



Company Catalog

About us



Company Profile

Jiangsu Zhonghai Bridge Equipment Co., Ltd is a technology innovation oriented enterprise.

With an annual production scale of over 60000 tons, our main products include 100type Bailey Brdige, 200 type Bailey Bridge, 400type Bailey Bridge, steel supports,etc. The product is applied in fields such as national defense, emergency rescue, and transportation.

Our products have undergone strict testing by authoritative third-party laboratories such as CNAS, TUV, SGS, BV, etc., and have obtained ISO9001 quality management system certification and CE steel structure manufacturer certification. Our products comply with international standards such as Chinese, American, and European standards.

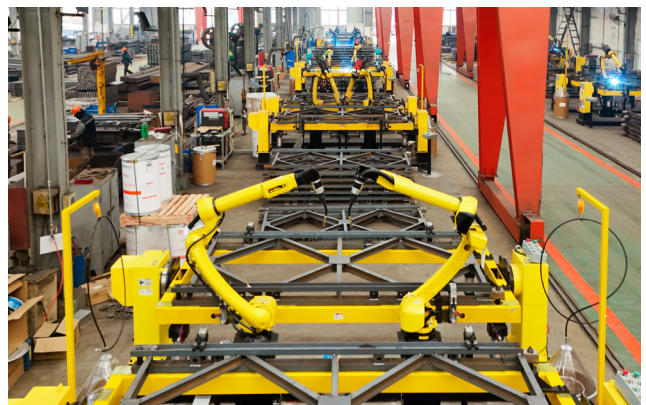
Automatic Welding Robot Technology

Jiangsu Zhonghai Bridge aims to improve production and strictly control quality, optimizing processes through technological innovation to ensure product accuracy and quality. We have conducted in-depth research on welding processes and robot technology, and independently developed an automatic welding production line for Bailey panels. This line significantly improves the stability and efficiency of production quality, providing strong support for product quality and production capacity improvement.

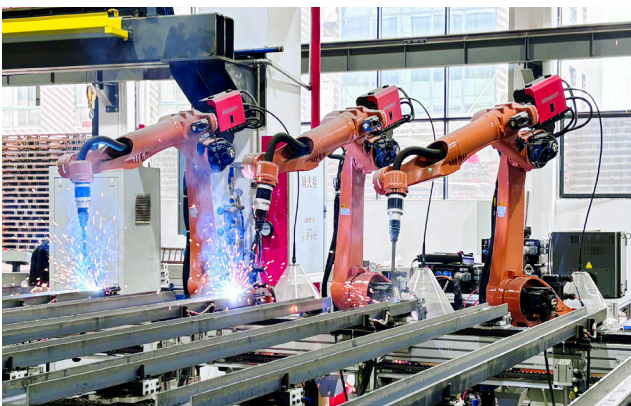
Fully automatic welding robot Production line



Bailey panel automatic welding machine



Bailey panel automatic welding production line



Chord automatic welding machine



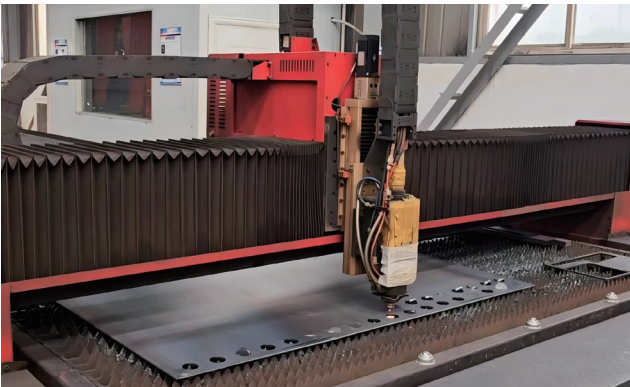
Chord welding robot production line



Chord automatic welding production line



Non standard Bailey panel welding robot



Laser flat cutting machine



Laser profile cutting production line



Laser pipe cutting machine



Bridge deck welding machine



CNC sawing machine



CNC Technician Center

Certification of Product Quality

Jiangsu Zhonghai Bridge has always adhered to strict quality management concepts and established a quality control system covering the entire process. All of its products have been tested by top international third-party laboratories such as CNAS (China National Accreditation Service for Conformity Assessment), TUV (Rheinland Group), SGS (Swiss General Notary), BV (French Bureau Veritas), etc., verifying the excellent quality of the products in terms of material properties, structural strength, and environmental adaptability.

Related Certifications



ISO9001 Quality Management System Certification



ISO9001 Environmental Management System Certification



CERTIFICATE

Certificate No: 016SH232024R0M

BCC

CERTIFICATE OF OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM CERTIFICATION

Date of Initial Issuance: Nov. 17, 2022 / Date of Issuance: Nov. 22, 2023
Date of Expiration: Nov. 16, 2025

This is to Certify that the Occupational Health and Safety Management System of

JIANGSU ZHONGHAI BRIDGE EQUIPMENT CO., LTD.

is in conformity with GB/T 45001-2020 idt ISO 45001:2018 Standard, applies to FABRICATION AND SALES OF PREFABRICATED HIGHWAY STEEL BRIDGES

BCC Inc.
President: 



Unified social credit code: 9132122123140558400
REGISTERED ADDRESS: BUILDING 1, NO. 83, DANTU NEW TOWN SECTION, YANJIANG ROAD, DANTU DISTRICT, ZHENJIANG CITY, P.R.C.
OPERATION ADDRESS: NO. 83, DANTU NEW TOWN SECTION, YANJIANG ROAD, DANTU DISTRICT, ZHENJIANG CITY, JIANGSU PROVINCE, P.R.C.




BCC Address: Room 402-403, Floor 4, No.46 Gaoqiangmen Street, Shanghai District, Beijing, CHINA. This certificate is valid within the scope of the activities and qualifications stated in the certificate. The effectiveness of this certificate shall be reviewed by regular surveillance audits. The validity of the certificate can be renewed through www.bcc.com.cn or by QR code. The statement of the certificate available for inquiry on CCRP website: www.ccrp.gov.cn.

ISO9001 Occupational Health and Safety Management System Certification



Made-in-China

Audit Report

Report NO.: MIC-ASI2342016 Audit Date: 2023-12-18

Holder: Jiangsu Zhonghai Bridge Equipment Co., Ltd.
Company Name (English): Jiangsu Zhonghai Bridge Equipment Co., Ltd.
Company Name (Chinese): 江苏中海桥梁设备有限公司
Showroom: <https://e21e90b7092c687b.en.made-in-china.com>
Registered address: Building 1, No. 83, Xincheng Duan, Yanjiang Road, Dantu District, Zhenjiang City, Jiangsu Province, China
Actual address: Building 1, No. 83, Dantu New Town, Dantu District, Zhenjiang City, Jiangsu Province, China
Indent Type: Initial Audit
Main Product: Bailey Bridge, Steel Bridge

Zhang Li

Sign for and on behalf of Bureau Veritas

Auditor: Austin Zhou **Reviewed by:** Joy Cai

This document is issued by Bureau Veritas. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this certificate is advised that information contained hereon is solely limited to visual examination of the safety and readily accessible portions of the certificate. The Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The certificate is not intended to be used as a document. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is prohibited and will be prosecuted to the fullest extent of the law. To check the authenticity of testing/inspection report & certificate, please click <http://www.bv.com.cn>



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BV Testing and Certification Certificate



CERTIFICATION Center
"SERTIFIKĀCIJAS CENTRS" LTD.
PRODUCT CERTIFICATION CENTER

CERTIFICATE
OF CONFORMITY OF THE FACTORY PRODUCTION CONTROL

No. SC-PSC-1090-1036

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9th March 2011 (the Construction Products Regulation or CPR), this certificate applies to the following construction product:

Construction product Structural components and kits for steel structures up to EXC2 according to EN 1090-2:2018

CE - marking method 3a in accordance with EN 1090-1:2009 + A1:2011 table A1

Manufacturer produced by or for
JIANGSU ZHONGHAI BRIDGE EQUIPMENT CO.,LTD.
BUILDING 1.83#.DANTU NEW TOWN,YANJIANG RODA ,DANTU DISTRICT,ZHENJIANG, JIANGSU

Manufacturing plant JIANGSU ZHONGHAI BRIDGE EQUIPMENT CO.,LTD.
Production facility of the manufacturer
BUILDING 1.83#.DANTU NEW TOWN,YANJIANG RODA ,DANTU DISTRICT,ZHENJIANG, JIANGSU

Confirmation This certificate attests that all provisions concerning the assessment and verification of constancy or performance described in Annex ZA of the harmonized standard EN 1090-1-A1:2011 under system 2+ are applied, and that the factory production control fulfills all the prescribed requirements stated therein.

Date of first issue 12.11.2024
Next surveillance audit 10.11.2025
Period of validity This certificate will remain valid until this date as long as neither the harmonized standard, the construction product, the AVCP methods nor the manufacturing conditions on the plant are modified significantly, unless suspended or withdrawn by the notified factory production control certification body, as well as a supervisory audit has been performed within the set deadline.

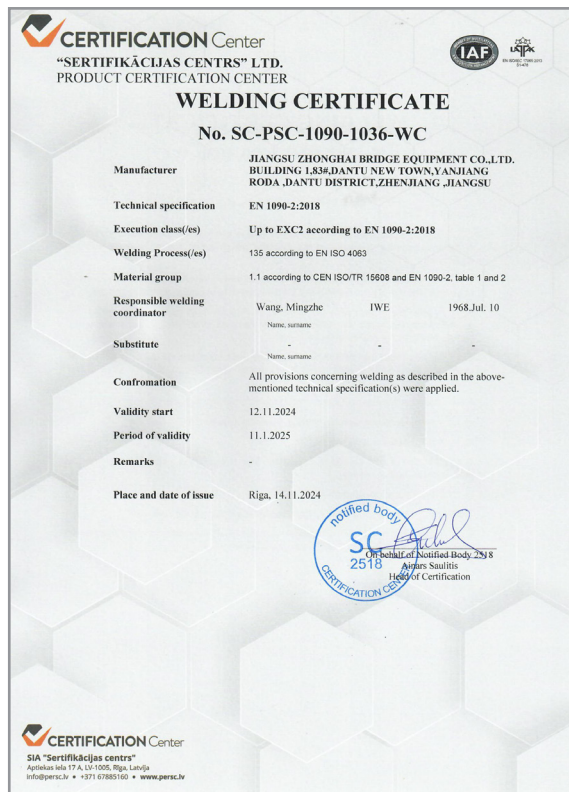
Remarks see reverse
Place and date of issue Riga, 14.11.2024



On behalf of Notified Body 2518
Ainars Saulitis
Head of Certification

CERTIFICATION Center
SIA "Sertifikācijas centrs"
Apriņķa iela 17 A, LV-1005, Rīga, Latvija
info@pers.lv • +371 67885100 • www.pers.lv

CE Certificate



CERTIFICATION Center
"SERTIFIKĀCIJAS CENTRS" LTD.
PRODUCT CERTIFICATION CENTER

WELDING CERTIFICATE
No. SC-PSC-1090-1036-WC

Manufacturer JIANGSU ZHONGHAI BRIDGE EQUIPMENT CO.,LTD.
BUILDING 1.83#.DANTU NEW TOWN,YANJIANG RODA ,DANTU DISTRICT,ZHENJIANG, JIANGSU


Technical specification EN 1090-2:2018
Execution class(es) Up to EXC2 according to EN 1090-2:2018
Welding Process(es) 135 according to EN ISO 4063
Material group 1.1 according to CEN ISO/TR 15608 and EN 1090-2, table 1 and 2

Responsible welding coordinator Wang, Mingzhe IWE 1968.Jul. 10
Name, surname

Substitute -
Name, surname

Conformation All provisions concerning welding as described in the above-mentioned technical specification(s) were applied.

Validity start 12.11.2024
Period of validity 11.1.2025
Remarks -
Place and date of issue Riga, 14.11.2024



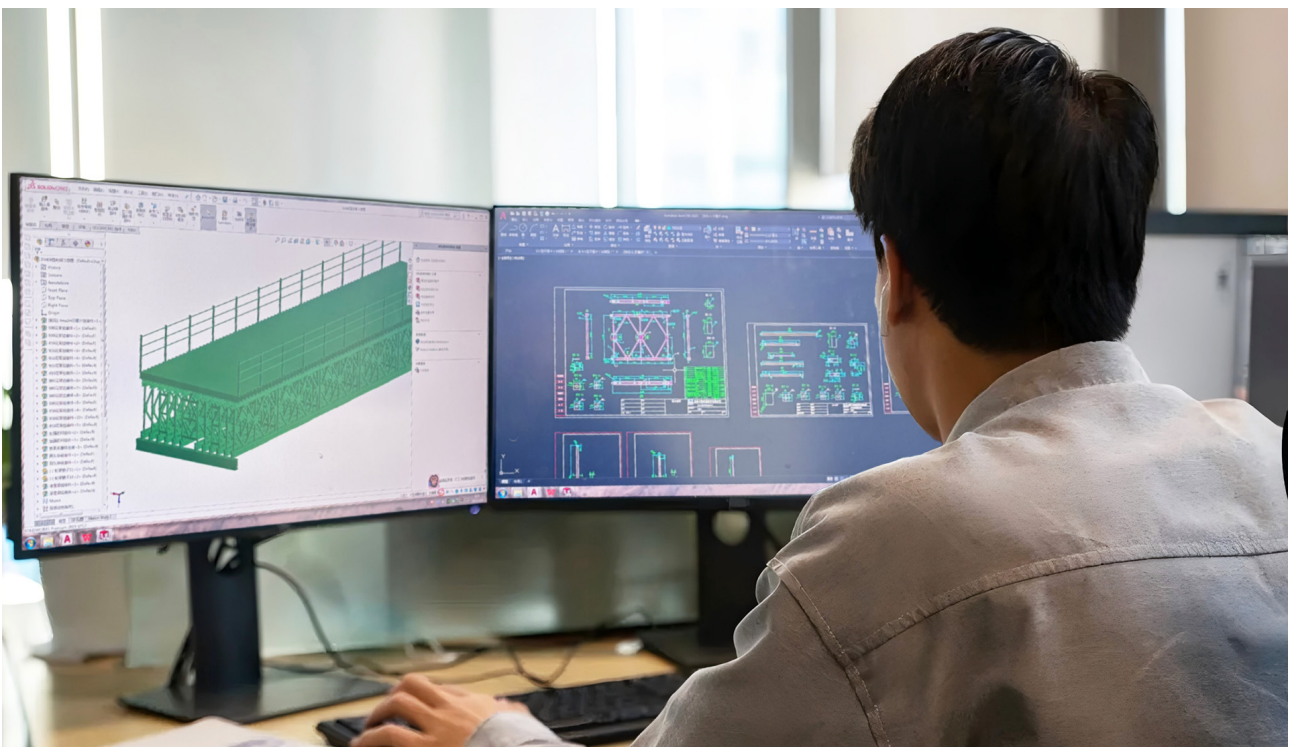
On behalf of Notified Body 2518
Ainars Saulitis
Head of Certification

CERTIFICATION Center
SIA "Sertifikācijas centrs"
Apriņķa iela 17 A, LV-1005, Rīga, Latvija
info@pers.lv • +371 67885100 • www.pers.lv

CE Certificate

Customized Services

Since its establishment, the company has continuously cultivated the field of bridge engineering, gathered top talents in the industry, equipped with advanced technical equipment, and accumulated rich practical experience in the design and manufacturing of Bailey Bridge. It can accurately meet the diverse needs of customers and create customized bridge solutions with excellent quality.



Exclusive Solution

Our professional technical team will go deep into the project site to conduct detailed surveys of key elements such as topography, hydrological conditions, and traffic loads, accurately capturing project requirements.

Subsequently, the engineering department relied on a digital design platform, combined with mechanical calculations and structural optimization techniques, to tailor exclusive solutions that fit the site conditions from bridge span, bearing capacity to structural form.

Transportation Logistics

According to the size and transportation distance of bridge components, flexible transportation methods such as highway, railway, and waterway are selected, and professional reinforcement and protection measures are equipped to ensure the safe arrival of components.



Construction Guidance

During the on-site construction phase, the construction team led by certified engineers strictly follows standardized operating procedures and uses mature lifting equipment and installation techniques to ensure efficient and reliable construction quality.

Product Introduction

Our core product, prefabricated highway steel bridge, also known as Bailey Bridge. We have adopted the standards of "Manufacturing of Prefabricated Highway Steel Bridges"(JT/T728-2008), "Technical Specifications for Construction of Highway Bridges and Culverts" (JT-G/T3650-2020), and the national standard GB50205 "Code for Construction and Acceptance of Steel Structures" for processing and production.

100 Type Bailey Bridge

The 100 type Bailey bridge is a widely used prefabricated bridge in China, with the following core advantages:

1. Simple structure, quick installation, strong interchangeability of components, and convenient transportation.
2. High load-bearing capacity, supports different loads, flexible combinations, and adapts to different terrains and needs.
3. The standard roadway has a clear width of 4.2 meters, which meets the passage of various types of vehicles.
4. Low cost and high reuse rate.
5. Strong durability, using high-strength steel fully welded structure, with a long service life.





200 Type Bailey Bridge

The advantages of the 200 type Bailey Bridge compared to the 100 type Bailey Bridge include:

1. Stronger traffic capacity and optimized structural design.
2. Improve structural stability and increase safety.
3. With wider load adaptability, the 200 type Bailey bridge supports double lane design, with loads including Automobile Load Class 10, Automobile Load Class 20, HS15, HS20, and Track-50, making it suitable for a wider range of scenarios.



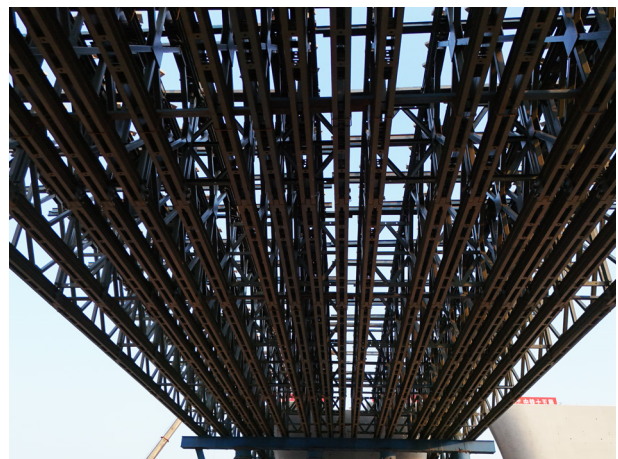
400 Type Bailey

The 400 type Bailey (Bridge No.1) has significant advantages and performs outstandingly in the field of bridge construction.

1. From the perspective of structural design, it optimizes the traditional 100 type Bailey panel, which is larger and stronger than the conventional railway bridge Bailey panel, and can effectively cope with complex construction environments.

2. In terms of construction convenience, the bridge significantly reduces assembly time and effectively improves construction efficiency.

3. In terms of bearing capacity, it has better shear and bending resistance, providing solid support for the construction of large-span structural supports.



Steel Support

The steel supports are made of high-quality steel such as Q355B and Q235B, and have been scientifically designed with multiple specifications of standard segments, which can flexibly adapt to different engineering needs.

1. Strong bearing capacity, meeting the load requirements of various construction structures such as overpasses and cast-in-place supports.

2. The processing and manufacturing technology is strict, from layout marking to welding and painting, with precise control over each link to ensure quality.




3. Convenient transportation and storage, lightweight components, and can be classified for shipping and stacking.

4. Simple maintenance and regular upkeep can extend the service life.



Test Report


200 Type Bailey Bridge Inspection Report

No. GLGXJT2024-QL-00030
 (18 pages)

Testing Report

Project Name: Modular Steel Bailey Bridge System - Tunoh Bridge, Sarawak, Malaysia
Client: Jiangsu Zhonghai Bridge Equipment Co., Ltd.
Test Item: Details shown in Page 3 text
Test Type: Request Testing

Guangxin testing and Certification Group Co., Ltd

 November 22, 2024

Guangxin Engineering Testing Group Co., Ltd. GLGXJT2024-QL-00030

10 Attached On-site Testing Photos




Photo 10-1 Modular Steel Bailey Bridge System for Malaysia




Photo 10-2 Modular Steel Bailey Bridge System (Side view)




Photo 10-3 Mid-span Center Loading Test

Guangxin Engineering Testing Group Co., Ltd. GLGXJT2024-QL-00030



Photo 10-4 Mid-span Right Off-center Loading Test




Photo 10-5 Loading Test at the End of the Bailey Bridge





Photo 10-6 Testing System

TUV Welding Inspection Report

TÜV Rheinland (Shanghai) Co., Ltd. Member of TÜV Rheinland Group.  Precisely Right.

Non-destructive Testing Report

TUVRL Report No.: IN-SH-24100134-EN **TUVRL Order No.:** /
Contact Person: Seria Leng **Telephone:** 021-60814028 **Email:** Seria.Leng@tuv.com

CLIENT NAME: Jiangsu Zhonghai Bridge Equipment Co., Ltd. **Phone:** /
Contact Person: Zhou Jianbo **Telephone:** 13655282755 **Email:** zjhwm@gjgl.com

MANUFACTURER: Jiangsu Zhonghai Bridge Equipment Co., Ltd. **Phone:** /
Contact Person: Zhou Jianbo **Telephone:** 13655282755 **Email:** zjhwm@gjgl.com


Product Inspected: Compact 321 Type Panel **Quantity:** 100 pieces
Time of Inspection: 24h after welding completion **Inspector Name:** Dongfeng Fan

Test Location: Building T No. 83, Dantu New Town Sector, Yangjiang Road, Dantu District, Zhenjiang City, Jiangsu Province. **Test Date:** Oct 15, 2024

Test Summary (all details see verification sheet)
 Test Name: UT **Test Result:** Acceptable **REFERENCE DOCUMENTS No.:** EN ISO 17640:2017, EN ISO 15995:2018

REFERENCE DOCUMENTS

No.	Document No. / Rev.	Title
1.	EN ISO 17640:2017	Non-destructive testing of welds-Ultrasonic testing-Techniques, testing levels, and assessment
2.	EN ISO 15995:2018	Non-destructive testing of welds-Ultrasonic testing-Acceptance levels



TÜV Rheinland (Shanghai) Co., Ltd. Member of TÜV Rheinland Group.  Precisely Right.

Non-destructive Testing Report



Sample photo



Sample photo




Sample photo



Sample photo







TÜV Rheinland (Shanghai) Co., Ltd. Member of TÜV Rheinland Group.  Precisely Right.

Non-destructive Testing Report

Time Sheet

Used for Inspection (including Traveling and Reporting)	Date	Working Hours	Over Time
	Oct 15, 2024		
Total time charged:		1 Day	

Inspected by	Reviewed by	Approved by
Dongfeng Fan	Pan Yuchang	Shurong Yang
Level II	Level II or Level III	Level III
		
(Signature)	(Signature)	(Signature)
Date: Oct 15, 2024	Date: Oct 16, 2024	Date: Oct 16, 2024



Test Report

TUV Square Steel Inspection Report

TÜV Rheinland (Shanghai) Co., Ltd.
Member of TÜV Rheinland Group

TÜV Rheinland
Precisely Right.

Test Report No.: 01 220 CHNT-2407013_EN Page 1 of 3

Test Report

Client: Jiangsu Zhonghui Bridge Equipment Co., Ltd.
Client address: No.83, Danta New City Section, Yangjiang Highway, Danta District, Zhenjiang City

Contact information: Tel: / Mail: 71912099@tqv.com
Sample No.: SHM020410207013
Sample receiving date: Dec.6, 2024
Testing period: Dec.6, 2024-Dec.12, 2024

Test report 01 220 CHNT-2407013 exists in two official versions, English version and Chinese version, with suffixes "_EN" and "_CN" following test report No. to distinguish respectively.

For and on behalf of TÜV Rheinland (Shanghai) Co., Ltd.
Yansheng Shen
Metal Materials Lab
Technical Manager
Dec.12, 2024
Date Name

TÜV Rheinland (Shanghai) Co., Ltd.
Member of TÜV Rheinland Group

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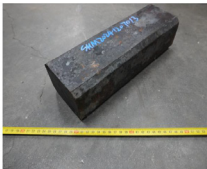
Test Report No.: 01 220 CHNT-2407013_EN Page 2 of 3

1. Sample information (provided by customer):

Sample name: Square steel
Sample description: A piece of square steel
Sample obtaining method: Sending by customer Sampling by TÜV staffs Other ()

Other information: Product specification: 81*101; Material and Mark: 1235581

Sample photo(s):



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Test Report No.: 01 220 CHNT-2407013_EN Page 3 of 3

2. Test result:

2.1 Chemical composition analysis:
Test method: ASTM A515-12

Element	C	Si	Mn	P	S	Cr
Req. %	≤0.27	≤0.60	≤1.70	≤0.045	≤0.045	≤0.34
Result %	0.16	0.38	1.34	0.012	0.004	0.04
Element	Mo	Ni	Cu	N	Conclusion	
Req. %	≤0.14	≤0.47	≤0.60	≤0.014	-	
Result %	<0.01	0.02	0.01	0.009	Pass	

Note: The requirement is specified in EN 10025-2:2019 Steel name S355JR, product analysis (40mm nominal thickness 100mm).

2.2 Tensile test:
Test method: EN ISO 6891-1:2019 A274

Test item	Tensile strength (R _m) (N/mm ²)	Yield strength (R _{eH}) (N/mm ²)	Elongation after fracture (A ₅) (%)	Conclusion
Requirement	470-630	≥355	≥20	-
Result	514	357	34.0	Pass

Note: The requirement is specified in EN 10025-2:2019 Steel name S355JR (30mm nominal thickness $\leq 100\text{mm}$).

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TUV 8# Channel Steel Inspection Report

TÜV Rheinland (Shanghai) Co., Ltd.
Member of TÜV Rheinland Group

TÜV Rheinland
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Test Report No.: 01 220 CHNT-2406710_EN Page 1 of 3

Test Report

Client: Jiangsu Zhonghui Bridge Equipment Co., Ltd.
Client address: No.83, Danta New City Section, Yangjiang Highway, Danta District, Zhenjiang City

Contact information: Tel: 13951020795; Mail: 71912099@tqv.com
Sample No.: SHM02041106710
Sample receiving date: Nov.25, 2024
Testing period: Nov.25, 2024-Nov.29, 2024

Test report 01 220 CHNT-2406710 exists in two official versions, English version and Chinese version, with suffixes "_EN" and "_CN" following test report No. to distinguish respectively.

For and on behalf of TÜV Rheinland (Shanghai) Co., Ltd.
Yansheng Shen
Metal Materials Lab
Technical Manager
Nov.29, 2024
Date Name

TÜV Rheinland (Shanghai) Co., Ltd.
Member of TÜV Rheinland Group

TÜV Rheinland
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Test Report No.: 01 220 CHNT-2406710_EN Page 2 of 3

1. Sample information (provided by customer):

Sample name: 8# Channel Steel
Sample description: A piece of channel steel
Sample obtaining method: Sending by customer Sampling by TÜV staffs Other ()

Other information: Product specification: 8# Channel Steel; Material and Mark: 1235581

Sample photo(s):



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Member of TÜV Rheinland Group

TÜV Rheinland
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Test Report No.: 01 220 CHNT-2406710_EN Page 3 of 3

2. Test result:

2.1 Chemical composition analysis:
Test method: GB/T 4252-2015 (X61.2017)(other elements)

Element	C	Si	Mn	P	S	Cr
Req. %	≤0.27	≤0.60	≤1.70	≤0.045	≤0.045	≤0.34
Result %	0.13	0.36	1.48	0.018	0.016	0.04
Element	Mo	Ni	Cu	N	Conclusion	
Req. %	≤0.14	≤0.47	≤0.60	≤0.014	-	
Result %	<0.01	0.01	0.02	0.007	Pass	

Note: The requirement is specified in EN 10025-2:2019 Steel name S355JR, product analysis (nominal thickness 16mm).

2.2 Tensile test:
Test method: EN ISO 6891-1:2019 A274

Test item	Tensile strength (R _m) (N/mm ²)	Yield strength (R _{eH}) (N/mm ²)	Elongation after fracture (A ₅) (%)	Conclusion
Requirement	470-630	≥355	≥22	-
Result	564	373	29.0	Pass

Note: The requirement is specified in EN 10025-2:2019 Steel name S355JR (dimensional thickness 16mm).

--- END ---

Test Report

TUV 10# Channel Steel Inspection Report

TÜV Rheinland (Shanghai) Co., Ltd.
Member of TÜV Rheinland Group

Test Report No.: 01 220 CHNT-2405378_EN Page 1 of 3

Test Report

Client: Jiangsu Zhonghai Bridge Equipment Co., Ltd.

Client address: No.83, Danta New City Section, Yangyang Highway, Danta District, Zhenjiang City

Contact information: Tel.: / Mail: 71972096@qq.com

Sample No.: SHM20240905378

Sample receiving date: Sep-24, 2024

Testing period: Sep-24, 2024-Sep-29, 2024

This report 01 220 CHNT-2405378 exists in two official versions, English version and Chinese version, with suffixes "_EN" and "_CN" following test report No. to distinguish respectively.

For and on behalf of TÜV Rheinland (Shanghai) Co., Ltd.

Yiayang Shen
Metal Materials Lab
Technical Manager

Sep-29, 2024
Date Name

TÜV Rheinland (Shanghai) Co., Ltd.
Member of TÜV Rheinland Group

Test Report No.: 01 220 CHNT-2405378_EN Page 2 of 3

1. Sample information (provided by customer):


Sample name: 10#Channel Steel

Sample description: A piece of channel steel

Sample obtaining method: Sending by customer Sampling by TÜV staffs Other ()

Other information: Product specification: 10#Channel Steel; Material and Mark: Q355B.

Sample photos:



TÜV Rheinland (Shanghai) Co., Ltd.
Member of TÜV Rheinland Group

Test Report No.: 01 220 CHNT-2405378_EN Page 3 of 3

2. Test result:

2.1 Chemical composition analysis:
Test method: GB/T 4306-2016(X1-X2) (other elements)

Element	C	Si	Mn	P	S	Cr
Req. %	≤0.27	≤0.00	≤1.70	≤0.045	≤0.045	≤0.34
Result, %	0.20	0.48	1.22	0.015	0.011	0.04
Element	Mo	Ni	Cu	N	Conclusion	
Req. %	≤0.14	≤0.47	≤0.60	≤0.014	-	
Result, %	0.01	0.01	0.01	0.008	Pass	

Note: The requirement is specified in EN 10025-2:2019 Designation S355JR, product analysis (thickness≤16mm).

2.2 Tensile test:
Test method: EN ISO 6892-1:2019 A234

Test item	Tensile strength (R _m) (N/mm ²)	Yield strength (R _{eL}) (N/mm ²)	Elongation after fracture (A _g) (%)	Conclusion
Requirement	470-630	≥355	≥22	-
Result	576	400	28.0	Pass

Note: The requirement is specified in EN 10025-2:2019 Designation S355JR (dimensional thickness≤16mm).

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TUV H-Steel Inspection Report

TÜV Rheinland (Shanghai) Co., Ltd.
Member of TÜV Rheinland Group

Test Report No.: 01 220 CHNT-2406711_EN Page 1 of 3

Test Report

Client: Jiangsu Zhonghai Bridge Equipment Co., Ltd.

Client address: No.83, Danta New City Section, Yangyang Highway, Danta District, Zhenjiang City

Contact information: Tel.: 13615526755 Mail: 71972096@qq.com

Sample No.: SHM2024110711

Sample receiving date: Nov-25, 2024

Testing period: Nov-25, 2024-Nov-29, 2024

This report 01 220 CHNT-2406711 exists in two official versions, English version and Chinese version, with suffixes "_EN" and "_CN" following test report No. to distinguish respectively.

For and on behalf of TÜV Rheinland (Shanghai) Co., Ltd.

Yiayang Shen
Metal Materials Lab
Technical Manager

Nov-29, 2024
Date Name

TÜV Rheinland (Shanghai) Co., Ltd.
Member of TÜV Rheinland Group

Test Report No.: 01 220 CHNT-2406711_EN Page 2 of 3

1. Sample information (provided by customer):

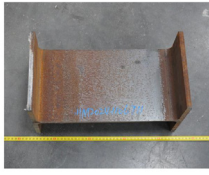
Sample name: H Section steel

Sample description: A piece of H section steel

Sample obtaining method: Sending by customer Sampling by TÜV staffs Other ()

Other information: Product specification: H40*200; Material and Mark: Q355B.

Sample photos:



TÜV Rheinland (Shanghai) Co., Ltd.
Member of TÜV Rheinland Group

Test Report No.: 01 220 CHNT-2406711_EN Page 3 of 3

2. Test result:

2.1 Chemical composition analysis:
Test method: GB/T 4306-2016(X1-X2) (other elements)

Element	C	Si	Mn	P	S	Cr
Req. %	≤0.27	≤0.00	≤1.70	≤0.045	≤0.045	≤0.34
Result, %	0.18	0.31	1.32	0.021	0.020	0.05
Element	Mo	Ni	Cu	N	Conclusion	
Req. %	≤0.14	≤0.47	≤0.60	≤0.014	-	
Result, %	<0.01	0.01	0.01	0.008	Pass	

Note: The requirement is specified in EN 10025-2:2019 Steel name S355JR, product analysis (nominal thickness≤16mm).

2.2 Tensile test:
Test method: EN ISO 6892-1:2019 A234

Test item	Tensile strength (R _m) (N/mm ²)	Yield strength (R _{eL}) (N/mm ²)	Elongation after fracture (A _g) (%)	Conclusion
Requirement	470-630	≥355	≥22	-
Result	565	403	32.5	Pass

Note: The requirement is specified in EN 10025-2:2019 Steel name S355JR (dimensional thickness≤16mm).

--- END ---

Production Process

Strictly Select Materials

Material Procurement

Material procurement should be carried out according to the material requirements of the construction drawings, from large-scale steel production and operation enterprises in the country, and there should be a material quality assurance certificate. Samples can also be taken from the operation enterprises for physical and chemical testing.

Material Testing

The materials arriving at the company's factory should be sampled according to the requirements of the welding process qualification report and undergo physical and chemical tests at a qualified testing company. Only after passing the test can we enter the production process.

Cutting and Processing

Laser Cutting

The cutting must be carried out on the laser profile cutting machine according to the specifications in the process card, and should meet the tolerance requirements of the construction drawing or process card.

The precision of laser cutting is controlled at 0.5mm.

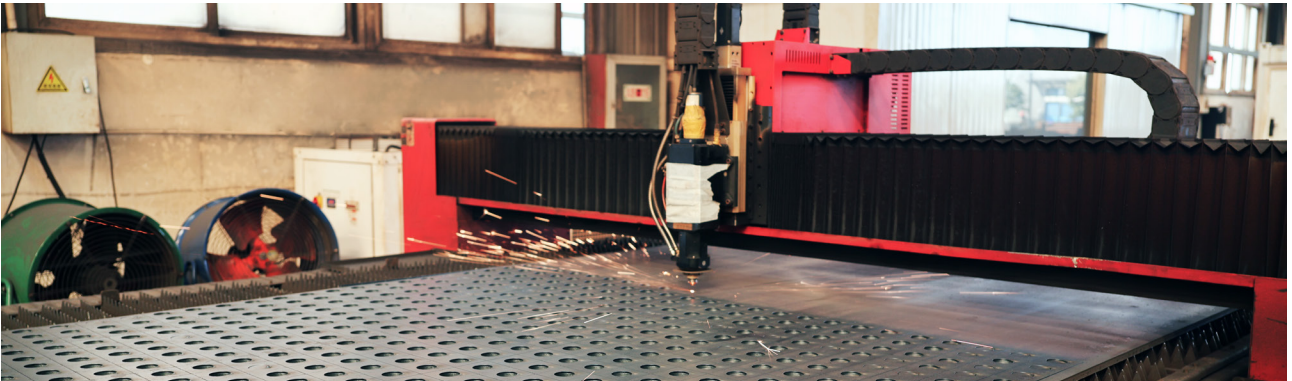


Shaping and Decontamination

After cutting, the material should be shaped, deburred, rust removed, stained, and the welding groove should be reversed, and stored according to the number for future use.

Parts Processing

The parts are processed according to the tolerance of the process drawing, using a flat laser cutting machine for cutting and processing.



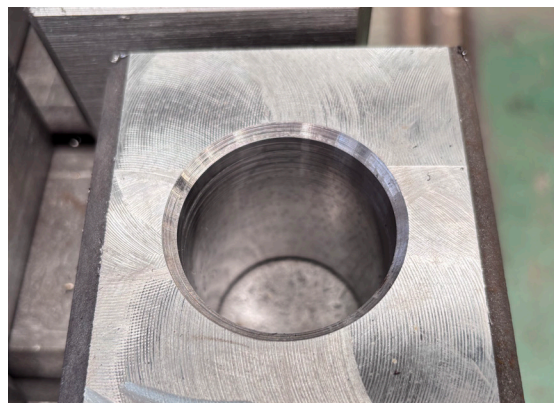
CNC Machining

Punching Processing

The hole processing of chord members, vertical members, and small and medium-sized square blocks is carried out by punching and drilling according to the process requirements. Punching and drilling should meet the requirements of the construction drawings.

Processing of End Post

The female and male End Post in the truss are drilled on a fixed drilling machine, and the reaming is completed. The machining accuracy meets the tolerance requirements of the construction drawing, and the equipment used is a CNC machining center.



Accurate Assembly

Small Piece Assembly

Small components, tools, accessories assembly, upper and lower chord assembly, and truss assembly should be carried out on specially designed and process required jig frames.

Ensure Accuracy

Assembly should be carried out in a sequential process, and the limit support on the jig frame should be accurate and reliable. If there is any looseness or deformation, it should be replaced in a timely manner.

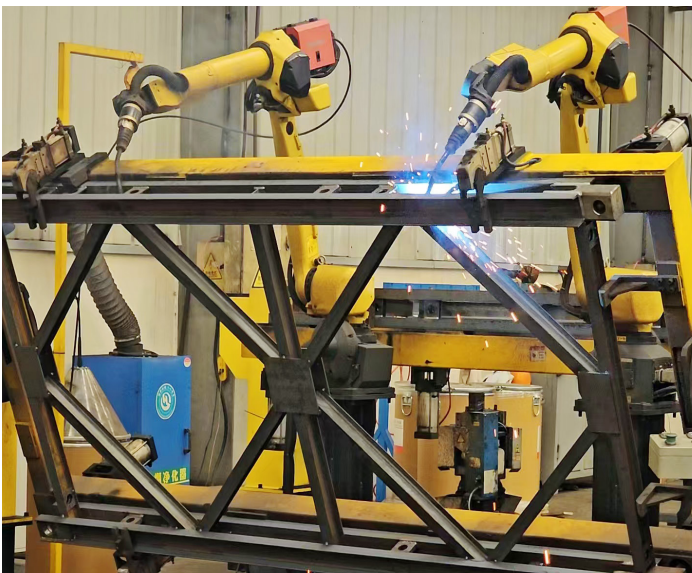
Intelligent Welding

Process Review

Welding should be carried out after the approved welding process review report.

Robot Welding

The welding of small components, accessories, tools, chords, and trusses should be aligned with the welding requirements on the construction drawing, and automatic welding robots should be used as equipment.



Compliance

The welding method, polarity, welding material, specifications, welding current, arc voltage, and welding speed should be carried out according to regulations.

Meet the Requirements

The internal and external quality of welding should meet the requirements of the construction drawings.

Painting

Shot Blasting Rust Removal

The main accessories of the steel bridge are all treated with shot blasting and rust removal technology. After the shot blasting meets the requirements, the surface dust is blown away with compressed air, and a protective layer is applied to areas that are not painted.

Surface anti-corrosion

Paint/galvanized anti-corrosion (85um) according to the usage environment.



Relevant Explanations



Production Capacity

Our company has an average daily production rate of 400 pieces of Bailey panels, with a monthly production capacity of 12000 pieces and accessories. We have undertaken the construction of a number of national key projects such as Hangzhou Bay Bridge, Shanghai Tunnel Project, Xiamen Railway, Shenzhen Zhongshan Passage, Fuzhou Xiamen High speed Railway, Hangzhou Bay Public Railway Bridge Phase II.

Raw Material Suppliers

The company's raw material procurement channels are mostly from large steel enterprises in some countries that are legitimate and have a guaranteed reputation. The procurement requirements strictly follow the workflow of supply quality management.



Quality Assurance

Our company is mainly supervised by the Technical Engineering Department and the Production and Manufacturing Department to implement the prescribed process flow, regularly inspect and calibrate the tooling and molds, and even replace them.

Firstly, check whether the storage, preservation, and protective measures of various materials entering the site comply with regulations. Conduct sampling inspections and tests on each batch of materials according to the specified batch size and frequency, and review the test reports. Unqualified materials are not allowed to be used in the product system. And even if the unqualified materials are transported out of the processing site. After the materials enter the workshop, they are cut, assembled, welded, and bored according to the process requirements of the technical engineering department's drawings. After cleaning, polishing, shot blasting, painting, and passing the inspection, it will be stored in the warehouse.

Our company has a complete production quality assurance system for the management and control of products, services, and quality, mainly based on the following technical specifications, standards, and design drawings.



Technical Specifications

The standards of the Ministry of Transport of the People's Republic of China include "Design Specification for Highway Steel Structure Bridges" (JTGD64-2015) and "Manufacturing of Prefabricated Highway Steel Bridges" (JT/T728-2008).

1. Design of prefabricated highway bridges and special tools (JT/QS0012-65; JT/QS0014-65).

2. Low content high-strength structural steel (GB/T1591-2018).

3. Sampling and preparation methods for samples used in the determination of chemical composition of steel and iron (GB/T 20066-2006).

4. Allowable deviation of chemical composition of finished steel products (GB/T 222-2006).

5. Sampling location and sample preparation for mechanical property testing of steel and steel products (GB/T 2975-2018).

6. Solid welding wire for melting electrode gas shielded arc welding of non alloy steel and fine grain steel (GB/T8110-2020).

7. Non destructive testing of welds - Ultrasonic testing technology, testing levels and evaluation (GB/T 11345-2023).

8. Construction Quality Acceptance Standards for Steel Structure Engineering (GB 50205-2020).

9. Code for Welding of Steel Structures (GB50661-2011).

10. Appendix to the Specification Manual for the Use of Prefabricated Highway Bridges: "Regulations for Manufacturing, Inspection, and Acceptance of Prefabricated Highway Bridges".

And our company has passed the ISO9001 certification, conducted dynamic and static load testing, and issued a testing report. The product fully meets the requirements for the manufacturing, inspection, and acceptance of prefabricated highway steel bridges issued by the Ministry of Transport.

AFTER SALES SERVICE

Organize Supply

After the contract and technical agreement are signed, our company will establish a dedicated project management organization to develop design, production, and quality inspection plans, and coordinate the work of various departments such as the technical department, supply department, finance department, and quality inspection department to ensure the delivery period.



Transport

All the goods we provide will be protected according to corresponding standards, suitable for long-distance inland transportation requirements, and have good protection measures such as deformation prevention, shock resistance, rust prevention, and rough loading and unloading prevention.



After Sales Solution

1. Ensure that the supplied equipment is brand new, advanced, mature, complete, safe and reliable high-quality performance products, and that the technical and economic performance of the equipment meets national industry standards.
2. The production of the product shall comply with national industry standards. Strictly produce according to the requirements of Party A.
3. The supplied products are covered by three guarantees. The warranty period is 36 months, and any items that are not damaged by human error during the warranty period will be replaced.
4. Provide free technical services to users. (including drawings and technical data, external dimensions, etc.).
5. Ensure safe and timely delivery to the site.

Performance Display

Bailey Bridge in Malaysia



Bailey Bridge in Papua New Guinea for a Hydropower Station



Papua New Guinea Bailey Bridge



Performance Display

Fully galvanized Bailey Bridge in Russia



The Bailey Bridge in Canada



Bailey Bridge in Nigeria



Performance Display

Maldives China-Maldives Friendship Bridge



Camana Nigan Steel Bridge in the Philippines



Colombia Bailey Bridge



Performance Display

Mozambique Steel Bridge



Pakistan Hubu Power Station Project



China MCC Overseas Engineering Cambodia SKY Villa Project



Performance Display

Bailey Bridge in Myanmar



Nigeria Bailey Bridge



South Africa 200 type Bailey Bridge



Performance Display

Guatemala Bailey Bridge



Kyrgyzstan Bailey Bridge



Bailey Bridge of Lalin Railway in Tibet



Performance Display

Bailey Bridge in Diqing Yunnan



Xiamen Xiajin Bridge



Bailey Bridge of Shanxi Reservoir



Performance Display

Double Lane Pedestrian Bailey Bridge in Chaxian Xinjiang



Jiangsu Liyang Pedestrian Bailey Bridge



Bailey Bridge, Anneng Reservoir Songyang, Lishui, Zhejiang



Performance Display

Tai'an 200 type Double lane Bailey Bridge



Jiaxing Bailey Bridge



Suzhou Xiegang Bridge



Performance Display

Nile Pedestrian Bridge in Xinjiang



Hefei Pipeline Bridge



Nalati Steel Bridge in Xinjiang



Performance Display

Shanghai International Import Expo 200 type Bailey Bridge



Hangzhou Bay Public Railway Bridge



Linzhi section of Sichuan Tibet Railway



Performance Display

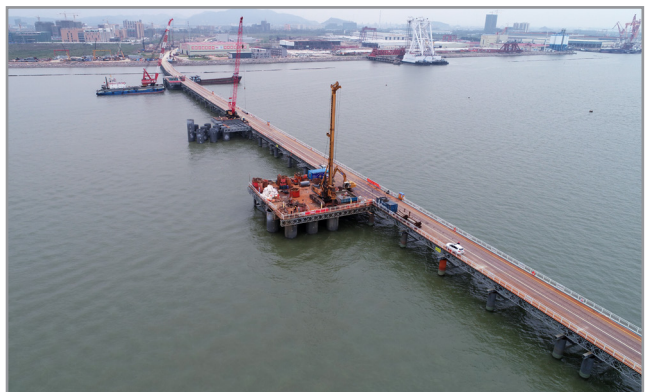
Zhoushan Liuheng Highway Phase II



Xiongshang high-speed railway steel Bridge



Shenzhen Zhongshan Expressway



Performance Display

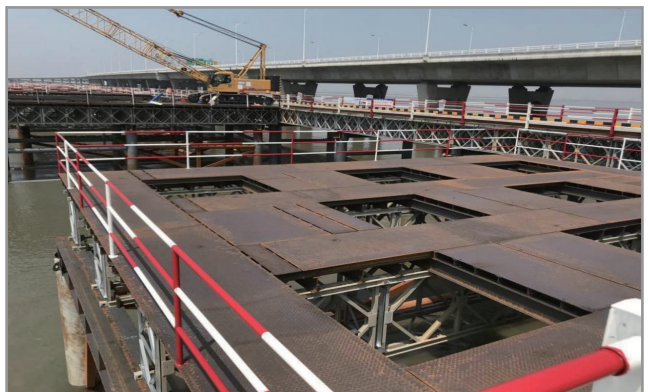
Construction of steel Bridge for Ya'an section of Sichuan Tibet Railway



Zhejiang Ninghai Steel Bridge



Fuzhou Xiamen Railway Steel Bridge



Performance Display

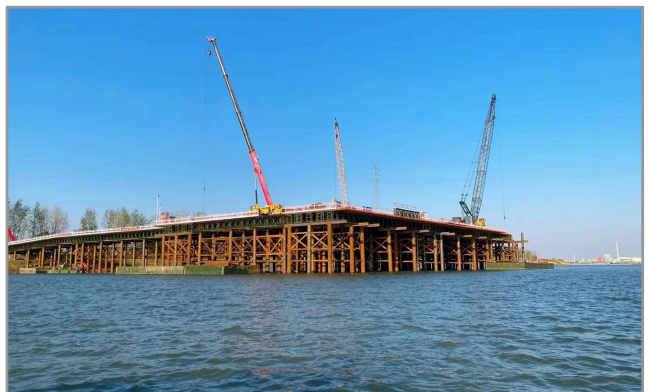
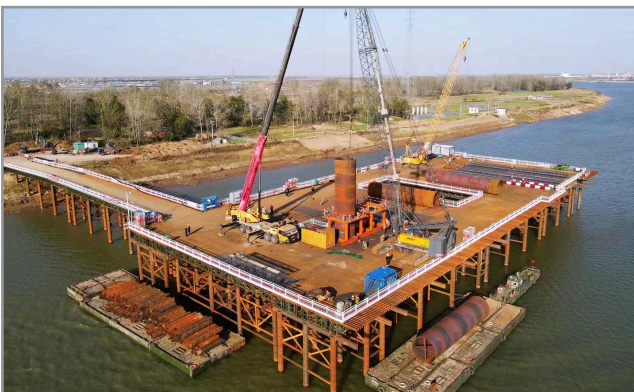
Bailey Bridge over Suzhou River in Ningbo



Gaoyou Lake Steel Bridge



G329 Fengyang Bengbu realignment project construction steel Bridge



Performance Display

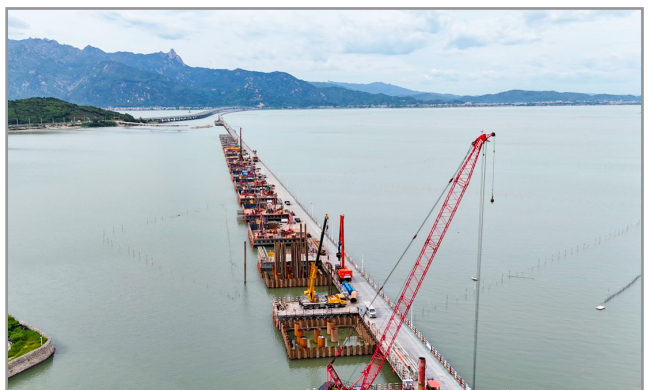
Shanghai Municipal Bailey Bridge



Bailey Bridge, Kunming, Yunnan



Zhangshan Railway Steel Bridge

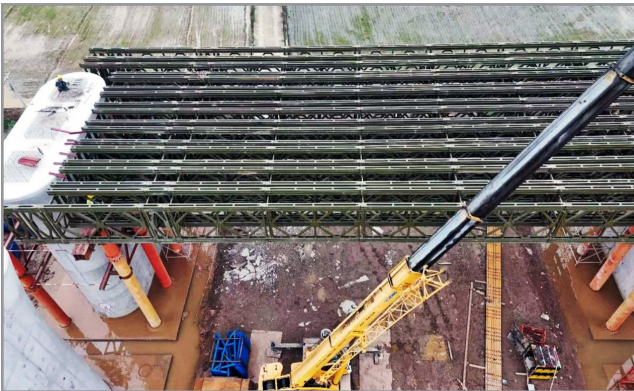


Performance Display

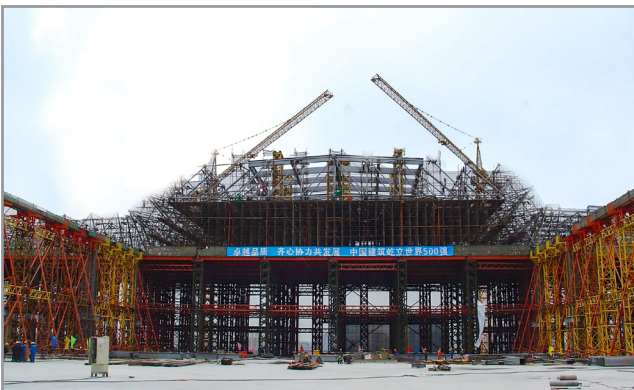
Bailey Bridge in Xiong'an New Area



400 type Bailey Support (Shenjiang, Zhuzhao Railway)



Bailey Beam Gantry Crane





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