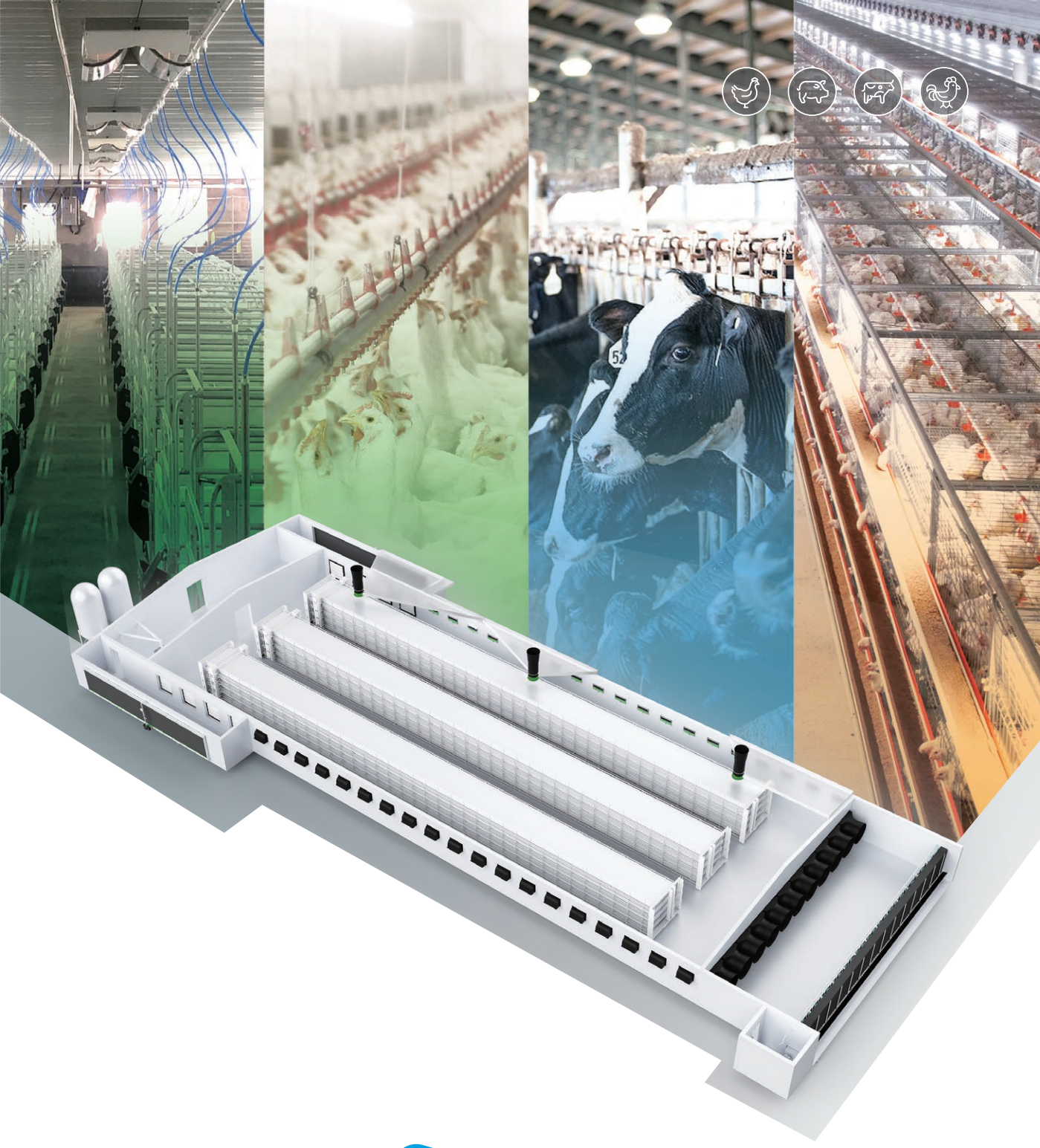


WUSEN

FARM ENVIRONMENTAL CONTROL

EQUIPMENT MANUFACTURER

PERFECT QUALITY WORLD SHARING

Continuously creating value for global users

INVESTMENT
5000万

AREA COVERED
30000㎡

STAFF
100+

ANNUAL CAPACITY
40000套







ABOUT US

TO ALIGN WITH TOP COMPANIES IN THE INDUSTRY,
BE A GLOBAL MANUFACTURER OF HIGH-QUALITY LIVESTOCK EQUIPMENT!

Shandong Wusen Environmental Control Equipment Technology Co., Ltd. is located in the Economic Development Zone of Qingzhou City, Shandong Province, which is a scenic and economically vibrant area. It is a modern technology enterprise specializing in the field of high-end agricultural and animal husbandry environmental control. Integrating R&D, production, sales, installation and service, the company is committed to providing comprehensive and professional overall environmental control solutions for agricultural and animal husbandry customers.

The company covers an area of 30,000 square meters, including 20,000 square meters of modern standard workshops, laying a solid foundation for efficient production and service guarantee. Relying on an advanced production system, the company is equipped with 10 injection molding production lines, 3 extrusion production lines, 2 rotational molding production lines, 2 blister production lines, 5 laser CNC equipment and 6 sets of assembly production lines, ensuring that products are technologically leading, with stable quality, high efficiency and energy saving.

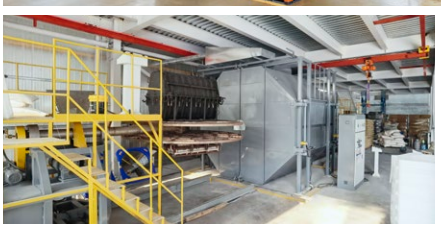
Wusen Environmental Control's core competitiveness stems from its diversified product lines and continuous technological innovation capabilities. Its main products include microbial waste gas purification and deodorization systems, high-efficiency spray deodorization equipment, PVC water collection tank cooling systems, ventilation windows and air inlets, ultra-clean core air filtration systems, negative pressure fans, etc. These products perform excellently in improving the air quality of breeding environments, accurately controlling temperature and humidity, and enhancing breeding efficiency, and can meet the personalized needs of different agricultural and animal husbandry scenarios.

The company has a strong R&D and design team, which closely follows the cutting-edge trends of international environmental protection and agricultural and animal husbandry development, and continuously launches innovative technologies and products that meet the new requirements of the industry, providing strong support for the technological upgrading of the industry.

With high-quality products and services, Wusen Environmental Control has established long-term strategic cooperative relationships with large domestic agricultural and animal husbandry-related enterprises, and has provided stable product supply and professional technical support for many large global EPC companies. It has won wide praise and deep trust from customers at home and abroad, and has become a highly influential benchmark brand in the industry.

Adhering to the corporate mission of "living up to every trust", Wusen Environmental Control actively responds to industry challenges and is determined to become a leader in the global agricultural and animal husbandry environmental control field. Facing the trend of large-scale and modern transformation of the breeding industry, the company promises to continue to increase investment in technological innovation and provide more comprehensive, efficient and environmentally friendly equipment support for global animal husbandry partners. We firmly believe that through the joint efforts of all parties, we will promote the sustainable development of the industry and contribute solid strength to the prosperity and development of agriculture and animal husbandry!




FARM BREEDING ENVIRONMENTAL CONTROL SYSTEM

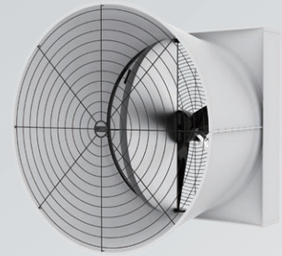
Wusen Environmental Control provides a full range of solutions for the whole farm environmental control system, including the front-end air filtration system, PVC self circulating cooling system, a full range of farm air intakes at the middle end, including side wall air intakes, ceiling air intakes, the whole farm spray disinfection and sterilization system, tail fan and WUSEN 5S air purification and deodorization system.

Wusen Environmental Control supports automated management, real-time monitoring, and adjustment of environmental parameters.

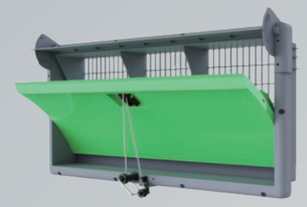
Wusen Environmental Control helps farms improve production efficiency and animal welfare through advanced technology and customized solutions.



Chimney fan
Farm roof ventilation system



Plastic fan
Large air volume,
high efficiency and energy saving



Poultry air inlet
While increasing the ventilation area,
animals will not experience stress caused by cold air.



Tunnel air Inlet
Animals will not suffer cold stress from cold air.



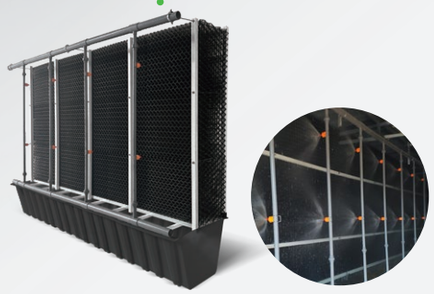
Environment Controller
Intelligent linkage to
improve management efficiency



Plastic Frame Gutter Cooling System
Modular frame system,
easy to assemble and replace cooling pads

Light-shading rain cover
Suitable for light-controlled chicken farms

Air-to-air Heat Exchange System
It maintains a constant indoor air temperature
and enables precise supply air control.



Farm AirClean
Reduce odors in the farm,
remove dust inside the houses,
modular installation for easy construction

PLASTIC FRAME GUTTER COOLING SYSTEM

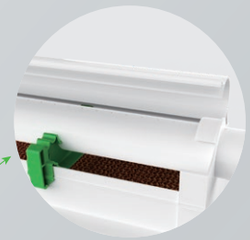
Wusen cooling system is a modular PVC frame system: it is specially designed for the cooling system of farms and greenhouses. This is an innovative fully enclosed water pad frame system, with the lowest installation requirements, simple maintenance, and easy to replace the cooling water pad.

All made of plastic, without rusting metal frames in the external environment. No external water tank is required, and the system can be built and installed according to the project site size, suitable for any length of plastic cooling pads or paper cooling pads.

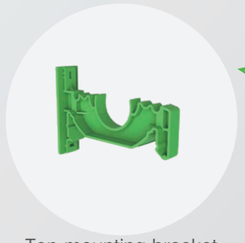


Backwater plate

Backwater plate connector


Can be opened

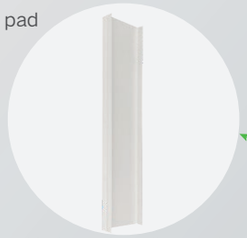

Guide plate end cover

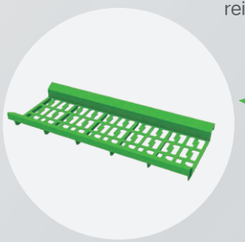

Top mounting bracket


Upper frame M-board

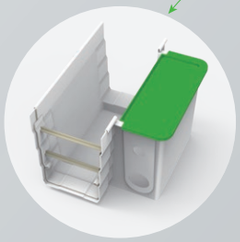

Upper frame M-board connector

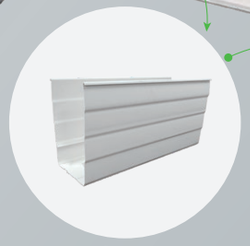

Evaporative cooling pad
side frame


H-shaped cooling pad
reinforcement plate


Cooling pad bracket


Plastic installation
bracket for gutter


Intermediate floating
water tank


Gutter

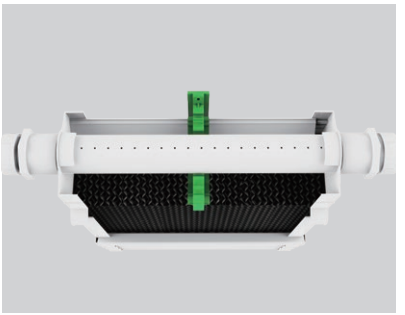

Newly Upgraded Gutter
Double-Layer Hollow Design, Superior Stability


Gutter end
cover/water tank


Gutter connectors

- Easy to install.
- The lower collection gutter is used as a water reservior. There is no need for a groundwater tank.
- When the water level drops, the floating system allows automatic refilling.
- Modular structure, adjustable length and height.
- Due to the use of a special locking system, the water cooling pad can be easily installed and unloaded.
- PVC raw materials have UV resistance.
- More durable than other metal frame cooling systems.
- Complete anti-rust system.

FEATURES OF PVC COOLING CIRCULATION SYSTEM



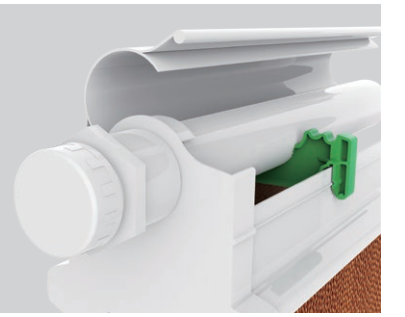
Drip Pipe φ63

·Dedicated drip pipes for paper and plastic cooling pads
·Dripper holes on the pipes are distributed 3 cm apart
·Ensure uniform water distribution along the entire length of the cooling pad



Ball Valve

·A 63 ball valve is installed in the water inlet pipeline to regulate the water flow.
·A 63 (T-type) ball valve is used to regulate the drainage.



Top Anti-Splash Plate

·The newly developed top anti-splash plate is easy to disassemble, allowing for quick inspection and cleaning of the internal pipelines.



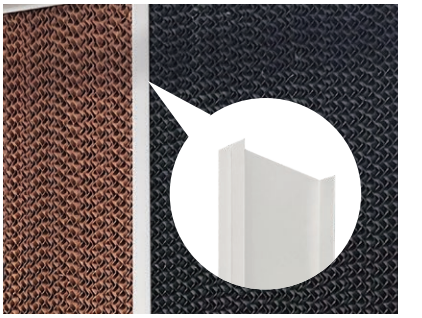
Mounting Bracket

·All profiles are treated with snap fasteners, facilitating the fixing of pipe racks and M-plates.
·Provide high stability for M-plates.
·Facilitate the opening and replacement of cooling pads.



Gutter

·Meets all water supply requirements of the system without the need for an external water tank.
·A mounting bracket is installed on the bottom gutter for fixing to the wall.
·The side end cover is equipped with a drainage port to facilitate cleaning.



H-Type Cooling Pad Reinforcement Plate

·Suitable for reinforcing large-size cooling pads.
·Stabilizes the cooling pads, preventing deformation during long-term use and enhancing overall stability.



Make-up Water Tank

·The integrated water make-up system is connected to the sump tank/water collection tank.
·An internal float valve is equipped to automatically replenish water according to water consumption.



Cooling Pad Bracket

·The cooling pad bracket enables perfect water recirculation.
·Prevents gnawing by rodents.
·The cooling pad is embedded in the bracket, with high splash resistance on both sides.



Circulating Water Pump

·Equipped with an integrated filter, available in 1.5-inch or 2-inch caliber.
·Different water pumps are configured according to different lengths of the cooling system.

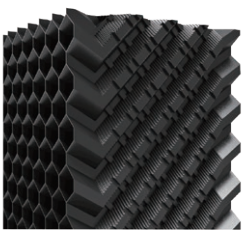
PVC PLASTIC COOLING PAD

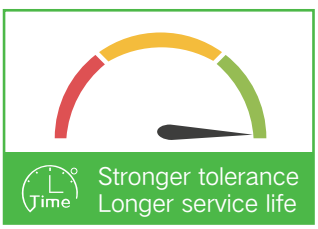
The Wusen PVC Cooling Pad is a simple and cost-effective solution that cools farms with minimal energy consumption through an adiabatic process. It is made of self-extinguishing polyvinyl chloride (PVC) material and combined with a special geometric structure, creating components that are robust, durable, UV-resistant, and nearly opaque. This high-efficiency version of the cooling pad is specifically designed for application scenarios requiring brightness control, making it suitable for breeding facilities with high light-shielding requirements.

The Wusen PVC Cooling Pad features excellent cooling performance and a low wind resistance coefficient. The material used ensures it is extremely sturdy and durable, easy to clean, and does not require regular replacement—an important advantage compared to other products on the market.

The mold cavity designed for the "special honeycomb structure" ensures uniform water flow distribution, increases the contact area with air, and enhances adiabatic cooling efficiency.





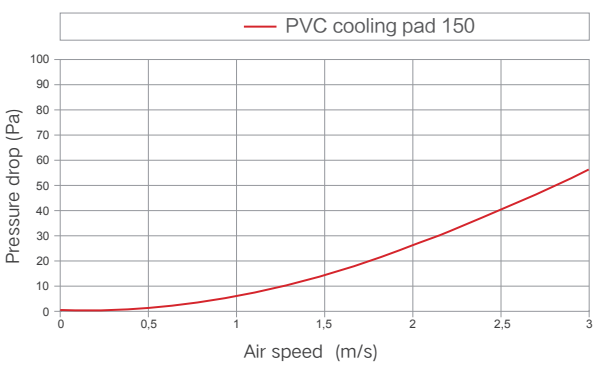


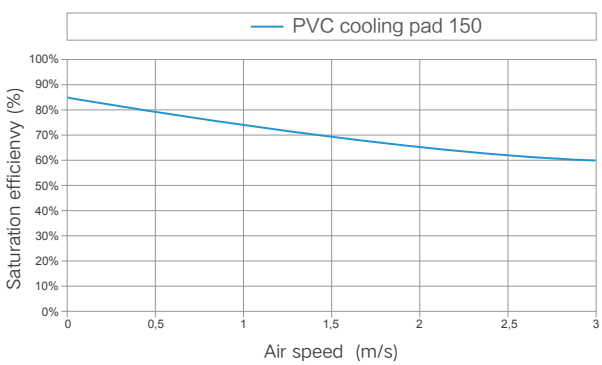
Technical features, dimensions

Lenght L-(mm)	Height H-(mm)	Thickness T-(mm)	Specific weight (kg/m³)	Material	Specific surface area m²/m³	Light reduction factor	Operationg temperature ℃
600	1200/1500/1800/2000	150	35	PVC	≈345	≈1 000 000	−5/+60℃

Note: Different heights can be provided according to requirements.

Performance test data





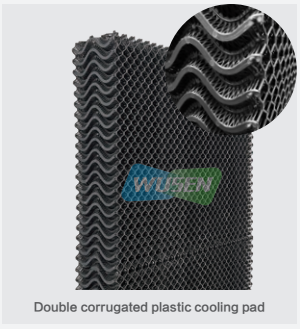
PP PLASTIC COOLING PAD

Wusen plastic evaporative cooling pad is a new product made of polypropylene based on the application of paper cooling pad. The plastic cooling pad not only has the cooling effect of the paper cooling pad, but also has the characteristics of water corrosion resistance, zero and insect resistance. Its normal use the life expectancy can reach more than 15 years. Due to the long service life of plastic village mats, there is no need to replace the liner during use, which greatly reduces the material cost and high labor costs required for customers to replace the liner.



Characteristic

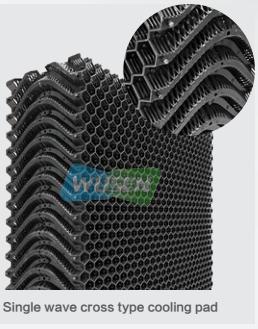
- CoolPads consist of polypropylene and are therefore easy to clean and highly robust.
- Available in standard dimensions 600 / 900 / 1,200 / 1,500 / 1,800/ 2,100/ 2,400 x 150 mm and100mm; Custom heights up to max. 3,000 mm available on enquiry
- Can replace standard paper pads without any problem
- Lower pressure loss compared to paper pads
- Long service life
- Length is flexible (up to 24 m/1 pump). Height max. 2.5 m.
- Quick and easy assembly
- High cooling performance



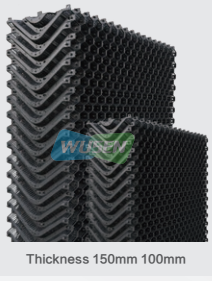
Double corrugated plastic cooling pad



Single wave plastic cooling pad

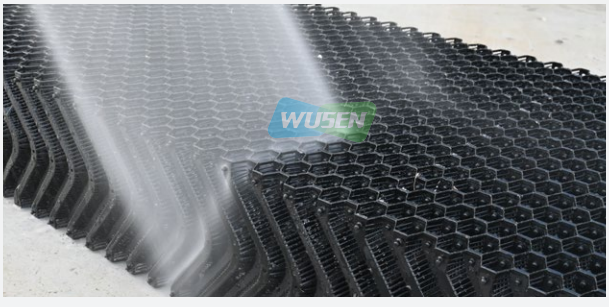


Single wave cross type cooling pad



Thickness 150mm 100mm





Specifications

Single wave plastic cooling pad thickness 100mm 150mm, double wave plastic cooling pad thickness 150mm
The area size of the cooling pad can be customized according to actual installation needs and can be made into any size.
The specifications of cooling pads without frames are as follows:

600mm*600mm	1200mm*600mm	1500mm*600mm	
1800mm*600mm	2400mm*600mm	3000mm*600mm	Size customization

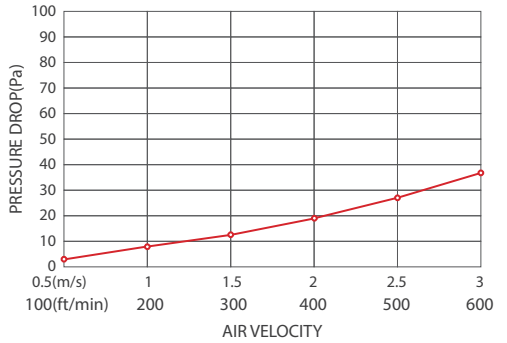
PERFORMANCE INDICATORS OF COOLING PADS

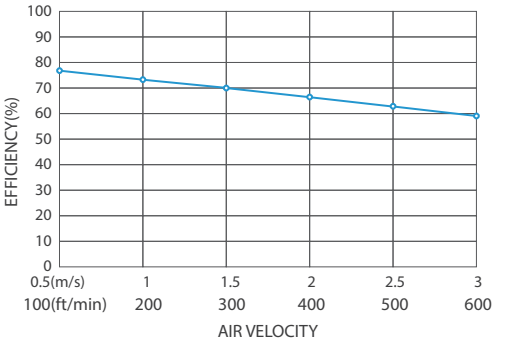
Plastic evaporative cooling pad								
Length	[mm]	6000	9000	12,000	15,000	18,000	21,000	24,000
Thickness	[mm]	150	150	150	150	150	150	150
Water pump	(W)	750	750	750	750	1,500	1,500	1,500

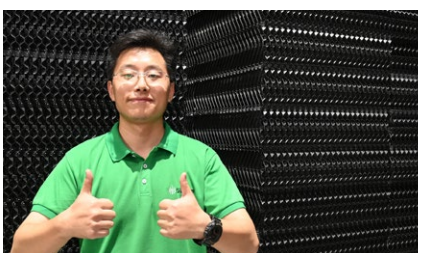
Water pump load: 1~230V/50Hz

Air temperature after plastic evaporative cooling pad																	
		T	rH	T	rH	T	rH	T	rH	T	rH	T	rH	T	rH	T	rH
		[°C]	[%]	[°C]	[%]	[°C]	[%]	[°C]	[%]	[°C]	[%]	[°C]	[%]	[°C]	[%]	[°C]	[%]
Air temperature before plastic evaporative cooling pad	50°C	32.2	49														
	48°C	30.9	49	33.9	59												
	46°C	29.6	49	32.3	59	34.7	67										
	44°C	28.2	50	30.9	59	33.1	67										
	42°C	26.9	50	29.3	60	31.5	67	33.5	74								
	40°C	25.5	51	27.9	60	29.9	68	31,8	74	33.4	80						
	38°C	24.1	52	26.3	60	28.3	68	30.0	74	31.6	80	33.1	85				
	36°C	22.8	52	24.8	61	26.7	68	28.4	74	29.9	80	31.3	85	32.6	89	33.8	93
	34°C	21.4	53	23.3	61	25.1	68	26.6	75	28.1	80	29.4	85	30.7	89	31.9	93
	32°C	20.1	53	21.8	61	23.5	68	25.0	75	26,4	80	27.6	85	28.9	89	29.9	93
	30°C	18.7	53	20.4	61	21.9	68	23.3	75	24,6	80	25.8	85	26.9	89	28.1	93
	28°C	17.3	54	18.8	62	20.2	69	21.6	75	22.8	80	24.0	85	25.1	89	26.1	93
	26°C	15.9	54	17.4	62	18.6	69	19.9	75	21.0	80	22.2	85	23.2	89	24.2	93
	24°C	14.5	55	15.8	63	17.0	69	18.2	75	19.3	80	20.3	85	21.3	89	22.3	93
	22°C	13.1	55	14.3	63	15.4	69	16.5	75	17.6	80	18.5	85	19.5	89	20.3	93
	20°C	11.7	56	12.8	63	13.8	70	14.8	75	15.8	80	16.7	85	17.6	89	18.4	93
		10%		20%		30%		40%		50%		60%		70%		80%	
		Air condition behind plastic evaporative cooling pads															

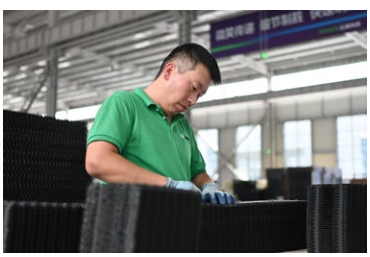
Air velocity of 1.5 m/s，water volume surface of 120 （min・m^2），12Pa











EVAPORATIVE COOLING PAD

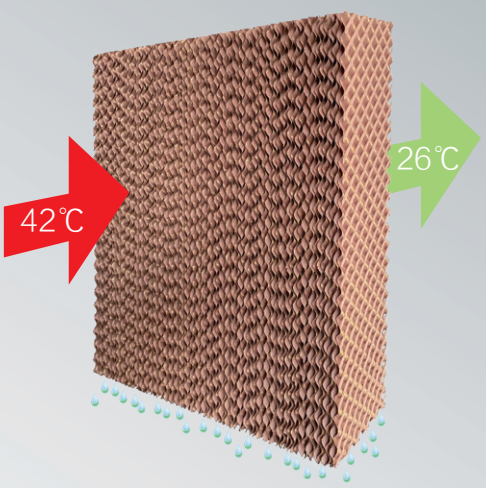
◆ Special treatment of corrugated paper, high structural strength, corrosion resistance, and long service life;

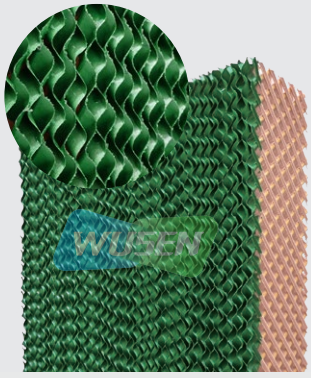
◆ Has excellent permeability and water absorption, which can ensure that water evenly penetrates the entire evaporative cooling pad wall;

◆ The specific three-dimensional spatial structure provides the maximum evaporative surface area for heat exchange between water and air;

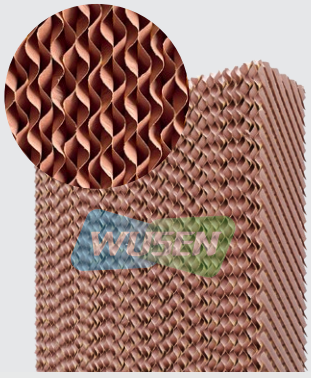
◆ The cooling process of the Wusen evaporative cooling pad cooling system is completed within the base core WUSEN evaporative cooling pad. There is a thin layer of water film on the surface of the corrugated fiber paper. When the outdoor dry and hot air is sucked through the cooling pad by the fan, the water on the water film will absorb the heat in the air and evaporate into the water vapor.

◆ The vertical ventilation cooling combination of evaporative cooling pad and fan is the most economical and effective greenhouse summer cooling measure.

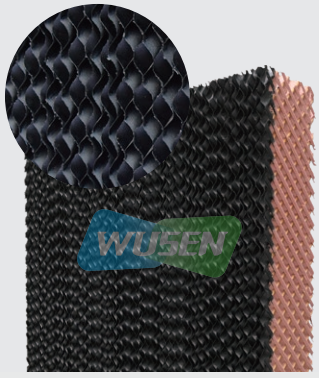




Green evaporative cooling pad



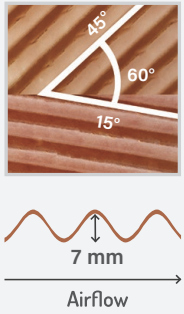
Brown evaporative cooling pad

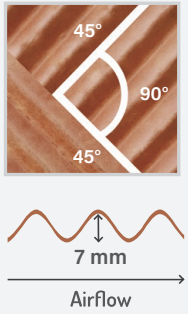


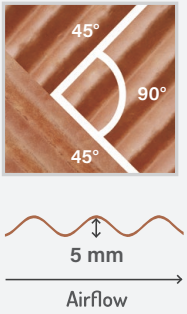
Black evaporative cooling pad

Product specifications

Model	Height(mm)	Width(mm)	Thickness(mm)	Aperture	Angle
7090	1500/1800/2000/Customization	300/600/Customization	100/150/200/Customization	7mm	45°/45°
7060	1500/1800/2000/Customization	300/600/Customization	100/150/200/Customization	7mm	15°/45°
5090	Customization	Customization	Customization	5mm	45°/45°

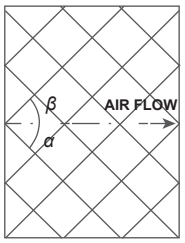




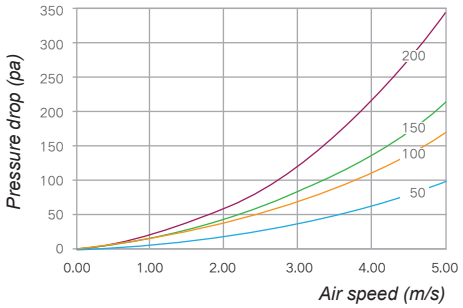


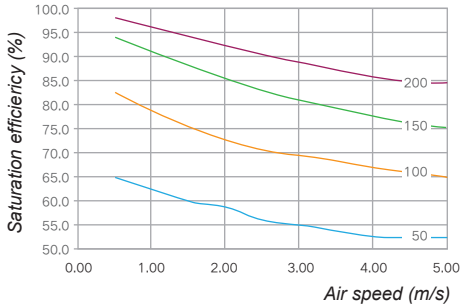
1 TYPE 7090/4545/~7

Suitable for application conditions where a good balance between humidification efficiency and pressure drop is required.



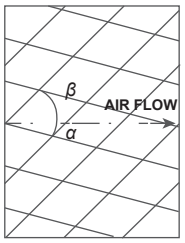
α=45 β= 45



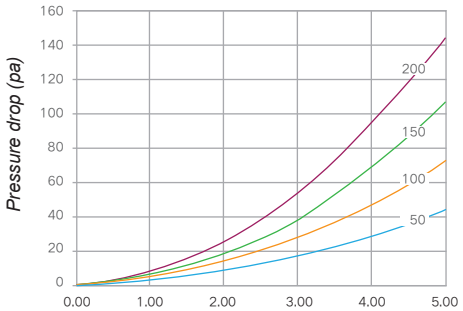


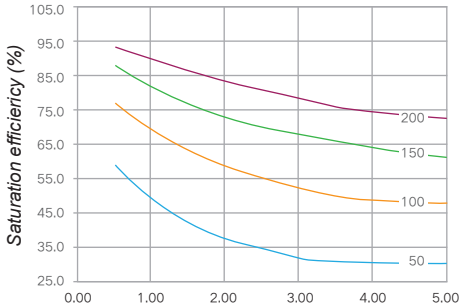
2 TYPE 7060/1545/~7

Particularly suitable where low pressure drop as well as reasonable humidification efficiency are required.



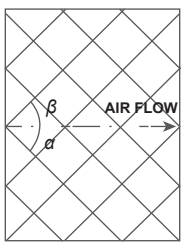
α=15 β= 45



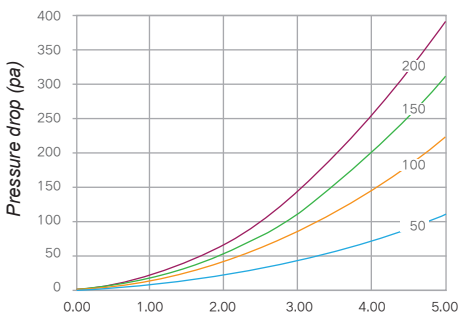


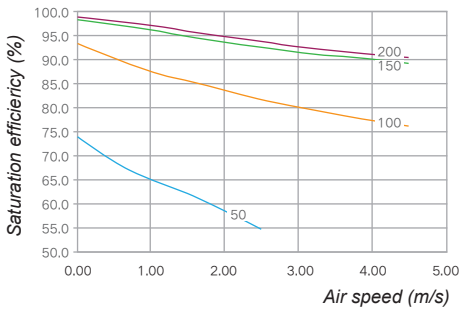
3 TYPE 5090/4545/~5

Suitable for application conditions where a good balance between humidification efficiency and pressure drop is required.



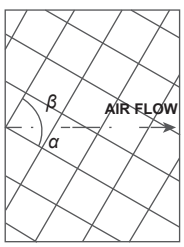
α=45 β= 45



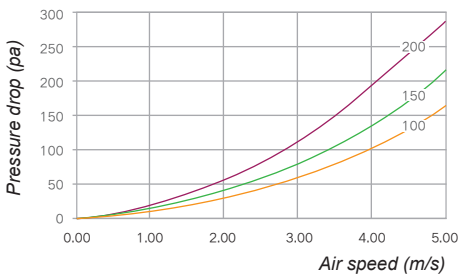


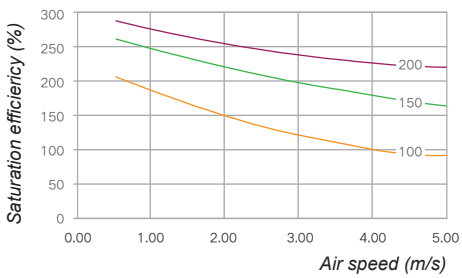
4 TYPE 7090/3060/~7 **(version available on request - MOQ required)**

Suitable for application conditions where a good balance between humidification efficiency and pressure drop is required.



α=30 β= 45





Note: risk of drops ejection in case of air speed through the pads > 3 m/s.

FARM WASTE GAS DEODORIZATION SYSTEM
BIOLOGICAL AIR CLEANING



Deodorization gutter

Quick installation & easy construction

On site installation is fast, construction is very convenient, and at the same time, it saves shipping costs, time, and effort. Compared with infrastructure construction, it can move quickly, is not easy to waste, and saves construction costs.

New raw materials

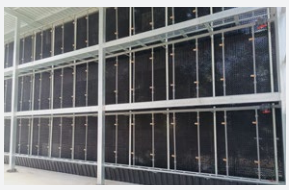
Acid and alkali resistant, resistant to the erosion of various chemicals, no need to worry about corrosion during use.

Fine workmanship resistant to impact and impact

Plastic deodorizing water tank has bending resistance and strong impact toughness, which is not easy to break or damage.

Save construction costs

Compared to brick masonry and concrete pouring water collection tanks, it greatly reduces labor costs and can save about 2-3 times labor costs.



GRID DEODORIZATION FILTER MATERIAL



Three levels
are available:

- V0 Flame retardant grade
- V2 Flame retardant grade
- Non flammable

WUSEN Deodorizing filter material

Whether the deodorization system can work stably and efficiently is closely related to the filter material. Its core lies in whether the structure design is reasonable, the characteristics of raw materials, and the maturity of processing technology.

Core functions

The multilateral structure is both hydrophobic and breathable

After thousands of tests, the filter material structure finally adopts the superimposed multilateral structure, which has good hydrophobicity, moisture retention, air permeability and other characteristics.

Stable performance of polymer materials

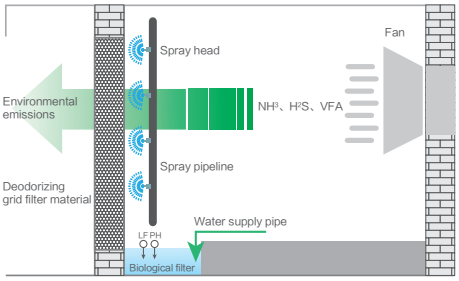
The raw material is high-strength copolymer PP polymer material, which has the characteristics of aging resistance, acid and alkali resistance, corrosion resistance and flame retardance.

Made by one-time stamping

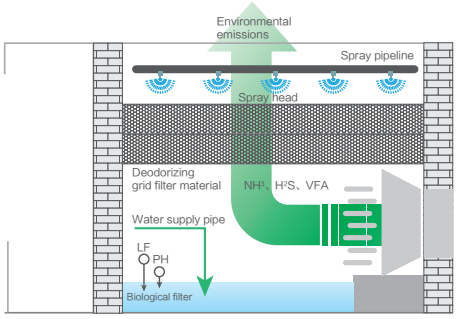
It is made by using advanced stamping machine and one-time high temperature stamping, with solid structure, strong pressure resistance, smooth surface and easy cleaning.

Entry Name	Parameter
material quality	PP
Overall height	600mm and 908mm
Assembly requirements	Snap fit in place
Specs	Thickness: 450mm and 250mm
Density	21.3kg/m^3
Working temperature	-40℃-90℃
Working humidity	Humidity has no effect
Yield stress	35.73
Heating change rate	＜0.2%
Vicat softening temperature	148℃
Heat resistance	No embrittlement within 24 hours at 112 ℃
Flame retardancy	V0 level V2 level non flammable
Falling hammer impact	6.86/7.61
By means of	Sloping channel with splashing droplets
Channel width	20mm
Specific surface area	125m^2/m^3
Porosity	＞97%
Gas-liquid ratio	0.1-0.3L/m^3, 1.5m/s win
service life	>20 years

Deodorization mode



Schematic diagram of horizontal ventilation deodorization mode



Schematic diagram of vertical ventilation deodorization mode

INTELLIGENT LIVESTOCK SPRAY DISINFECTION AND COOLING SYSTEM



The water treated by softening water equipment and filters enters the spray system and is diluted with Wusen deodorizer in a certain proportion. It is then pressurized by a high-pressure plunger pump and transported to the pipeline. Through a high-pressure atomizing nozzle, small droplets (≤ 40um) are formed and sprayed out, which are fully mixed and contacted with the odor discharged from the fan outlet to achieve the deodorizing effect.

Intelligent spray system

Through the intelligent linkage system control, the operation status of each fan is collected and transmitted to the intelligent control system. In the linkage state, the automatic judgment and adjustment of the start stop and atomization volume of each fan port are carried out, which saves water, electricity, and liquid, and operates economically, greatly reducing the cost of odor control for enterprises.

1



Spray pipeline
- 9.52mm PA pipe fittings with high pressure explosion-proof and corrosion-resistant properties

2



fixing of pipes
- Wire rope fixation

3



Filter unit
- central filter unit also with medication dosing unit
- (prevention/healing of respira-tory diseases)

4



spray nozzle
- Quick plug atomizing nozzle (direct, terminal)

5



PLC Touch Controller
- interactive controller for control and monitoring of the pump unit
- easy operation via touch SC reen

6

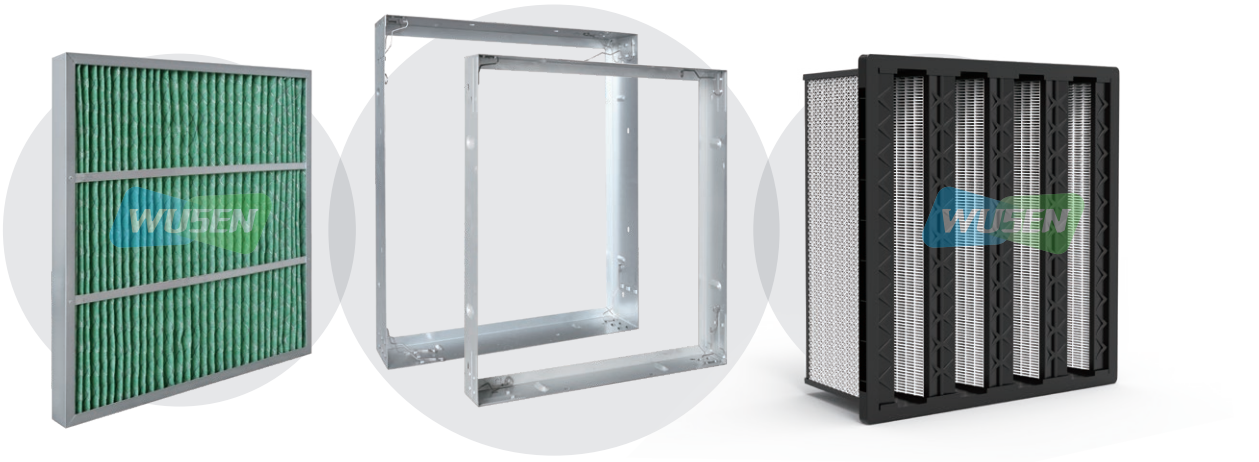


Pump system
- automatic speed control
- automatic adjustment of the flow rate to the required waterquantity

- Raising of humidity to any desired level(greatest comfort between 60 and 70% relative humidity).
- Effective dust binding: Positive influence on the respiratory organs of the animals, less use of medication.
- More active animals due to species-appropriate climate, even at high outside temperatures.
- WUSEN medicator for spraying of active solutions [prevention/curing of respiratory diseases].
- Connection via WUSEN controls also to other climate computers and thus fully automatic operation of several houses possible.

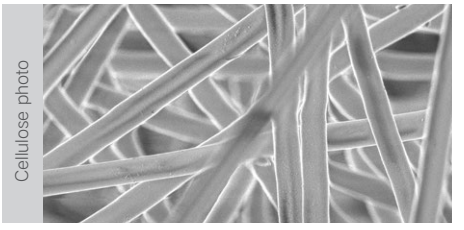
Product name	Model specifications
High pressure spray host	Siemens 5.5KWKW/4-stage direct connection Italian Intel 50L high-pressure pump Schneider switch/West door contactor Voltage: 380V speed: 1450 revolutions per minute Pressure regulating range of high-pressure pump: 0-160 kg Chassis: Stainless steel chassis (size: 950*620*1120) Dual filtration/time control/water shortage protection/power-off protection/undervoltage protection/automatic water inlet/dual outlet, including frequency converter, dosing device, 4T ultrafiltration filter
Spray pipeline	PE spray tube/9.52mm, 304 stainless steel spray tube/9.52mm, brass nickel plated body three-stage filter cotton stainless steel sheet nozzle
Fixings	Pipeline fasteners
Linkage controller	Including 8 signal collectors, 8 receivers, and corresponding 8 solenoid valves
Intelligent control box	IoT water meter
	IoT electric meter
	Stainless steel intelligent control box, PLC with touch screen, local reading, remote data reading

AIR FILTRATION SOLUTION FOR FARMS



G4 folding pre filter

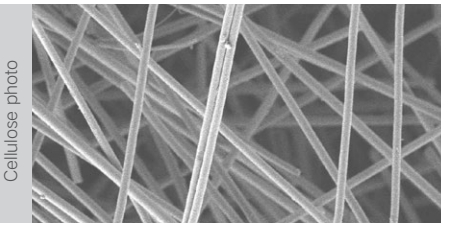
Type: Pleated Pre-Filter with Paper Frame
Filter Material: Cotton Fiber Blended Material
Outer frame material: galvanized outer frame/aluminum alloy/high moisture resistant cardboard outer frame
Suggested final resistance: 250pa
Continuous and stable operating temperature: not higher than 80 ℃
Moisture resistance: 90% RH



2μm EHT=2.00kV Signal A=SE2 WD=4.6mm

Sub efficient filter 4V

Type: Sub efficient filter 4V
Filter material: Glass fiber filter paper
Outer frame material: ABS plastic assembled outer frame
Partition: Hot melt adhesive
Sealing glue: polyurethane
Suggested final resistance: 500pa
Continuous and stable operating temperature: not higher than 90 ℃
Moisture resistance: 90% RH



10μm EHT=2.00kV Signal A=SE2 WD=4.6mm

G4 folding pre filter technical parameter

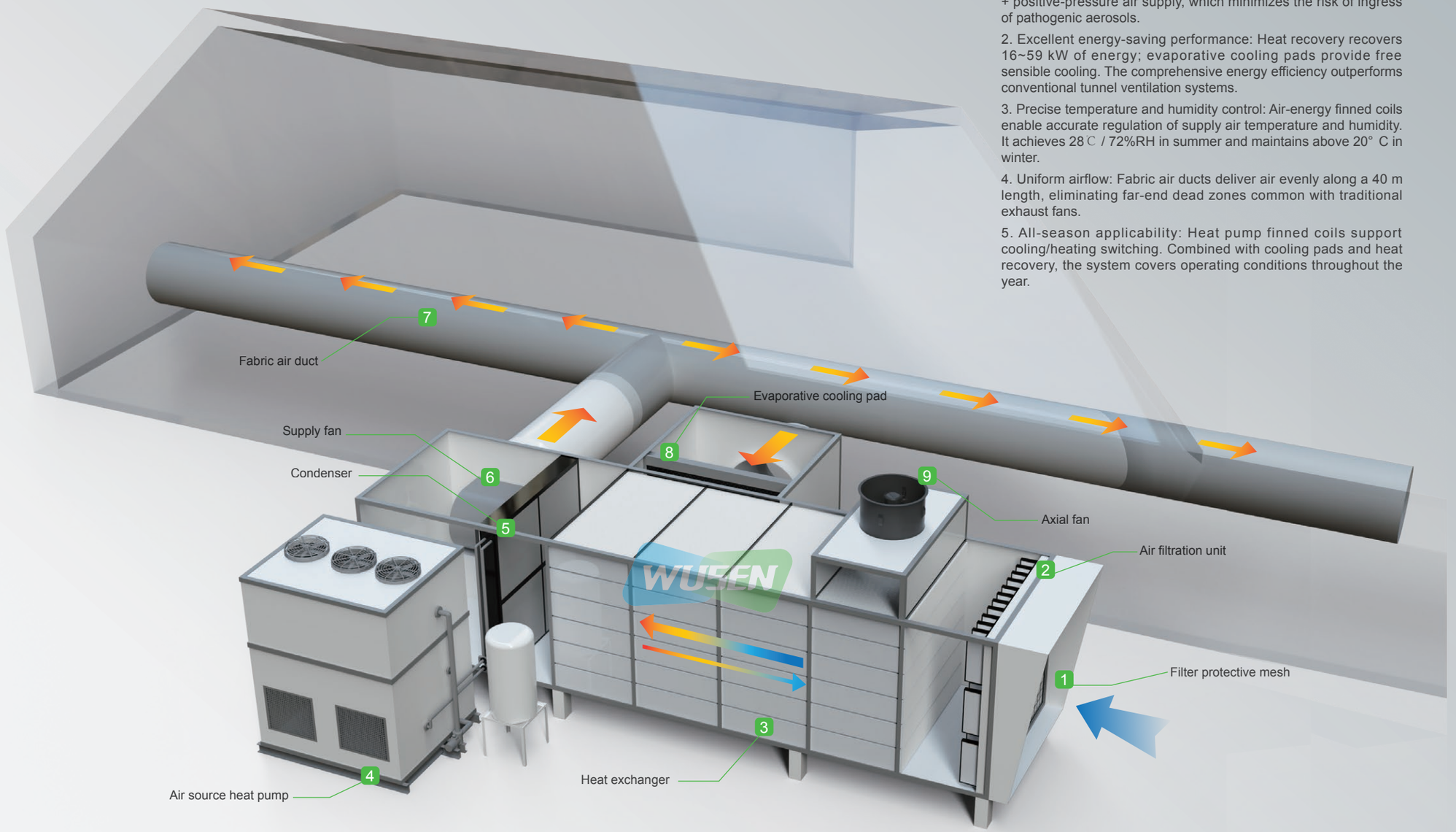
Series	Width*Height (mm)	Depth (mm)	Filter classification			Operating air flow (CMH)	Initial pressure drop (Pa@1.0m/s)	Net weight (Kg)
			ASHRAE (52.2-1995)	EN779: 2012	ISO16890: 2016			
Wusen-G4	592*592	45	MERV8	G4	92%	1000	16	0.6

Series	Width*Height (mm)	Depth (mm)	Net weight (Kg)
Filter installation frame-70	610*610	70	2
Filter installation frame-95	610*610	95	2.8

Sub efficient filter 4V technical parameter

Series	Width*Height (mm)	Depth (mm)	Filter classification			Operating air flow (CMH)	Initial pressure drop (Pa@1.0m/s)	Net weight (Kg)
			ASHRAE (52.2-1995)	EN779: 2012	ISO16890: 2016			
Wusen-4V	592*592	292	MERV15	F9	ePM1=85%	1000	23	7.2
Wusen-4V	592*592	292	MERV16	H10	95% 0.3μm	1000	30	7.3

AIR-TO-AIR HEAT EXCHANGE SYSTEM



Product Advantages

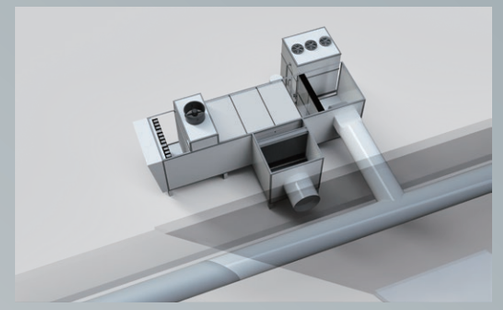
1. High biosafety level: 100% fresh air supply + multi-stage filtration + positive-pressure air supply, which minimizes the risk of ingress of pathogenic aerosols.

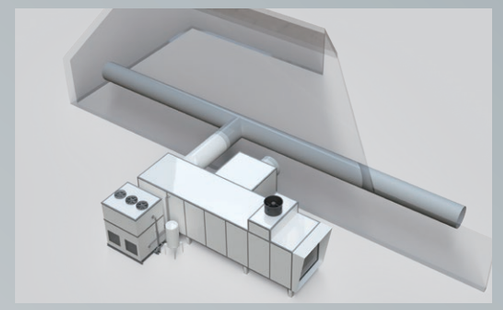
2. Excellent energy-saving performance: Heat recovery recovers 16~59 kW of energy; evaporative cooling pads provide free sensible cooling. The comprehensive energy efficiency outperforms conventional tunnel ventilation systems.

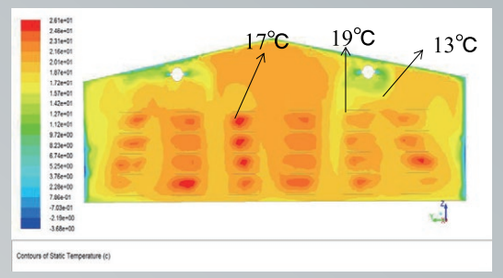
3. Precise temperature and humidity control: Air-energy finned coils enable accurate regulation of supply air temperature and humidity. It achieves 28℃ / 72%RH in summer and maintains above 20° C in winter.

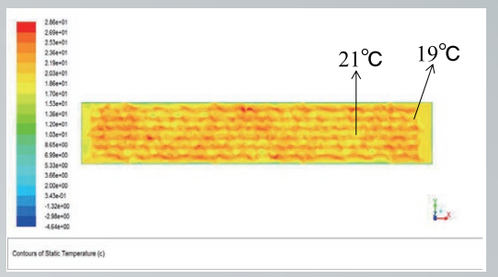
4. Uniform airflow: Fabric air ducts deliver air evenly along a 40 m length, eliminating far-end dead zones common with traditional exhaust fans.

5. All-season applicability: Heat pump finned coils support cooling/heating switching. Combined with cooling pads and heat recovery, the system covers operating conditions throughout the year.









Precise heat distribution via heat exchange supply air eliminates cold spots and ensures uniform temperature.

WUSEN Air-to-Air Heat Exchange System

During the heating period in spring, autumn and winter, the system recovers heat from waste exhaust air inside the house to meet most of the heating requirements for breeding in winter, replacing other heating equipment.

Farm exhaust air is drawn by exhaust fans into the exhaust duct for cooling and deodorization. After being washed, purified and cooled, the exhaust air is discharged to the atmosphere via the exhaust unit. Fresh air for the house is drawn by a positive-pressure fan into the fresh air duct of the unit. The fresh air and exhaust air flow through two independent separate channels without direct contact and perform cross heat exchange inside the heat exchange core of the unit. After heat exchange, the fresh air temperature rises; it is then heated or cooled by the condenser before being supplied into the house.

Technical Parameter

Model	Heat recovery efficiency	Air volume (m^3/h)	Power Kw
WS-QL25/50	50%	25000	11.5
WS-QL15/50	50%	15000	7.5
WS-QL10/50	50%	10000	4.0

Applications of Air-to-Air Heat Exchange System

Application of WS-QL15/50 Standard Heat Recovery Unit:

Indoor temperature 18℃, outdoor temperature -10℃. After preheating by the heat recovery unit (heat recovery efficiency 50%), the temperature of fresh air supplied into the house reaches 4°C, and the exhaust air discharge temperature is 4°C.

Indoor temperature 18℃, outdoor temperature 0℃. After preheating by the heat recovery unit (heat recovery efficiency 50%), the temperature of fresh air supplied into the house reaches 9°C, and the exhaust air discharge temperature is 9°C.

The WS-QL15/50 unit is equipped with one 7.5 kW centrifugal supply fan and one 4.0 kW axial exhaust fan, with a total operating power of 11.5 kW.

The WS-QL15/50 unit measures 7.2 m in length, 2.0 m in width and 2.0 m in height. A 1500×600 mm fresh air opening and an 1100×1100 mm exhaust air opening need to be reserved on the sidewall. The supply air duct is a fabric air duct with a diameter of 650 mm.

50" DIRECT DRIVE PLASTIC FAN

Product Overview

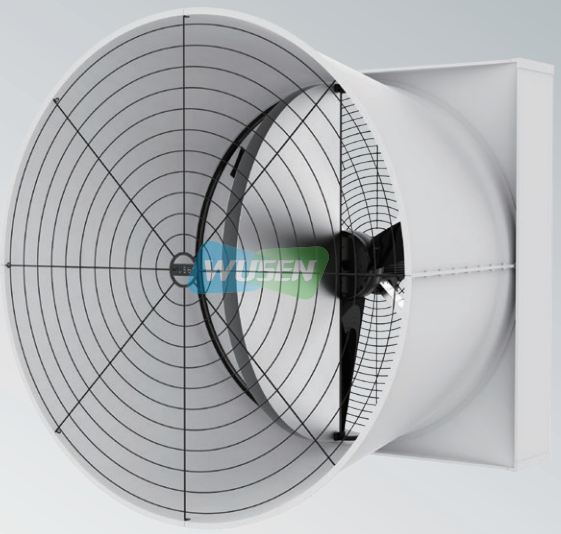
Wusen Fan Big 50 is a direct-drive fan engineered for installation into the standard 140×140 cm opening globally, delivering guaranteed superior performance.

Equipped with a 1,280 mm (50.8-inch) impeller, the Wusen Fan Big 50 generates higher airflow, greater pressure capacity and superior energy efficiency than any other conventional 50-inch fans available on the market.

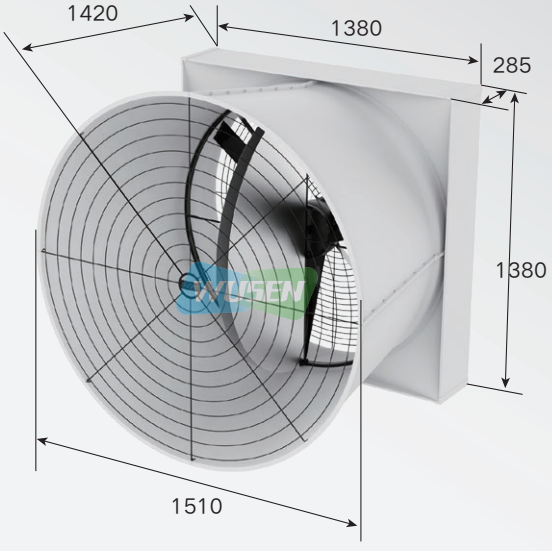
It adopts permanent magnet direct drive technology with belt-free structure and maintenance-free operation. Fitted with a 304 stainless steel motor bracket and corrosion-resistant housing.

The split whole-unit design maximizes loading rate in container sea transportation, effectively cutting international logistics costs.

It maintains efficient airflow under high static pressure: it can deliver an air volume of 35,000 m³/h at 125 Pa, with power consumption as low as 66 watts per 1,000 cubic meters per hour.



- ✔ 50-inch model with airflow up to 59,200 m³/h
- ✔ Maximum static pressure: 150 Pa (0.60" WC)
- ✔ Standard ON/OFF control, VFD control available as an option
- ✔ Certified by BESS Laboratory, constructed with AISI 304 stainless steel



50-inch Direct Drive Plastic Fan (EC Motor)

Voltage	230/400 V
Number of phases	3~
Frequency	50 Hz/60 Hz
Rotational speed	700 RPM/840RPM
Power	1.88kW/2.0kW
Rated current	8.73A/5.05A
Protection grade	IP66
Fan blade	3
Fan size	1510*1510*1417 mm
Hole size	1390*1390 mm

Static pressure(Pa)	Air volume (m³/h)	Electric current (A)	Voltage (V)	Power (W)	Efficiency (m³/hr)/W
0	59200	3.90	460.6	1700	34.8
12	57100	3.98	460.6	1795	31.8
25	55000	4.05	460.6	1868	29.5
37	53400	4.11	460.6	1937	27.6
50	51800	4.18	460.6	2012	25.7
62	49600	4.25	460.4	2082	23.8
75	47400	4.32	460.3	2153	22
87	44900	4.39	460.2	2228	20.1
100	42600	4.43	460.2	2272	18.7
112	40100	4.48	460.1	2326	17.2
125	36900	4.53	460.1	2364	15.6
137	33000	4.55	460.1	2389	13.8
149	27200	4.48	460.1	2320	11.7

57" DIRECT DRIVE PLASTIC FAN

Product Overview

Constructed with high-grade plastic material, it boasts ultra-high efficiency, outstanding performance and user-friendly installation.

Permanent magnet direct drive design eliminates belt pulleys for maintenance-free operation. It is fitted with a 304 stainless steel motor bracket and corrosion-resistant housing.

The split unit design improves container loading efficiency for sea freight, helping reduce international logistics expenses.

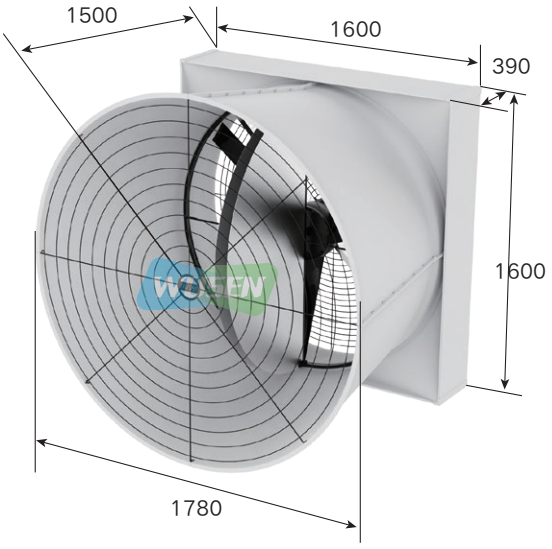
It achieves an efficiency rate of over 85%. When paired with energy efficiency management software, it cuts energy consumption by approximately 70% and lowers operational costs.

The housing is UV-resistant, heat resistant up to 120 ° C, and enjoys a long service life in acidic and alkaline corrosive environments.

Featuring an internationally advanced impeller design, it withstands fluctuating high and low pressure, delivers larger airflow volume and runs with lower noise levels.



- ✔ Energy savings up to 70%
- ✔ Direct drive, no belts or pulleys required
- ✔ Superior high-pressure performance
- ✔ Certified efficiency: 30 CFM/W



57-inch Direct Drive Plastic Fan (EC Motor)

Voltage	230/400 V
Number of phases	3~
Frequency	50 Hz
Rotational speed	700 RPM
Power	1800 W
Rated current	8.5/4.9 A
Protection grade	IP66
Fan blade	3
Fan size	1780*1780*1500 mm
Hole size	1610*1610 mm

Static pressure(Pa)	Air volume (m^3/h)	Electric current (A)	Voltage (V)	Power (W)	Efficiency (m^3/hr)/W
0	69500	3.76	399.1	1428	48.7
12	66300	3.86	399.1	1537	43.1
25	62700	3.98	399.1	1650	38
37	59500	4.08	399.1	1750	34
50	56400	4.18	399.1	1837	30.7
62	52300	4.28	399.1	1925	27.2
75	48500	4.35	399.1	1994	24.3
87	44000	4.40	399.1	2030	21.7
100	37700	4.40	399.0	2033	18.5

AXIAL HIGH-PRESSURE FAN

high-pressure axial flow fan

Thanks to their unique design, these fans feature a wide high-pressure range. They are ideal for evaporative cooling pad systems, air filters and agricultural drying applications.

These energy-efficient, low-noise high-pressure fans deliver a stable pressure up to 375 Pa. Constructed with corrosion-resistant metals and high-tech engineered plastic components, they perform reliably under harsh climatic conditions.

As such, they are widely applied in central exhaust systems, air purifiers and drying equipment. Pre-drilled mounting points allow our high-pressure fans to be easily installed both horizontally and vertically.



WUSEN-24″

24-inch High Pressure Fan

Air volume at 0 Pa (0.00 in.wg)	19100 m³/h
Air volume at 150 Pa (0.6 in.wg)	16100 m³/h
Voltage	230/400 V
Frequency	50 Hz
Power consumption	1650 W
Nominal current	5.7/3.3A
Maximum current	6.5/3.8A
IP Class	IP55
Min.ambient temperature	-25 ℃
Max.ambient temperature	40 ℃
Overall Dimensions	700*700*500 mm



WUSEN-36″

36-inch High Pressure Fan

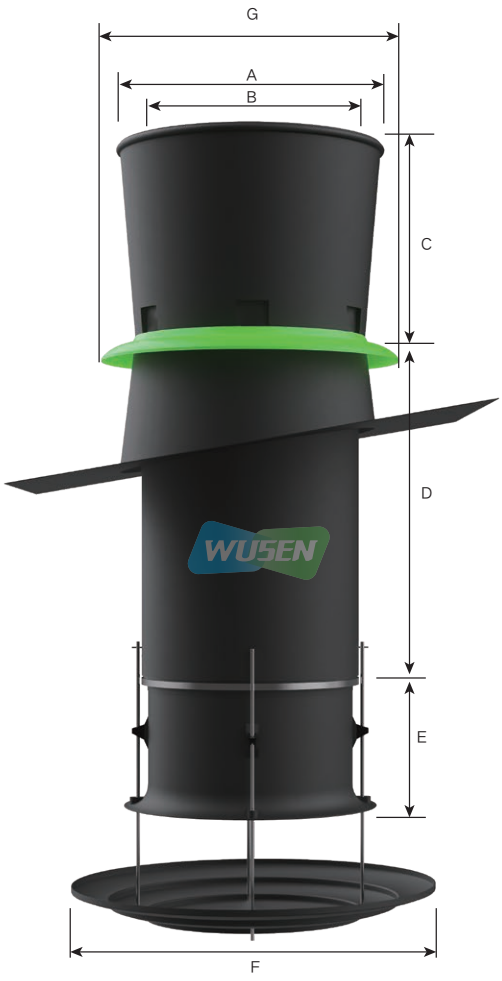
Air volume at 0 Pa (0.00 in.wg)	40100 m³/h
Air volume at 150 Pa (0.6 in.wg)	33700 m³/h
Voltage	230/400 V
Frequency	50 Hz
Power consumption	4300 W
Nominal current	14.5/8.5A
Maximum current	16.0/9.2A
IP Class	IP55
Min.ambient temperature	-20 ℃
Max.ambient temperature	40 ℃
Overall Dimensions	980*980*500 mm

CHIMNEY EXHAUST FAN

Product overview

The chimney fan series is specially designed and developed to meet the stringent ventilation requirements of enclosed livestock and poultry houses. In high-altitude or temperate climate zones, the air velocity inside animal houses tends to be low. Special attention shall be paid to wind speed variation to prevent unwanted airflow directly above the livestock and poultry. Capable of meeting airflow demands in different seasons, these fans are applicable to all types of livestock barns, with prominent advantages in the following scenarios: extremely cold regions; barns without ceiling air inlets; constant-pressure or low-pressure ventilation modes.

Chimney exhaust fans work on the principle of hot air rising. Polluted hot air is exhausted from the upper part of the livestock house via outlets, while fresh cold outdoor air is drawn in to form a vertical ventilation system. Airflows avoid cross-contamination, effectively reducing the risk of disease among livestock and poultry.



Overall Dimensions of Chimney Inlet Fan

Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	G (mm)
24inch	880	640	775	1500	450	1176	1026
32inch	1060	820	775	1500	500	1480	1206
36inch	1170	920	815	1500	500	1480	1306



·Insulated PE air duct

·Filled with polyurethane thermal insulation material internally



·Patented snap-on panel splicing technology for easier installation

·Reduces transportation costs

·Diameter: 24–36 inches; Height: 1.5 m

Technical Parameter

	Model	Blade diameter (mm)	Voltage/Frequency (V/Hz)	Power (W)	Current (A)	Speed (RPM)	Speed Control
Free Flow Damper	24inch-AC	630	380~415/50	750	1.8	1450	/
	36inch-AC	910	380~415/50	750	2.0	930	/
Damper Actuator	24inch-EC	630	115/230 50/60	750	9.8/5.8	1450	0-10V
	36inch-EC	910	115/230 50/60	750	9.8/5.8	900	0-10V

CHIMNEY INLET FAN

Product overview

The chimney inlet fan is installed below the eaves. This high-static-pressure, high-airflow fan delivers fresh air into the livestock house. Hot air gathered under the roof inside the barn mixes with incoming fresh air at the air intake. The mixed airflow is dispersed evenly around the livestock via a deflector plate, saving energy and preventing direct cold air draft on the animals.

It eliminates cold bridge issues inside the barn in frigid cold regions and prevents excessive indoor humidity.

Configuration 1: EC inlet fan without preheating function, with 0–10V speed regulation to meet airflow requirements for different seasons.

Configuration 2: AC inlet fan equipped with air preheating function. The fresh air proportion can be adjusted up and down, cutting costs for fresh air ductwork.



Overall Dimensions of Chimney Inlet Fan

Model	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)
24inch	1176	640	1500	450	1200	1026
32inch	1480	820	1500	500	1500	1206
36inch	1480	920	1500	500	1700	1306

Chimney Inlet Fan, T Series

WS-T series inlet fans are designed for equal-pressure and slight positive-pressure ventilation systems.

With the roof deflector plate and EC motor, fresh outdoor air is distributed throughout the livestock house at an optimal flow rate and direction.

The deflector plate is designed based on aerodynamic principles. Columnar airflow ensures the best air intake effect.

Equipped with EC motors, protection class IP66. Airflow ranges from 5,000 to 16,200 m³/h to meet fresh air demands of livestock and poultry at different growth stages.



Technical Parameter

Model	Blade diameter (mm)	Voltage/Frequency (V/Hz)	Power (W)	Current (A)	Speed (RPM)	Air Supply Diameter (m)
24inch-T/EC	630	115/230 560/60	750	9.8/5.8	1450	18
36inch-T/EC	910	115/230 560/60	750	9.8/5.8	900	23

Chimney Inlet Fan, TB Series



Product overview

HW-TB series inlet fans come with built-in sliding modules and a rope-driven system, which drives the air damper at a fixed area ratio between fresh air and recirculated air.

During summer operation, the recirculation gap can be fully closed by adjusting the sliding module, allowing 100% fresh outdoor air to enter the barn. This reduces the required fresh air duct volume by approximately 50%.

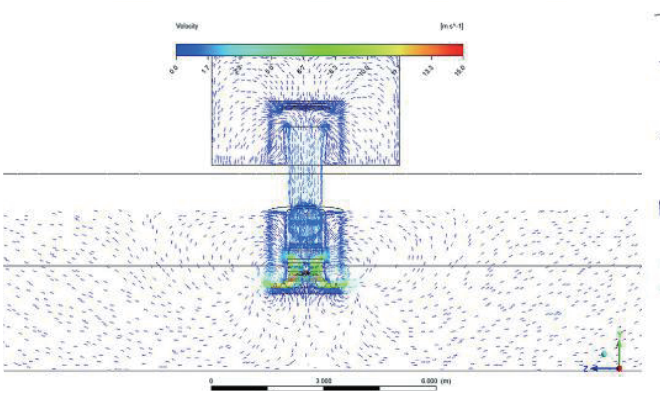
In winter operation, the sliding module adjusts the opening ratio of the recirculation gap to mix hot air collected at the top of the house with incoming fresh air, lowering heating costs effectively.

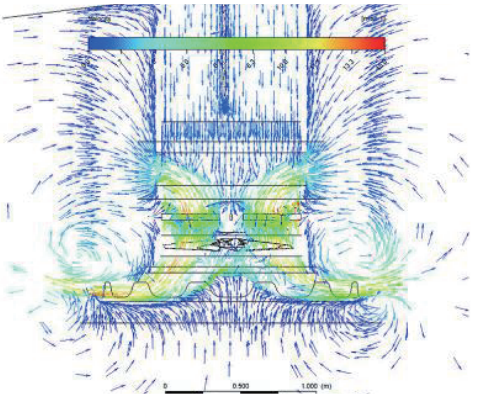
Fitted with AC motor, IP66 protection rating, air supply diameter: 23 m.

The risk of icing is greatly minimized under extremely low temperature conditions.

Technical Parameter

Model	Blade diameter (mm)	Voltage/Frequency (V/Hz)	Power (W)	Current (A)	Speed (RPM)	Air Supply Diameter (m)	Function
24inch-TB/AC	630	380~415/50	750	1.8	1450	18	Mixed Air Preheating
36inch-TB/AC	910	380~415/50	750	2.0	930	23	Mixed Air Preheating







Winter Air Intake



Spring & Autumn Air Intake



Summer Air Intake

18-INCH HOT WATER FAN

Product overview

The Wusen water heating heat exchanger has a long service life, and the wider fin spacing makes cleaning easier.

With the help of snap fasteners, the interior of the device can be easily accessed, and a protective film is also provided to make maintenance work easier.

The blades are 40% thicker than standard water heaters and are more resistant to damage when cleaning with compressed air or high-pressure water.

Motor waterproof and dustproof rating (IP66). The speed is adjusted by the controller, and the stronger fan compressor can remove the accumulated dust inside the equipment.

Suitable for air heating solutions in chicken and pig farms;

Structural corrosion resistance environment;

Can be cleaned with a high-pressure water gun;

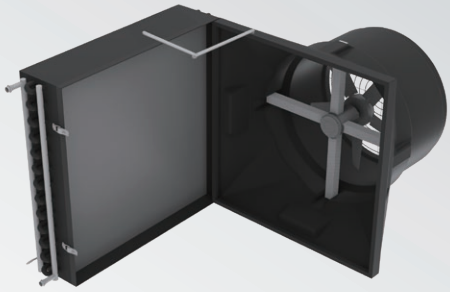
Low energy consumption;

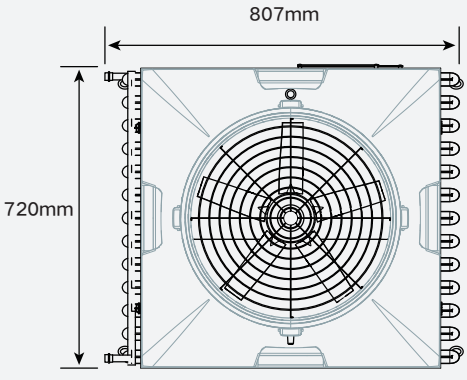
Controllable heat output;

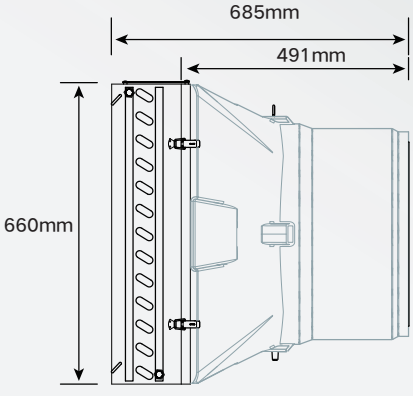
Can be installed vertically or horizontally through a bracket;

Reduce indoor humidity;





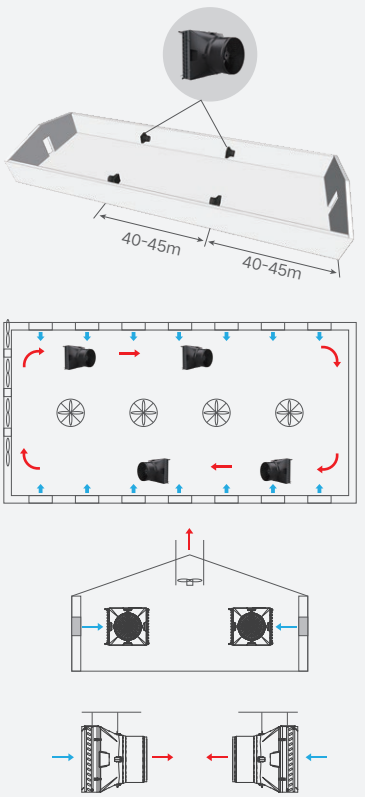




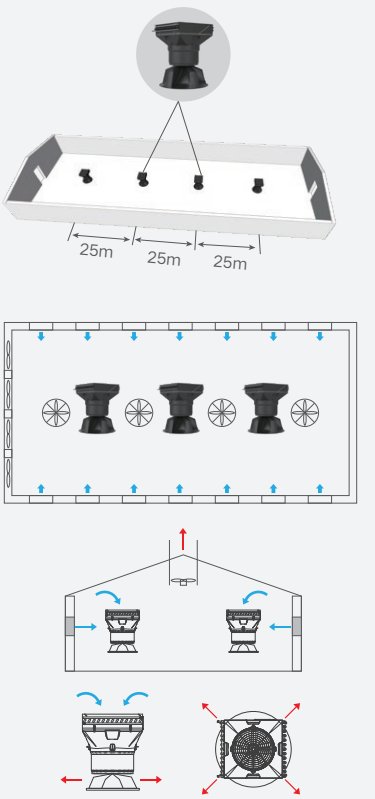
Technical Parameter

thermal power	56.2KW	power supply	230V/50Hz
fan air volume	4600m³/h	Maximum current consumption	2.8A
Maximum airflow range	28m	shell	PE
noise level	62dB(A)	Water content quality	28.7KG
Maximum water temperature	95℃	width	807mm
Maximum water pressure	1.6MPA	depth	685mm
Heat exchanger link diameter	3/4"	height	720mm

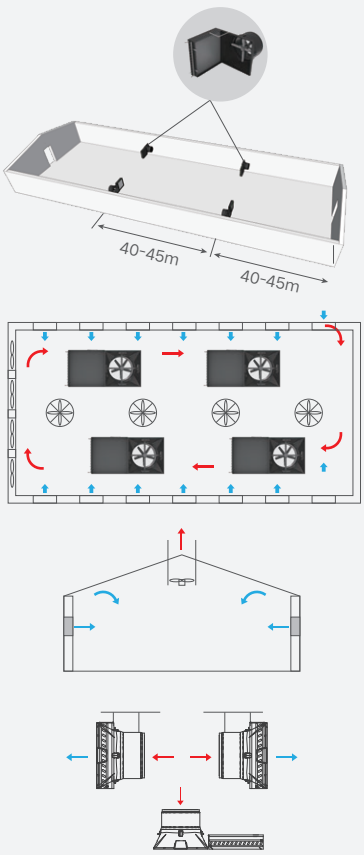
Horizontal installation of air circulation path



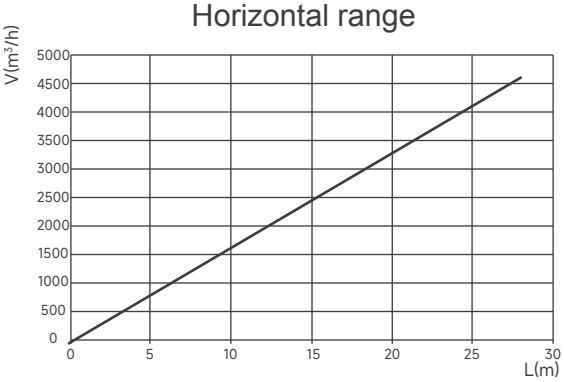
Vertical air circulation path



The airflow direction of the air mixer

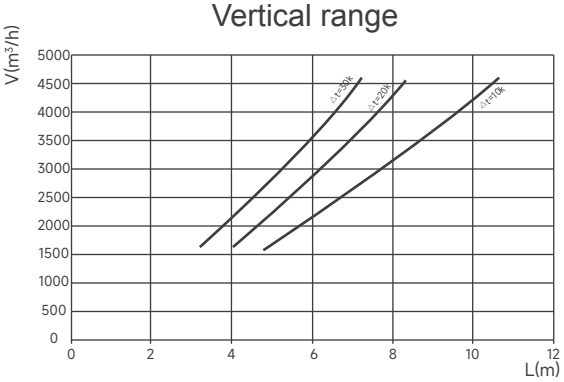


Horizontal range



V - Air flow rate
L - Horizontal range of isothermal flow (velocity boundary equal to 0.5m/s)

Vertical range

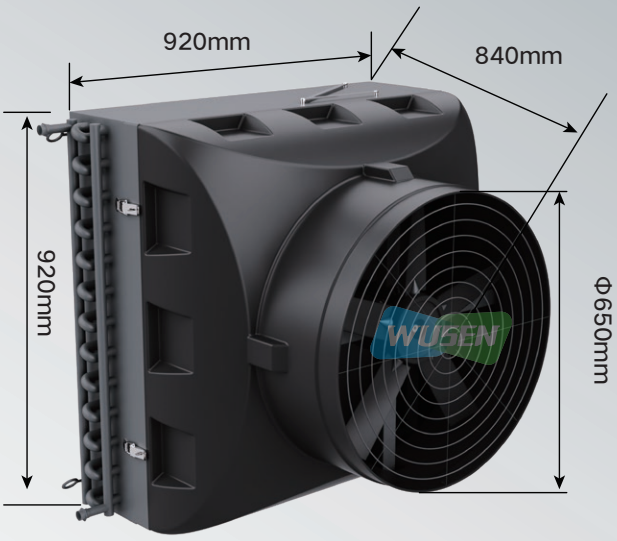


V - Air flow rate
L-Vertical range of non isothermal flow (velocity boundary equal to 0.5m/s)

24-INCH HOT WATER FAN

Product overview

24-inch hydronic heating fan with a wider heating range. The surface of the heat exchanger is coated with a special electrostatic anti-corrosion finish. The hinge design facilitates air mixing in summer. Quick access to the unit interior via latches for easy maintenance. Dustproof and waterproof fan, IP55 protection rating.



Application

Poultry farms, pig farms and other large buildings suffer from severe air contamination due to solid particles, high humidity and corrosive conditions.

The WUSEN 24-inch hydronic heating fan heater is designed for horizontal mounting (with rotating console) and vertical mounting (with air diverter). The installation height shall not exceed 2 meters for vertical installation.

Heating Capacity [kW]
19.2-158

Air flow[m³/h]
10000

Minimum: heating medium temperature 40/30 ° C, inlet air temperature 20°C

Maximum: heating medium temperature 90/70 ° C, inlet air temperature 0°C

Weight [KG]
75-90

Colour
Black

Casing
PE Plastic

Technical Parameter

Max. Air Flow	10000m³/h	Max. Working Pressure	1.6MPa
Power Supply	3x380V/50Hz	Connection / Fitting	1"
Max. Operating Current	1.6A	Net Weight	73KG
Max. Power Consumption	630W	Total Weight (water filled)	83KG
IP / Insulation Class	55/F	Rotation Speed	955rpm
Max. Sound Pressure Level	72.8dB(A)	Max. Air Throw without diverter	48m
Max. Hot Water Temperature	95℃	Vertical Air Throw with diverter	15m

Heating capacities

Tw1/Tw2=90/70℃

Tp1	PT	Qw	△pw	Tp2
℃	kW	l/h	kPa	℃
V=10000 m³/h				
0	117.0	5156	98.0	32.5
5	108.0	4778	85.0	35.5
10	100.0	4404	74.0	38.5
15	91.7	4043	63.0	42.0
20	83.6	3686	53.0	45.0
25	75.7	3335	44.0	48.0
30	67.8	2991	36.0	51.0
35	60.2	2652	29.0	54.0

Tw1/Tw2=80/60℃

Tp1	PT	Qw	△pw	Tp2
℃	kW	l/h	kPa	℃
V=10000 m³/h				
0	102.0	4454	77.0	28.0
5	93.2	4085	66.0	31.5
10	84.9	3723	56.0	34.5
15	76.8	3368	47.0	37.5
20	68.9	3019	38.0	40.5
25	61.1	2676	31.0	43.5
30	53.4	2339	24.0	46.5
35	45.8	2006	18.0	49.0

Tw1/Tw2=70/50℃

Tp1	PT	Qw	△pw	Tp2
℃	kW	l/h	kPa	℃
V=10000 m³/h				
0	86.3	3760	50.0	24.0
5	78.0	3400	48.0	27.0
10	69.9	3047	40.0	30.0
15	61.9	2699	32.0	33.0
20	54.1	2358	25.0	36.0
25	46.4	2021	19.0	39.0
30	38.7	1688	14.0	42.0
35	31.1	1356	9.0	45.0

Tw1/Tw2=60/40℃

Tp1	PT	Qw	△pw	Tp2
℃	kW	l/h	kPa	℃
V=10000 m³/h				
0	70.9	3074	42.0	19.5
5	62.7	2722	34.0	23.0
10	54.8	2376	26.0	25.5
15	46.9	2035	20.0	28.5
20	39.1	1697	14.0	31.5
25	31.4	1362	10.0	34.5
30	23.6	1024	5.5	37.0
35	15.4	668	2.5	40.0

Tw1/Tw2=50/40℃

Tp1	PT	Qw	△pw	Tp2
℃	kW	l/h	kPa	℃
V=10000 m³/h				
0	65.0	5630	128.0	18.0
5	57.0	4937	101.0	21.0
10	49.2	4258	77.0	24.0
15	41.5	3592	57.0	27.0
20	33.9	2937	39.0	30.0
25	26.5	2292	25.0	33.0
30	19.1	1652	14.0	36.0
35	11.6	1004	6.0	38.5

V - Air Flow PT - Heating Capacity Tp1 - Inlet Air Temp. Tp2 - Outlet Air Temp.

Tw1 - Inlet Water Temp. Tw2 - Outlet Water Temp. Qw - Heat Exchanger Water Flow ΔPW - Heat Exchanger Water Pressure Drop

TUNNEL AIR INLET

Product overview

The biggest feature of tunnel air intakes is their high ventilation capacity. They can be used as air intakes for tunnel ventilation systems or for additional ventilation in summer. Both air flow rate and airflow direction can be easily adjusted. In cold seasons, the air intake baffle can be reliably closed. And the baffle has undergone insulation treatment to reduce temperature loss.

The tunnel air inlet is very suitable for lightweight wall buildings, as you can install the inlet on the inner wall by threading screws through the flange.

The opening angle of the tunnel air inlet when fully opened is only 35 centimeters, making it particularly suitable for livestock houses produced by cage systems. In such animal pens, there is usually only a small space available for opening the entrance.

Especially suitable for houses with small gaps in wall space; Like egg chicken cage production

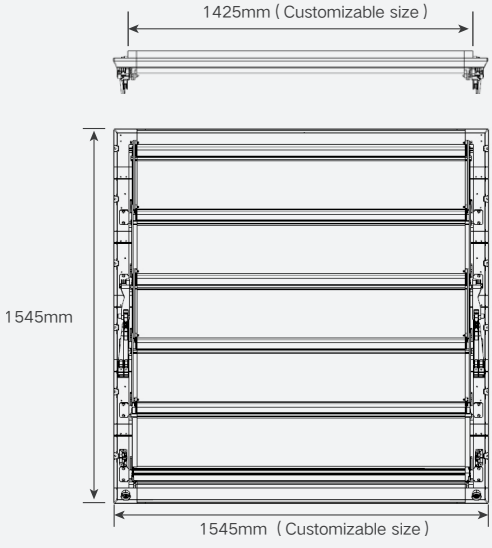
Controllable air direction, providing optimal airflow;

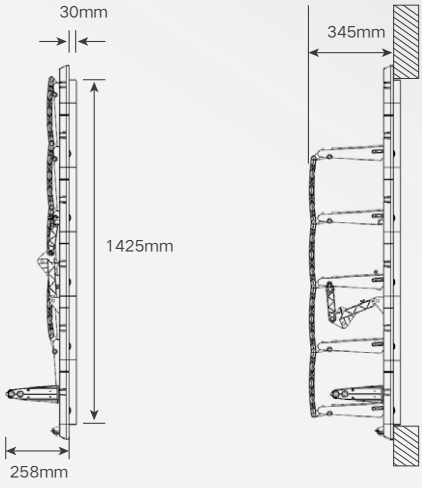
Provide semi insulated and highly insulated flip covers;

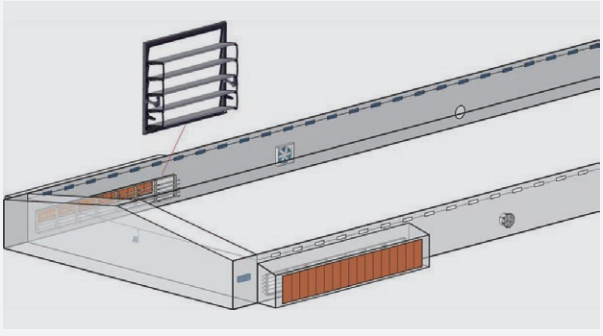
The fan blades have strong sealing properties when closed;

Durable and easy to clean;

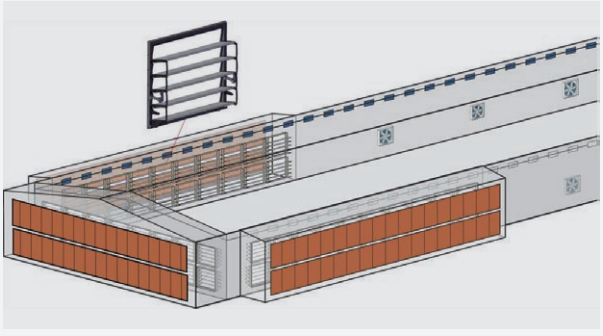








Single row tunnel type air inlet



Double row tunnel air inlet

Core Advantages

1. Precise Airflow Guidance (Core for Stress Prevention)

With a specially angled blade design, high-speed airflow is directed to the upper part of the house, creating a Coandă effect.

Cold air first mixes with warm air at the ceiling before settling evenly, completely eliminating direct cold drafts and reducing respiratory diseases.

2. Ultimate Sealing and Thermal Insulation

When closed, multi-layer blades with double rubber gaskets ensure full sealing, with an air leakage rate <1%.

Under minimum winter ventilation, heat loss is extremely low, saving up to 30% energy compared to ordinary curtains or wall openings.

3. Fast Response & Stable Control

Direct drive by electric linear actuator, with stepless adjustment from 0–100% opening and response time <10 seconds.

Can be connected to an environmental controller for fully automatic linkage with temperature, wind speed, and negative pressure.

4. Super Durability (Designed for Livestock Environments)

Material: engineering plastic with UV resistance, ammonia resistance, and moisture resistance.

Extremely low maintenance, service life up to 8–12 years.

5. Modular Design & Easy Installation

Standard modular sizes fit directly into wall openings without wall modification.

Multiple units can be spliced to meet end-wall requirements of any width.







Technical Parameter

Model	Product Dimensions	Installation dimensions	Opening size	
1st Floor	485mm	365mm	375mm	Customizable width
2nd Floor	750mm	625mm	635mm	
3rd Floor	1015mm	895mm	905mm	
4th Floor	1280mm	1160mm	1170mm	
5th Floor	1545mm	1425mm	1435mm	

LOUVER AIR INLET

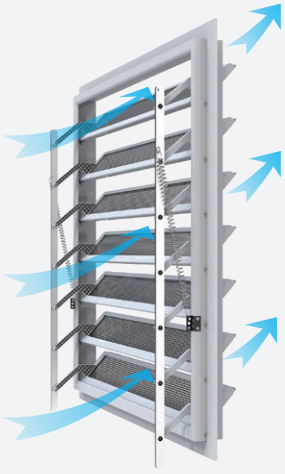
Product features

The panel of the all-plastic insulated louvered air inlet is composed of a four-layer hollow PC (polycarbonate) insulated sun panel. It is equipped with adjustable louvers that can be adjusted between 0 ° and 105 ° for both daylighting and light shading purposes, allowing flexible control of the indoor ventilation volume. This product can be used for guiding and introducing air through the side walls of livestock farms, and also for heat preservation at the air inlets and outlets of fans.

The louvers have a width of 163mm and a thickness of 20mm, featuring a stable structure. Each layer of louver is equipped with a sealing strip, which further enhances the heat preservation effect, improves the overall airtightness, reduces heat loss, and prevents the intrusion of external impurities.

The entire product is made of all-plastic material, which has excellent anti-oxidation and corrosion resistance properties. It can resist erosion from harsh environments such as humidity, acids, and alkalis, making it suitable for the high-humidity and high-corrosion application scenarios of livestock farms.







Technical Parameter

Layers	External dimensions (mm)	Installation dimensions (mm)	Opening size (mm)	
5	967mm	867mm	880mm	Width of blinds Customizable
6	1130mm	1030mm	1040mm	
7	1293mm	1193mm	1210mm	
8	1456mm	1356mm	1370mm	
9	1620mm	1520mm	1530mm	

Note: 1. The width can be adjusted according to the actual situation, and the optimal width is 110-130cm.
2. The size of the opening should be 10mm larger than the size of the inner frame.

AUTOMATIC OPENING OF SIDEWALL AIR INLET

Product features

It enables sensitive and convenient opening and closing, automatically maintains the air pressure difference between indoor and outdoor environments (the auto-opening pressure is freely adjustable), and can soften strong external light.

The panel is made of materials from well-known domestic brands, which have excellent light transmittance and are not prone to deformation. The rotating shaft is made of solid stainless steel round rods, ensuring stable and reliable opening and closing.

This product is suitable for guiding and introducing air through the side walls of livestock farms.



Material

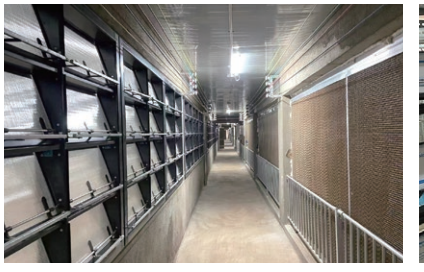
It is made of PVC plastic steel and ABS engineering plastic, featuring UV resistance and anti-aging properties, which ensures a long service life and durability. The buckles are made of high-strength alloy plastic, boasting strong impact resistance. The rotating shafts are made of stainless steel, enabling stable and reliable opening and closing.

Its dimensions can be customized to meet different ventilation requirements.

Technical Parameter

Layers	External dimensions (mm)	Installation dimensions (mm)
3 layer	940mm	840mm
4 layer	1220mm	1120mm
5 layer	1500mm	1400mm
6 layer	1780mm	1680mm







MULTI LAYER LARGE BOARD AIR INLET

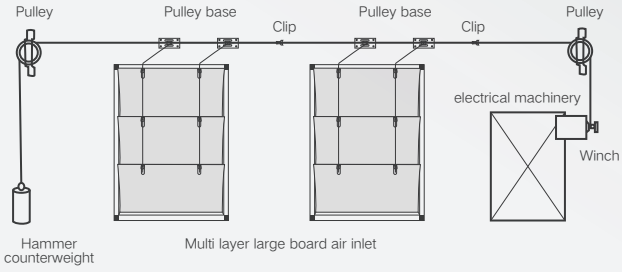
Product features

The multi-layer air inlet is made of PVC plastic steel material, with high strength, strong toughness, anti-aging, no deformation at high and low temperatures, and long service life; It is sensitive and convenient to open and close, with a large ventilation volume, quiet and reliable opening and closing, and will not disturb livestock and poultry. It can be used for side wall ventilation in pig houses, chicken houses and other breeding farms.

From the perspective of full-scenario adaptation and risk prevention and control, it is strongly recommended to equip both a manual winch and an electric push rod at the same time. Through "dual-power complementation", full functional coverage can be achieved.



Installation Diagram







high strength
Strong resilience

Sealed tightly
Enable flexibility

Anti aging
Strong performance

Quiet opening
and closing

Technical Parameter

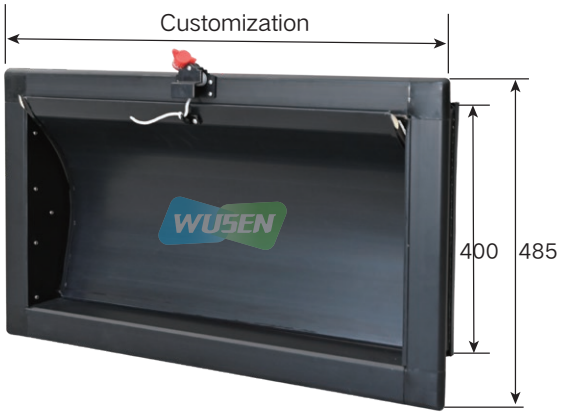
Layers	External dimensions (mm)	Installation dimensions (mm)	Opening size (mm)
1 layer	489mm	389mm	404mm
2 layer	868mm	768mm	783mm
3 layer	1247mm	1147mm	1162mm
4 layer	1626mm	1526mm	1541mm
5 layer	2005mm	1905mm	1920mm
6 layer	2384mm	2284mm	2299mm

Note: 1. This size is a fixed height size, and the width can be customized according to demand.
2. The size of the opening is 10mm larger than the installation size.

SIDE WALL AIR INLET

400 air inlet

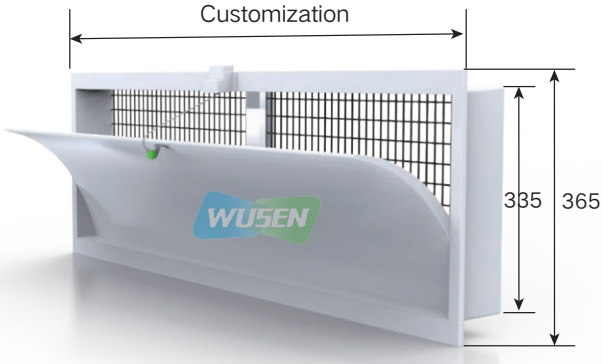
The air inlet of the side wall is made of PVC plastic steel, with high strength, strong toughness, anti-aging, no deformation at high and low temperatures, and long service life; It is sensitive and convenient to open and close, with a large ventilation volume, quiet and reliable opening and closing, and will not disturb livestock and poultry. It can be used for side wall ventilation in pig houses, chicken houses and other breeding farms.



340 air inlet

The air inlet of the side wall is made of PVC plastic material, with high strength, strong toughness, anti-aging, no deformation at high and low temperatures, and long service life; Sensitive and convenient opening and closing, large ventilation volume, quiet and reliable opening and closing, will not disturb livestock and poultry, and can be used for ventilation on the side walls of livestock and poultry houses.

- The fan blades are made of PVC, and the outer frame is made of PVC;
- Two side baffles, pulley ABS;
- Bird proof net PP, fixed bracket stainless steel; ABS plug, screws made of stainless steel or nylon;
- Side opening installation, flexible and easy to use, with customizable air volume and length.



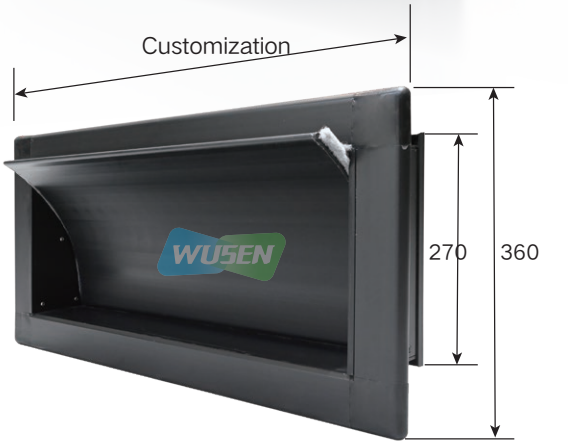
270 air inlet

The frame and fan blades are made of PVC, which is UV resistant, anti-aging, cold proof, heat insulated and durable.

The curved large plate fan blades can be adjusted to any open state, allowing for free adjustment of air volume for better performance.

Specially added high-quality insulation layer, both opening and closing can achieve the best state. Equipped with sealing strips on both sides, it can effectively prevent heat dissipation and achieve a tighter sealing effect.

Side wall installation, can be automatically or manually controlled.



Technical Parameter

Product Name	External dimensions (mm)	Installation dimensions (mm)	Opening size (mm)	Cube meter hour (m^3/h)
400 air inlet	850mm*485mm*125mm	750mm*400mm	760mm*410mm	3780m^3/h
340 air inlet	800mm*365mm*110mm	750mm*335mm	760mm*345mm	2200m^3/h
270 air inlet	720mm*360mm*130mm	630mm*270mm	640mm*280mm	1200m^3/h

Note: 1. Any length can be customized.

POULTRY AIR INLET

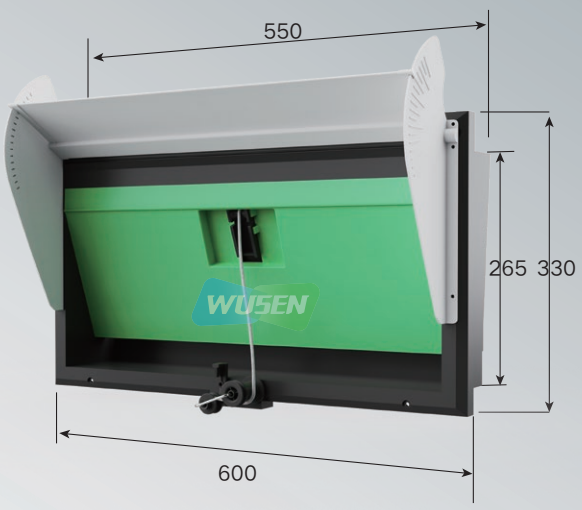
600 air inlet

ABS material, thickened board, high cost-effectiveness; Breathable and fast cooling;

Install protective nets to effectively prevent the invasion of insects and birds, ensure sufficient dryness and freshness, smooth air circulation, and ensure comfort and safety inside;Strong wind, rejecting stuffiness;

Sealed tightly, with a reasonable structure and flexible opening.

The special design of the top and edges of the ventilation window provides better sealing when closed. Can be equipped with a deflector.

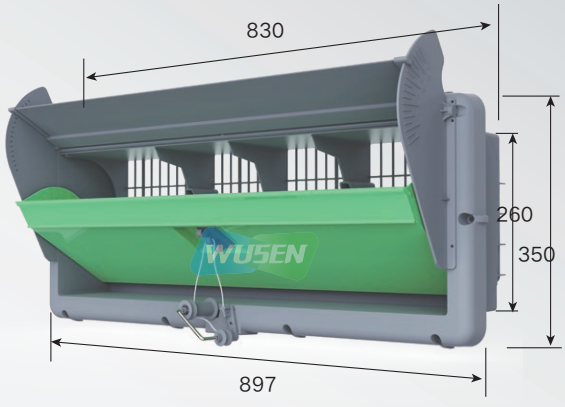


880 air inlet

Stable air intake is ensured, especially under low ventilation volume conditions.High-tension springs enable the inlet louvers to close tightly.

High-quality materials are adopted to guarantee a long service life of the air inlets.It can be safely cleaned with a high-pressure water gun.

Fitted with premium accessories, it is nearly maintenance-free!



1100 air inlet

Made of ABS/PP engineering plastic or PVC plastic-steel material, it features excellent aging resistance, UV resistance, and resistance to deformation under high and low temperature conditions, boasting a long service life and being suitable for the complex temperature and humidity environments of livestock houses. It is equipped with a manual / optional electric adjustment mechanism, enabling flexible opening and quiet operation.



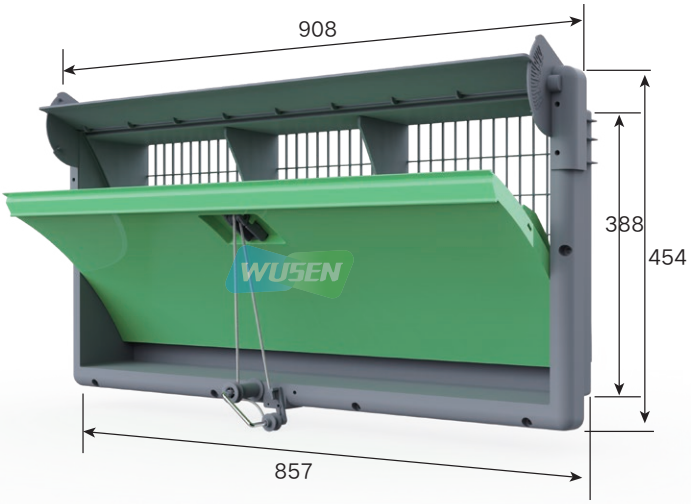
Technical Parameter

External dimensions (mm)	Installation dimensions (mm)	Opening size (mm)	Cube meter hour (m^3/h)
600*330*150	550*265	560*275	1800m^3/h
897*350*150	830*260	840*270	3000m^3/h
1100*425*130	990*340	1000*350	4500m^3/h

POULTRY AIR INLET

908 air inlet

Due to its capacity it is used in low quantities in the house which keeps in minimum the isolation losses in the houses.The special design of the door guides the air flow. Ventilation of the poultry houses can be made more economically with the increased airflow capacity of wusen Air Inlet. Ilgaz air inlet's flap also has an insulation material and aluminum profile for maximum strength.



Advantages

Less mounting holes through big dimensions, less isolation problem

Opening and closing options from inside and outside of house

Providing minimum ventilation all the time with the option of adjusting



Common specifications

- Manufactured from high quality plastic.
- Isolation foam inside the air inlet door offers high isolation.
- The handle on the airinlet door lets the user to open the airinlet door in two steps.
- Stainless steel springs offer perfect air tightness.
- Aluminum profiles inside the air inlet door.







Technical Parameter

Outer Dimensions (mm)	Flange Dimensions (mm)	Opening size (mm)	Air volume 10pa (m^3/h)	Air volume 20pa (m^3/h)	Air volume 40pa (m^3/h)
908*454*150	857*388	870*400	2500	3100	4800

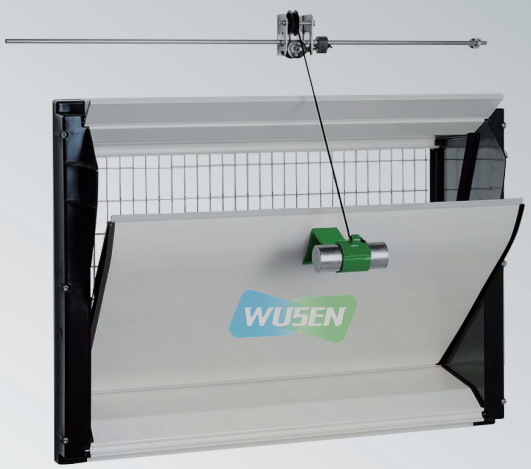
SIDE WALL AIR INLET

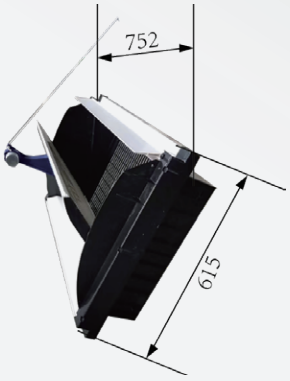
Product features

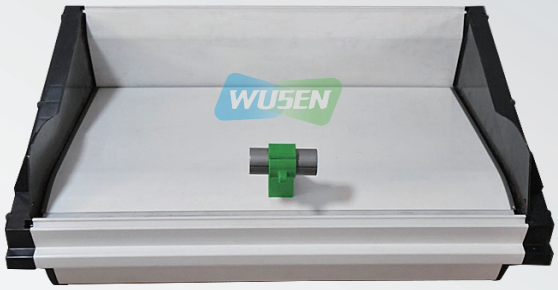
The size of the air intake is easier to control and adjust the air volume, and the height and length are more reasonable compared to traditional ventilation windows.

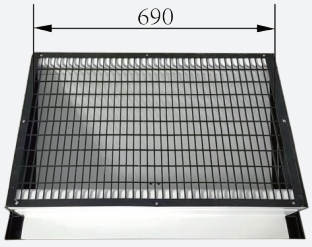
The opening method is self hanging, using the principle of gravity to close, which has a lower failure rate and better closing effect than traditional spring opening.

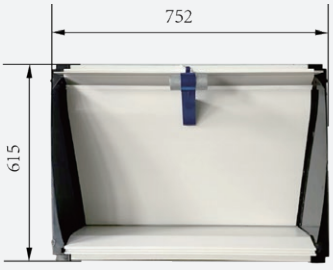
Good sealing, no ventilation, no light transmission, minimizing the impact of unnecessary wind and light on the production performance of homes and poultry. Better sealing is also more conducive to creating negative pressure and better ventilation.

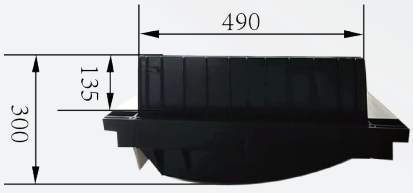












Technical Parameter

External dimensions (mm)	Installation dimensions (mm)	Opening size (mm)
752*615*300	690*490	700*500

Air volume

10Pa	20Pa	30Pa	40Pa
2400m³/h	3350m³/h	4150m³/h	4800m³/h

BUTTERFLY AIR INLET

Product features

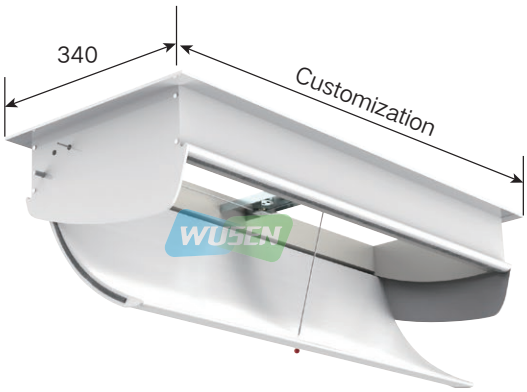
The frame is made of high-quality ABS engineering plastic injection molding, and the side and flap are made of PVC plastic steel, which is UV resistant, anti-aging and durable.

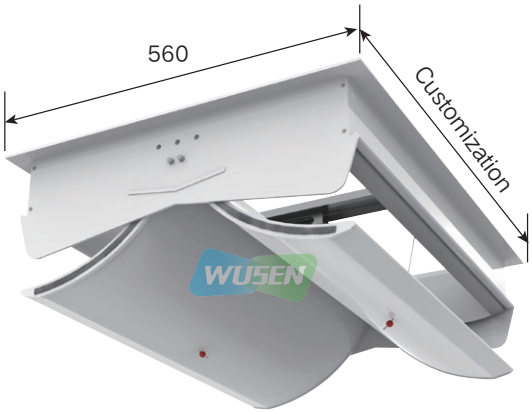
The brand new double door design allows for simultaneous opening of two doors, allowing for adjustable opening status and free adjustment of air volume for better performance.

Specially added high-quality insulation layer, both opening and closing can achieve the best state. If insulation is needed, it can effectively prevent heat dissipation and achieve a tighter sealing effect.

It can be controlled automatically or manually.

Suitable for factories, greenhouses, and large-scale livestock breeding facilities.





Technical Parameter

External dimensions (mm)	Installation dimensions (mm)	Cube meter hour (m^3/h)
730*560*160	680*500	4100
800*560*160	750*500	4528
1200*560*160	1140*500	7300

Note: 1. Any length can be customized.

CEILING FOUR-SIDE AIR INLET

Product Overview

Four sided air intakes for animal husbandry are used for negative pressure ventilation, which automatically opens according to the magnitude of the negative pressure.

Material

It is composed of frame, blade and foam plate at the bottom made of ABS plastic.

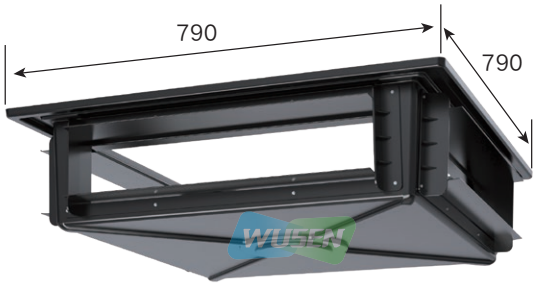
Advantages

The prolonged maintenance of indoor temperature can significantly alter indoor air circulation;

High temperature resistance, cold resistance, high strength, easy installation;

The ventilation effect is obvious, the service life is long, and it is installed on the top;

Four sides are used for air induction, and the thickness of foam plate is 20mm.



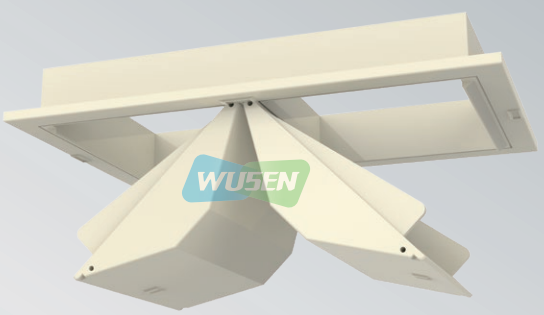
Technical Parameter

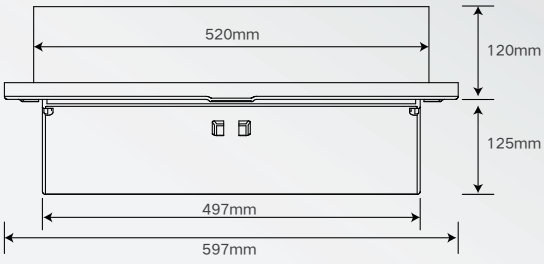
External dimensions (mm)	Installation dimensions (mm)	Cube meter hour (m^3/h)
790*790*213	660*660	5553

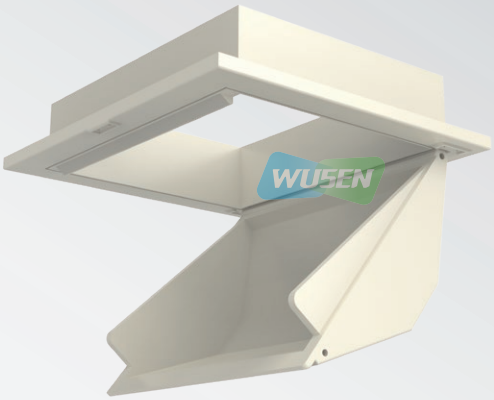
POLYURETHANE CEILING AIR INLET

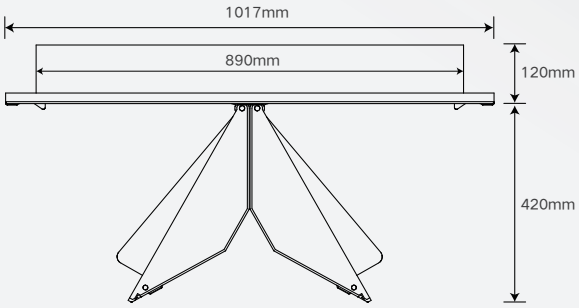
Product Overview

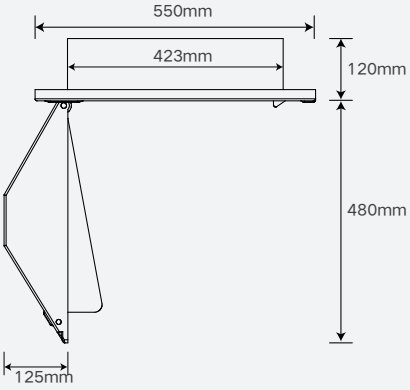
This large ceiling inlet is specially designed for installation in ceilings. The inlet is used to bring air from the attic into the house. Working with ceiling inlets, in turn, helps preheat the incoming air temperature. The entrance is controlled by a central stainless steel accessory. The inlet features the WUSEN designed ridge that guides the airflow along the ceiling for a higher distance.

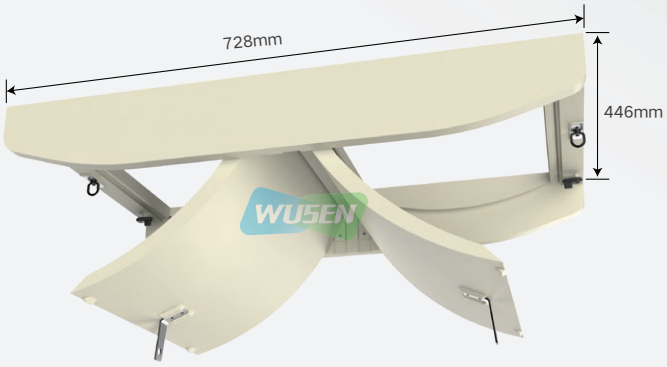












Technical Parameter

External dimensions (mm)	Installation dimensions (mm)	Opening size (mm)	Cube meter hour (m^3/h)
550*597*245	423*520	430*530	1250
1017*597*245	890*520	900*530	2516
728*446*100	628*406	628*406	2125

650 POLYURETHANE SIDE WALL AIR INLET

Product overview

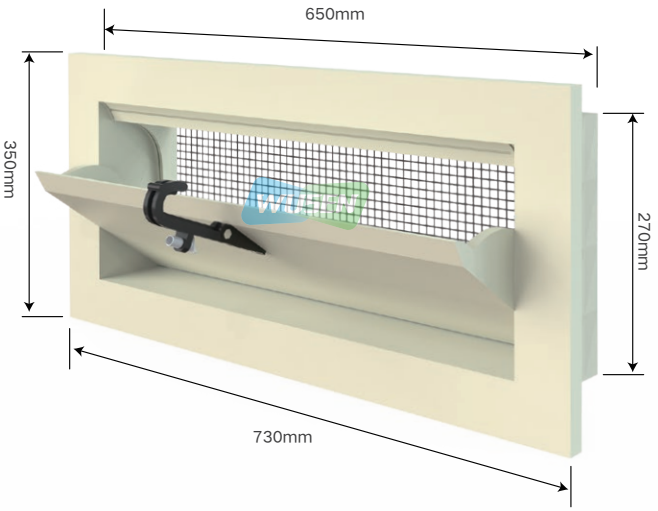
Constructed of polyurethane material, it features good air permeability and excellent thermal insulation. It resists deformation after long-term service and delivers superior air tightness.

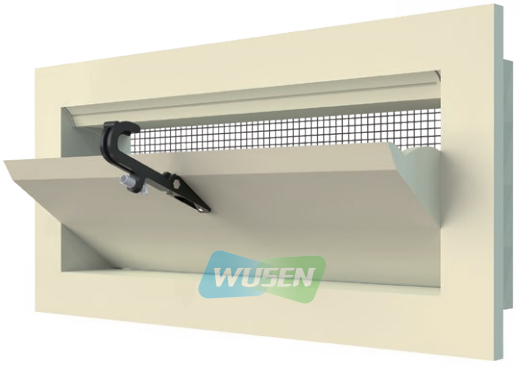
A bird screen is installed to effectively block insects and birds. It guarantees sufficient dry, fresh and smooth airflow for a comfortable and safe indoor environment.

Tight sealing, rational structure and smooth operation.

This air inlet is designed for livestock farms. It opens from the middle with guide vanes on both sides to direct airflow into the house; the air direction can be adjusted freely.

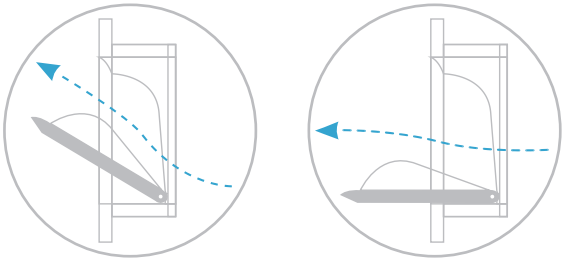
Actuation options: It can be equipped with either a manual winch or an electric linear actuator. We normally recommend fitting both for backup between manual and electric operation.







Air flow direction



Technical Parameter

External dimensions (mm)	Installation dimensions (mm)	Opening size (mm)	Air volume 10pa (m^3/h)	Air volume 20pa (m^3/h)	Air volume 40pa (m^3/h)
730*350*120	650*270	660*280	1450	2050	2900

800 POLYURETHANE SIDE WALL AIR INLET

Product overview

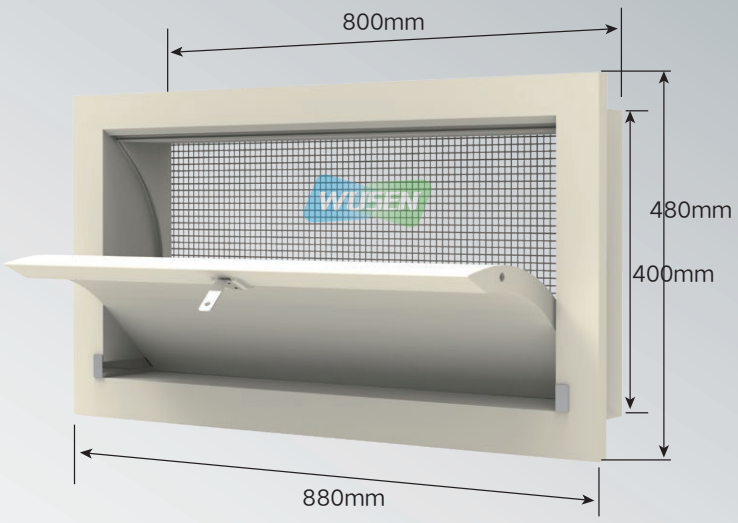
Made of polyurethane, it offers good air permeability and excellent thermal insulation. It resists deformation after long-term use and provides outstanding air tightness.

A bird screen is fitted to effectively prevent insects and birds from entering. It maintains sufficient dry, fresh and smooth airflow to ensure a comfortable and safe indoor environment.

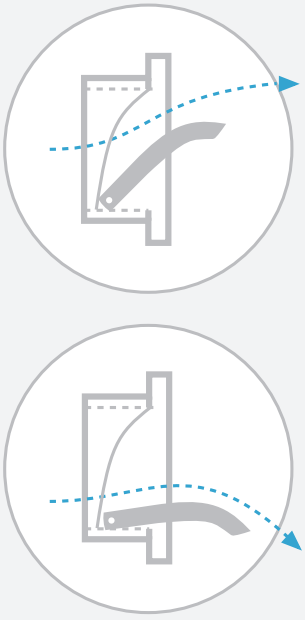
It features tight sealing, a well-designed structure and smooth opening movement.

The curved guide vanes help direct air toward the middle of the building and avoid animal stress.

Actuation options: It can be equipped with a manual winch or an electric linear actuator. We generally recommend installing both, so the manual and electric systems serve as mutual backups.



Air flow direction





Technical Parameter

External dimensions (mm)	Installation dimensions (mm)	Opening size (mm)	Air volume 10pa (m^3/h)	Air volume 20pa (m^3/h)	Air volume 30pa (m^3/h)
880*480*145	800*400	810*410	2050	3536	4265

800 POLYURETHANE SIDE WALL AIR INLET

Product overview

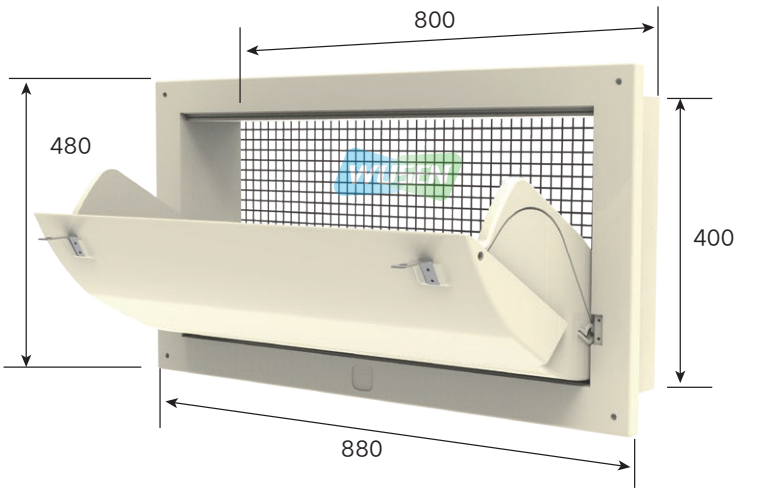
Made of polyurethane, it delivers thermal insulation, sound attenuation, light weight and high strength, durable corrosion resistance, moisture and water resistance, energy saving and environmental friendliness, and easy maintenance.

Fitted with a bird screen to effectively block insects and birds. It ensures adequate dry, fresh, unobstructed air circulation for a comfortable and safe indoor environment.

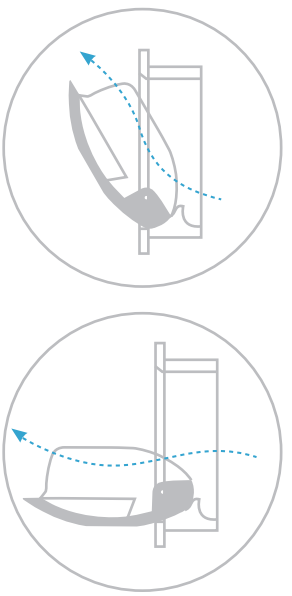
Tightly sealed, well-designed and smoothly operated.

The scoop-shaped guide vanes help deliver air to the center of the building and prevent animal stress.

Actuation options: It can be equipped with a manual winch or an electric linear actuator. We generally recommend installing both for mutual backup between manual and electric operation.



Air flow direction





Guide vanes are arranged on both sides of the blade for more precise ventilation performance.

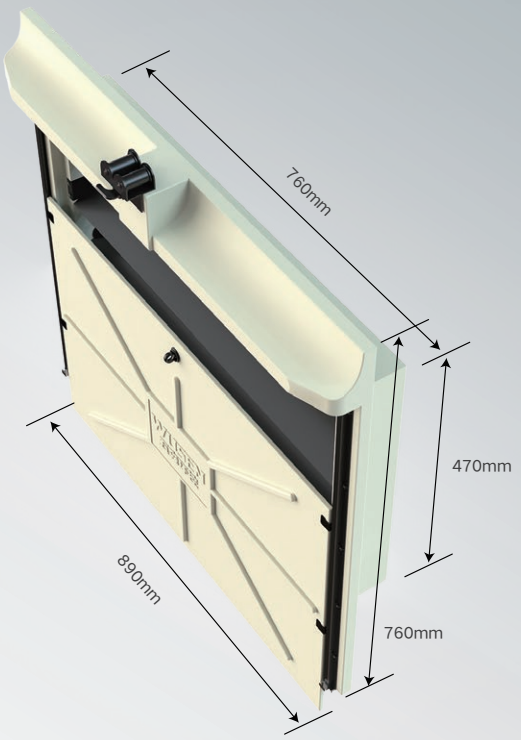
Technical Parameter

External dimensions (mm)	Installation dimensions (mm)	Opening size (mm)	Air volume 10pa (m^3/h)	Air volume 20pa (m^3/h)	Air volume 30pa (m^3/h)
880*480*210	800*400	810*410	2150	3636	4365

EXHAUST AIR CHIMNEYS

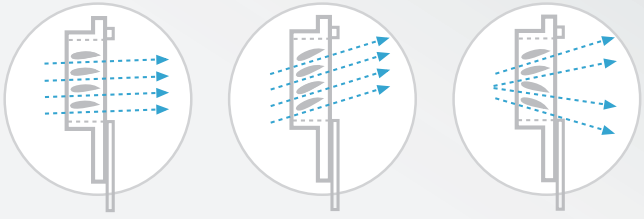
Product overview

The polyurethane sliding plate window is designed for very spacious breeding houses or those with obstacles. Thanks to the adjustable shutters, the air flow can be directed to any desired direction, regardless of the required capacity. With the unique slider and guide rail, we ensure that the special-shaped sliding plate at the entrance will never get stuck. The two quick-release devices at the bottom of the guide rail allow for quick removal of the baffle for cleaning. The polyurethane sliding plate window is equipped with a special internal rope lock device, which can lock the position of the entrance sliding plate when needed.





Air flow direction



Technical Parameter

Ventilation mode		Air volume (10 pa)	Air volume (20 pa)	Air volume (40 pa)
Mode 1	Horizontal ventilation	3200m³/h	4450m³/h	6400m³/h
Mode 2	All 30°	2250m³/h	3200m³/h	4450m³/h
Mode 3	30° up and down	2150m³/h	3000m³/h	4350m³/h
Ventilation mode		cfm@0.05 inH_2O	cfm@0.1 inH_2O	cfm@0.15 inH_2O
Mode 1	Horizontal ventilation	2106	2922	3638
Mode 2	All 30°	1481	2102	2529
Mode 3	30° up and down	1415	1970	2472

1200 POLYURETHANE SIDE WALL AIR INLET

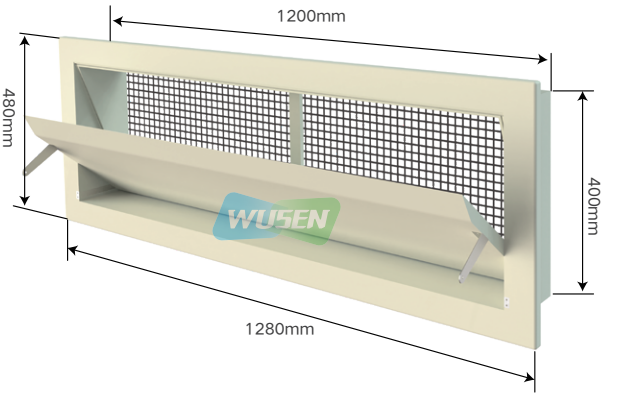
Product Overview

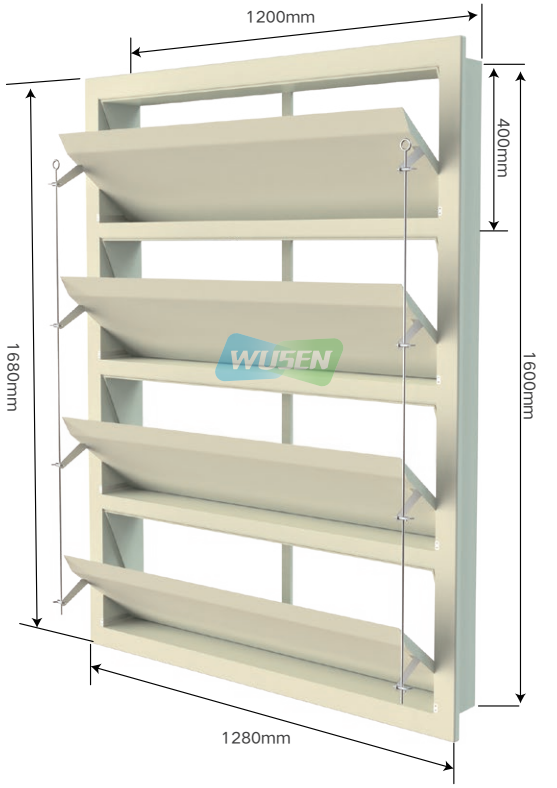
The 1200 polyurethane ventilation window is suitable for poultry farms, featuring straight blade fans and a unique polyurethane formulation that provides excellent thermal insulation, good breathability, and superior heat retention. It remains resistant to deformation after prolonged use and offers exceptional airtightness.

Install bird netting to effectively prevent the intrusion of insects and birds, ensuring sufficient dryness and freshness, smooth air circulation, and maintaining indoor comfort and safety;

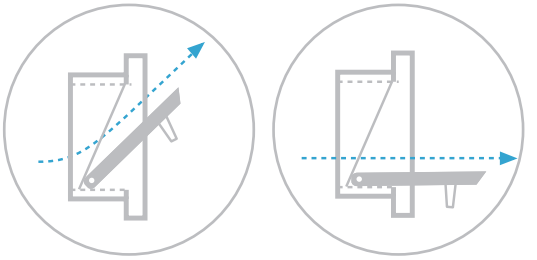
The seal is tight, the structure is rational, and the opening is flexible.

This ventilation window is an ideal choice for cold-climate regions.





Air flow direction



Technical Parameter

Model	Overall dimensions (mm)	Installation dimensions (mm)	Opening size (mm)	Air volume 10pa (m^3/h)	Air volume 20pa (m^3/h)	Air volume 25pa (m^3/h)
一层	1280*480*140	1200*400	1210*410	3850	5381	6532
二层	1280*880*140	1200*800	1210*810	7700	10762	13064
三层	1280*1280*140	1200*1200	1210*1210	11550	16143	19596
四层	1280*1680*140	1200*1600	1210*1610	15400	21524	26128
五层	1280*2080*140	1200*2000	1210*2010	19250	26905	32660

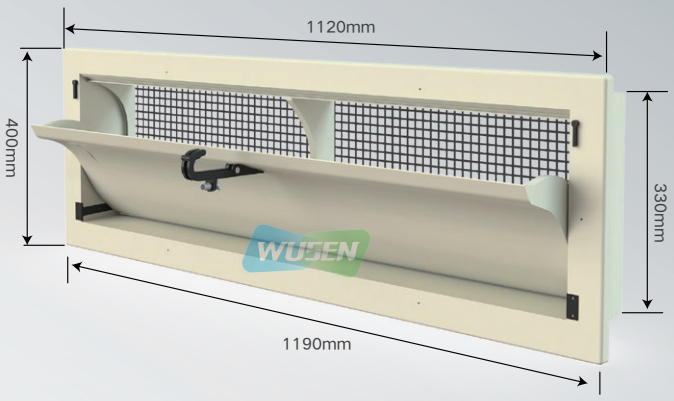
1120 POLYURETHANE SIDE WALL AIR INLET

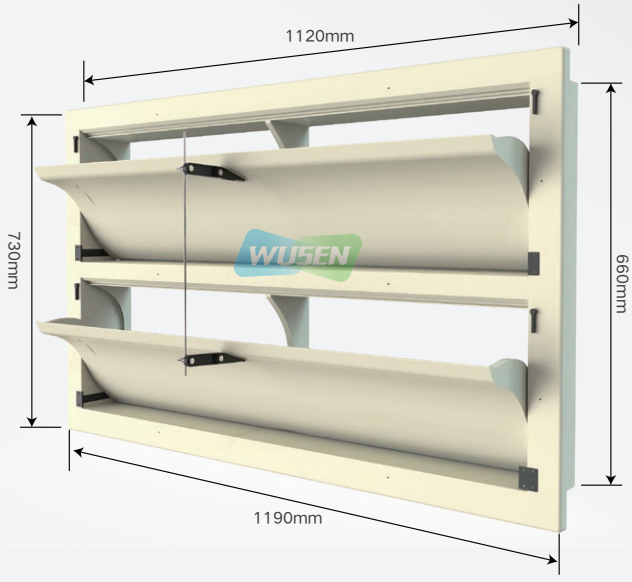
Product overview

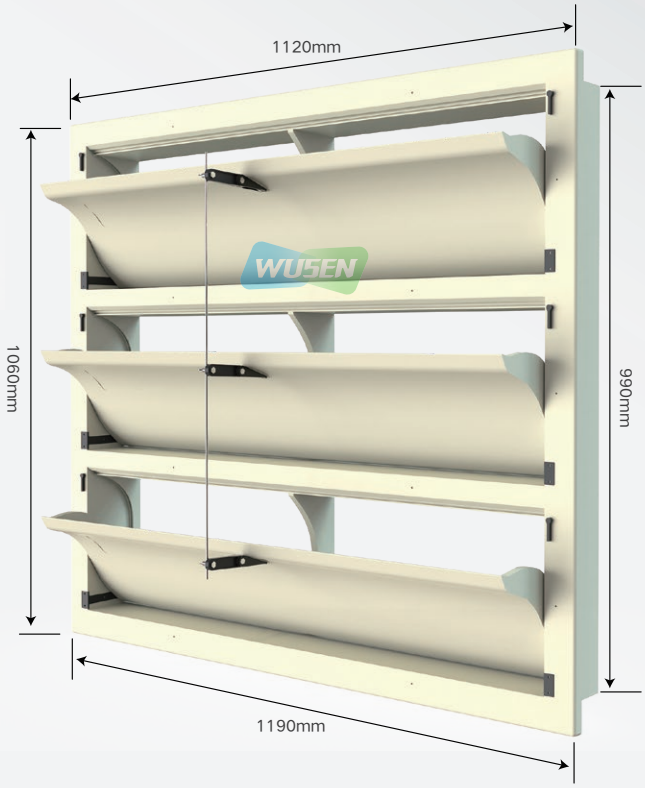
The 1120 polyurethane air inlet is suitable for poultry farms. Its curved fan blades help guide the air, and guide plates are designed on both sides of the fan blades to prevent air leakage. The unique polyurethane formula boasts excellent thermal insulation performance, along with good air permeability.

It is not prone to deformation after long-term use and has excellent air tightness. An anti-bird net is installed to effectively prevent the intrusion of insects and birds, ensuring sufficient dryness and freshness, smooth air circulation, as well as indoor comfort and safety. It features tight sealing, a reasonable structure, and flexible opening.

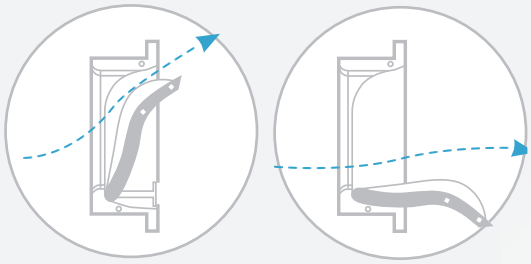
This type of air inlet is an ideal choice for areas with low-temperature climates.







Air flow direction



Hard link opening

The air inlet is connected in series by hard connecting rods on the fan blades, which can precisely control the opening direction of each layer of fan blades. A sealing device is added at the bottom of the fan blades, which means that in the early opening stage, air will not flow to the animals under the fan blades. Instead, the air is guided upward into the breeding house.

Arc-shaped S-plate fan blade

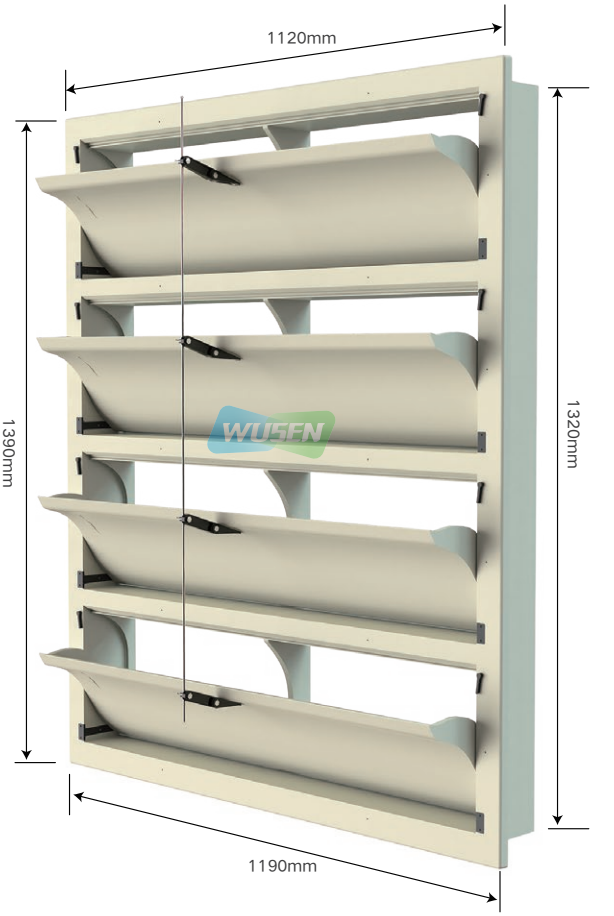
The air inlet is equipped with a curved S-plate fan blade. The curved fan blade guides air upward during minimum ventilation, but also directs air downward when it reaches the maximum opening state. This makes it an ideal ventilation device for breeding houses during the maximum ventilation period.

Power unit

It can be equipped with a manual winch or an electric push rod. Usually, we recommend equipping both to enhance the complementarity between manual and electric operation.

The window sash is equipped with a buckle device.

The closing buckles on the fan blades can be used to permanently close the blades. According to different solar terms, the opening state of the fan blades on each layer can be adjusted, and the unused blades can be closed. This helps maintain the temperature inside the house. For example, during hot summer days, all blades can be opened.



Technical Parameter

Model	Overall dimensions (mm)	Installation dimensions (mm)	Opening size (mm)	Air volume 10pa (m^3/h)	Air volume 20pa (m^3/h)	Air volume 40pa (m^3/h)
First floor	1190*400*140	1120*330	1130*340	3480	4900	6950
Second floor	1190*730*140	1120*660	1130*670	6960	9800	13900
Third floor	1190*1060*140	1120*990	1130*1000	10440	14700	20850
Fourth floor	1190*1390*140	1120*1320	1130*1330	13920	19600	27800

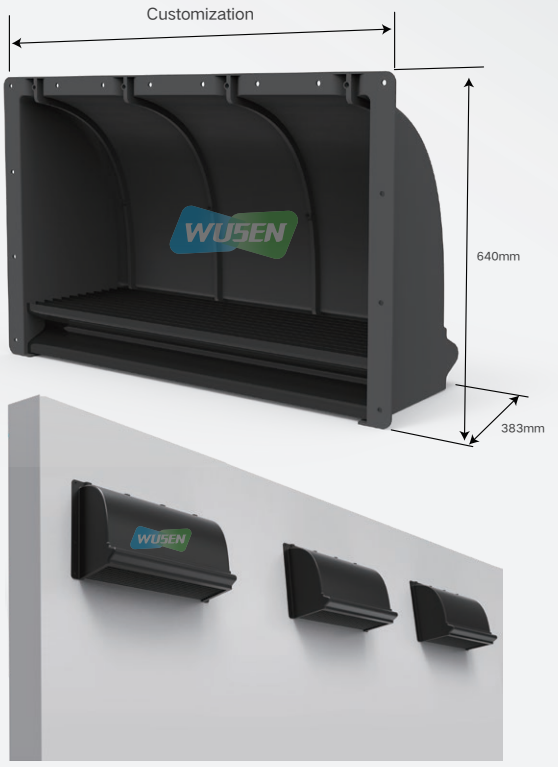
RAINPROOF COVER FOR AIR INTAKE

Product Overview

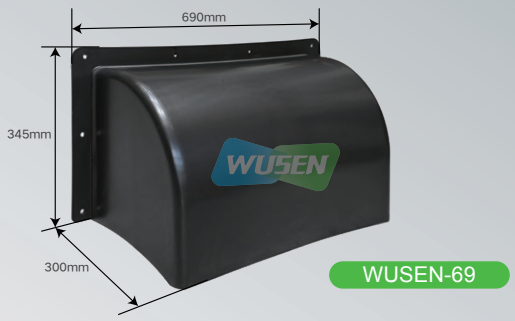
Made of environmentally friendly engineering plastics, it can be spliced according to the size of the ventilation window. It has good sealing performance, can more firmly withstand strong winds, and has excellent waterproof performance. Relying on the semicircular design, it does not accumulate rainwater and provides all-round protection.

The bottom of the rain cover is equipped with a 115mm light-shielding sheet, which is suitable for breeding places with high light-shielding requirements. It is integrally formed for easy installation.

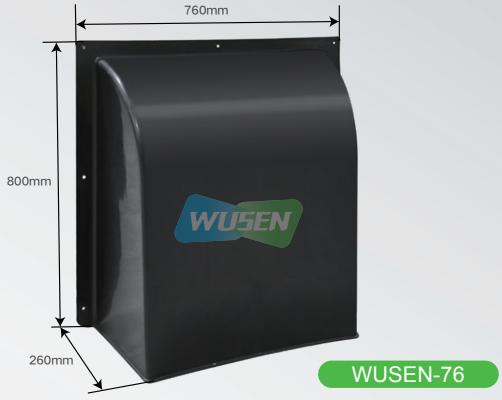
This product is UV-resistant, not afraid of long-term exposure to sunlight, anti-aging, and has a long service life. It effectively protects the air intake and prevents heat dissipation in winter.



Rain cover + light trap



WUSEN-69



WUSEN-76



WUSEN-130

Technical Parameter

Model	Specifications (mm)
Type 1	750*383*640
Type 2	1030*383*640
Type 3	1300*383*640
Type 4	1580*383*640

Technical Parameter

Model	Specifications (mm)
WUSEN-69	690*300*345
WUSEN-76	760*260*800
WUSEN-130	1300*400*400

LIGHT TRAP

Product Overview

Within an enclosed henhouse, chicken growth and sexual maturity needs to be strictly controlled, most often through the use of different lighting situations. Because natural lighting can't meet these requirements, we have designed the light trap and filter to manually control the lighting periods. Our light trap block sunlight from the exhaust fan or window of the henhouse, thus achieving artificial control of the illumination period.

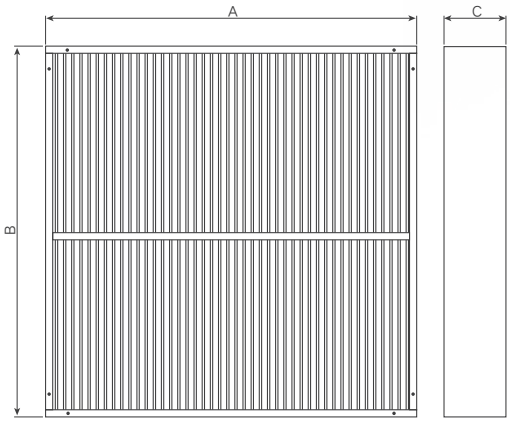


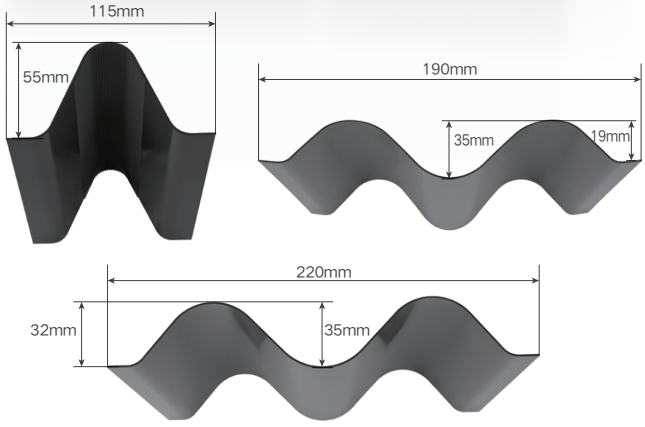
Material

It is made by injection molding of the no glare PVC material. It can resist the long-term sunlight, chemical corrosion, and cleaning at high pressure;

It is reasonably designed to be conveniently installed with different sizes to efficiently reduce the brightness;

The outer frame materials are stainless steel frame and galvanized steel frame;





218mm specification technical parameters

Model	1530	1380	1220	1110	1000	900	830	780	620	270	255
A(mm)	1530	1380	1220	1110	1000	900	830	780	620	270	255
B(mm)	1530	1380	1220	1110	1000	900	830	780	620	270	255
C(mm)	260	260	260	260	260	260	260	260	260	260	260

According to customer requirements, stainless steel casing and galvanized steel casing can be customized.

ENVIRONMENTAL CONTROLLER

WUSEN Climate Controller

The WUSEN livestock farm climate controller is a revolutionary device that elevates farm breeding to a new level. It manages all aspects of farm environmental control, providing better air quality and animal welfare for your livestock.

The WUSEN climate controller ensures an optimal climate environment and rapid response to weather changes through dynamic ventilation, while reducing energy consumption and carbon emissions. Its intuitive user interface facilitates installation, guiding users through setup and configuration, and simplifies troubleshooting needs.

The WUSEN climate controller supports multi-house control, making it easy to manage the needs of different herds. Remote management includes cloud services, the Trio Air application, and personal ID accounts. Both the touch screen of the WUSEN climate controller and the remote services offer independent user experiences, enabling you to conveniently manage settings, users, and preferences with higher security.



Analog Inputs
- Room Temperature Sensors
- Outdoor Temperature Sensors
- Humidity Sensors
- CO_2 Sensor
- Ammonia Sensor
- Static Pressure Sensor
- Wind Direction
- Potentiometers



Analog Qutputs
- Variable Fans
- Lighting
- Variable Heaters
- Air inlets

Digital Qutputs
- Fans On/Off
- Tunnel Curtain
- Air inlets
- Heaters
- Pad Cooling
- Spraying/Misting
- Lighting
- Clocks
- Water Valve
- Local Alarms

Digital Inputs
- Water Meters
- Energy Consumption
- External Alarms

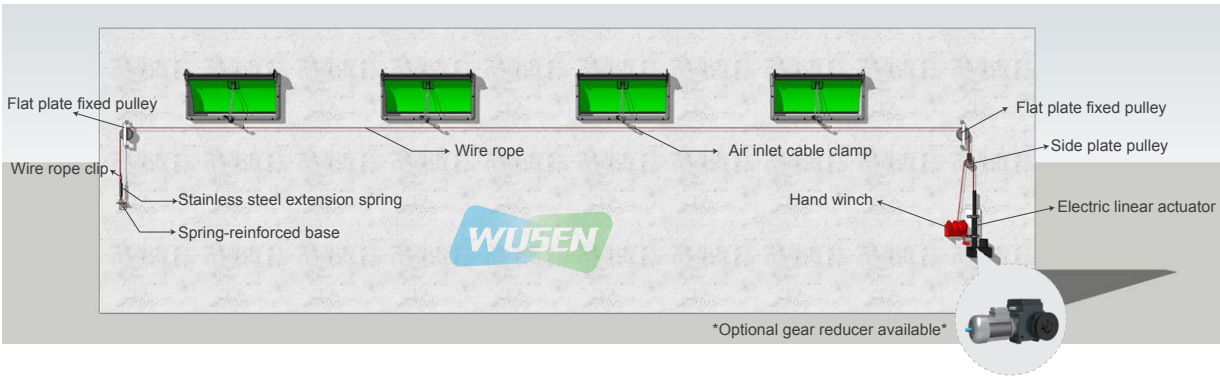
EIN BUS
- Distributed Control
- Inputoutput Extension
- Data Acquisition/management

Alarm
- Auxiliary alarm
- Priority alarm

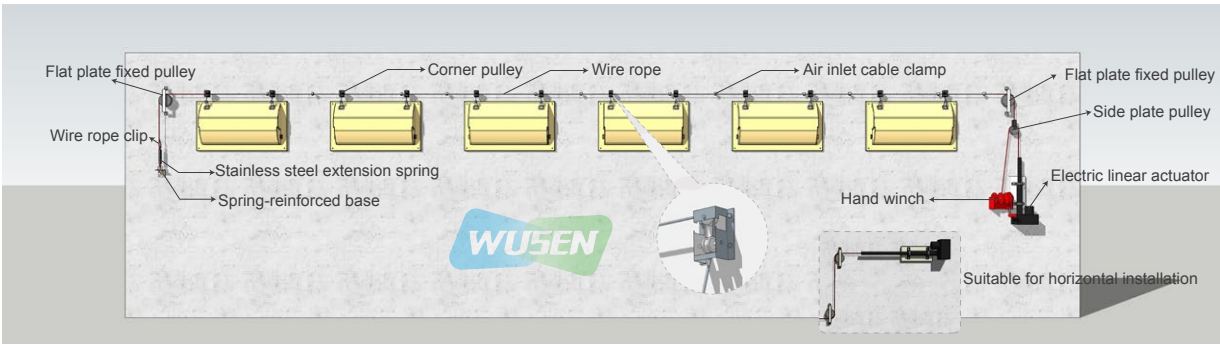
- Intuitive and stylish user interface
- Dynamic ventilation management
- Capable of controlling multiple rooms/sheds
- Cloud services and Trio Air live app/apk
- Support for multiple languages
- Connect to standard LAN devices

AIR INLET ACTUATOR

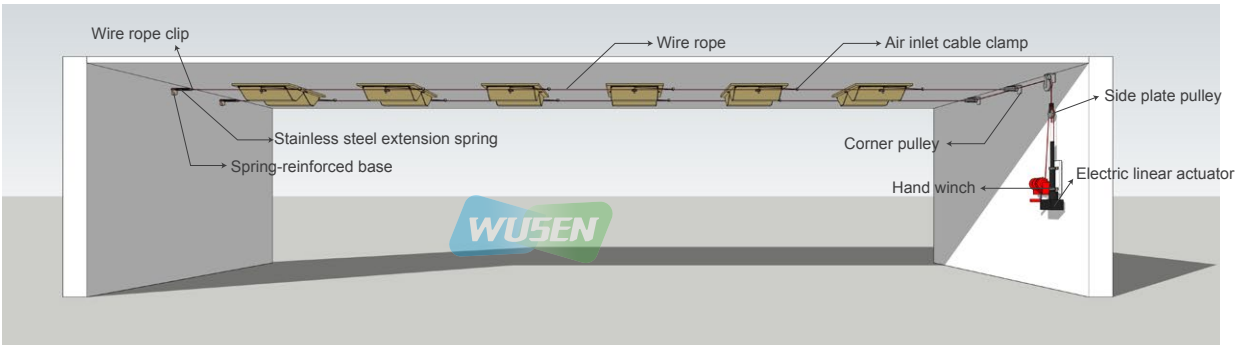
01.Sidewall air inlet actuator



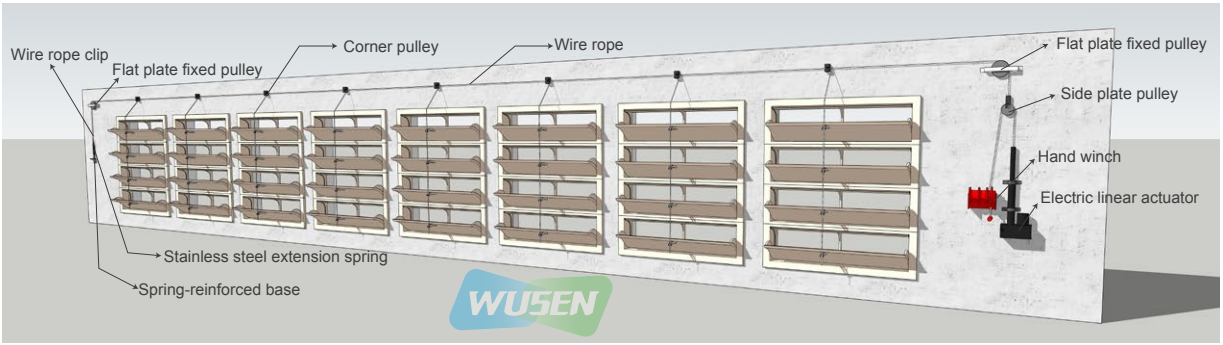
02.Spring-balanced self-opening air inlet



03.Gravity-driven vertical drive unit



04.Baffle vent control system



Environmental control Experts

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