KUN SHENG
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KUNSHENG AGRICULTURE

WEIFANG KUNSHENG AGRICULTURE TECHNOLOGY CO.,LTD
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WEIFANG KUNSHENG AGRICULTURE TECHNOLOGY CO.,LTD



COMPANY PROFILE

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COMPANY PROFILE

Weifang Kunsheng Agriculture Technology Co.,ltd, established in 2012, is identified as a greenhouse project contractor with our own manufacturing factory, the company's core focus and main business activities include the design, manufacturing, installation and maintenance of commercial greenhouse.

We have strong technical force and perfect after-sales service guarantee, dedicated to provide comprehensive modern equipment and technology for the modern greenhouse agriculture.

We can help you design a suitable greenhouse based on your details needs.

We can supply and help shipping whole greenhouse to your site.

We will conduct a professional and successful construction process with your help.

We can provide training to help you use your commercial greenhouse to its full potential.

We can supply you with everything you need to keep your greenhouse operating smoothly.

We will provide a 12 months guarantee, no worries in following using.

In short, we provide a complete turn-key solution

VENLO TYPE GLASS GREENHOUSE

Besides nice appearance , glass greenhouse has high light transmittance , over 90%, provides good anti - corrosion and fire resistance performance , strong ability of resisting wind and snow .
We can also design according to different area climate .

Other devices

External and internal shading system , roof and side windows , cooling system , fully automatically controlled in one greenhouse control system



Structure

Venlo type hot-dip galvanized steel structure , good anti-corrosion ability , service life over 20years.

Cover material

5mm tempered glass on roof ,5+6+5mm double layer glass at sides . All glasses are installed with aluminum alloy frame , sealed by EPDM rubber strip .

Technical data : Wind load :0.6KN/m²
Snow load : 0.5KN/m²
Dead load : 18kg/m²
Rainwater drain capacity : 140mm/ h at maximum

Span width	9.6m, 10.8m, 12m
Column distance	4m
Gutter height	3–6m



POLYCARBONATE SHEET GREENHOUSE

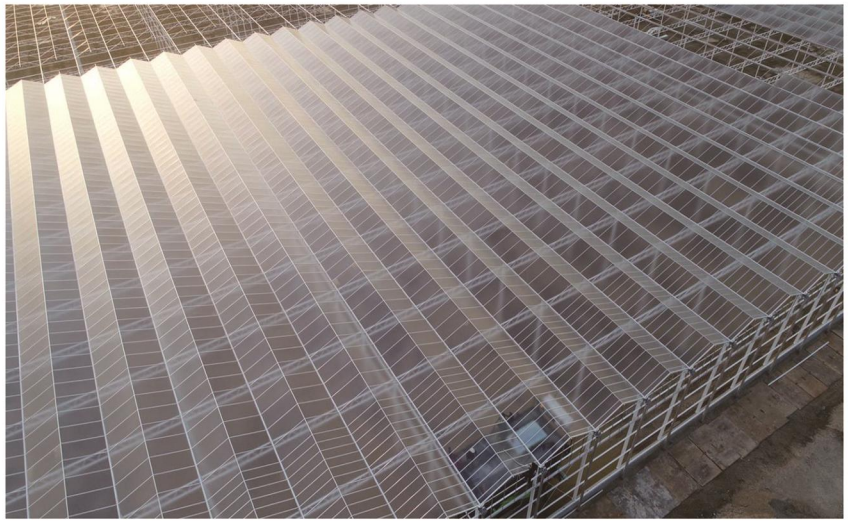
Venlo polycarbonate sheet greenhouse uses single layer or multi-layer hollow polycarbonate sheet as the top and surrounding enclosure with special aluminum alloy profile frame. The greenhouse framework uses hot dip galvanized steel, with beautiful appearance, high light transmittance, good thermal insulation performance. The special anti-UV polycarbonate sheet can ensure the light transmittance and good thermal insulation performance.

The polycarbonate sheet has characteristics of light weight, good day lighting, great thermal insulation performance, anti-UV, dew-free, hail proof, high flame retardant, anti aging and etc.









Span width	8m, or customized size
Column distance	4m
Gutter height	3–6m

MULTI-SPAN PLASTIC FILM GREENHOUSE

The main structure of the greenhouse is simple and practical, with low construction and operation cost. In the cold area, the top can be designed with double arches and double layer films, which can effectively prevent heat loss and the invasion of cold air, with good insulation effect and low operation cost in the winter. The surrounding coverage can choose polycarbonate sheet, glass, film (single layer, double layer).

Technical data :

Wind load :0.45KN/m^2 Snow load :0.4KN/ m^2 Dead load :15-18kg/m^2

Rainwater drain capacity :

120mm/ h at maximum









Span width	8m, or customized size
Column distance	4m
Gutter height	3–6m

GREENHOUSE STEEL STRUCTURE

High quality hot-dip galvanized steel is used, and all components are processed by first-welding and galvanizing. The quality is guaranteed for 20 years, the zinc adhesion is more than 270g/m² and the thickness is more than 70 microns. All components were assembled on site. The connectors and fasteners are not rusted for 20 years.

Pipe size	Steel	Galvanized layer thickness	Chemical components%					Mechanic Property)		
			C	Si	Mn	S	p	Yield point	compressive strength	Elongation rate
100*50*2.0mm	Q235	270	0.12	0.13	0.38	0.038	0.026	>235	>375	20
50*30*2.0mm	Q235	270	0.12	0.13	0.38	0.038	0.026	>235	>375	20
ϕ50*2.0mm	Q235	270	0.12	0.13	0.38	0.038	0.026	>235	>375	20
Φ32*1.8mm	Q235	270	0.12	0.13	0.38	0.038	0.026	>235	>375	20
Φ32*1.5mm	Q235	270	0.12	0.13	0.38	0.038	0.026	>235	>375	20

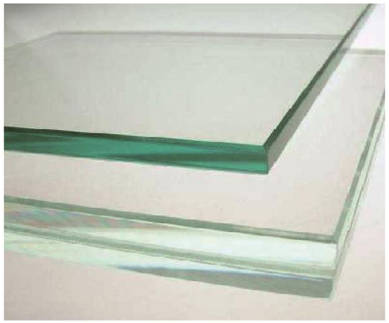


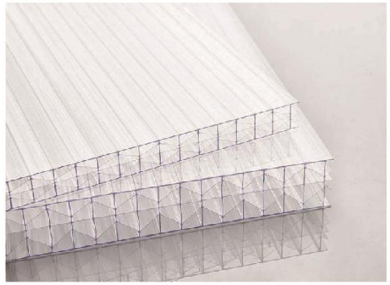


COVERING MATERIAL

GLASS

Tempered glass
5+6+5mm hollow glass
High shock resistance
Anti-drip, Anti UV
Light transmittance>90%
Colour: white
Service life: over 25 years
Other option: diffuse glass





POLYCARBONATE SHEET

POLYCARBONATE SHEET
6-10mm Polycarbonate sheet
High shock resistance
Anti-drip, Anti UV
Light transmittance>88%
Colour: white
Service life: over 10 years

FILM

Polyethylene film
120-200 micron film
Anti-drip, anti-mist, anti-UV,
Light transmittance>92%
Light diffusion:53%
Light: white, light blue
Service life: 4-5years



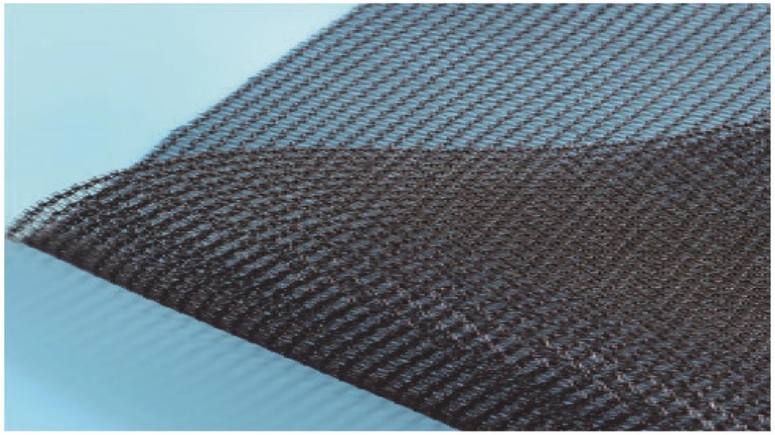
EXTERNAL SHADING SCREEN

The main function of the system is to cool and shade in the summer, so that the sunlight diffuses into the greenhouse to ensure that the crop is protected from glare of the sun. Because it blocks a large amount of light, it effectively reduces the accumulation of heat inside the greenhouse, which generally reduces the greenhouse temperature by 4 ℃ to 6 ℃.

The speed reducing motor drives the A-shaped gear to rotate through the driving shaft, and the gear drives the rack to make a linear reciprocating motion.

Since the rack is integrated with the push-pull rod, the push-pull rod is connected with the driving edge profile, and one end of the shade net is fixed on the driving edge profile, therefore, the shade net is driven to realize the unfolding and folding action. The shade net moves in the passage formed by the polyester curtain threads, and is therefore called a curtain type.







Light transmission (%)	Shading (%)	Energy saving (%)	Shrinkage (%)	UV quarantee (years)
35	65	22	2	5
25	75	25	2	5
15	85	30	2	5

INTERNAL SHADING SCREEN

Anti-fog and anti-drip:

When the inside shading net is closed, two separate spaces are formed in the greenhouse, which can effectively prevent the formation of dripping in the greenhouse.

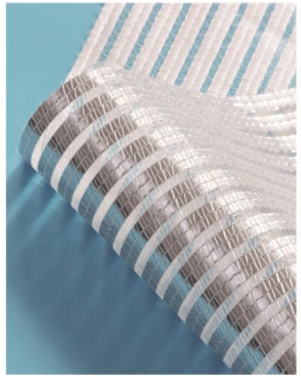
Energy-saving and insulation:

In the winter and night, the inside shading net can effectively prevent the heat inside the greenhouse from overflowing through radiation or heat exchange, thus reducing energy consumption and reducing greenhouse operating costs.

Water conservation:

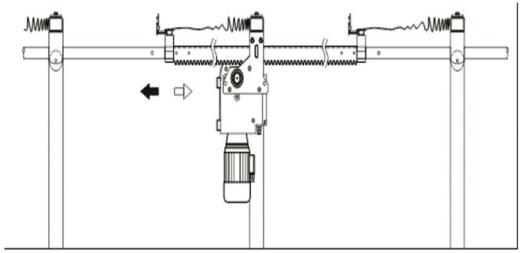
The inside shading net can reduce the evaporation of crops and soilmoisture in the greenhouse, effectively maintain air humidity and reduce irrigation water.

In order to increase the insulation effect in the greenhouse, double inside shading nets can be used.





Light transmission (%)	Shading (%)	Energy saving (%)	Shrinkage (%)	UV quarantee (years)
57	43	50	1	5
54	55	58	1	5
33	67	65	1	5
25	75	77	1	5
18	82	77	1	5



External and internal shading screen system all controlled with motor and gear rack, able to stop/start at any position of the setting route.

Running speed (m/min)	0.36
One way running time (min)	10.8
Route (m)	3.7



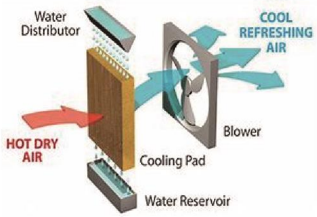
COOLING SYSTEM

The most popular also lowest cost cooling system is cooling pad+ exhaust fan.

Cooling pad and exhaust fan are installed on opposite walls of greenhouse, the negative pressure formed when fan runs, forces outside hot dry air flowing to inside through cooling pad. Hot dry air changes water from liquid to the vapor phase, it absorbs considerable heat from inside air. Along with running of exhaust fan, greenhouse inside air becomes cool and dry.

Greenhouse inside temperature can be 8-12 ℃ lower than outside.

This evaporate cooling system is most effective in dryer climates







CIRCULATION FANS

Circulating fans are also designed inside greenhouse to speed up air flow, also help to cool greenhouse quickly.

It's used to bring cool air to whole greenhouse, this is very helpful to cool down in hot days.





Model	Air flow (m^3/ h)	Power (w)	Full pressure (Pa)	Work distance (m)	Size (mm)
KS–400	3200	120	60	12–16	Dia460*310
KS–500	5400	180	60	18–22	Dia560*310

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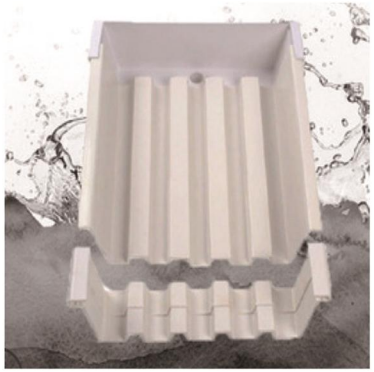
HYDROPONIC SYSTEM

ELEVATED GROW GUTTER SYSTEM

The elevated gutter is suitable for growing strawberry, peppers, tomato and other vine crops. Gutters offer you a large saving in labor. It is easier to put substrate on and to remove from elevated gutters than the ground. It is far easier and efficient when planting.







Material	PVC
Thickness	3–4mm
Gutter size	15*8cm, 20*9cm, or customized

ROLLING BENCHES

The rolling bench is movable to left and right, with movement control stoppers, create a standard 55cm wide working channel between two benches, which is portable, freely operated.

Material: The bench bracket is made of hot-dip galvanized steel pipes. The bench frame is made of angle steel and aluminum alloy. The steel wire mesh is laid on the surface of bench, and the surface of the steel wiremesh is treated with hot dip galvanizing.

Instead of steel wiremesh, plastic plate is also available, to make an ebb flow rolling bench, widely used for production of leafy vegetables.

Quality assurance for 10 years.



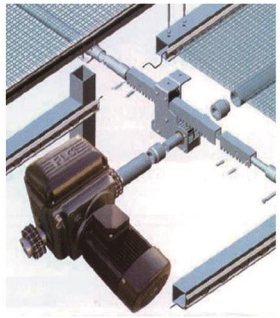


GREENHOUSE ACCESSORIES











GREENHOUSE EQUIPMENT

RO PLANT

RO (Reverse Osmosis) plant is used to filtrate water to produce clean water for hydroponic system, it can remove 99.9% salt and most abio-ion, germ, virus, organic matters, colloid and other impurities.

RO plants usually contains quartz sand filter, active carbon filter, cartridge filter and RO membrane. As production water is stored in water tank, it may reborn alga and bacteria after long time, UV sterilizer is equipped to clean production water again after production water tank.





GREENHOUSE EQUIPMENT

WATER CHILLER

Keeping the water temperature of the reservoir at the right temperature is essential for hydroponics. Water chillers prevent the water in the reservoir from overheating and ensure the water remains at the right temperature for plant growth, to stabilize water temperatures and help provide an optimal environment for crops.

The most common type of water chiller for hydroponics is a refrigeration unit that works with a water pump located inside the reservoir. The pump sends the nutrient solution through tubing to the unit, where the liquid is chilled by cooling coils before being recirculated back into the reservoir.





GREENHOUSE EQUIPMENT



All terrain electric platform



Crops transfer trolly



Nursery trolley



Spray irrigation machine



Rail-mounted electric hydro-scissor platform



Seeding machine



Electric carts



CO_2 Generator