



## Heavy Duty Steel Structure Factory Workshop Prefabricated Portal Frame Metal Building for Industrial Production

### Our Product Introduction

#### Basic Information

- Place of Origin: Hebei, China
- Brand Name: Baodu
- Certification: CE
- Model Number: Modular Steel Structures
- Minimum Order Quantity: 1000 Square Meters
- Price: USD19-35
- 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: 30days
- Payment Terms: L/C,D/A,D/P,T/T,Western Union,
- Supply Ability: 100000 Square Meter/Square Meters Per Month



#### Product Specification

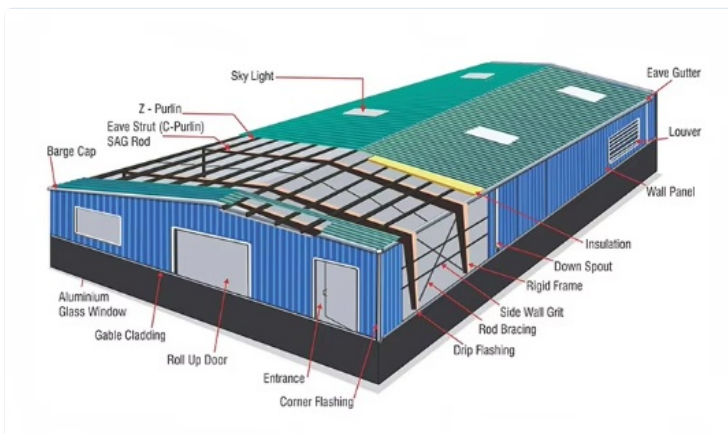
- Product Name: Heavy Duty Steel Structure Factory Workshop Prefabricated Portal Frame Metal Building For Industrial Production
- Fireresistance: Complies With International Fire Safety Standards
- Processing Service: Bending, Welding, Decoiling, Cutting, Punching
- Material: Q235/Q345 Steel
- Keyword: Steel Strcutrue Warehouse
- Advantage: Fire Proof.water Proof Fast Install Durable
- Surface Treatment: 1. Painting 2. Galvanized
- Design Style: Modern
- Application Fields: Prefabricated Light Weight Steel Structure Warehouse
- Steel Frame: H Beam, C/Z Purlin
- Highlight: **Prefabricated Steel Workshop Building, Heavy Duty Portal Frame Structure,**

## Product Description

### Heavy-Duty Steel Structure Factory Workshop

This heavy-duty portal frame steel factory workshop is specially engineered for high-load industrial production scenarios. The main frame uses thickened steel plates and a reinforced portal frame structure to withstand heavy dynamic loads generated by large production machinery, heavy processing equipment, and overhead cranes.

All primary steel components are fabricated, welded, drilled, and coated inside our factory workshop. Most connections adopt high-strength bolt assembly, minimizing complex on-site welding work. The entire structure is designed for long-term heavy-load operation. Our structural engineers complete load calculations based on your equipment weight, crane tonnage, and local meteorological parameters. This prefabricated metal building is widely used for heavy industry production requiring high structural stability and strong bearing capacity.



### Key Features of Heavy-Duty Steel Workshop

- Heavy load reinforced portal frame design** — thickened steel plates for main beams and columns to sustain heavy dynamic loads.
- Custom crane beam system** — compatible with overhead cranes up to 50 tons for heavy equipment lifting and handling.
- High overall structural rigidity** — strong stability under continuous heavy working load and vibration from production machines.
- Customizable eave height and bay spacing** — accommodates large heavy machinery and production lines.
- Complete bracing system** — includes cross bracing and tie rods to resist wind force and seismic movement.
- Heavy-duty anti-rust paint system** — suitable for workshop environments with metal dust and mechanical vibration.

### Technical Parameters

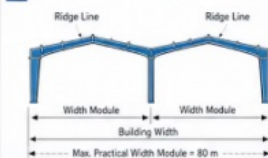
# STEEL FRAME OPTIONS

FLEXIBLE SOLUTIONS FOR EVERY PROJECT

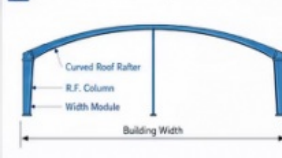
**1 Tapered Column Clear Span (TCCS)**



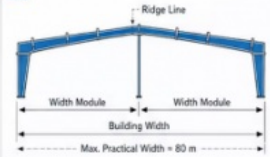
**2 Multi Gable (MG)**



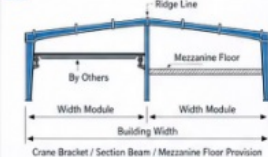
**3 Arched Multi Span**



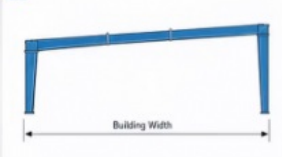
**4 Multi Span "1" (MS-1)**



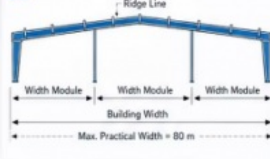
**5 Mezzanine / Crane Beam Provision**



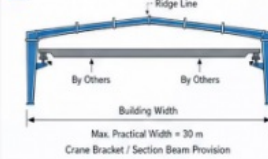
**6 Mono Slope**



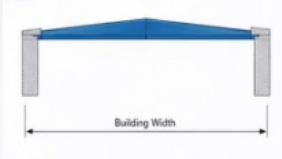
**7 Multi Span "2" (MS-2)**



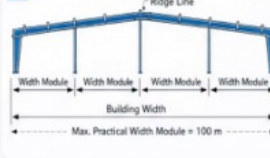
**8 Crane Bracket / Section Beam Provision**



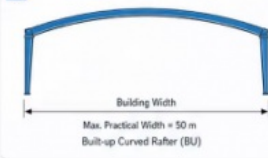
**9 Roof System**



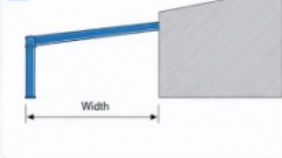
**10 Multi Span "3" (MS-3)**



**11 Built-up Curved Rafter (BU)**



**12 Lean-To**



## FREE DESIGN

3D AND CAD DRAWINGS

✓ Professional ✓ Accurate ✓ Efficient ✓ Reliable

**Tekla**  
Structures

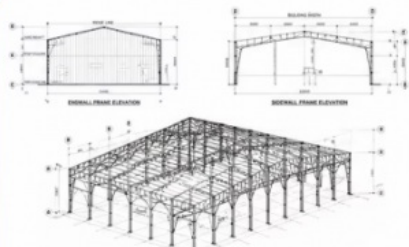
**AUTODESK**  
3DS MAX

**SAP2000**

**PKPM**

**AUTODESK**

**AUTOCAD**



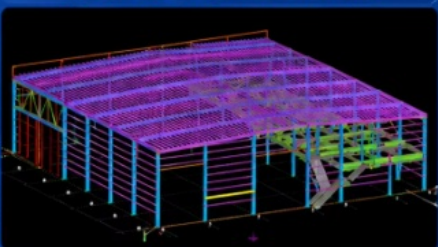
**SCHEMATIC DIAGRAM**



**CONSTRUCTION DRAWINGS**



**EFFECT DIAGRAM**



**PROCESSING DRAWING**



**PROFESSIONAL TEAM**  
Experienced engineers  
provide support



**ACCURATE DESIGN**  
Precise solutions  
tailored to needs



**EFFICIENT DELIVERY**  
Fast turnaround to  
save your time



**RELIABLE QUALITY**  
Details ensure safety  
and compliance



**ONE-STOP SERVICE**  
From concept to  
completion

## Industrial Applications

Steel processing workshop

Heavy machinery manufacturing factory

Metal casting and forging plant

Large heavy equipment assembly workshop

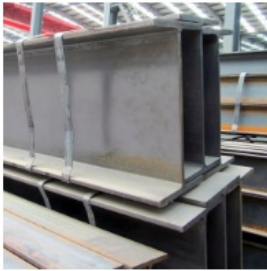
Heavy mechanical processing factory

Industrial plant with large tonnage overhead cranes

## Customization Options

Our prefabricated steel buildings can be fully customized to match your specific industrial production requirements, site conditions, and operational workflow.

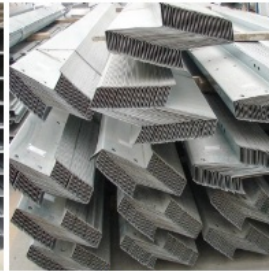
### Products Materials



H-beam



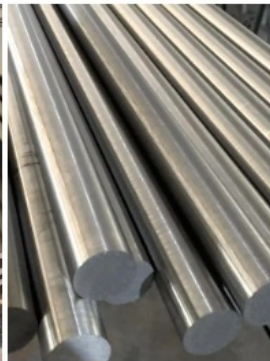
C purlin



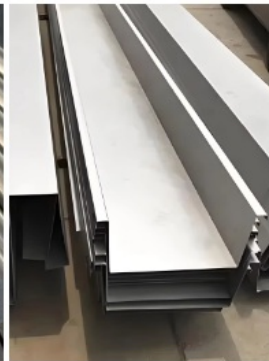
Z purlin



Angle steel



Round bar



Gutter

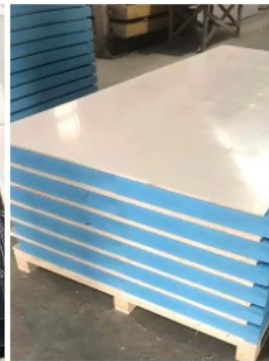
### Wall & Roof Material



Single steel sheet



Glazed tile



Extruded board XPS



Eps sandwich panel



Rockwool sandwich panel



PU sandwich panel



Pulping rivet



High strength bolt



Foundation bolt



Expansion bolt



Self tapping screw



Ventilation equipment on roof



Rainwater Pipe



Ventilation Shutters



Electric rolling shutter door



Plastic steel window

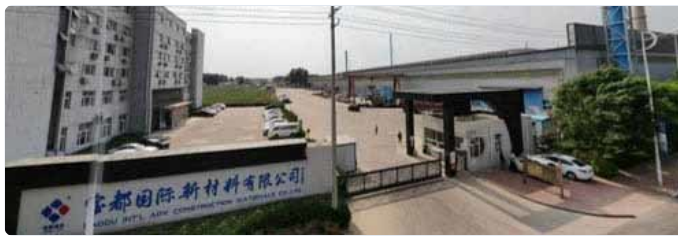


Pedestrian access door

## Company Certifications

Our manufacturing processes and products meet stringent international quality, safety, and environmental standards.







Certificate No. 016724E9027826

## CERTIFICATE OF ENVIRONMENT MANAGEMENT SYSTEM CERTIFICATION

Date of Initial Issuance Apr. 11, 2018 / Date of Re-certification Issuance Apr. 10, 2024  
Date of Expiration Apr. 10, 2027

This is to Certify that the Environment Management System of

**BAODU INT'L ADV CONSTRUCTION  
MATERIALS CO., LTD.**

is in conformity with  
GB/T24001-2016 idt ISO14001:2015 Standard, applies to  
PRODUCTION OF STEEL STRUCTURE (INCLUDING PRODUCTION OF COLOR  
PROFIED STEEL PLATE AND CONSTRUCTION METAL SURFACE INSULATION  
SANDWICH PANEL)

BCC Inc.

President:



Unified social credit code 911101020157598502

REGISTERED ADDRESS NO.24, BAHU AVE, INDUSTRIAL PARK, YONGQING COUNTY, LANGFANG, HEBEI PROVINCE, P.R.C.  
OPERATION ADDRESS NO.24, BAHU AVE, INDUSTRIAL PARK, YONGQING COUNTY, LANGFANG, HEBEI PROVINCE, P.R.C.



中国认可  
国际互认  
管理体系  
CHAS C016-M



BCC Address: 45-50-01, Floor 2, 19-45 Guangyuan Road, Dongcheng District, Beijing, 100701. The certificate is valid unless there is significant violation of requirements and qualifications. Issuance: The effectiveness of this certificate shall be maintained by regular surveillance audits. The validity of the certificate can be regained through re-evaluation as to ISO rules. The information of this certificate is available for inquiry on CQC's website: www.cqc.org.cn.



CERTIFICATE

Certificate No. 0147D433000823M



# CERTIFICATE OF OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATION

Date of Initial Issuance Apr. 11, 2018 / Date of Re-certification Issuance Apr. 10, 2024  
Date of Expiration: Apr. 10, 2027

This is to Certify that the Occupational Health and Safety Management System of  
**BAODU INT'L ADV CONSTRUCTION  
MATERIALS CO., LTD.**

is in conformity with  
GB/T 45001-2020 idt ISO 45001:2018 Standard, applies to  
PRODUCTION OF STEEL STRUCTURE (INCLUDING PRODUCTION OF COLOR  
PROFILED STEEL PLATE AND CONSTRUCTION METAL SURFACE INSULATION  
SANDWICH PANEL)

BCC Inc.

President:



Unified social credit code 9111010203793020

REGISTERED ADDRESS NO. 24, BAOME AVE, INDUSTRIAL PARK, YONGQING COUNTY, LANGFANG, HEBEI PROVINCE, P.R.C.  
OPERATION ADDRESS NO. 24, BAOME AVE, INDUSTRIAL PARK, YONGQING COUNTY, LANGFANG, HEBEI PROVINCE, P.R.C.



中国认可  
国际互认  
管理体系  
MANAGEMENT SYSTEM  
CNAS C016-M



BCC follows Item 45-01-01, Part 1, 10-47 Occupational Health, Dangerous Disease, Beijing, CHINA. This certificate is valid within the specified validity of assessment and qualification. Issuing The effectiveness of this certificate shall be maintained by regular surveillance audits, the validity of the certificate can be required through www.bccgroup.cn or by QR code. The information of this certificate available for inquiry on CCAA's website: www.ccaa.org.cn.



CERTIFICATE

Certificate No. 0147D433000823M



# CERTIFICATE OF QUALITY MANAGEMENT SYSTEM CERTIFICATION

Date of Initial Issuance Apr. 11, 2018 / Date of Re-certification Issuance Apr. 10, 2024  
Date of Expiration: Apr. 10, 2027

This is to Certify that the Quality Management System of  
**BAODU INT'L ADV CONSTRUCTION  
MATERIALS CO., LTD.**

is in conformity with  
GB/T 19001-2016 idt ISO 9001:2015 Standard, applies to  
PRODUCTION OF STEEL STRUCTURE (INCLUDING PRODUCTION OF COLOR  
PROFILED STEEL PLATE AND CONSTRUCTION METAL SURFACE INSULATION  
SANDWICH PANEL)

BCC Inc.

President:



Unified social credit code 9111010203793020

REGISTERED ADDRESS NO. 24, BAOME AVE, INDUSTRIAL PARK, YONGQING COUNTY, LANGFANG, HEBEI PROVINCE, P.R.C.  
OPERATION ADDRESS NO. 24, BAOME AVE, INDUSTRIAL PARK, YONGQING COUNTY, LANGFANG, HEBEI PROVINCE, P.R.C.



中国认可  
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MANAGEMENT SYSTEM  
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# C E R T I F I C A T E

## ATTESTATION CERTIFICATE

The Company mentioned below has been audited by the Notified Body UDEM, according to relevant standard given below

Company Name : **Baodu International Advanced Construction Material Co., Ltd.**

Company Address : **No.26, Baihe Road, Yongqing Industrial Zone, Hebei Province, China**

Related Standards : **EN 14509:2013**

Product Name : **Insulated Metal Cladding**

Report No and Date : **BIACM210615001/15.06.2021**

Product Brand/Model/Type : **BD-100MM-IMC, BD-50MM-IMC, BD-75MM-IMC, BD-120MM-IMC, BD-150MM-IMC, BD-200MM-IMC**

Certificate Number : **M.2021.206.N8433**

Initial Assessment Date : **28.06.2021**

Registration Date : **29.06.2021**

Reissue Date/No : **-**

Expiry Date : **28.06.2026**

  
UDEM International Certification  
Auditing Training Centre Industry  
and Trade Inc.Co.



The currency of the certificate can be checked through [www.udemtd.com.tr](http://www.udemtd.com.tr). The CE mark shown on the right can only be used under the responsibility of the manufacturer with the completion of EC Declaration of Conformity for all the relevant Directives. This certificate remains the property of UDEM International Certification Auditing Training Centre Industry and Trade Co. Ltd. to whom it must be returned upon request. The above named firm must keep a copy of this certificate for 15 years from the registration of certificate. The above named firm must notify all changes related with the approved type to UDEM. If UDEM will not renew expiry date of this certificate in question  
**Address: Mutlukent Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çankaya - Ankara - TURKEY**  
**Phone: +90 0312 443 03 90 Fax: +90 0312 443 03 76**  
**E-mail: info@udemtd.com.tr www.udem.com.tr**

**RUSSIAN FEDERATION** 02353

**СИСТЕМА ДОБРОВОЛЬНОЙ СЕРТИФИКАЦИИ  
ПОЖАРНОЙ БЕЗОПАСНОСТИ**  
№ РОСС RU.32623.ОС13ПБ в едином реестре зарегистрированных систем добровольной сертификации

**СЕРТИФИКАТ СООТВЕТСТВИЯ**  
№ РОСС RU.32623.ОС13ПБ.10362  
(номер сертификата соответствия)

**ЗАЯВИТЕЛЬ**  
(индивидуальное или юридическое лицо)  
Общество с ограниченной ответственностью "Перспектива"  
Адрес: Российская Федерация, 125167, г. Москва, вн. тер. г. муниципальный округ Хорошево-Мневское, Проспект Ленинградский, д. 47, стр. 2, помещение 28а  
ОГРН: 1247700676750, телефон: +74955181399, адрес электронной почты: perspektiva2409@mail.ru

**ИЗГОТОВИТЕЛЬ**  
(индивидуальное или юридическое лицо)  
Baodu International Engineering Technology Co., Ltd.  
Адрес: Китай, Room 1101, Building 6, No. 9 Yard, Hongye Road, Daxing District, Beijing City  
Телефон: +86 010-61237405

**ОРГАН ПО СЕРТИФИКАЦИИ**  
(индивидуальное или юридическое лицо, осуществляющее деятельность по сертификации, выдает сертификаты соответствия)  
№ РОСС RU.32623.ОС13ПБ Общество с ограниченной ответственностью «Эксперт», 129090, г. Москва, вн.тер.г. муниципальный округ Мещанский, ул. Щепкина, дом 28, помещ 2/5

**ПОДТВЕРЖДАЕТ, ЧТО ПРОДУКЦИЯ**  
(индивидуальное или юридическое лицо, подтверждающее соответствие продукции требованиям)  
Конструкция ограждающая стеновая на основе стеновых панелей, трехслойных, с облицовкой из стальных профилированных листов толщиной 0,6-1,0 мм, с утеплителем из минеральной ваты с плотностью не менее 100 кг/м<sup>3</sup>, общая толщина панели 100-350 мм. Торговая марка: BAODU.  
Серийный выпуск.

**СООТВЕТСТВУЕТ ТРЕБОВАНИЯМ**  
(технические стандарты, правила, условия договора, на соответствие которых (заявитель) производится сертификация)  
ГОСТ 30244-94 «Материалы строительные. Методы испытаний на горючесть», раздел 6, метод 1. Материал относится к негорючим материалам (НГ). ГОСТ 32603-2021

**ПРОВЕДЕННЫЕ ИССЛЕДОВАНИЯ, ИСПЫТАНИЯ И ИЗМЕРЕНИЯ**  
Протокол испытаний № ИЛ13-62792 от 23.05.2025 года, выданной Испытательной лабораторией Общества с ограниченной ответственностью «Эксперт», аттестат аккредитации РОСС RU.32623.ИЛ13ПБ

**ПРЕДСТАВЛЕННЫЕ ДОКУМЕНТЫ**  
(документы, подтверждающие соответствие продукции требованиям нормативной документации)

**ДОПОЛНИТЕЛЬНАЯ ИНФОРМАЦИЯ**  
Схема сертификации: 1с

**СРОК ДЕЙСТВИЯ СЕРТИФИКАТА СООТВЕТСТВИЯ**  
с 23.05.2025 по 22.05.2028

**Руководитель органа**  
 О.В. Ребрин  
инженер, физика

**Эксперт**  
 Т.А. Сибирякова  
инженер, физика

Сертификат не применяется при обязательной сертификации

**Verified**

**Gold Plus Supplier Assessment Certificate**

Certification No.: 21019358\_P+T

Baodu International Advanced Construction Material Co., Ltd.

宝都国际新材料有限公司

<http://baoducn.en.alibaba.com>

Onsite assessment was conducted by SGS

Valid: 29 Oct., 2020 to 28 Oct., 2021

Issued by:  Assessed by: 

Signature: 

Title: Director of SGS eCommerce, Government & Institution Services, SGS CHN

Explore our completed heavy-duty steel structure factory workshop projects delivered worldwide for various industrial production applications.

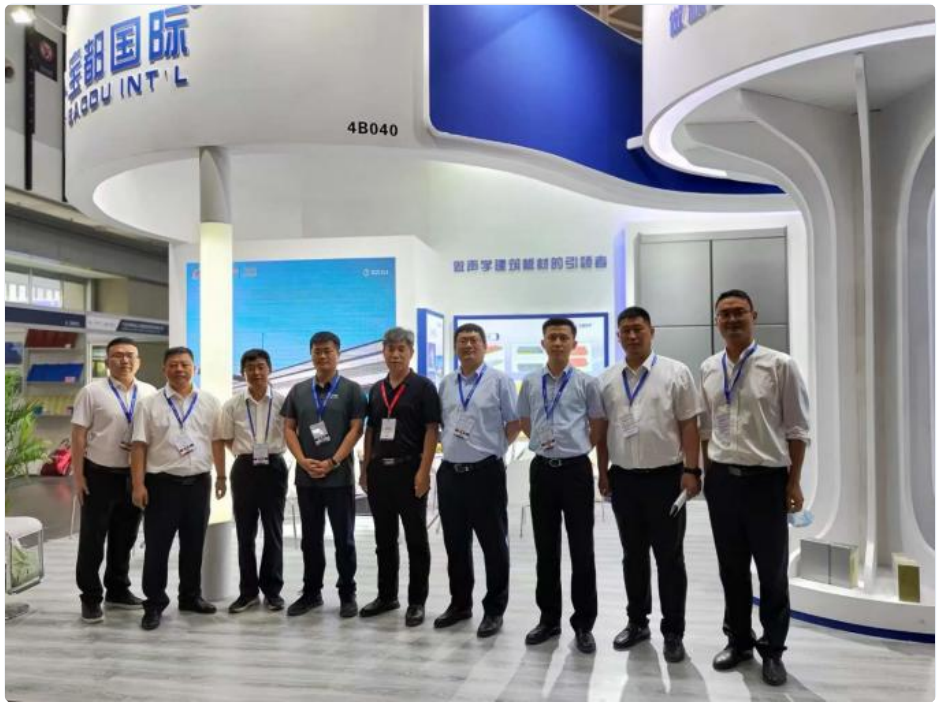








Support and Services











**Song Chunlei**  
Overseas Manager



**Baodu International Engineering Technology Co., Ltd**  
Add : Floor 11, Jayue Square, Xihongmen, Daxing District,  
Beijing, China 100162  
Tel : +86-10-60256462 Fax : +86-10-61225599  
Mobile : +86-13717927965  
Email : chunlei.song@baodu.com  
Website: www.baodu.com

**Business Scope:**

|                 |                 |
|-----------------|-----------------|
| Prefab House    | Sandwich Panel  |
| Container House | Steel Structure |



**Free Industrial Scheme Design:** Customized steel frame building solutions based on production types, storage volume, and site layout.

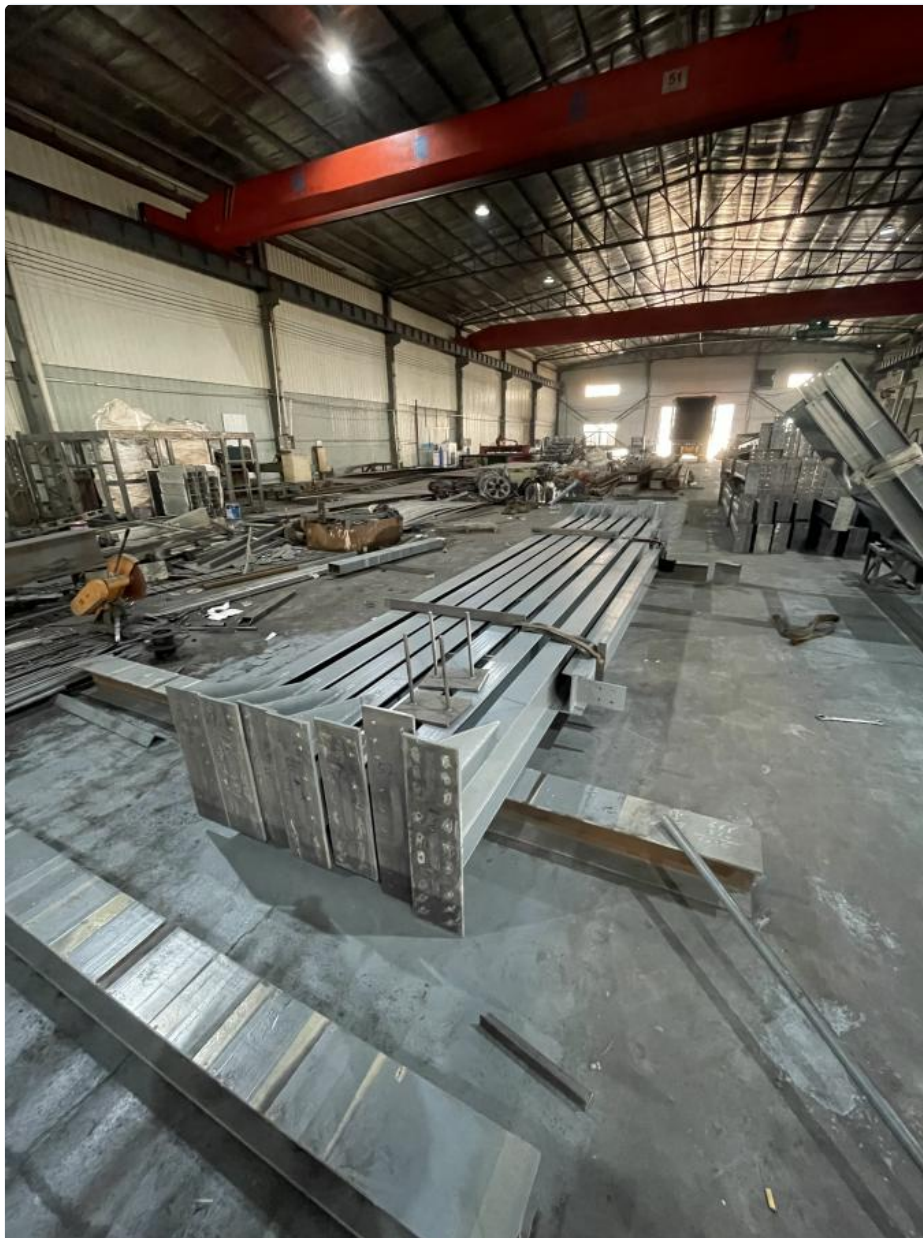
**Industrial Standard Quality Inspection:** Comprehensive testing including tensile tests, load tests, and welding quality inspections.

**Simplified Construction Guidance:** Industrial special installation manuals and step-by-step assembly videos.

**Fast Spare Parts Supply:** Long-term spot supply for vulnerable parts and matching accessories.

**Global Export Customized Service:** Compliant export documents and logistics cost optimization.

## Packing and Shipping











Heavy H-beam columns and crane beams are bundled and fixed with heavy steel strips. Each member is marked with drawing number and project code for easy site identification.

Heavy purlins, tie rods, and cross braces bundled separately, wrapped with PE protective film to prevent scratches and rust during ocean transport.

All hardware accessories — bolts, nuts, gaskets, anchor bolts — packed into thick export plywood cases, with detailed packing list inside each case.

Wall and roof panels wrapped by PE film to protect coating surface.

Shipping mode: standard container for small components; oversized heavy beams shipped via bulk vessel.

Each bundle and wooden box printed with shipping mark, weight, and part number for customs clearance and onsite sorting.

## Project Delivery and Installation Process

**Custom Scheme Confirmation:** Confirm building size, local wind load standard, and usage scenario.

**Factory Precision Prefabrication:** Complete steel component processing and hot-dip galvanized surface treatment.

**Standard Seaworthy Packaging:** Professional anti-scratch, waterproof, and anti-collision packaging.

**Global Shipment and Document Handover:** Arrange on-time shipment and hand over technical documents.

**Remote Installation Guidance:** Provide full-process English technical guidance for standardized assembly.

## Frequently Asked Questions

### Q1: Can you design the structure for a 30-ton overhead crane?

Yes. Our structural engineer will design dedicated crane beams, reinforce columns and base plates according to your crane tonnage, working duty, span, and lifting height. Please provide full crane parameters for calculation.

### Q2: What geotechnical information do you need for foundation suggestion?

We require local soil test report, local wind load, snow load, and seismic grade. If you have no soil report, we can provide reference foundation drawing for your local civil engineer.

### Q3: Can this heavy-duty workshop resist machine vibration?

Yes. We optimize the frame rigidity and connection design to reduce vibration influence. We will consider equipment vibration load during structural calculation once you supply machine parameters.

**Q4: Can we use rock wool fireproof panels for wall and roof?**

Yes, rock wool sandwich panels are available as optional cladding to meet fire protection requirements for heavy industry factories.

**Q5: What documents can you provide?**

Structural calculation report, 2D construction drawings, 3D model, installation manual, material MTC certificate, component list, and packing list.



**Baodu International Advanced Construction Material Co., Ltd.**



+86 13717927965



chunlei.song@baodu.com



baodupanel.com

No. 2, Yijin North Street, Daxing District, Beijing