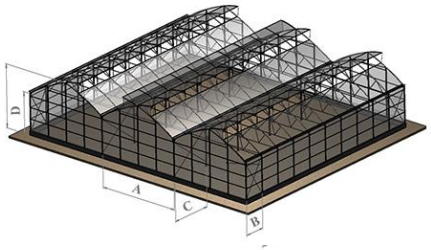
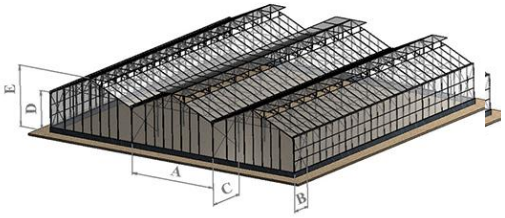
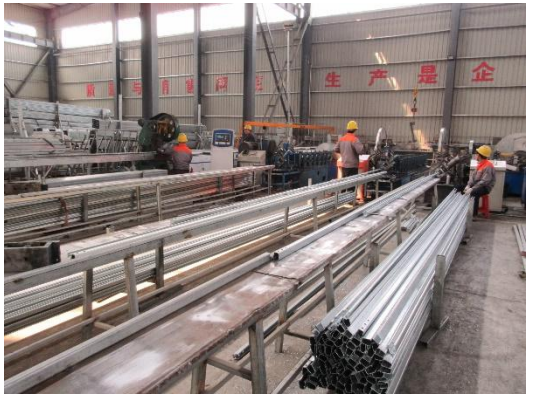
STEEL PIPE SINCE 1991

BAOLAI THE ULTIMATE SOURCE

Tianjin Baolai Steel specializes in agricultural facility planning and design, production and processing, installation and commissioning, and after-sales service. In response to the actual needs of different plants for the growth environment, Sinosen Agriculture is committed to providing customers with scientific and comprehensive solutions. We will use internationally leading design concepts, follow scientific and rigorous construction standards, adhere to accurate and efficient construction techniques, provide customers with meticulous and thoughtful quality services, and build energy-saving, controllable and suitable growth environments for plants.







Greenhouse Structure

Venlo Type Greenhouse

Covering materials: single-layer glass, double-layer insulating glass, sunlight board

Production process Galvanizing process or cold bending forming process, spraying process

Standard size Span 8m/9.6m/12m, gutter height 4m-8m, bay 4m/5m/8m

Scope of application: It can be used for nursery, horticultural planting, flower maintenance, leisure and sightseeing, scientific experiments, etc.

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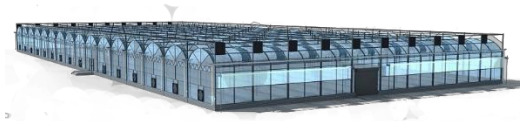
Greenhouse Structure

Plastic Film Greenhouse



Covering material: single-layer film, double-layer film, double-layer inflatable film

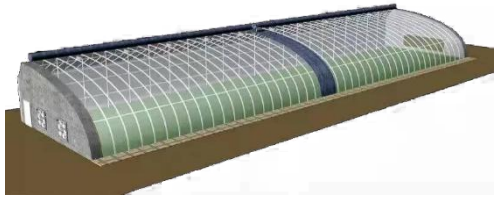
Production process Galvanizing process or cold bending forming process, spraying process

Standard size Span 8m/9.6m, gutter height 3m-4m, bay 4m/5m

Scope of application Mild climate. Can be used for nursery, gardening, flower maintenance, scientific experiments, etc.

Greenhouse Structure

Energy-saving solar greenhouse



Covering material PE film/PO film

Production process Galvanizing process or cold forming process

Standard size Span 8m/10m/12m

Scope of application can be used as nursery, gardening, flower maintenance, etc.

Microclimate Control System

Screen System

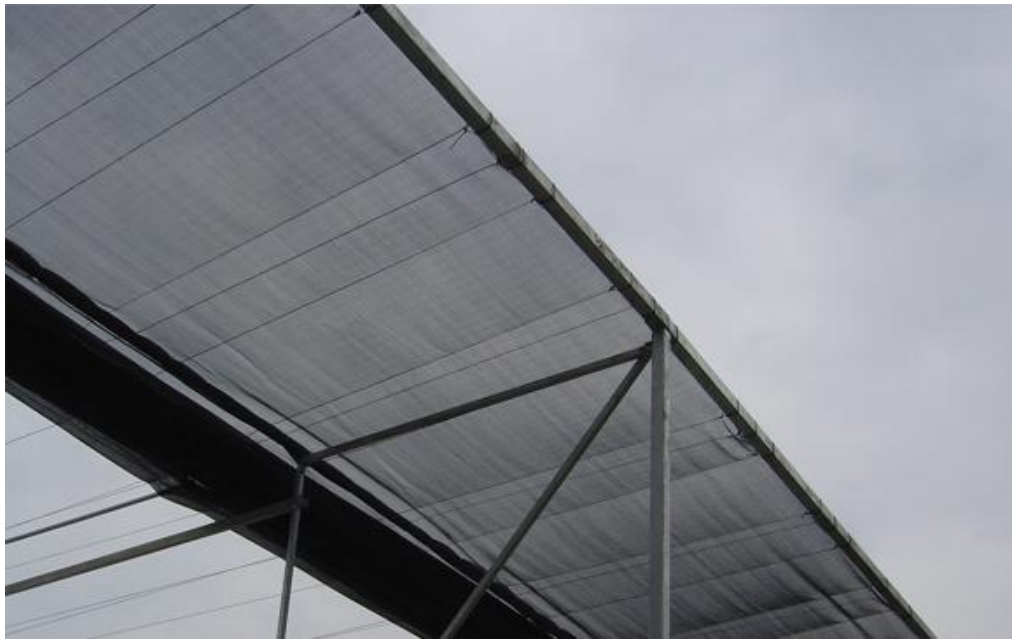
Cooling System

Artificial Light Syste

Heating System

CO2 Supplement System

Microclimate Control System



Shading insulation system

Mainly used to adjust the light and temperature inside the greenhouse, divided into indoor and outdoor curtains

System, namely inner shading system, inner thermal insulation system, outer shading system.

System components: motor, drive mechanism, curtain, etc.

According to the different needs of plants for light, you can choose different shade rate and heat preservation rate

Microclimate Control System

Greenhouse cooling system

In the hot summer, based on energy efficiency considerations, you can gradually cool down through natural ventilation and fog

- And forced cooling system, etc., to provide a suitable greenhouse environment for plant growth. System composition:
- Natural ventilation system: including ventilation windows and driving mechanism
- High-pressure mist system: including high-pressure unit, filter system, pipeline and nozzle
- Wet curtain-fan system: including axial fan, wet curtain, water circulation

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Microclimate Control System

Artificial Light System

The artificial fill light system is designed to maximize the benefits of agricultural production by providing plants with appropriate light. For example, in order to extend the planting season or even the whole year; in order to maximize the yield and quality of crops; in order to break the plant growth law, so as to advance or delay the time of flowering and fruiting.

The artificial fill light system includes two main modes of high-pressure sodium lamp fill light and LED fill light. Among them, LED fill light can be divided into top fill light and fill light between plants.

Microclimate Control System

Heating System

The scientific and reasonable design of the heating system can ensure that the temperature in the greenhouse is suitable, uniform and stable.

Object growth creates a good temperature environment; and saves energy consumption to the greatest extent and reduces operating costs.

- Comprehensive warming plan: ground warming, warming between plants, warming around, space warming
- End heating form: round wing radiator, light pipe radiator, fan coil, etc.

Microclimate Control System

CO2 Supplement System

When the greenhouse is in a closed state, plants continue to consume CO2 due to photosynthesis, and need to

It is necessary to supplement CO2 and maintain a certain concentration in time to ensure the normal growth of crops.

- Liquid canned CO2 gas source
- Boiler combustion (exhaust gas recovery) CO2 piping system

Air Circulation System

Stir the air in the greenhouse by the circulation fan to achieve the balance of indoor temperature and humidity

And the purpose of uniform distribution of CO2, to ensure the consistency of the crop growth environment in the greenhouse.

Cultivation System

Modern soilless cultivation can realize water and fertilizer recycling, effectively reduce soil-borne diseases,
Significantly improve the utilization rate of water resources and fertilizer use efficiency. The main cultivation modes include
Fruit and vegetable substrate culture: rock cotton cultivation, coconut husk cultivation
Leaf vegetable hydroponic culture: late night hydroponic culture (DFT), nutrient liquid membrane technology (NFT), etc.

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Recent cases

01

Greenhouse Case

Quebec 2 - Canada

In Canada, Sinosen has built a turnkey greenhouse project of ± 81,000 square meters for a client in Quebec. The project includes 3.8 hectares of biological cucumber cultivation and 3.8 hectares of biological pepper cultivation.

01

Quebec - Canada

The project includes diffuse glass, which is equipped with 2-sided AR treatment. In the greenhouse we've fitted insect netting and the deck is equipped with 2-pane ventilation windows. The greenhouse project alsoincludes warehouse, a part of this area is furnished as a cold store.

02

Greenhouse Case

Moscow - Russia

The third phase of a project in Moscow, Russia. The first phase of 10 hectares was achieved in 2015 and the second phase of 12 hectares in 2016. We are very pleased that we can build the third phase of this turn-key greenhouse project.

02

Moscow - Russia

The customer is a cucumber and tomato growing company. This is the third phase of a turnkey project covering an area of 21 hectares, suitable for growing tomatoes and young plants. The turnkey project will be equipped with modern facilities such as screen installation, insect screens, high-pressure fog systems, artificial lighting and Priva computers.