

Industrial Workshop Shed Warehouse Steel Structure Design With Engineer Guidance

Basic Information

Place of Origin: Hebei, China
 Brand Name: BAODU
 Certification: ISO9001, CE
 Model Number: Steel Warehouse
 Minimum Order Discussible Quantity:

• Price: Reasonable

• Packaging Details: In general, for steel structure, we use the

steel frame packing to keep goods not to be broken . For sandwich panel and color steel sheet, we use the plastic packing . If the clients need special packing will according to their requirements.

• Delivery Time: 15-21days

• Payment Terms: L/C, D/A, D/P, T/T, Western Union,

MoneyGram

Supply Ability: 10000 Square Meter/Square Meters per

Month



Product Specification

• Product Name: Industrial Workshop Shed Big Prefab

Warehouse Steel-work Design Structure

• Warranty: 50 Year

Main Frame: Solid H-shape Steel Beam

Installation: Engineer Guidance
 Purlin: C/Z Galvanized Steel
 Drawing Design: Customers' Request

Window: Sliding Window, PVC Window Or Aluminium

Window

• Processing Service: Bending, Welding, Decoiling, Cutting,

Punching

Application Fields: Warehouse, Factory, Steel Structure Building

• Surface Treatment: Hot Dip Galvanised Or Painted

Hahliahti Indonésia Waliatan Obad



Industrial Workshop Shed Big Prefab Warehouse Steel-work Design Structure

Product Description:

A steel frame building is a load-bearing framework composed of steel columns and steel beams fabricated by section steel or steel plates. The steel columns and steel beams are connected by bolts or welding, usually rigid connections.

Steel frame building belongs to the steel building and also belongs to frame structures. The steel column and the steel beam form a rectangular axis, the steel beam bears the horizontal load of the axis, and the steel column bears the vertical load. The steel frame structure needs to meet the strength and stability of the material and needs to ensure the overall rigidity of the frame to meet the design requirements.

Steel frame building composed of welded H-shaped steel and hot-rolled H-shaped steel as the main load-bearing skeleton, and C and Z section steel used for purlins and walls girt. The corrugated metal sheet use for roof and wall panels. Polystyrene foam, rigid polyurethane foam, rock wool, glass wool use as thermal insulation materials, and appropriate bracing light steel structure building systems.

The Beam and column of portal steel frames use welded h-shaped variable cross-section members. The beam-column joints of single-span portal frames rigidly connected, the multi-span portal frames are rigidly and hinged connected, the column feet can be rigidly or hinged connected with the foundation. The wall and roof panel use corrugated metal sheets. Thermal insulation materials used glass wool.

1. Primary Framing

Primary Frames are the main load-carrying structural steel components. They may be Clear-span Rigid Frames, Continuous Beam Frames, or Post & Beam Frames. Primary frames are designed in accordance with the steel construction manual published by American Institute of Steel Construction (AISC). Manufacturing dimensional tolerances are in accordance with the requirements of 'Metal Building Manufactures Association' (MBMA) of USA, "Low Rise Building Systems Manual". Besides AISC and MBMA, we also design buildings with IS-875, 1984 and IS-875, 2007. Built-up sections are fabricated from hot rolled steel plates confirming to ASTM A 572M grade or equivalent with minimum yield strength of 345N/mm2 (50ksi). The most common primary framing systems are illustrated here. All structures shown are symmetrical about the ridge line. Framing systems unsymmetrical about the ridge line and Multi span Framing Systems with unequal width modules are possible too. Practically any frame geometry can be erected.

2. Secondary Framing (Bracing, Z and C section purlin)

Purlin, tie bar and bracing are secondary structural members used to support the wall and roof cladding. Secondary members as purlin, tie bar, column bracing and horizontal bracing connect the main frame and help in resisting part of the longitudinal loads that are applied on the building such as wind and earthquake loads. Steel purlin is available in high grade steel conforming to GB/T 2518-2008, Q235B/Q345B Grade or equivalent, available in 1.8 mm. 2.0 mm, 2.2 mm, 2.5 mm and 3.0 mm thickness. The purlin come with a galvanized sheet. Column bracing is a connecting member set between two adjacent columns to ensure the overall stability of the building structure, improve lateral stiffness and transfer longitudinal horizontal force. Column bracing will be round steel or angle steel according to the building need.

3. Steel Decking Floor

The pressed steel plates supporting the floor concrete are called profiled plates, also called floor bearing board. The steel decking board are widely used in multi-storey buildings such as power plant, exhibition hall, steel structure workshop, cement warehouse, steel

structure office, airport terminal, railway station, stadium, concert hall, grand theater, large supermarket, logistics center, Olympic venues and sports venues and other steel structure buildings. It can adapt to the main steel structure rapid construction requirements, can provide a firm platform in a short time, and can take flow repetitive construction operation, laid a number of floors decking board, and pouring concrete slab.

Features:

N o	Classification of steel structure	Describe
1	Equipment steel structure	Equipment steel structure mainly refers to the steel structure part of the use of steel structure in all kinds of large equipment, such steel structure generally plays a bearing and stable role in the equipment, such as the tower steel structure of the bridge erecting machine, large equipment support and so on.
2	Marine steel structure	Marine steel structure mainly refers to all kinds of offshore steel structure built platform, because often to withstand the attack of wind waves, corrosion of sea water, working environmental conditions are very harsh, so the requirements of this type of steel structure are very high, mainly including offshore oil drilling platforms, jacket platforms, jack-up platforms, semi-submersible platforms and so on.
3	Construction of steel structure	Building steel structure mainly refers to the steel structure used in all kinds of buildings instead of concrete structure. Mainly because of its high strength, good seismic resistance, short construction period, green environmental protection and other advantages, it is widely used in industrial buildings and civil buildings. Common are ultra-high buildings, industrial plants, steel structure houses, steel structure villas and so on.
4	Steel bridge structure	Because the steel structure has strong bearing capacity and good durability, the modern bridge stress system is mainly made of structural steel. With the development of technology, the bridge steel structure has become increasingly mature in many aspects such as load, manufacturing process, material properties, installation methods and maintenance methods. Common is all kinds of steel structure bridge.
5	Space grid steel structure	Space truss steel structure buildings refer to steel structure buildings with large space span, which are mainly divided into grid structure, suspension cable structure, shell structure, tube truss structure, membrane structure and other types. Widely used in factory buildings, stadiums, railway stations, large conference rooms and so on.
6	Hydraulic steel structure	Water conservancy steel structure mainly refers to the steel structure used in water conservancy projects. In fact, there are quite a lot, typical such as steel structure platform, the rest of the steel gate, steel trestle and so on.

Advantages of steel structure buildings

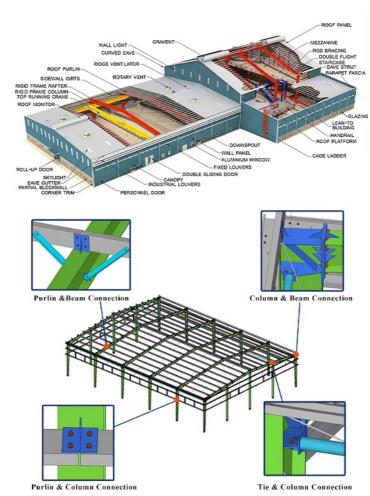
Steel structure is a building structure system composed of steel materials, it is one of the main building structure types, widely used in high-rise buildings, Bridges, aerospace facilities, industrial plants and other fields. The characteristics and application areas of steel structure are as follows: High material strength, light weight: the high strength and low density of steel make the steel structure have smaller component section size under the same stress conditions, thereby reducing the building's own weight and improving the stability and safety of the structure.

- and safety of the structure.

 1. Fast construction speed: Because the steel structure can be assembled with prefabricated parts on site, the construction period of the steel structure project is shorter and the construction efficiency is improved.
- 2. Recyclable: Steel can reduce resource consumption through recycling, reduce the generation of construction waste, and contribute to environmental protection.
- 3. Good seismic performance: the plastic deformation ability and good ductility of steel make it able to effectively absorb energy in the case of earthquakes and other disasters and reduce the damage to buildings.

4. Wide range of application: steel structure is suitable for many types of projects, such as high-rise buildings, Bridges, aerospace facilities, industrial plants, etc. However, the steel structure also has some potential problems that need attention, such as easy rust, the need for regular maintenance, and the possibility of oxidative degradation at high temperatures.

Technical Parameters:



Please kindly inform us of the information below if you are interested in our products.

- 1. Project Progress: Is Land Purchased? Is it licensed by the government?
- 2. Usage: for warehouse, workshop, showroom, etc.
- 3. Location: In which country will it be built?
- 4. Local Climate: Wind speed, Snow load (max. Wind speed)
- 5. Design: Please provide the design drawing. Or do you need us to design for you?
- 6. Dimension: Length*width*height
- 7. Crane Beam: Do you need crane beam inside the steel structure?
- 8. Roof and Wall: determine the panel material, such as color steel panel, and metal sandwich panel.
- 9. Windows and Doors: what material, quantity, and type?

Drawing Design

We need the following information to make a design for you: the specifications and use of the steel building, thermal and lighting conditions, window and door requirements, wind/snow load, and whether it has a crane.

Our company offers full design and detailing services to every customer.(PKPM, AutoCAD, Tekla). And our design team turns your requirements into clear drawings, offer 3D drawings for installation guidance, and ensures every detail is easily understandable.

We have our own independent architectural design and research institute, with strong design strength and professional design team, and several experts with senior design experience. Technical consultants and technical guides are well-known Chinese structural experts, professors, and national design masters.

Working with us can provide you with a unique opportunity to bring a dedicated design team to your project to ensure the highest quality design solutions.

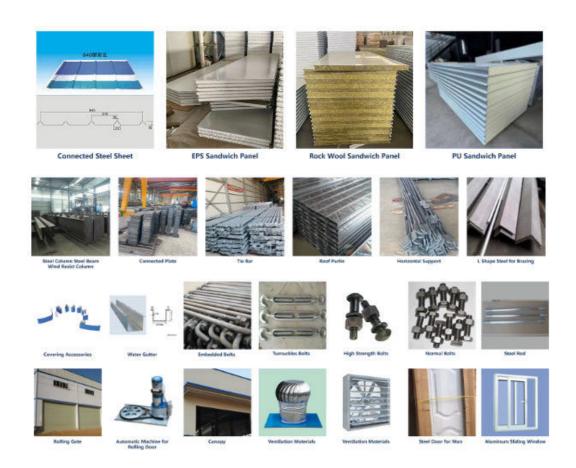
After years of improvement and customer experience, our process ensures that each building is completed in accordance with your needs and expectations.

We can provide:

1. Customization Service

We have a professinal design team about 20 people, with 10 years design experience. We can meet your individual needs.

And multi-type steel components, roof and wall panels, doors and windows for choosing.



2. Strict Quality Inspection

With good quality steel material, we have AWS-D1.1/D1.5 welding quality system and professional CWI welding inspector to ensure high quality of the product.

3. Shortest Delivery Time

We have 2 modern factories and 3 production lines with a total area of 150000 square meters to produce. We guarantee a warehouse of 5000 square meters and delivery within 30 days.

4. Production Visualization

We can provide you with picture, video information of all production links, from raw materials to steel processing, the whole process of visual production. You can even video call us to watch workshop production.

5. Packing and Delivery

Container and pallet packing will protect the surface paint or zinc of the steel structures. In order to facilitate your installation, we will mark each component in sequence according to the drawings.

6. Installation Guide

Installation instruction and video will be provide, we can also send our engineers to your site as installation guide, they will teach your people how to build project.

Installation scene:



1. Choose steel plate, quality inspection after the start of the material



2.Distinguish the steel plate material, waiting for cutting



3. According to the drawing specification, laser cutting into the corresponding component size



4.Drill holes into some steel plate



5. The steel plate was shot blasted to remove rust



6.Start assembling the steel plate and spot welding it



7.Fully welded steel plate, perfect weld ensures the strength and beauty of steel structure



8.Inspect welded steel structure. prepare for galvanizing or painting



9. Spray paint and galvanize steel structure according to technical reauirements of drawings



10.Spray paint and galvanize steel structure according to technical



11.Steel structure construction finished effect



12.Exterior wall insulation system construction effect

THREE ways to help you on the installation:

- 1. We can offer you the manual include the photos and drawings, or some videos for help you on the installation. And you will organize the local people to install it. 93% of our clients finished their houses in this way.
- 2. We can send our people to your site to guide your people to install. Or send team people (3-5 people) to your site to install for you. This way is most easy way, but you need to pay their round-way tickets, local food, accommodation, transportation, communication and salary, and also their security on the site. Almost 5% of our clients choose this way. And in the normal we will require the order should be more than 100000USD.
- 3. You can send your people (engineers or the technician) to our co- mpany to study the installation details. 2% of our clients choose this way for their orders.

Strict Quality Inspection Standards



Excellent product quality is our eternal pursuit, and it is also the fundamental reason for us to base ourselves on the global market. BAODU GROUP implements whole-process quality management and strictly supervises every process such as raw material supply, engineering design, steel component manufacturing, installation and construction.

We have established a professional team of quality inspection engineers, introduced internationally leading quality inspection equipment such as German GS1000 vacuum spectrometer and high-frequency infrared carbon sulfur analyzer, established a high-quality product inspection room, and won many awards from China's advanced quality management unit.

In addition, we support testing and certification by SGS, TUV, BV.

Applications:



Steel structure buildings serve a wide range of purposes, including warehouses, workshops, factories, cold storage facilities, high-rise buildings, shopping malls, power plants, distribution centers, pedestrian bridges, steel-structured hotels, prefabricated public schools, sports arenas and halls, car parking centers, airplane hangars and aviation facilities, church buildings and community centers, poultry farms, agricultural buildings and barns, storage sheds, self-storage buildings, greenhouses, garages, commercial buildings, industrial facilities, and much more.

Project Cases:

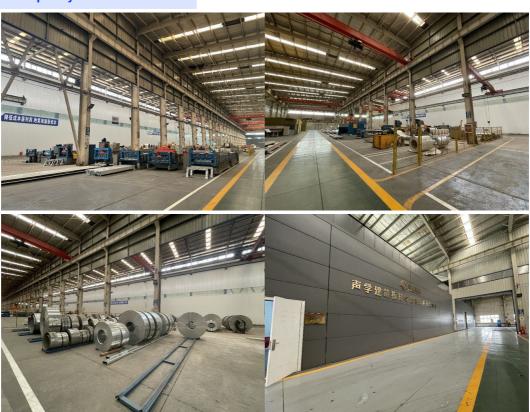


Gas Turbine Combined Cycle Power Station Expansion Project in Basra Iraq



Clean Coal Fired Power Plant Phase I (4x600mw net) Project in Hasyan Dubai

Our capacity and certification:





Support and Services:







After many years of operation, the BAODU Group has grown from strength to strength and made important contributions to the development of the construction industry and the steel structure industry. It is trusted by builders and customers from all over the world.

Our team of experts is available to provide technical support and services for the Prefab Steel Warehouse

product.

We offer:

Consultations to help you determine the best solutions for your needs

Customized design services to ensure the warehouse meets your specific requirements

Quality control inspections throughout the production process

On-site installation and assembly services

Maintenance and repair services to keep your warehouse in top condition

Our goal is to provide our customers with reliable, durable, and cost-effective solutions for their storage needs. Contact us for more information on our technical support and services.

Why Choose Us to offer steel structure building:

- 1.We have a group of professional engineers, most of whom has more than 20 years experiences in architecture field. our company has got a various of experiences in design, manufacture, installation and so on. The work staff have excellent skills. Some of them had helped customers to install the warehouse around the world.
- 2. We will offer one stop service. construction drawing, calculation sheet will be offered to help you get construction permit. Foundation design could be free made if you need. We could make 3D drawings to show the view. What's more, Installation drawings will be offered and Steel structure column, beams will be marked number on it to help you install. 3. We will send you extra bolts, purlins, panels incase any damage when install.
- 4. Efficiency is our pursuit. Every inquiry ,emails will be replied immediately. Every questions will be paid high attention.
- 5. We also have possessed more than 40 sets of large precise and domestically advanced processing equipments, including large gantry planing machines, automatic submerged arc welding machines, assembling machines, slitters, shot blasting machines and soon.
- 6.We will offer details packing list for every container when load so it will be easier to unload.
- 7. "Moral personality decides product quality." is our guarantee to the products. "Customers come first." is our everlasting pursuit. Believe your choose, we'll give you a satisfied answer.

Company profile:



Baodu International Advanced Construction Material Co., Ltd was established in January 2010 with the office in Beijing and factory in Hebei, China. Baodu is a designer, manufacturer, supplier and exporter of industrial noise comprehensive treatment, steel structure, sandwich panel and prefab house. Baodu has an annual output of 6 million square meters of acoustic sandwich panels, 100000 tons of steel structures and 1 million square meters of floor decking sheet. The products are sold in more than 30 countries and regions around the world. Baodu has a professional design team with more than 10 years' experience, including 5 senior engineers, 20 engineers, and 35 technicians. Baodu has several energy saving and environment protection intellectual property rights, construction and environment protection design qualification, CE certification and Russian GOST certification etc. Baodu participated in the military parade village project for the 60th anniversary of China and project of Beijing Daxing International Airport. Under the guidance of China's "one belt, one road" strategy, Baodu has also undertaken overseas projects such as the project of Thar, Pakistan coal fired power plant, Hasyan Dubai power plant and so on. Finally, welcome your coming to Baodu for a visit and cooperation!



- 1. Packing steel components and pipe into bundles with steel straps;
- 2. Wrapping the ends of steel components with fabric;
- 3. Packaging parts in iron boxes.

Regular goods will be transported in 40ft HQ (High Cubic) containers.

If we use 40ft HQ, steel pallets are required to pack the goods, and then the pallets are pushed into the container. When unloading, the entire pallet is pulled out of the container, which can better protect the steel components and quickly unload.

If you have any other special packaging requirements, please let us know.

FAQ:

1. You are manufacture factory or trading company?

A:BAODU Group is a well-known leading enterprise in the industry, choose us, you will get the most professional technical solutions and the most competitive prices, you are welcome to visit at any time.

2. How can you get a quotation for your projects?

A:You can contact us via Alibaba, email, phone, WsApp, etc., we will reply to you as soon as possible.

3. Is your price competitive compared with other companies?

A:Our business objectives are to give the best price with same quality and best quality with the same price. We will do everything we can to reduce your cost and guarantee you get the best product that you paid for.

4. Do you offer designing service for us?

A:Yes, we could design full solution drawings as your requirements. By using AutoCAD, PKPM, MTS, 3D3S, Tarch, Tekla Structures (Xsteel) and etc.

5. How about your quality control?

A:We have a professional quality inspection team and advanced testing equipment. In addition, we support third-party testing, such as SGS, TUV and so on.

6. What is the delivery time?

A:Delivery time depends on order quantities. In general the delivery time to nearest seaport in China will be 30-40 days after receiving deposit.

7. Do you accept container loading inspection?

A:You are welcomed to send an inspector, not only for the container loading, but any time during the production time.

8. Can you send engineers or whole team to install my project?

A:We will provide you with detailed installation drawings and video explanations. If necessary, we will send professional engineers for guidance and experienced technical workers to help with installation.

9. What's the payment terms?

A:We support T/T or L/C, 30% deposit, 70% balance before delivery.



Baodu International Advanced Construction Material Co., Ltd.





