
				21.6 [12.7]

* All values refer to 3 phases 50Hz single speed motors.
Note: airflow data are measured at standard conditions (20 °C, 1,013hPa)

EUROEMME® MFS52



- Family member of the time proven Euroemme® fan range
- Large cooling footprint
- Statically and dynamically balanced propeller
- Cast aluminium propeller hub for the best bearing protection
- Horizontal support bar reduces stress on fan housing when mounted overhead
- Motor positioned in air stream for maximum cooling
- Mounting kits for easy mounting
- Optional belt tensioner
- Stainless steel blades (optional)

COUNTRY OF ORIGIN		UNIT	DESCRIPTION	CAN BE USED IN:
Italy		Unit	Air blower with Munters Protect	EMEA, Asia, Central and South America
PERFORMANCES				
Motor			1.0/1.2Hp	2.0Hp
Airflow at 0 Pa	m ³ /h [cfm]		37,638 [22,153]	44,803 [26,370]
Specific performance at 0 Pa	m ³ /h/W [cfm/W]		33.5 [19.7]	25.3 [14.9]

* All values refer to 3 phases 50Hz single speed motors.
Note: airflow data are measured at standard conditions (20 °C, 1,013hPa)

AX51



- Made in the USA
- Durable and efficient cast aluminum propellers
- Premium pillow block bearings, made in USA
- High quality heavy gauge galvanized orifice panel
- Strong rigid tubular struts for solid performance
- Direct drive resulting in low noise levels
- Unique high quality belt tensioner with two grease zerks for easy maintenance
- Available direct drive EC motor technology
- Munters Drive can save up to 40% on your energy bill
- No maintenance = huge savings
- Optional performance and airflow modes including variable speed option

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
USA	Unit	Air blower fan with Munters Drive	USA

PERFORMANCES

Airflow at 0 Pa	cfm	27,900
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* The ratings shown are based on tests and procedures performed at the BESS Lab, University of Illinois. Airflow calculated according to ANSI/AMCA 230-12 Eq. 9.6 IP.
 Note: airflow data are measured at standard conditions (20 °C, 1,013hPa)

EUROEMME® EMS36/50



- Family member of the time proven Euroemme® fan range
- Fan housing and Venturi and blades made of strong Munters Protect coated sheet-steel, stainless steel blades (optional)
- Each motor is individually tested for 100% quality control
- Central hub and v-belt pulley are made from die-cast aluminium
- Welded wire guards divided into two parts ensure easy maintenance
- Propeller is statically and dynamically balanced
- Special threaded bushes on fan's side panels permit the fan to be easily hung

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Italy	Unit	Circulation fan with Munters Protect	EMEA, Asia, Central and South America

PERFORMANCES EMS36

Motor		0.5Hp	0.75Hp	1.0Hp
Airflow at 0 Pa	m ³ /h [cfm]	18,100 [10,650]	20,080 [11,820]	22,450 [13,215]
Specific performance at 0 Pa	m ³ /h/W [cfm/W]	25.5 [15.0]	22.5 [13.2]	18.7 [11.0]

PERFORMANCES EMS50

Motor		1.0/1.2Hp	1.5Hp
Airflow at 0 Pa	m ³ /h [cfm]	35,650 [20,980]	41,200 [24,250]
Specific performance at 0 Pa	m ³ /h/W [cfm/W]	30.7 [18.1]	25.0 [14.7]

* All values refer to 3 phases 50Hz single speed motors.
 Note: airflow data are measured at standard conditions (20 °C, 1,013hPa)

EUROEMME® EDC18/24HE



- Family member of the time proven Euroemme® fan range
- Perfect for cow cooling in parlor during milking process
- High airflow and high efficiency
- Low power consumption, results in lower energy cost
- Direct drive system
- Fast and easy installation

COUNTRY OF ORIGIN		UNIT	DESCRIPTION	CAN BE USED IN:
Italy		Unit	Direct Drive circulation fan	EMEA, Asia, Central and South America
PERFORMANCES				
Motor			EDC18HE	EDC24HE
Airflow at 0 Pa		m ³ /h [cfm]	5,046 [2,970]	10,087 [5,937]
Specific performance at 0 Pa		m ³ /h/W [cfm/W]	15.6 [9.2]	17.7 [10.4]

* All values refer to 3 phases 50Hz single speed motors.
Note: airflow data are measured at standard conditions (20 °C, 1,013hPa)

HADAR 7110*



- Effective nozzle system
- Modular construction for simple use and modification
- Wide range of wetted patterns with different inserts
- 2 color-coded nozzles with flow rates from 23-333 l/h
- Excellent water distribution
- Leakage Prevention Device (LPD)
- Recommended working pressure: 1.5-3.0 bar
- Wetted diameter: 1.7-11.0 m

COUNTRY OF ORIGIN		UNIT	DESCRIPTION	CAN BE USED IN:			
Israel		Unit	For feeding lane	Globally			
PERFORMANCES							
Used	Pressure	Nozzle size (mm)	Nozzle color	Flow rate (l/h)	Mist sprayer distance (m)	Small sprayer distance (m)	Half Circle sprayer (180°) distance (m)
Feeding lane	2 bar	1,2	Orange	75	2,6	2,8	2,8
Milking parlor waiting area	2 bar	2,3	Brown	265	5,4	3,2	3,7

* Product manufactured by Naandaan.

WDP MIST



- High pressure cooling system as alternative to evaporative pad cooling in cold continental and moderate climates, typically characterized by very brief periods of hot weather
- Minimizes heat stress which improves feed conversion for increase production
- Optimal relative humidity throughout the year
- Environmental benefits by effectively suppressing dust particles from the airstream
- Fast cleaning operation through preparatory soaking of various equipment
- Corrosion resistant components, made in stainless steel
- Quick and easy installation
- Fits in any size of housing system

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:		
Denmark	Unit	High pressure fogging and cooling system	EMEA, Asia		
PERFORMANCES					
Maximum working pressure	bar [PSI]	70 [1015]			
Water flow	l/min [gal/h]	12.0 [190.2]		21.0 [332.9]	
Nozzle tip diameter	mm	0.2	0.3	0.2	0.3
Maximum nozzles/pump	pcs	180	110	314	193
Nozzle water flow at 70Bar	l/h [gal/h]	4.0 [1.06]	6.5 [1.72]	4.0 [1.06]	6.5 [1.72]

BREEZE FAN



- Available in 5 different diameters : 3,4, 5, 6, 7 mt
- Propeller equipped with 5 blades (4.38m: with 8 blades)
- Variable speed control by VFD and EC (permanent magnet) motor
- Strong aluminum airfoil shaped blades
- Extremely high energy efficiency
- Very high m3/h /W (high cfm per watt)
- Very low noise level
- Reduces heat stress and improves comfort
- Easy to install, in new or existing structures

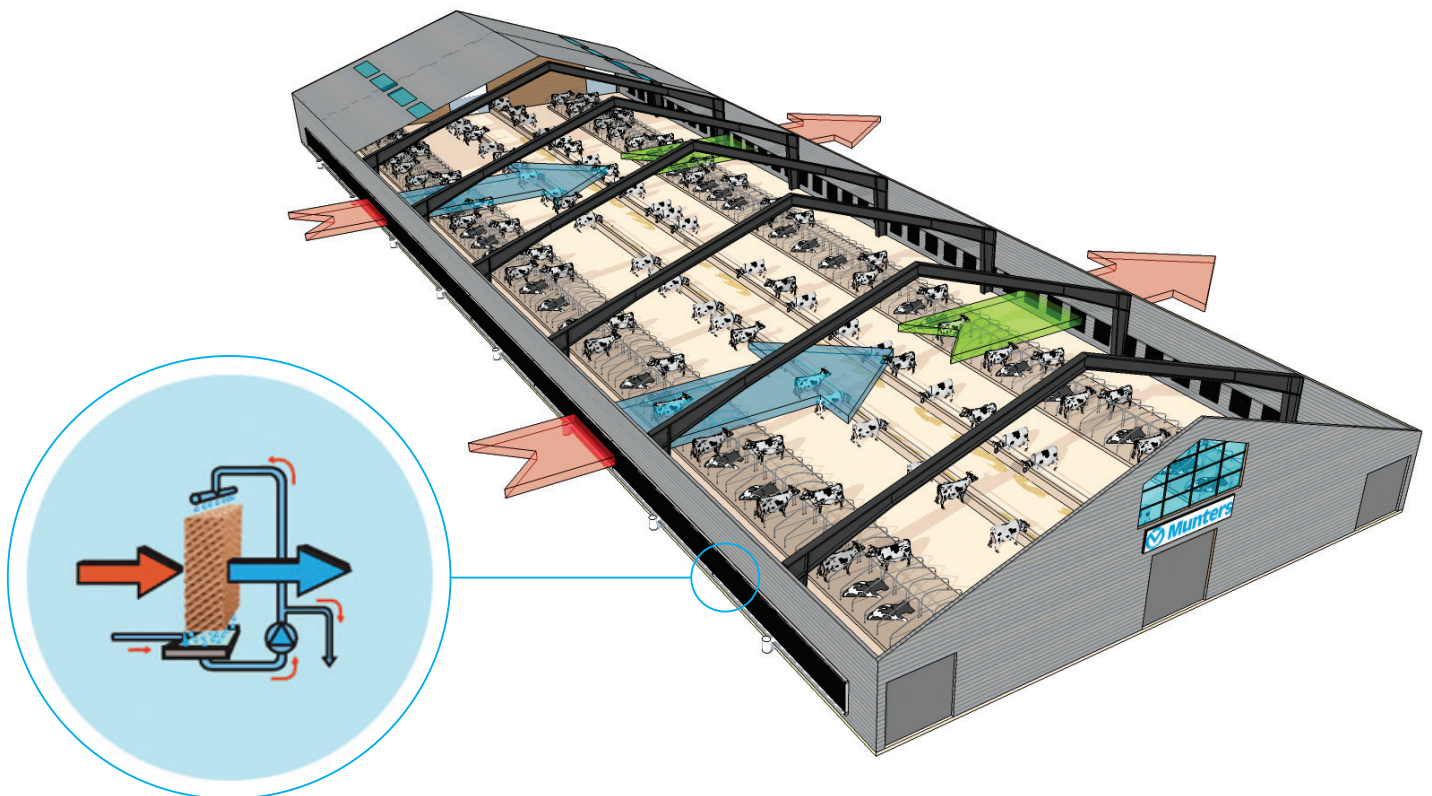
COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:			
Denmark	Unit	High Volume Low Speed fan,	EMEA, Asia			
PERFORMANCES						
Model		3m	4m	5m	6m	7m
Number of blades		5	5	5	5	5
Blade length	cm	130	180	230	280	330
Rotation Speed (min/max)	rpm	100/140	60/100	40/80	40/75	32/55
Noise level at 3 mt	dBm	55	53	51	50	48
Motor output power	kW	1.1	1.1	1.1	1.5	1.5
Total weight	kg	95	101	108	115	122
IEC protectice class of electric motor		IP55	IP55	IP55	IP55	IP55

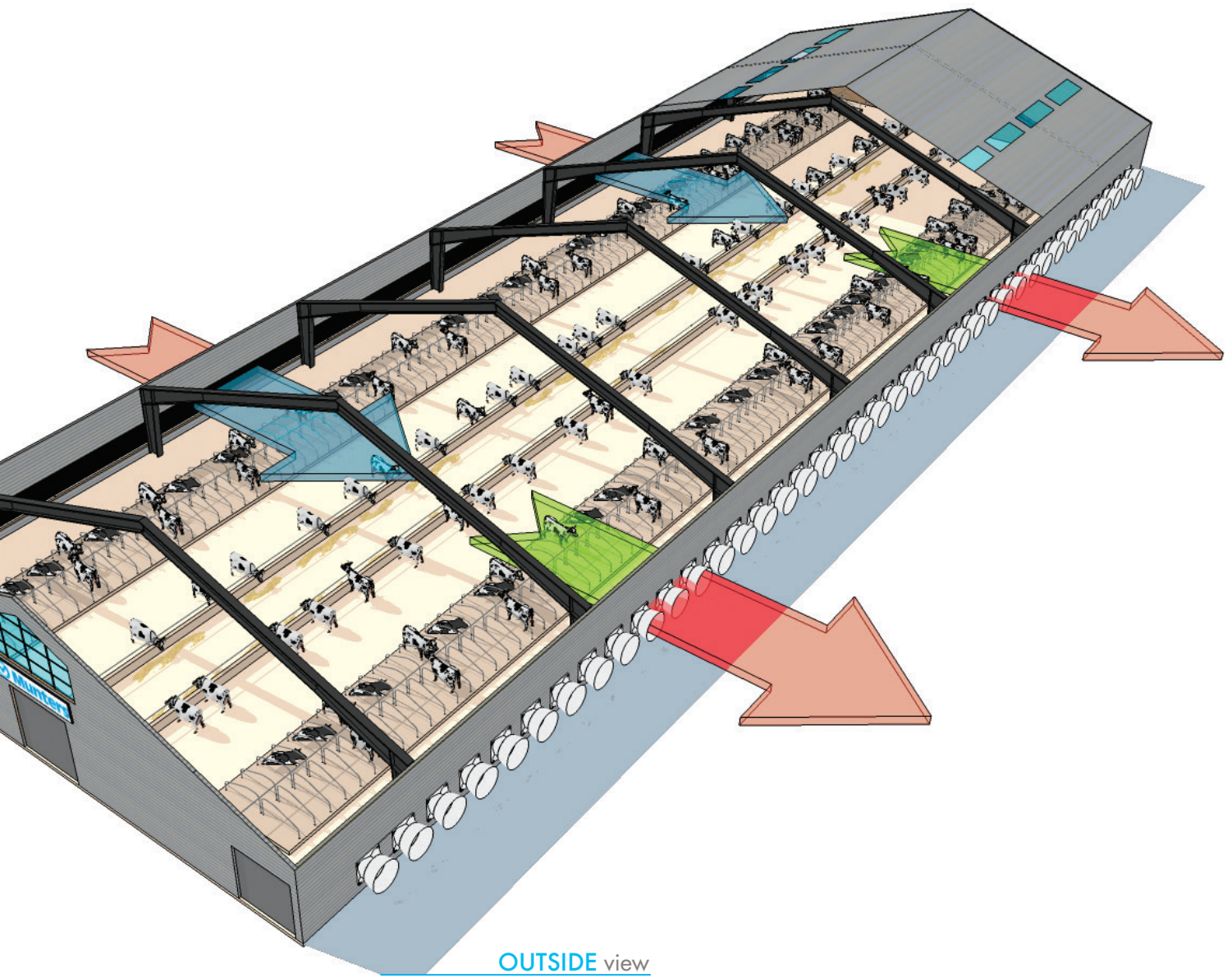


INTRODUCTION

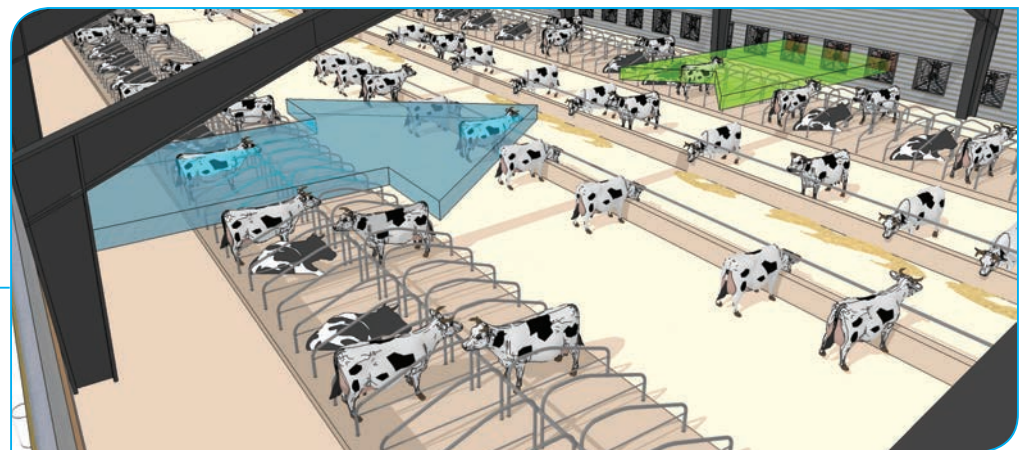
Tunnel and cross ventilation is a new technology for providing full climate control solution for dairy farming.

The system works on the concept of cooling the environment and eliminating heat stress before it occurs. Air and humidity are injected into the closed barn and providing a continuously cool environment for the cows 24/7. Munters are pioneers in implementing this technology in the dairy segment with many success cases mainly in USA. The cross/tunnel ventilation is very attractive in continental climates with cold winter and high temperatures during summer time. Munters has the full range of products for this application: exhaust fans, evaporation panel, water system, controllers, ...



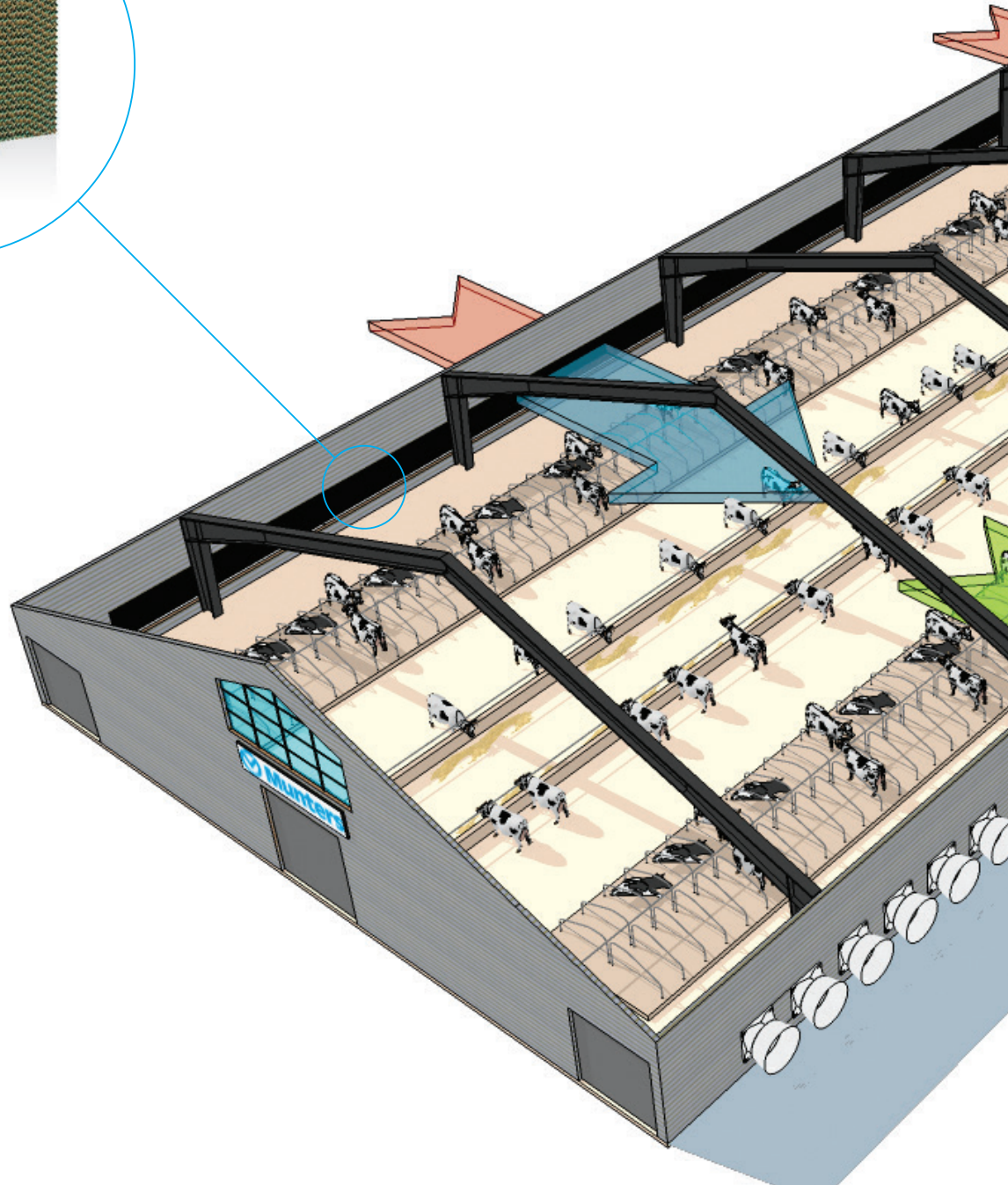
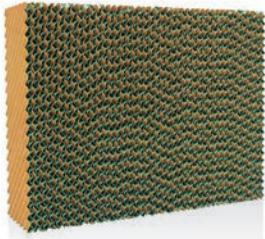


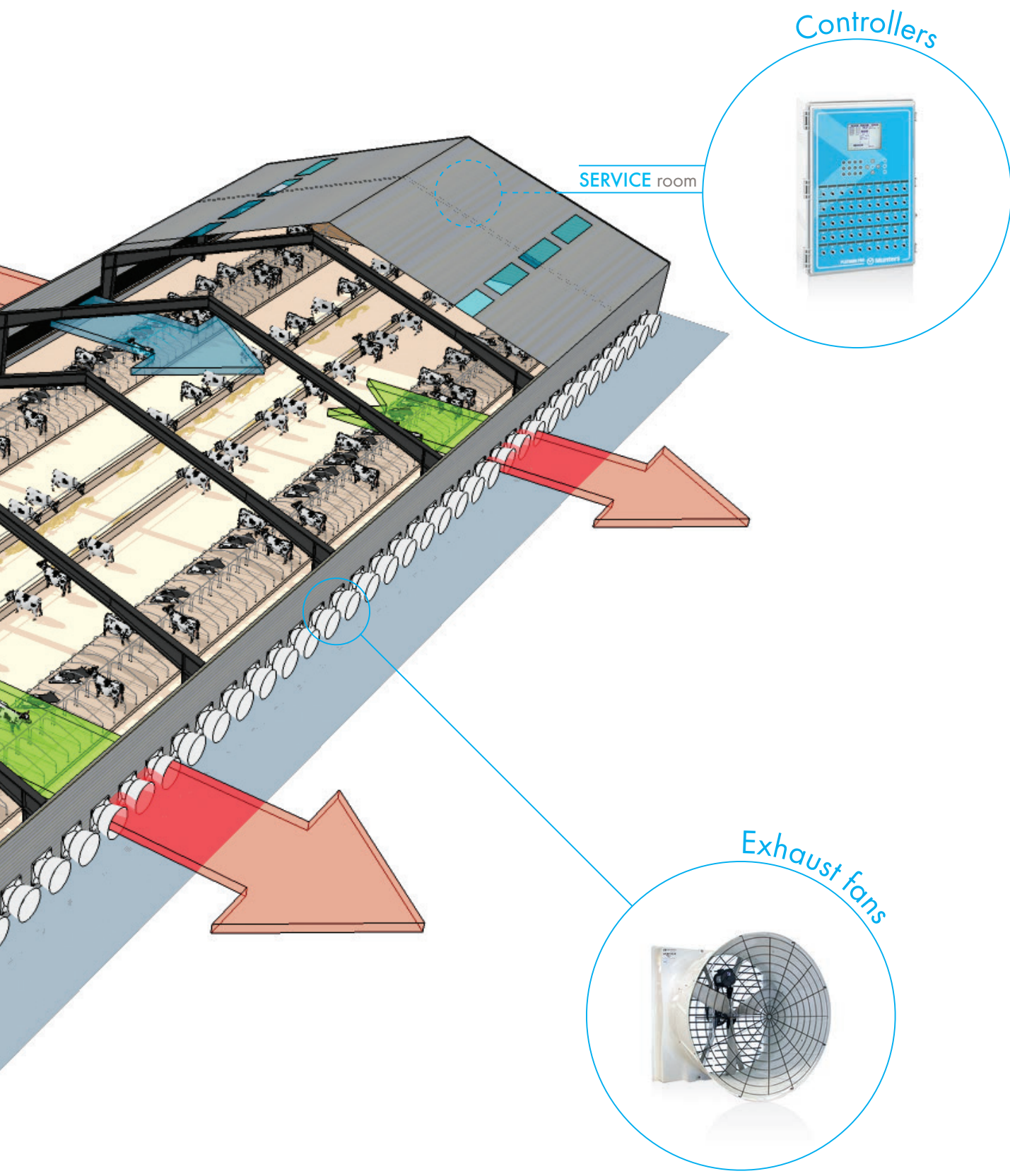
OUTSIDE view



INSIDE view

CELdek® Cooling Pads



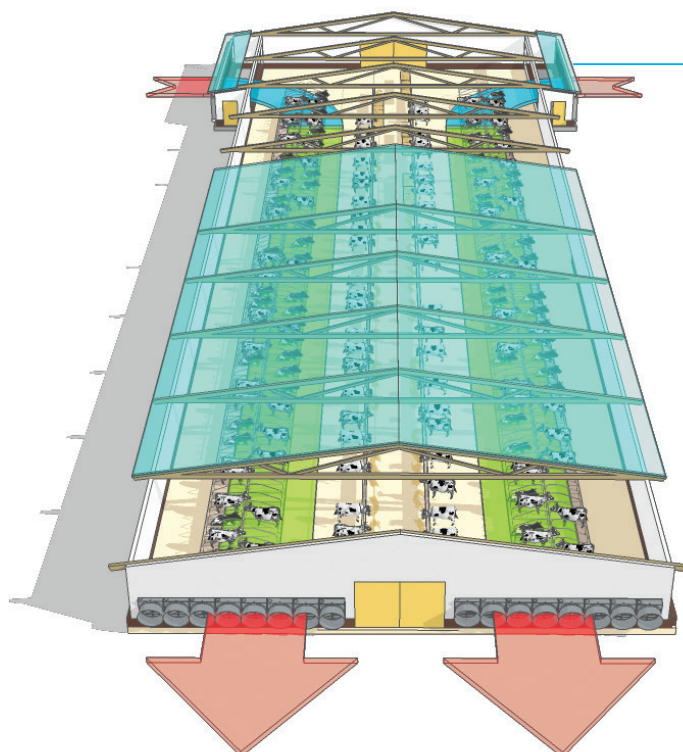




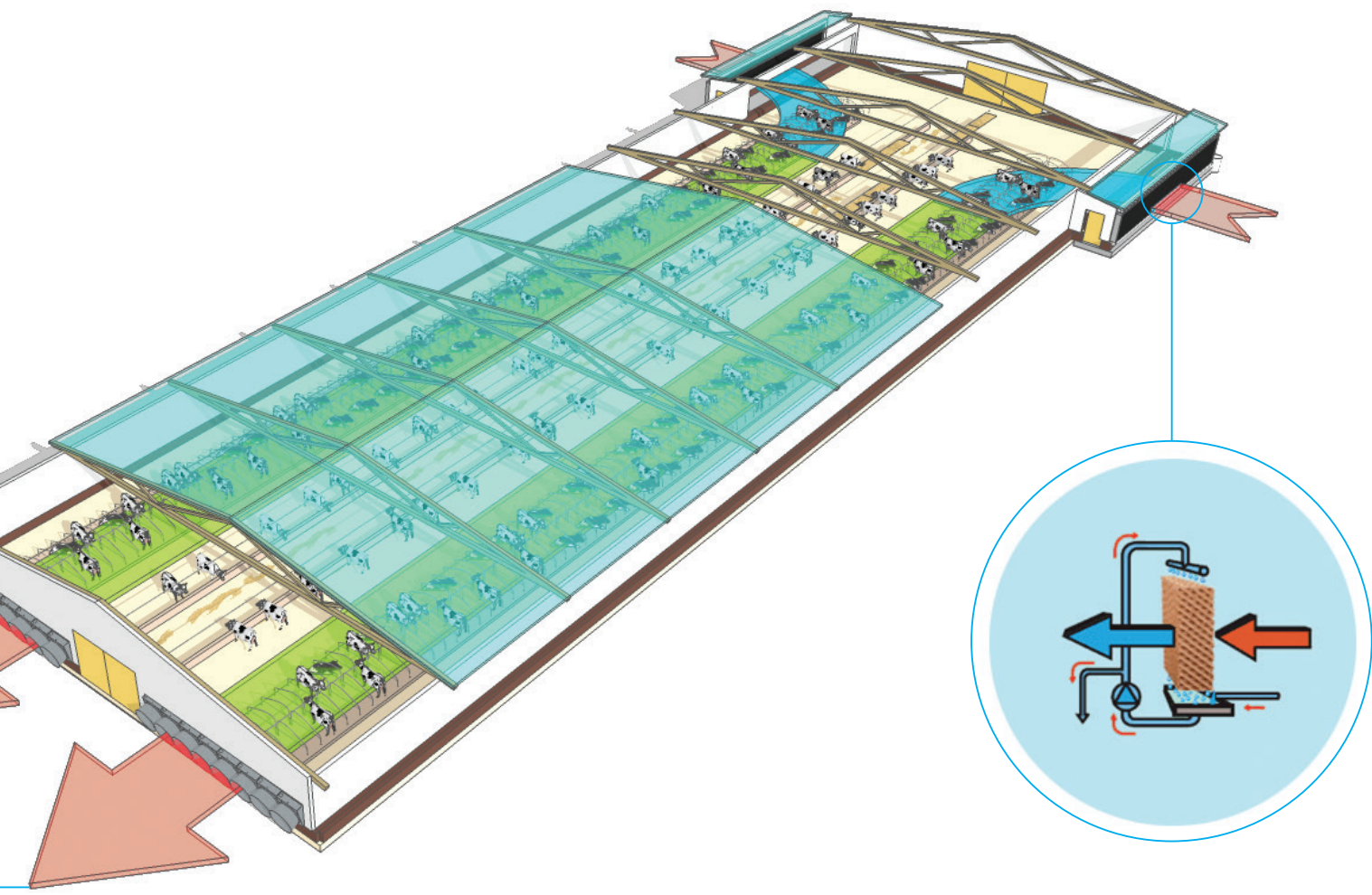
INTRODUCTION

Tunnel and cross ventilation is a new technology for providing full climate control solution for dairy farming.

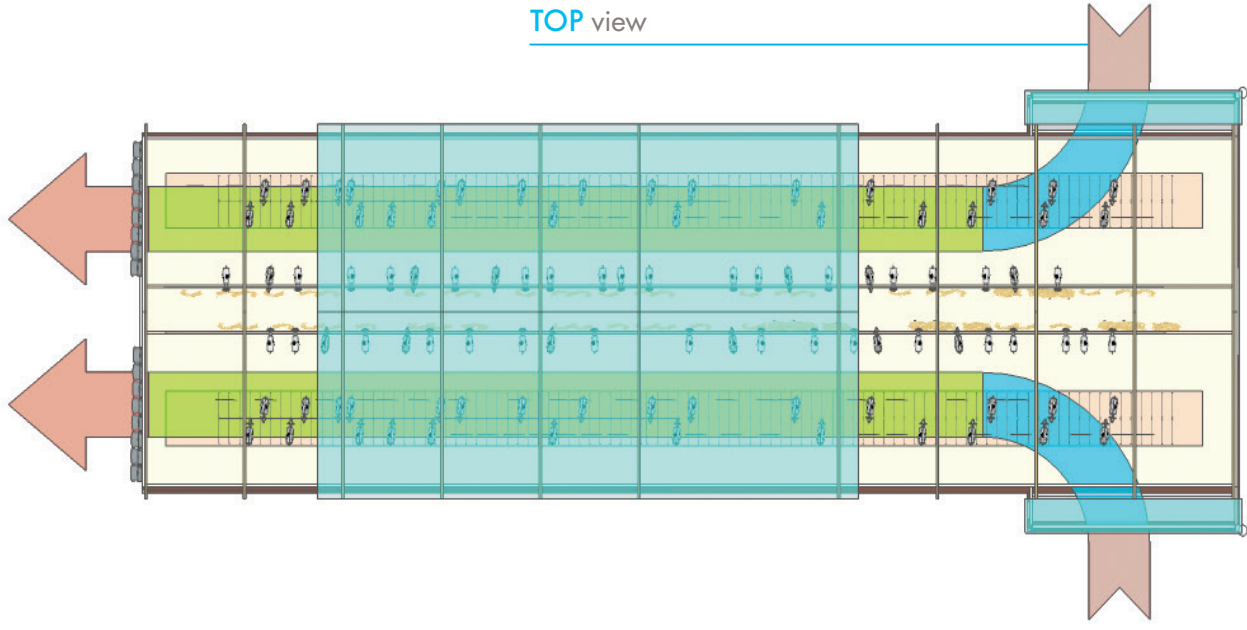
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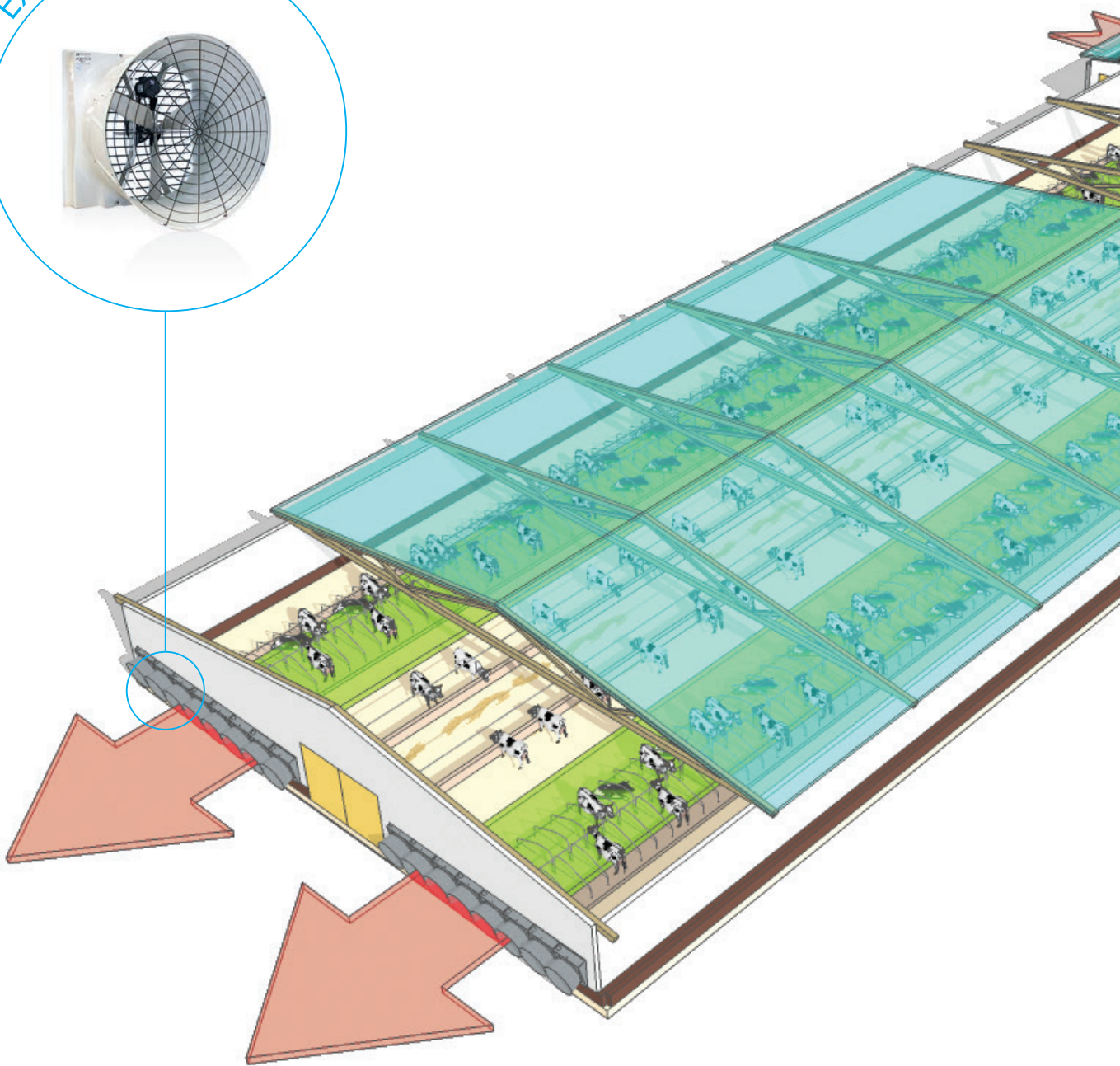
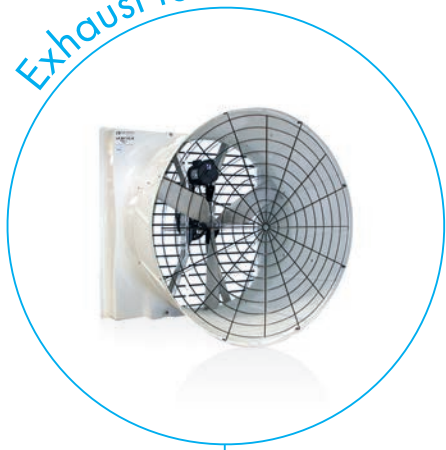
INSIDE views



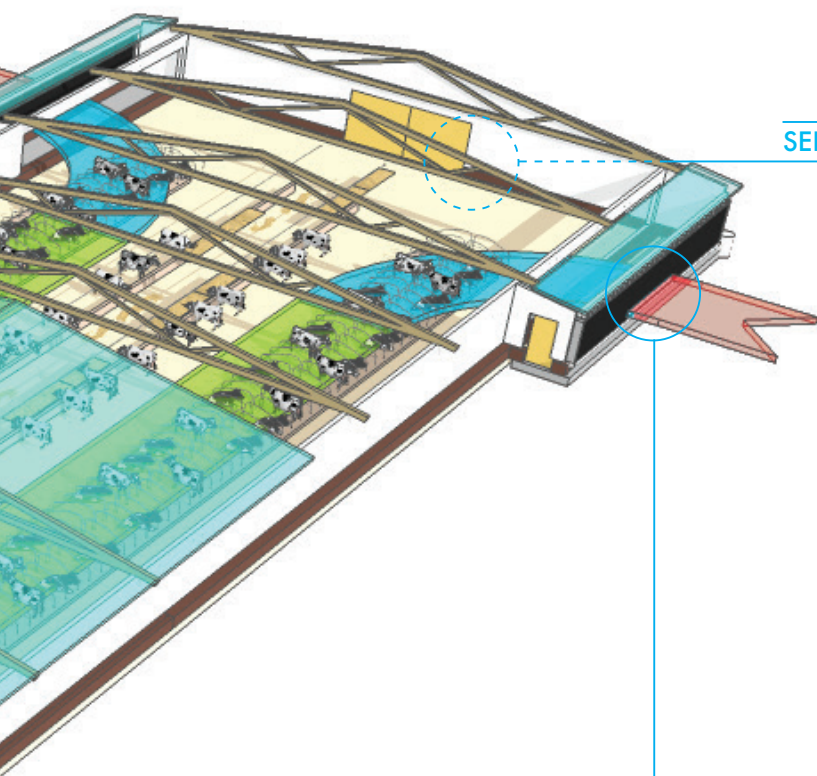
TOP view



Exhaust fans



RANGE OF PRODUCTS

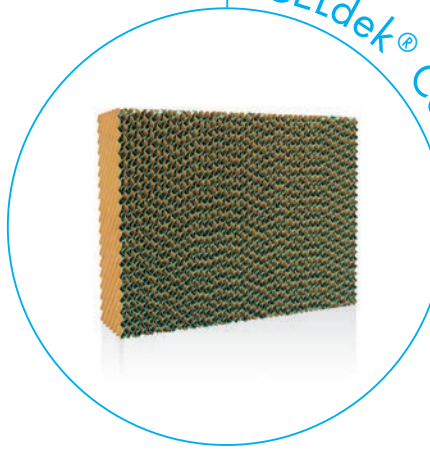


Controllers

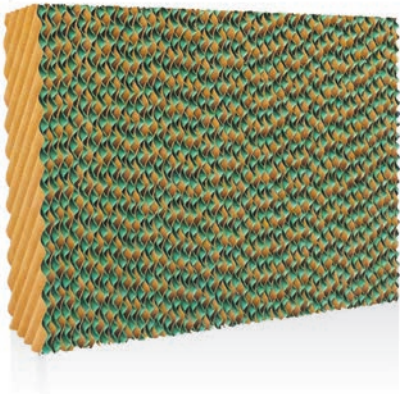


SERVICE room

CELdek® Cooling pads



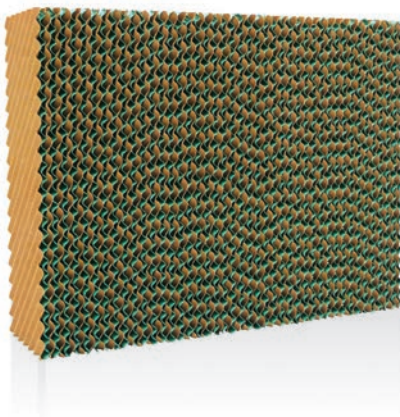
CELdek® 7090-15



- High evaporation efficiency and superb wetting properties
- Low pressure drop when wet, leading to lower operating costs
- No water carry-over
- Low scaling and self cleaning
- Strong and self supporting
- Long life time and low running costs
- Quick and easy to install
- Environmentally friendly
- Consistent high quality

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
China, Italy, USA, Mexico, Brazil	m ²	Cooling pad	Globally
STANDARD DIMENSIONS			
Height (max.)	m	2	
Width	m	0.6	
Depth	m	0.10	

CELdek® 7060-15



- High evaporation efficiency and superb wetting properties
- Low pressure drop when wet, leading to lower operating costs
- No water carry-over
- Low scaling and self cleaning
- Strong and self supporting
- Long life time and low running costs
- Quick and easy to install
- Environmentally friendly
- Consistent high quality

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
China, Italy, USA, Mexico, Brazil	m ²	Cooling pad	Globally
STANDARD DIMENSIONS			
Height (max.)	m	2	
Width	m	0.6	
Depth	m	0.15	

WDP



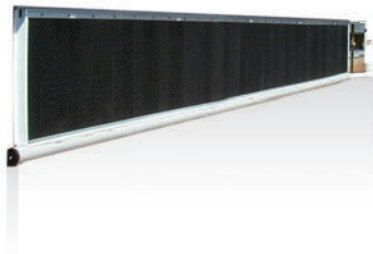
- Effective gutter system / draining system
- Quick and easy installation
- Easy maintenance and cleaning
- Flexible positioning of the water supply and discharge
- Resistant to corrosion (stainless steel 304, epoxy pre-coated galvanised steel)
- Designed to ensure an even wetting of the entire pad wall
- Stabilisation of the pad wall
- Fits any size of pad in height and width
- Available as complete system with all fitting parts
- Water filtration available upon request

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Italy	m	CELdek® support system	EMEA
STANDARD DIMENSIONS			
Length	mm	multiple of 600	
Height	mm	1,205	1,705 2,005 2,205
Width	mm	100/150	

CT (ALUMINUM) & CN (PVC) SYSTEMS

CT/CN header

- Corrosion resistant extruded aluminum header
- Spray deflector ensures uniform pad wetting
- Removable pad retainer for easy cleaning, open view header option available
- Cooling pads can be easily taken out

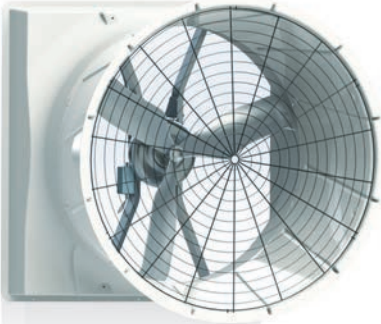


CT/CN footer

- Custom designed drip collectors for maximum water capacity & easy installation
- Simple to install drain fittings
- UV resistant PVC reservoir
- Heavy duty extruded aluminum wall mounting brackets
- Stacked pad system
- If your application requires a height over 72", Munters offers the stacked pad system which allows you to increase the system height to a maximum of 12 ft

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
USA	m	CELdek® support system	USA

VX51 - VX55 WITH MUNTERS DRIVE



- Cast aluminum propeller, with airfoil design
- Fully corrosion resistant
- Poly cones for added durability
- PVC shutters with efficiency boost bell mouth frame

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
USA	Unit	Exhaust fan fiberglass with Munters Drive	USA

PERFORMANCES

VX51 - Three Phase - 460 Volt Motor and Drive

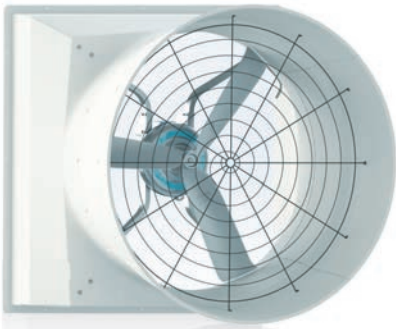
		0.00" SP		0.05" SP		0.10" SP		0.15" SP		0.20" SP		
	RPM	CFM	CFM Watt	CFM	CFM Watt	CFM	CFM Watt	CFM	CFM Watt	CFM	CFM Watt	BESS Lab Test
High efficiency-HE	540	28,300	30.4	26,700	27.1	24,700	23.9	22,500	20.9	19,900	18.0	12679
High rebate-HR	593	31,200	25.8	29,900	23.3	28,200	21.1	26,300	18.9	24,100	16.7	12680
High output-HO	655	34,800	21.2	33,300	19.4	31,900	17.7	30,400	16.2	28,700	14.8	12681

VX55 - Three Phase - 460 Volt Motor and Drive

		0.00" SP		0.05" SP		0.10" SP		0.15" SP		0.20" SP		
	RPM	CFM	CFM Watt	CFM	CFM Watt	CFM	CFM Watt	CFM	CFM Watt	CFM	CFM Watt	BESS Lab Test
High efficiency-HE	490	33,000	27.2	31,300	24.1	28,900	21.4	26,600	18.9	23,000	16.1	12797
High rebate-HR	496	33,500	26.5	31,600	23.7	29,500	21.1	27,200	18.8	23,900	16.1	12798
High output-HO	556	37,900	21.5	36,100	19.4	34,400	17.7	32,600	16.2	30,300	14.5	12799



VX48 WITH MUNTERS DRIVE



- Proven reliability
- Fully corrosion resistant
- Cast aluminum propeller
- Direct Drive requiring minimal maintenance

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
USA	Unit	Exhaust fan fiberglass with Munters Drive	USA

PERFORMANCES

VX48 - Three Phase - 460 Volt Motor and Drive

		0.00" SP		0.05" SP		0.10" SP		0.15" SP		0.20" SP		
	RPM	CFM	CFM WATT	CFM	CFM WATT	CFM	CFM WATT	CFM	CFM WATT	CFM	CFM WATT	BESS Lab Test
High efficiency-HE	594	25,000	25.4	23,500	22.7	21,900	20.5	20,100	18.2	18,000	15.9	13412
High rebate-HR	649	27,500	21.6	26,300	19.8	24,800	18.0	23,300	16.4	21,400	14.7	13413
High output-HO	688	29,300	19.4	27,900	17.7	26,600	16.4	25,200	15.0	23,700	13.7	13414



VX51



- Cast aluminium airfoil propeller and UV resistant fiberglass housing
- Stainless steel hardware and fasteners
- High strength, extruded aluminium struts
- High quality, pillow block greasable bearings made in the USA
- 51" standard fan with poly discharge cone
- Greasable automotive-style belt tensioner
- Three phase models compatible with variable frequency drives
- Optional premium efficiency motor
- Optional inlet shutter with bell mouth frame for increased airflow

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
China	Unit	Exhaust Fan	Asia
PERFORMANCES			
Motor			1.5Hp
Airflow at 0 Pa	m ³ /h [cfm]		46,800 [27,600]
Airflow at 25 Pa	m ³ /h [cfm]		41,000 [24,100]
Airflow at 50 Pa	m ³ /h [cfm]		32,500 [19,100]
Specific performance at 0 Pa	m ³ /h/W [cfm/W]		34.1 [20.1]

* All values refer to 3 phases 50Hz single speed motors.
 Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

WF50



- Cast aluminum
- Automotive style belt tensioner
- Heavy duty galvanized steel propeller
- Galvanized steel fan housing
- Single or 3 phase high efficiency motor
- Option of plastic or aluminum shutter
- MONO-STRUT for strength and durability

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
China	Unit	Exhaust Fan	North and South America

PERFORMANCES

Fan complete with round discharge cone, guard and inlet shutter.

Catalog No.	Shutter Material	Motor HP	Prop RPM	Max BHP	0.0" SP		0.05" SP		0.10" SP		0.15" SP		BESS Lab Test No.
					CFM	CFM/Watt	CFM	CFM/Watt	CFM	CFM/Watt	CFM	CFM/Watt	
WF501TCP	Plastic	1	460	1.27	25,400	25.1	23,900	22.5	22,400	20.1	20,400	17.5	03148
WF501TCJ	Aluminum	1	460	1.28	26,000	23.5	24,200	21.2	22,200	19.0	20,200	16.9	05159
WF501TCY	Aluminum	1	460	1.27	25,300	24.5	23,900	22.1	22,400	19.8	20,700	17.7	03149
WF5015TCP	Plastic	1.5	515	1.74	28,000	19.6	27,000	18.0	25,800	16.4	24,400	14.9	03151
WF5015TCJ	Aluminum	1.5	515	1.72	28,500	19.0	27,100	17.5	25,100	15.9	23,600	14.6	05160
WF5015TCY	Aluminum	1.5	515	1.80	28,100	18.6	27,100	17.1	25,800	15.6	24,500	14.3	03150



WF54 WITH MUNTERS DRIVE



- Option of Unique 4-Door damper design for maximum performance
- Option of durable PVC shutter blades
- Mono-strut for strength and durability

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
USA - Italy	Unit	Exhaust fan with Munters Drive	Globally

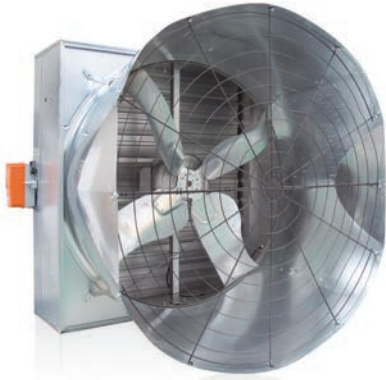
PERFORMANCES

54" WF, Three Phase - 460 Volt Motor and Drive

		0.00" SP		0.05" SP		0.10" SP		0.15" SP		0.20" SP		
	RPM	CFM	CFM WATT	CFM	CFM WATT	CFM	CFM WATT	CFM	CFM WATT	CFM	CFM WATT	Bess Lab Test
High efficiency-HE	522	29,200	30.0	27,600	26.3	25,900	23.5	23,800	20.9	21,400	18	13184 #2
High rebate-HR	563	31,400	25.9	30,100	23.3	28,500	21.1	26,700	18.9	24,500	16.8	13185 #1
High output-HO	590	32,600	23.0	31,300	21.0	29,900	19.2	28,400	17.5	26,500	15.8	13186 #1



EUROEMME® EC52 WITH MUNTERS DRIVE



- Patented EC motor for excellent energy reduction over standard AC motors
- Maintenance free: no belts to tension or replace
- Soft start for eliminating energy spikes
- Variable speed for providing a wide range of air flow with excellent efficiency values
- Strong and efficient steel propeller, discharge cone for best achievements in performances and strength
- Shutter operated by gear motor: opening not linked to air flow or propeller spin
- Ideal fan for minimum ventilation applications

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Italy	Unit	Exhaust fan with Munters Drive & Munters Protect	EMEA, Asia, Central and South America

PERFORMANCES

Motor		260 rpm	370 rpm	495 rpm
Airflow at 0 Pa	m ³ /h [cfm]	28,500 [16,800]	40,700 [24,000]	53,200 [31,300]
Airflow at 12 Pa	m ³ /h [cfm]	24,300 [14,300]	37,700 [22,200]	51,400 [30,200]
Airflow at 25 Pa	m ³ /h [cfm]	15,200 [8,900]	34,600 [20,400]	49,400 [29,100]
Specific performance at 12 Pa	m ³ /h/W [cfm/W]	81.2 [47.8]	49.9 [29.4]	30.6 [18.0]
Specific performance at 25 Pa	m ³ /h/W [cfm/W]	48.0 [28.3]	43.8 [25.8]	28.4 [16.7]

* All values refer to 3 phases 50Hz single speed motors.

Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

EUROEMME® EC52



- Family member of the time proven Euroemme® fan range
- High airflow and high efficiency
- Compact transportation (discharge cone made of 4 cone sectors)
- Special cone design for optimal use of installation space
- Patent pending shutter opening device
- Four blade propeller for reduced vibrations
- Optional belt tensioner
- Optional 4 shaped cone sectors

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Italy	Unit	Exhaust fan with Munters Protect	EMEA, Asia, Central and South America

PERFORMANCES

Motor		1.0Hp	2.0Hp
Airflow at 0 Pa	m ³ /h [cfm]	42,200 [24,900]	49,500 [29,100]
Airflow at 25 Pa	m ³ /h [cfm]	35,100 [20,700]	44,700 [26,300]
Airflow at 50 Pa	m ³ /h [cfm]	26,200 [15,400]	36,400 [21,400]
Specific performance at 0 Pa	m ³ /h/W [cfm/W]	43.7 [25.7]	32.7 [19.2]

* All values refer to 3 phases 50Hz single speed motors.

Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

EUROEMME® EM52



- Family member of the time proven Euroemme® fan range
- Fan built with outstanding strength for assuring high airflow at static pressure of up to 100 Pa.
- Fan housing and Venturi made of strong Munters Protect coated sheet-steel
- Redesigned 52" propeller suited for high static pressure environments
- Shutters are made of pressed Munters Protect coated steel in order to ensure highest strength
- Patented centrifugal system permits an energy efficient solution

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Italy	Unit	Exhaust fan with Munters Protect	EMEA, Asia, Central and South America
PERFORMANCES			
Motor			2Hp
Airflow at 0 Pa	m ³ /h [cfm]		43,000 [25,300]
Airflow at 50 Pa	m ³ /h [cfm]		33,900 [19,900]
Airflow at 75 Pa	m ³ /h [cfm]		27,600 [16,200]
Airflow at 100 Pa	m ³ /h [cfm]		19,200 [11,300]
Specific performance at 0 Pa	m ³ /h/W [cfm/W]		26.4 [15.5]

* All values refer to 3 phases 50Hz single speed motors.
Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

EUROEMME® EM50



- Family member of the time proven Euroemme® fan range
- Propeller is statically and dynamically balanced
- Patented centrifugal system permits an energy efficient solution
- Powerful springs keep shutters firmly closed when fan is not operating
- Every fan is individually checked for quality
- Fan housing and Venturi made of strong Munters Protect coated sheet-steel
- Shutters are made of pressed Munters Protect coated steel in order to ensure highest strength
- Central hub and v-belt pulley are made from die-cast aluminium, with reinforced ribs for prolonged lifetime

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Italy	Unit	Exhaust fan with Munters Protect	EMEA, Asia, Central and South America
PERFORMANCES			
Motor			1.0/1.2Hp
Airflow at 0 Pa	m ³ /h [cfm]		37,000 [21,800]
Airflow at 25 Pa	m ³ /h [cfm]		32,500 [19,200]
Airflow at 50 Pa	m ³ /h [cfm]		26,200 [15,400]
Specific performance at 0 Pa	m ³ /h/W [cfm/W]		33.9 [20.0]

* All values refer to 3 phases 50Hz single speed motors.
Note: airflow data are measured at standard conditions (20°C, 1,013hPa)

PLATINUM PRO



- Munters Drive ready
- Access via the Web or Cloud
- Business Intelligence provides data analysis 24/7 and real time alarms via smartphone or web
- Supports a large number of input/outputs, both analog and digital and up to 200 heavy duty relays (2 HP)
- Smart On/Off/Auto override switches and battery backup option
- 16 independent heat zones
- Precision fogger and evaporative cooling system
- Failsafe emergency relay
- SD card and ARM CPU and multilanguage support

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Israel	Unit	Climate controller	Globally

FARM HAND DAIRY



- Designed for open dairy barns with forced ventilation
- 3 temperature zones
- Ventilation control through THI index values or Temperature.
- Variable speed control of Munters Drive motors
- Soaking and Fogging cycles control
- Curtain control according to set temperature
- User friendly interface
- Supported by Munters PC communication software

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Israel	Unit	Climate controller	Globally

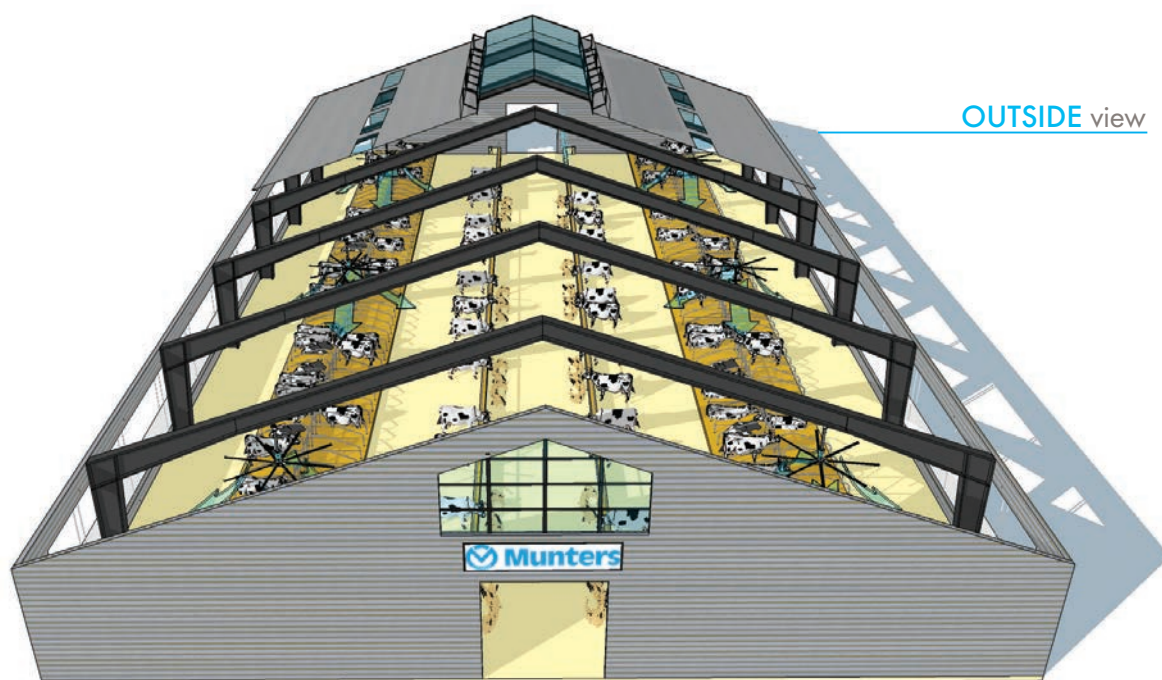


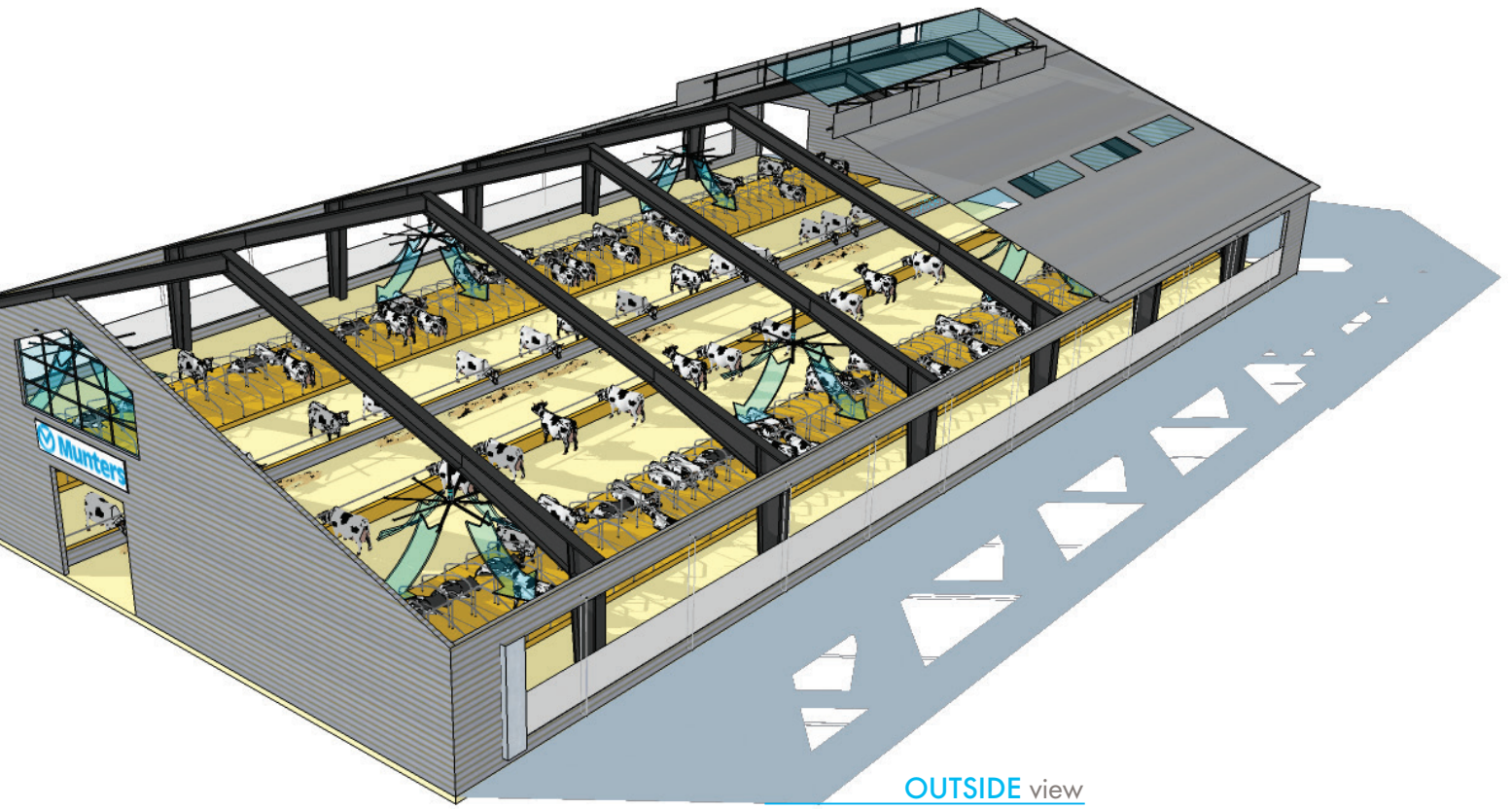
INTRODUCTION

Natural ventilation is used as a stand alone application in cold countries where summer temperatures range between 20-25°C. However, a combination with direct cooling system is always an advantage in any climate and temperature.

Natural ventilation applications use the natural wind and temperature differences out and inside and is controlled for the cow's need, keeping the building closed during cold winter and allowing wind and fresh air to come in during summer.

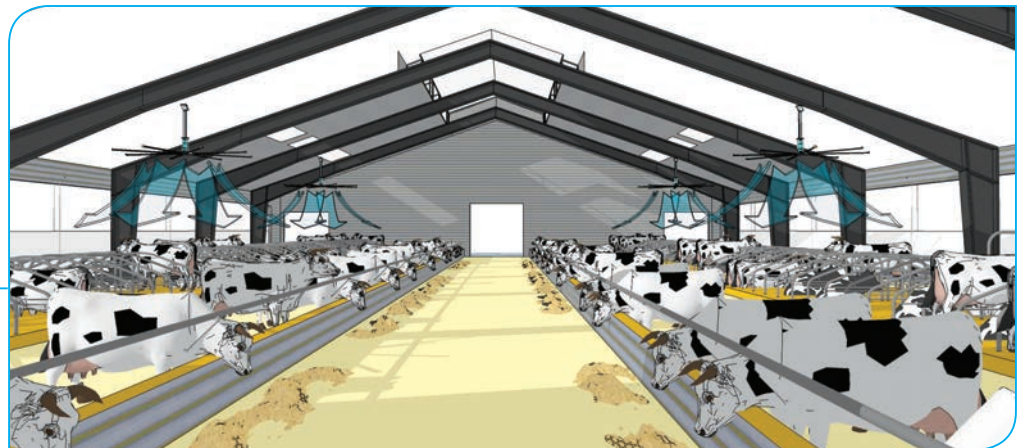
Munters has a full range of equipment and all professional and technical knowledge for applying this solution. Customers can see systems operating mainly in Europe.



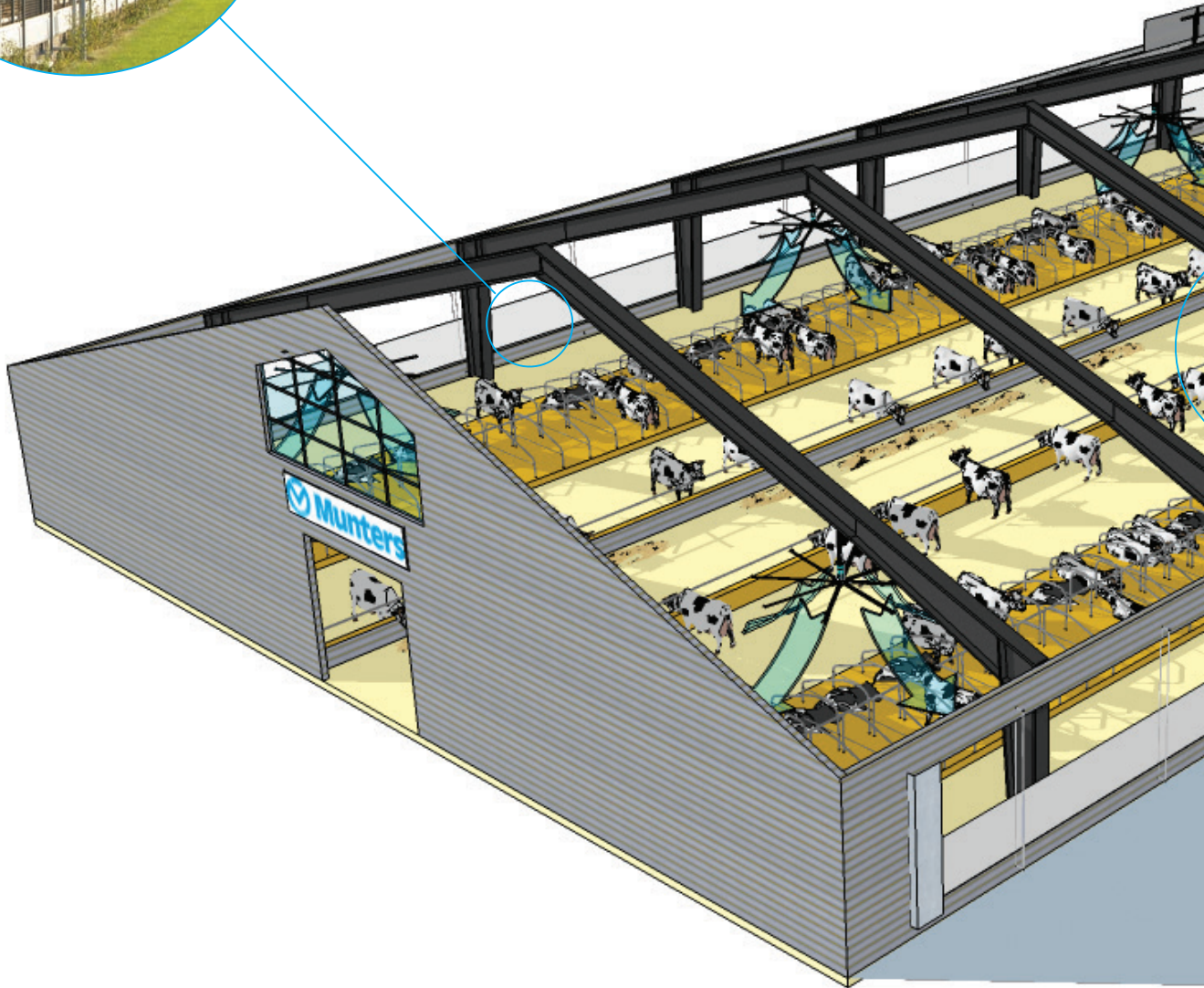


OUTSIDE view

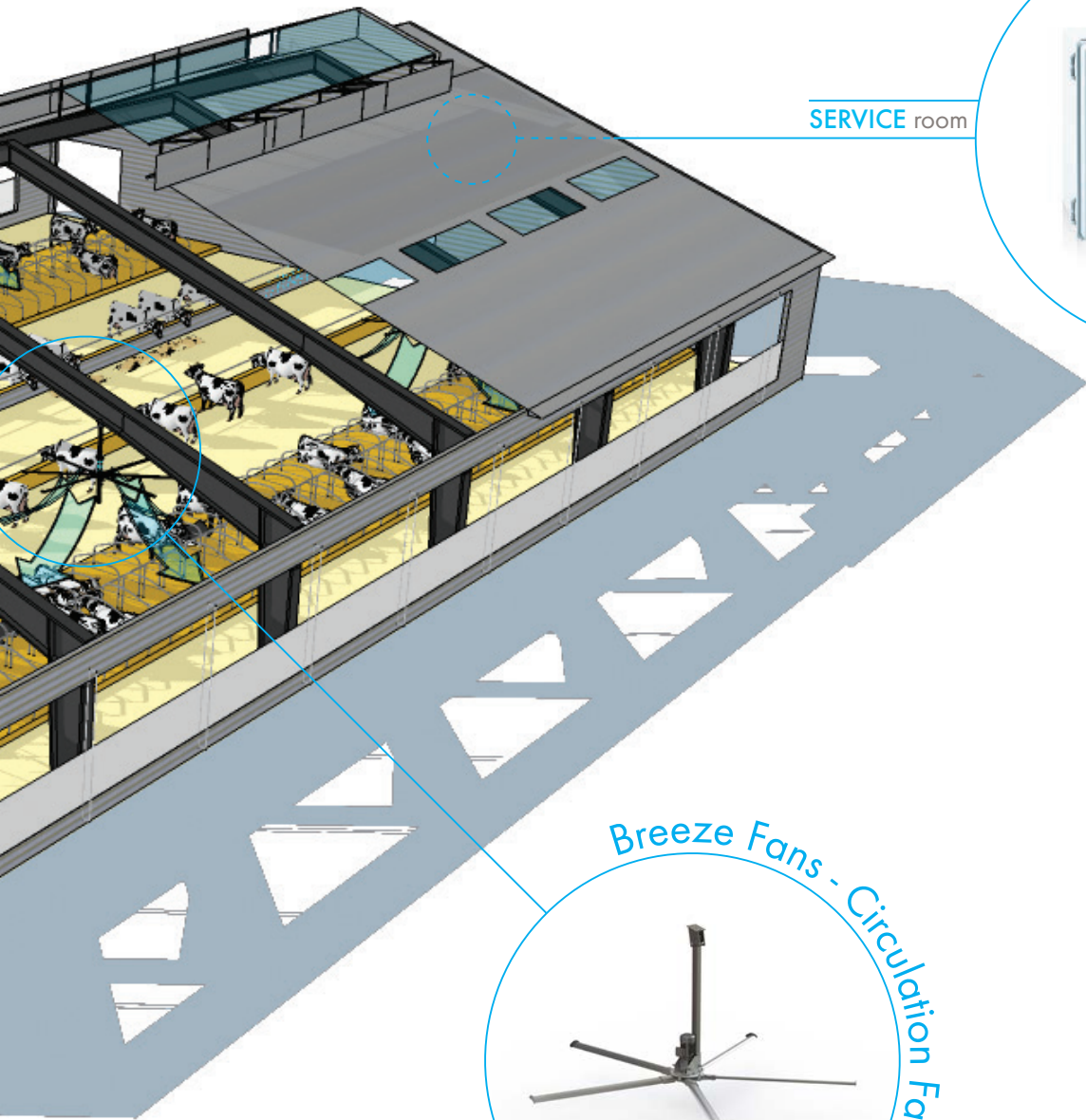
INSIDE view



Munters Curtains



- RANGE OF PRODUCTS



SERVICE room



LIGHT RIDGE VENT

ALUMINUM



GALVANIZED



COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Denmark	section (210cm)	Air-outlet bright & insulated fixed /adjustable up to 4,00 m width	EMEA and Asia

- Ideal combination of natural ventilation and optimum light dispersion in any form of barn/stable
- Rigid, weather proof construction, designed to withstand the climate conditions in northern Europe
- Double walled, 10 mm, UV resistant Lexan PC (PolyCarbonate) sheet material
- Optimal transparency
- Wind deflectors made from corrugated metal sheets prevent rain, snow, hail and dirt from entering the barn/stable
- Wind deflectors can be equipped with a manual or automatic closing system to seal off the barn/stable during extreme weather conditions
- Varying height and width to accommodate individual requirements for air capacity and light dispersion
- The ridge vent is part of the emergency ventilation in case of fire

BREEZE FAN



- Available in 5 different diameters : 3,4, 5, 6, 7 mt
- Propeller equipped with 5 blades (4.38m: with 8 blades)
- Variable speed control by VFD and EC (permanent magnet) motor
- Strong aluminum airfoil shaped blades
- Extremely high energy efficiency
- Very high m³/h /W (high cfm per watt)
- Very low noise level
- Reduces heat stress and improves comfort
- Easy to install, in new or existing structures

COUNTRY OF ORIGIN	UNIT	DESCRIPTION					CAN BE USED IN:
Denmark	Unit	High Volume Low Speed fan,					EMEA, Asia
PERFORMANCES							
Model		3m	4m	5m	6m	7m	
Number of blades		5	5	5	5	5	
Blade lenght	cm	130	180	230	280	330	
Rotation Speed (min/max)	rpm	100/140	60/100	40/80	40/75	32/55	
Noise level at 3 mt	dBm	55	53	51	50	48	
Motor output power	kW	1.1	1.1	1.1	1.5	1.5	
Total weight	kg	95	101	108	115	122	
IEC protectice class of electric motor		IP55	IP55	IP55	IP55	IP55	

TEMPMAN



- User-friendly and “simple” controller for Breeze Fan
- Controls the capacity of the Breeze fan according to the temperature in the stable
- Ensures that air circulation is sufficient on warm days, and that the air speed does not cause problems in the stable on cold days
- Up to 8 Breeze fans can be connected to 1 TempMan
- Ensures the welfare of the livestock

COUNTRY OF ORIGIN	UNIT	DESCRIPTION		CAN BE USED IN:
Denmark	Unit	Automatic temperature control for Breeze Fan		Globally
PERFORMANCES				
Power	V	230		
Temperature sensor	unit	1		
Output	-	2 pcs. 0-10V		
Relay output	pcs.	1		
Max/min output	-	Adjustable		
XP-tape	-	Adjustable		
Adjustable temp. set point	°C	5-45		
Density	-	IP54		

- EMC tested
- CE approved

ROLLER CURTAIN SYSTEMS

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Denmark	m	Different varieties in rolling systems up to 4,00 m height	EMEA and Asia

MRC - Munters Roller Curtain



- Curtain protects against wind and severe weather conditions
- Variable opening
- Manufactured in UV resistant PVC coated high tenacity polyester
- Anti-static treatment repels dirt (straw, sand, dust)
- Optimal light transmission
- Operates either semi-automatic or fully automatic
- Curtain opens from top down
- Optional netting/bird guard available

PERFORMANCES

Max. height	m	4
Max. length	m	100 (max 300 m ² per section)
Power	V	230/400
Function	-	Rolls from top down
Accessories	-	Automatic regulation (Master/Center)

MDC - Munters Duplex Curtain



- Curtain protects against wind and severe weather conditions
- Variable opening
- Curtain opens from top down or from bottom up
- Manufactured in UV resistant PVC coated high tenacity polyester
- Anti-static treatment repels dirt (straw, sand, dust)
- "Click & Go" wind pipes enabling vehicular access directly into shed
- Optimal light transmission
- Operates either semi-automatic or fully automatic

PERFORMANCES

Max. height	m	4
Max. length	m	100 (max 300 m ² per section)
Power	V	230/400
Function	-	Rolls from top/down and bottom/up
Accessories	-	Removable windpipes Automatic regulation (Master/Center)

MSC - Munters Simplex Curtain



- Curtain protects against wind and severe weather conditions
- Variable opening
- Manufactured in UV resistant PVC coated high tenacity polyester
- Anti-static treatment repels dirt (straw, sand, dust)
- Optimal light transmission
- Operates either semi-automatic or fully automatic
- Curtain opens from top down
- Optional netting/bird guard available

PERFORMANCES

Max. height	m	3
Max. length	m	50 (max 150 m ² per section)
Power	V	230/400
Function	-	Rolls from top down
Accessories	-	Automatic regulation (Master/Center)

MTC - Munters Topfixated Curtain



- Curtain protects against wind and severe weather conditions
- Variable opening
- Curtain opens from bottom and up
- Manufactured in UV resistant PVC coated high tenacity polyester
- Anti-static treatment repels dirt (straw, sand, dust)
- "Click & Go" wind pipes enabling vehicular access directly into shed
- Optimal light transmission
- Operates either semi-automatic or fully automatic

PERFORMANCES			
Max. height	m		3.5
Max. length	m		100 (max 300 m ² per section)
Power	V		230/400
Function	-		Rolls from bottom up
Accessories	-		Removable windpipes Automatic regulation (Master/Center)

MMC - Munters Milking parlour Curtain



- Keeps the optimal temperature in the milking parlour
- The curtain is available in multiple sizes
- The curtain material is a highly durable PVC coated high
- Operates either manually or semi-automatic

PERFORMANCES

Max. height	m	3
Max. length	m	18
Power	V	230/400
Function	-	Rolls up from bottom
Accessories	-	-

FOLDING CURTAIN SYSTEMS

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Denmark	m	Different varieties in folding systems up to 4,00 m height	EMEA and Asia

MFP - Munters Folding Curtain with Pipes



- Curtain protects against wind and severe weather conditions
- Variable opening
- Curtain opens from top down
- Operates either manually, semi-automatic or fully automatic
- Manufactured in UV resistant PVC coated high tenacity polyester
- Anti-static treatment repels dirt (straw, sand, dust)
- Optimal light transmission
- Does not require additional safety measures
- Optional netting/bird guard available

PERFORMANCES			
Max. height	m		3
Max. length	m		100 (max 150 m ² per section)
Power	V		230/400
Function	-		Opens from top down
Accessories	-		Automatic regulation (Master/Center)

MFP-S - Munters Folding Curtain with Pipes and Straps



- Curtain protects against wind and severe weather conditions
- Variable opening
- Curtain opens from top down
- Operates either semi-automatic or fully automatic
- Manufactured in UV resistant PVC coated high tenacity polyester
- Anti-static treatment repels dirt (straw, sand, dust)
- Optimal light transmission
- Does not require additional safety measures
- Optional netting/bird guard available

PERFORMANCES

Max. height	m	4
Max. length	m	100 (max 300 m ² per section)
Power	V	230/400
Function	-	Opens from top down
Accessories	-	Automatic regulation (Master/Center)

MFL - Munters Folding Curtains with Lines



- Curtain protects against wind and severe weather conditions
- Variable opening
- Curtain opens from top down
- Operated either manually, semi-automatic or fully automatic
- Manufactured in UV resistant PVC coated high tenacity polyester
- Anti-static treatment repels dirt (straw, sand, dust)
- Optimal light transmission
- Does not require additional safety measures
- Optional netting/bird guard available

PERFORMANCES

Max. height	m	3
Max. length	m	100 (max 150 m ² per section)
Power	V	230/400
Function	-	Opens from top down
Accessories	-	Automatic regulation (Master/Center)

VENTILATION PANELS

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Denmark	m	Insulated, translucent, adjustable wall panels up to 1,70 m height	EMEA and Asia

MVP - Munters Ventilation Panels



- Panel protects insulated buildings against wind and severe weather conditions
- Reduction of temperature loss inside barn/stable during cold winter days
- Double walled, 10 mm, UV resistant Lexan PC sheet material
- Optimal transparency
- Sections of 3m width and varying opening height up to 1.4 m
- Easy installation (lightweight construction, mounted directly on barn/stable walls, few moving parts)
- Operates either manually, semi-automatic or fully automatic
- Optional netting/bird guard available

PERFORMANCES			
Max. height	cm		140
Max. length	m		50
Power	V		230/400
Function	-		Opens from top down
Accessories	-		Automatic Regulation (Master/Center)

MVP-S - Munters Ventilation Panel with Straps



- Optimal airflow for insulated buildings in cold climate
- Avoid draft and protect livestock against wind and weather
- Reduction of temperature loss inside barn/stable during cold winter days
- Double walled, 10 mm, UV resistant Lexan PC sheet material
- Optimal transparency
- Sections of 3m width and varying opening height up to 1,7 m
- Easy installation (lightweight construction, mounted directly on barn/stable walls, few moving parts)
- Operates either semi-automatic or automatic
- Optional netting/bird guard available

PERFORMANCES

Max. height	cm	170
Max. length	m	70
Power	V	230/400
Function	-	Opens from top down
Accessories	-	Automatic regulation (Master/Center)

NATURAL CENTER / NATURAL MASTER



- Maximum and minimum ventilation level according to outside temperature
- Differentiated target temperature settings for day and night time
- Control, Management and History features
- One Natural Center regulates up to 10 Natural Master
- User-friendly programming interface
- Sends alarms alerting you of any problem

COUNTRY OF ORIGIN	UNIT	DESCRIPTION	CAN BE USED IN:
Israel	Unit	Wind, rain, temperature & humidity control for ridge, curtains and panels	EMEA and Asia

MUNTERS PROTECT



Euroemme® EMSO extraction fan in Munters Protect.

THE BARRIER AGAINST CORROSION

- Unique in the market
- Outstanding protection grade
- Developed for aggressive environments
- Suitable for all the applications
- Reduced inventory value
- Article standardization



Read more here:
www.munters.com/MuntersProtect

MUNTERS DRIVE

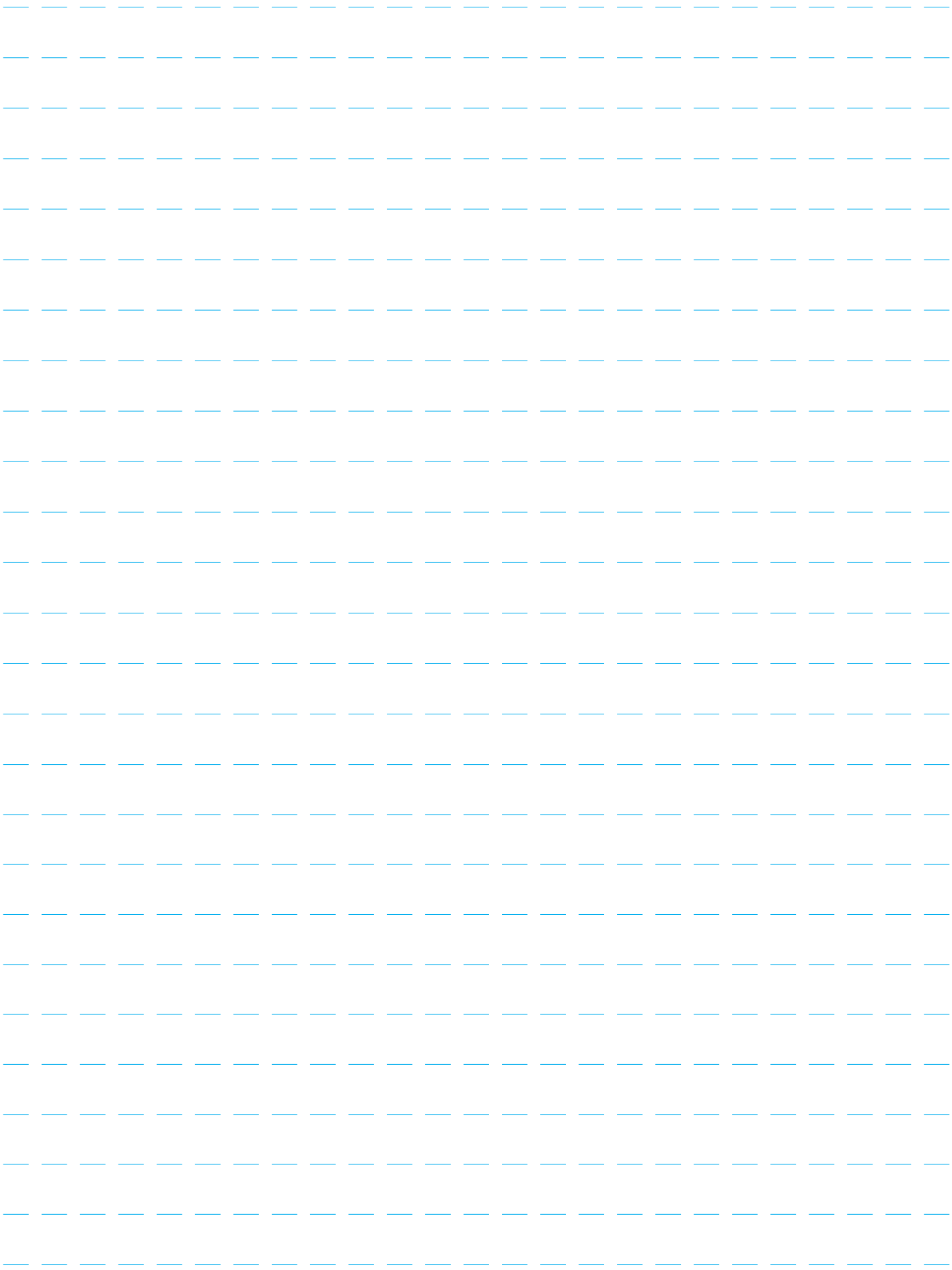


REVOLUTIONIZING AGRICULTURE VENTILATION SYSTEMS

- Reduce energy costs up to 40%
- Regional Energy Rebate
- Nearly Maintenance Free
- No belt, no bearing
- Reduced wiring cost



Find additional information and videos on:
www.muntersdrive.com





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