

# **Zertifikate**

## **Carport-Teile**

Hersteller wurde auf Wunsch anonymisiert - Vollständige  
Angaben auf Anfrage erhältlich



# Welding Certificate

TÜVRh-EN1090-2.02724.2024.004

in accordance with EN 1090-1, table B.1, its hereby declared:  
The manufacturer has produced evidence that he fulfills the requirements of the European standard EN 1090-2 for execution of structural steel components

## Manufacturer

Shanghai Shengyu Metal Trade Co., Ltd.  
No. 1, Zhongyuan Road, Zhongyuan Town,  
Songjiang District, Shanghai 201600  
China

## Technical specification

EN 1090-2:2018

## Execution class(es)

EXC2 according to EN 1090-2

## Welding Process(es)

(Reference no. acc. to DIN EN ISO 4063)

135 - Metal active gas welding, fully mechanized

## Material Group

1.1

according to CEN ISO/TR 15608 and EN 1090-2, table 2 and 3

## Responsible Welding Coordinator

(Title, Surname, Name, Qualification, Date of birth)

Zhijin Chen, Level B

born on: 28.01.1985

## Substitute

(Title, Surname, Name, Qualification, Date of birth)

-

## Confirmation

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

## Validity start

10.08.2020

## Period of validity



09.08.2025

## Remarks

-

## Place and date of issue

Cologne, 29.06.2024  
Xiao/LB

Dipl.-Ing. Makowka  
Head of certification body

Certificate number: TÜVRh-EN1090-2.02724.2024.004

## General Terms

1. This certificate is valid as long as the terms of the above technical specifications themselves or the manufacturing conditions of the essential manufacturing factory have not changed significantly.
2. This certificate may only be reproduced or published for advertising or other purposes than as a whole. The text of promotional material doesn't have to be in conflict with this certificate.
3. In case of any doubt as to the suitability of the manufacturing factory(ies) there is the possibility reserved by the inspection authority to carry out an unexpected spot checks in the manufacturing factory paid by the manufacturer
4. This certificate may be withdrawn at any time with immediate effect and be amended or modified if the conditions under which it was granted have changed, or if the terms of this certificate are not met.
5. The following changes must be reported to the inspection authority:
  - a) New production or significant changes to essential manufacturing facilities;
  - b) Change of the welding coordinator;
  - c) inception of new welding processes, new base materials and related WPQRs(welding procedure qualification record)
  - d) new essential manufacturing facilities

The inspection authority will cause a supplementary examination in the cases cited

6. At least two months before the expiry date there shall be submitted an application to the inspection authority, when the qualification should be recertified.

### distributor

1. Applicant
2. File


# CERTIFICATE

Conformity of the Factory Production Control

0035-CPR-1090-1.02840.TÜVRh.2024.004

In compliance with Regulation 305/2011/EU of the European Parliament and of the Council of 9 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 to EXC2 according to EN 1090-2
Intended use	for load-bearing structures in all types of buildings
CE-marking method	ZA.3.2 and ZA.3.4 acc. to EN 1090-1:2009+A1:2011
Manufacturer	produced by or for Huanbin Xiaohong Metal Steel Co., Ltd. No. 1, Huanbin Road, Huanbin District Tianjin, China
Manufacturing plant <small>Production facility of the manufacturer</small>	0035-CPR-1090-1.02840-004 No. 1, Huanbin Road, Huanbin District Tianjin, China
Confirmation	This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the harmonised standard EN 1090-1:2009+A1:2011 under system 2+ are applied, and that the factory production control fulfills all the prescribed requirements stated therein.
Date of first issue	10.08.2020
Next Surveillance audit	09.08.2025
Period of validity	This certificate will remain valid as long as the test methods and/or the factory production control requirements included in the harmonised standard used to assess the performance of the declared characteristics do not change, and the product and the manufacturing conditions in the plant are not modified significantly.
Remarks	see reverse
Place and date of issue	Cologne, 29.06.2024 Huanbin Xiao

  
Dipl.-Ing. Makowka  
Head of certification body



Certificate number: 0035-CPR-1090-1.02840.TÜVRh.2024.004

Remarks	The Notified Body - 0035 TÜV Rheinland Industrie Service GmbH has performed the initial inspection of the/of manufacturing plant(s) and of the factory production control and performs the continuous surveillance, assessment and approval of the factory production control.
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#### General provisions

The conditions of the standard EN 1090-1:2009+A1:2011, from section B. 4.1 until including section B. 4.4, must be fulfilled.

The requirements of EN 1090-1:2009 + A1: 2011, section B. 4.3 are observed. These refer to the annual statements to be submitted in writing of the manufacturer to the Notified Body.

The General Terms and Conditions of the TÜV Rheinland Industrie Service GmbH apply in the currently valid version.

## TEST REPORT

No. : XMIN1803001773ML

Date : Apr 03, 2018

Page: 1 of 3

CUSTOMER NAME:

ADDRESS:

Sample Name : END CLAMP

Product Specification : L40

Material and Mark : AL6005-T5

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

\*\*\*\*\*

SGS Ref. No. : XMIN180300553CCM

Date of Receipt : Mar 27, 2018

Testing Start Date : Mar 27, 2018

Testing End Date : Apr 03, 2018

Test result(s) : For further details, please refer to the following page(s)  
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for  
SGS-CSTC Standards Technical  
Services Co., Ltd Xiamen Branch  
Testing Center

*Hank Li*

Hank Li

Authorized signatory



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# TEST REPORT

No. : XMIN1803001773ML

Date : Apr 03, 2018

Page: 2 of 3

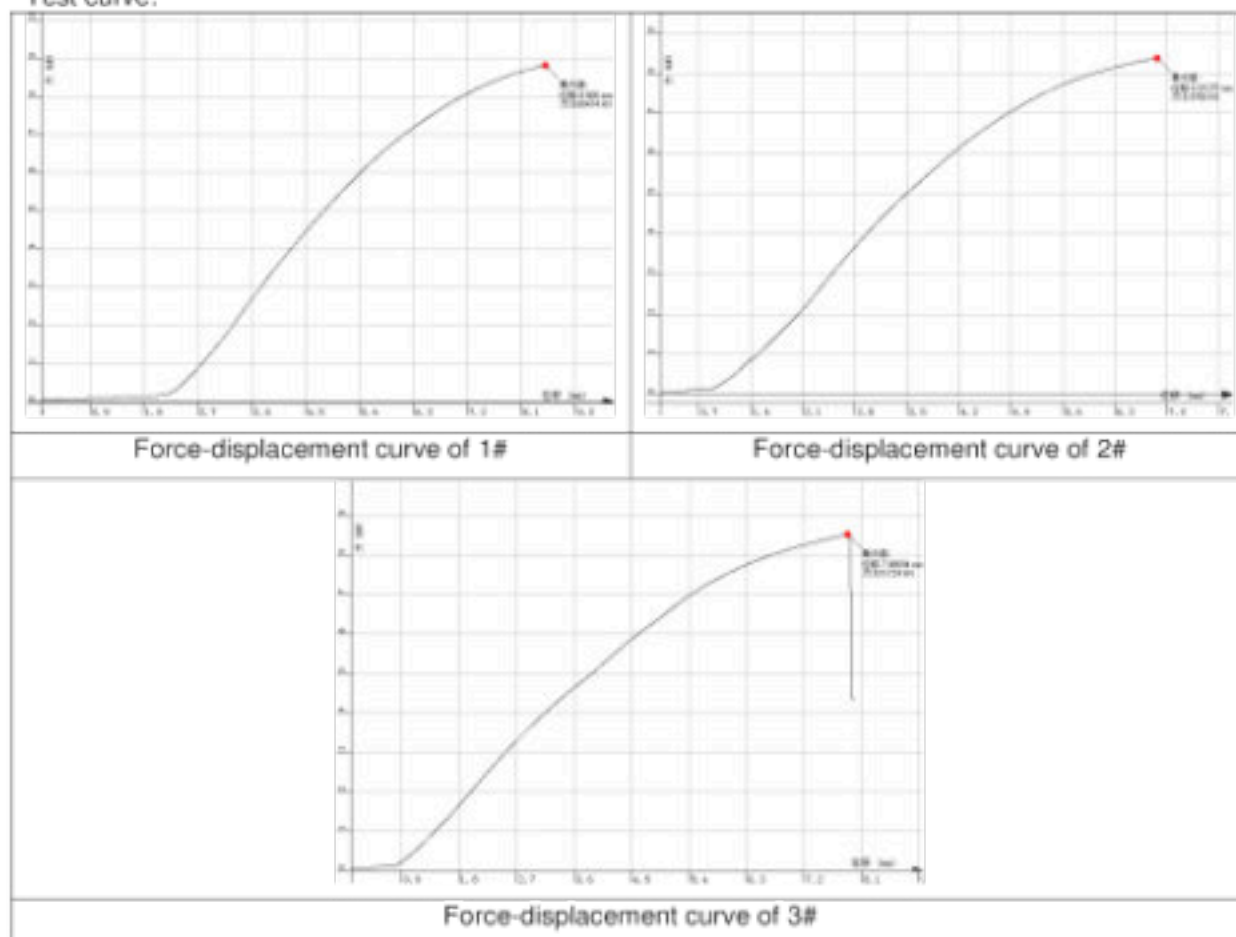
Pull test:

Test method: according to the client's requirements, fix the sample on the test machine. Apply the pull force as a rate of 5mm/min till destruction. Determine the maximum force.

Test Result:

Sample No.	Maximum force (kN)
1#	8.80
2#	8.38
3#	8.52

Test curve:



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## TEST REPORT

No. : XMIN1803001773ML

Date : Apr 03, 2018

Page: 3 of 3

Test Photo:

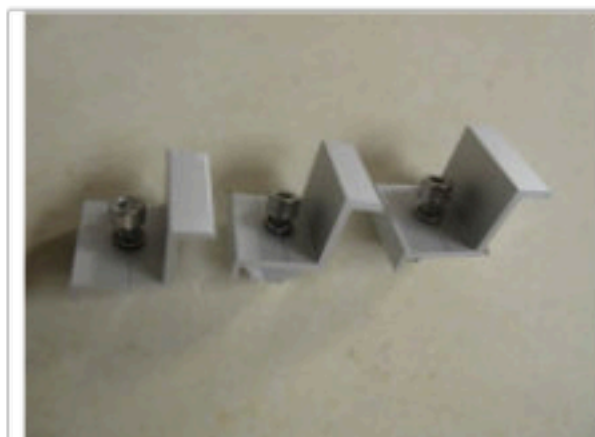


Photo 1: Samples before test



Photo 2: before loading



Photo 3: destroyed



Photo 4: the samples after the test

\*\*\*\*\* End of report\*\*\*\*\*



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Shanghai Inspection & Testing Co., Ltd. (Shanghai Branch)

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## TEST REPORT

No. : XMIN1901000346ML

Date : Jan 24, 2019

Page: 1 of 3

CUSTOMER NAME:

ADDRESS:

Sample Name : SOLAR SUPPORT: BEAM CONNECTOR & BASE

Product Specification : L=75&L=110

Material and Mark : AL6005-T5

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

\*\*\*\*\*

SGS Ref. No. : XMIN190100090CCM

Date of Receipt : Jan 15, 2019

Testing Start Date : Jan 15, 2019

Testing End Date : Jan 24, 2019

Test result(s) : For further details, please refer to the following page(s)  
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Signed for  
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Services Co., Ltd Xiamen Branch  
Testing Center

*Hank Li*

Hank Li  
Authorized signatory



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## TEST REPORT

No. : XMIN1901000346ML

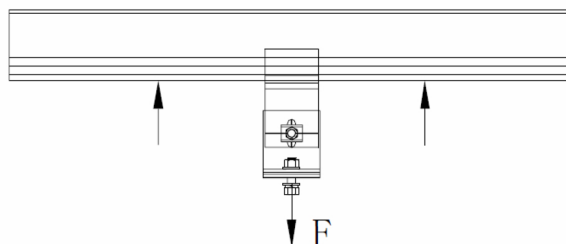
Date : Jan 24, 2019

Page: 2 of 3

Pull test:

Test method: according to the client's requirements, fixed the sample on the test machine as the following sketch. Apply the pull force as a rate of 5mm/min till destruction. Determine the maximum force.

Test sketch:



Test Result:

Test item	Maximum force(KN)
Pull Test	22.79

Test curve:



Force-displacement curve

## TEST REPORT

No. : XMIN1901000346ML

Date : Jan 24, 2019

Page: 3 of 3

Test Photo:

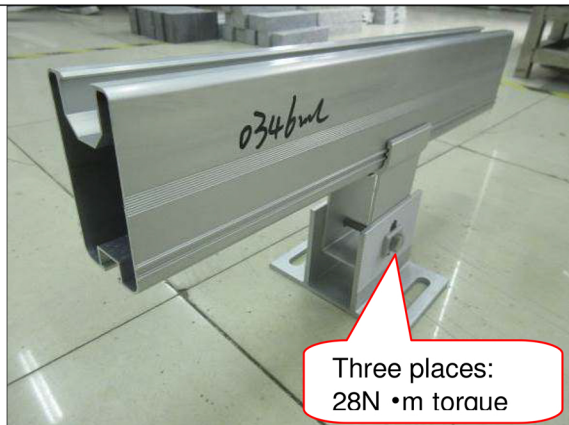


Photo 1: Sample



Photo 2: Before test



Photo 3: During the test



Photo 4: The sample after test

\*\*\*\*\* End of report\*\*\*\*\*

## TEST REPORT

No. : XMIN1901000347ML

Date : Jan 24, 2019

Page: 1 of 3

CUSTOMER NAME:

ADDRESS:

Sample Name : SOLAR SUPPORT: BEAM CONNECTOR

Product Specification : L=80

Material and Mark : AL6005-T5

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

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SGS Ref. No. : XMIN190100091CCM

Date of Receipt : Jan 15, 2019

Testing Start Date : Jan 15, 2019

Testing End Date : Jan 24, 2019

Test result(s) : For further details, please refer to the following page(s)  
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## TEST REPORT

No. : XMIN1901000347ML

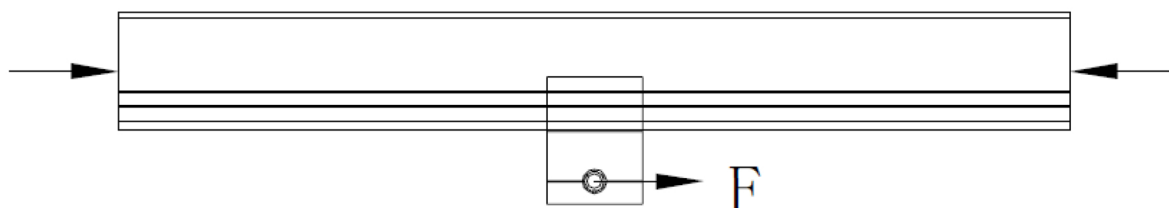
Date : Jan 24, 2019

Page: 2 of 3

Resistance slip test:

Test method: according to the client's requirements, fixed the sample on the test machine as the following sketch. Apply the force as a rate of 5mm/min till slipped. Determine the maximum force.

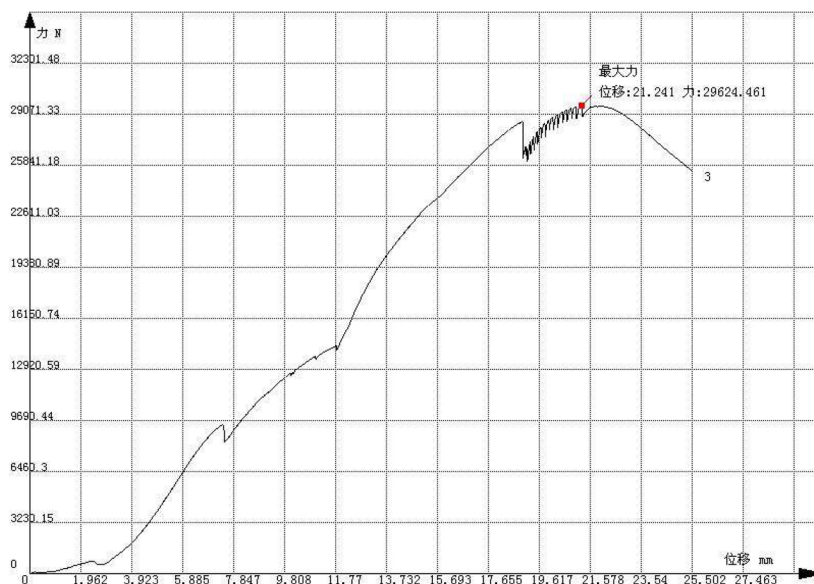
Test sketch:



Test Result:

Test item	Maximum force(KN)
Resistance slip test	When the force reaches 29.62KN, the specimen not slip and the load-bearing beam deforms

Test curve:



Force-displacement curve

## TEST REPORT

No. : XMIN1901000347ML

Date : Jan 24, 2019

Page: 3 of 3

Test Photo:



Photo 1: Sample



Photo 2: Before test



Photo 3: During the test



Photo 4: The sample after test

\*\*\*\*\* End of report \*\*\*\*\*

## TEST REPORT

No. : XMIN1901000349ML

Date : Jan 24, 2019

Page: 1 of 3

CUSTOMER NAME:

ADDRESS:

Sample Name : SOLAR SUPPORT: BEAM CONNECTOR+PILLAR+BASE

Product Specification : L=120&□50×50&L=140

Material and Mark : AL6005-T5

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SGS Ref. No. : XMIN190100093CCM

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## TEST REPORT

No. : XMIN1901000349ML

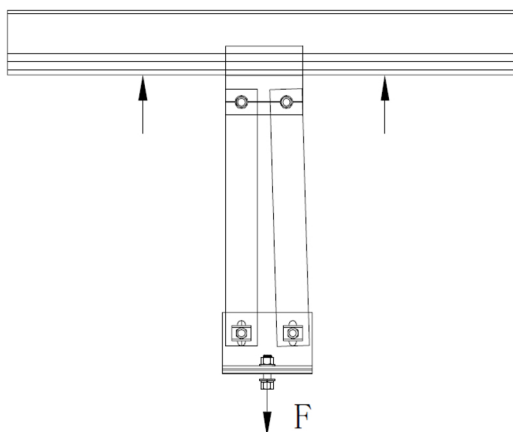
Date : Jan 24, 2019

Page: 2 of 3

Pull test:

Test method: according to the client's requirements, fixed the sample on the test machine as the following sketch. Apply the pull force as a rate of 5mm/min till destruction. Determine the maximum force.

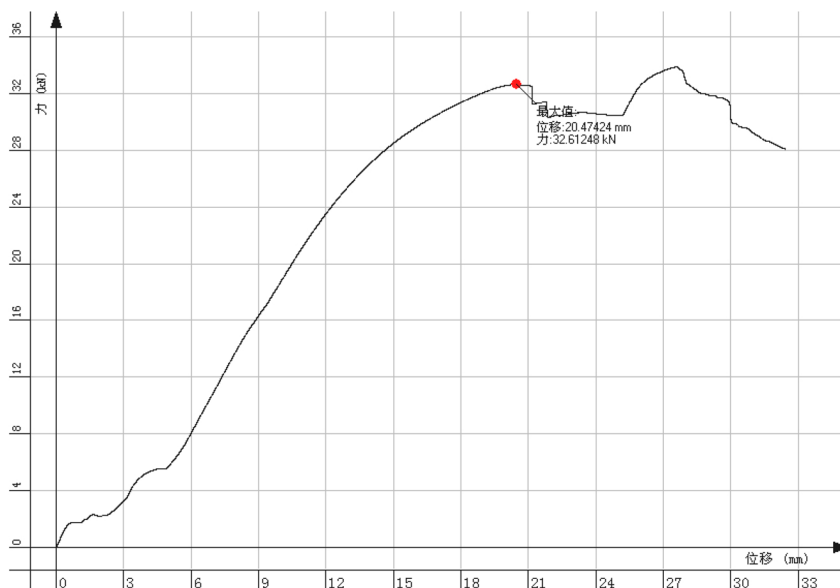
Test sketch:



Test Result:

Test item	Maximum force(KN)
Pull Test	32.61

Test curve:



Force-displacement curve



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## TEST REPORT

No. : XMIN1901000349ML

Date : Jan 24, 2019

Page: 3 of 3

Test Photo:



Photo 1: Sample

Photo 2: Before test

Photo 3: During the test

Photo 4: The sample after test

\*\*\*\*\* End of report\*\*\*\*\*

## TEST REPORT

No. : XMIN1803001772ML

Date : Apr 03, 2018

Page: 1 of 3

CUSTOMER NAME:

ADDRESS:

Sample Name : MIDDLE CLAMP

Product Specification : L40

Material and Mark : AL6005-T5

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SGS Ref. No. : XMIN180300552CCM

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Testing Start Date : Mar 27, 2018

Testing End Date : Apr 03, 2018

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中国·福建·厦门·翔安(翔安) 产业园区翔安路31号 邮编: 361101 | (86-592) 5765857 | (86-592) 5765860 | [sgs.china@sgs.com](mailto:sgs.china@sgs.com)



## TEST REPORT

No. : XMIN1803001772ML

Date : Apr 03, 2018

Page: 2 of 3

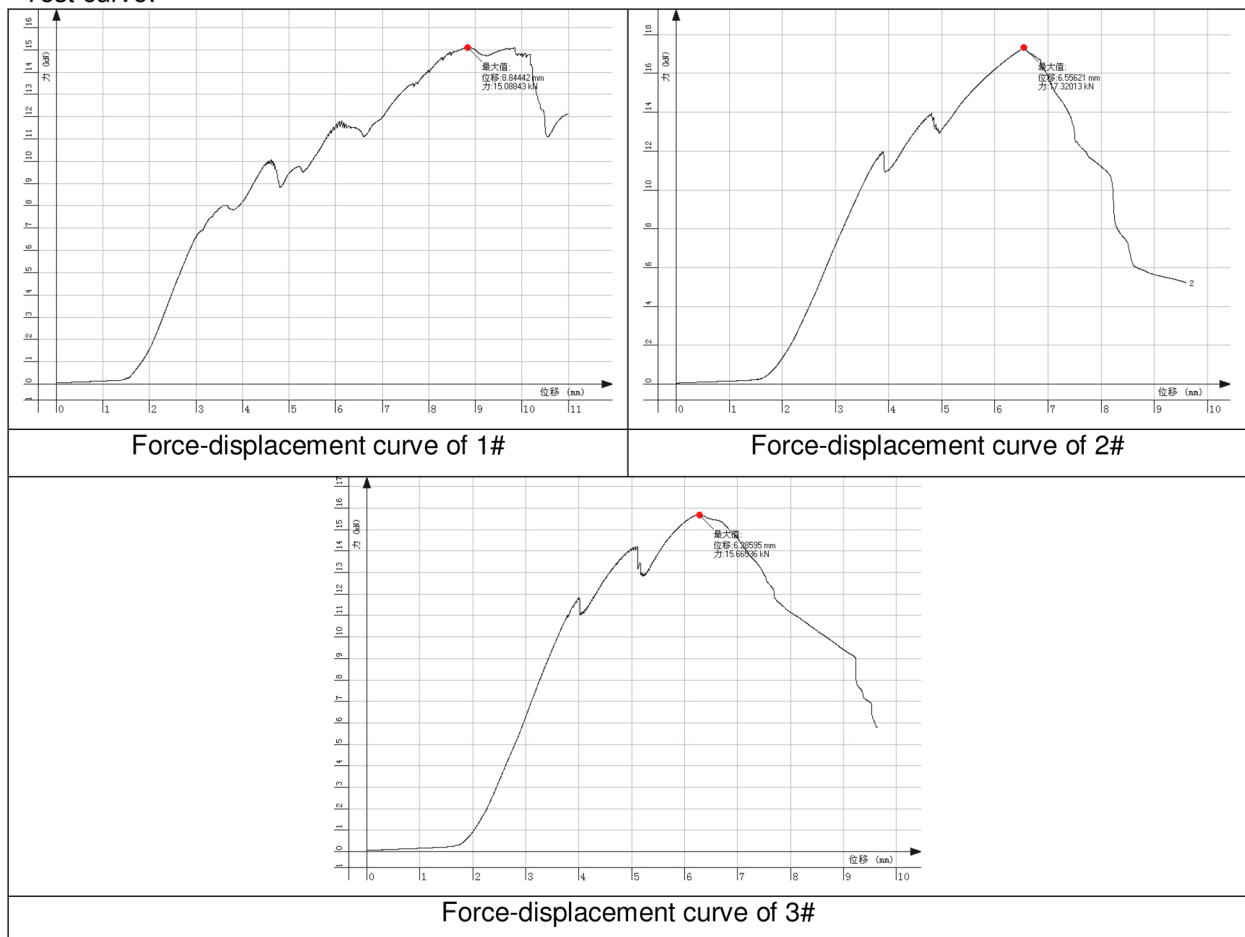
Pull test:

Test method: according to the client's requirements, fix the sample on the test machine. Apply the pull force as a rate of 5mm/min till destruction. Determine the maximum force.

Test Result:

Sample No.	Maximum force (kN)
1#	15.09
2#	17.32
3#	15.67

Test curve:



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Xiamen Branch Testing Center Commercial Construction Material Laboratory

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## TEST REPORT

No. : XMIN1803001772ML

Date : Apr 03, 2018

Page: 3 of 3

Test Photo:



Photo 1: Samples before test

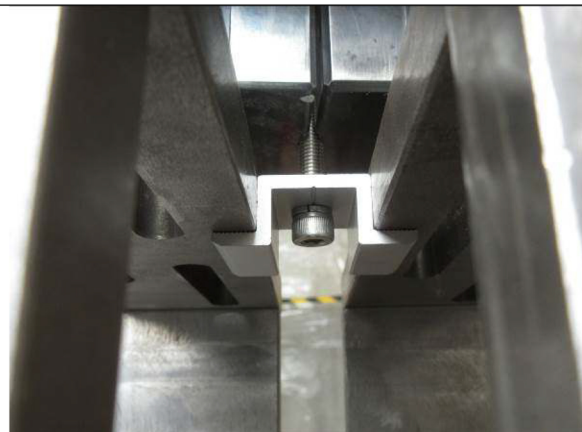


Photo 2: before loading



Photo 3: destroyed



Photo 4: the samples after the test

\*\*\*\*\* End of report\*\*\*\*\*



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# TEST REPORT

No. : XMIN1804002487ML

Date : Apr 27, 2018

Page: 1 of 6

Sample Name : SOLAR MOUNTING SYSTEM

Material and Mark : AL6005-T5

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

\*\*\*\*\*

Date of Receipt : May 11, 2017

Testing Start Date : May 11, 2017

Testing End Date : May 17, 2017

Test result(s) : For further details, please refer to the following page(s)  
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for  
SGS-CSTC Standards Technical  
Services Co. , Ltd Xiamen Branch  
Testing Center



Hank Li

Authorized signatory



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## TEST REPORT

No. : XMIN1804002487ML

Date : Apr 27, 2018

Page: 2 of 6

Pull test:

Test method: according to the client's requirement, fixed the sample on the test machine, the M8 bolts fasten by 12N.m torque, the M10 bolts fasten by 24N.m torque. Loading the force as a speed of 3mm/min till destroyed. Record the maximum force and the displacement under maximum force.

Test result:

No.	Sample name	Maximum force ( kN )	Displacement under maximum force (mm)	Destroyed location
1#	End clamp	7.09	10.29	See photo3 and photo 4
2#	Middle clamp	6.89	7.93	See photo7 and photo 8
3#	Beam 1	10.46	9.18	See photo11
4#	Beam 2	9.52	11.19	See photo14

Note: This test report is an English version of test report No.: XMIN1705003007ML dated: May 26, 2017 issued by SGS, this report is for reference only.

Test photo:



Photo 1: End clamp



Photo 2: During the test

## TEST REPORT

No. : XMIN1804002487ML

Date : Apr 27, 2018

Page: 3 of 6



Photo 3



Photo 4



Photo 5: Middle clamp

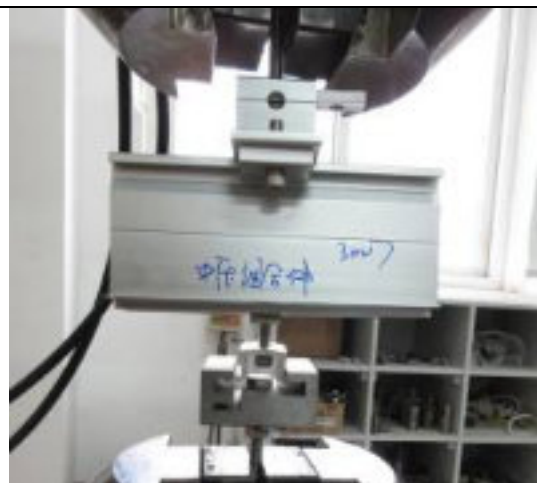


Photo 6: During the test

## TEST REPORT

No. : XMIN1804002487ML

Date : Apr 27, 2018

Page: of 6



Photo 7



Photo 8



Photo 9: Beam 1



Photo 10: during the test



## TEST REPORT

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Date : Apr 27, 2018

Page: 5 of 6



Photo 11



Photo 12 : Beam 2



Photo 13: during the test

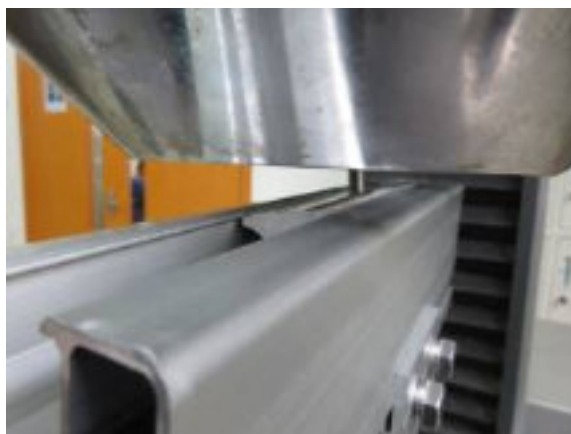


Photo 14

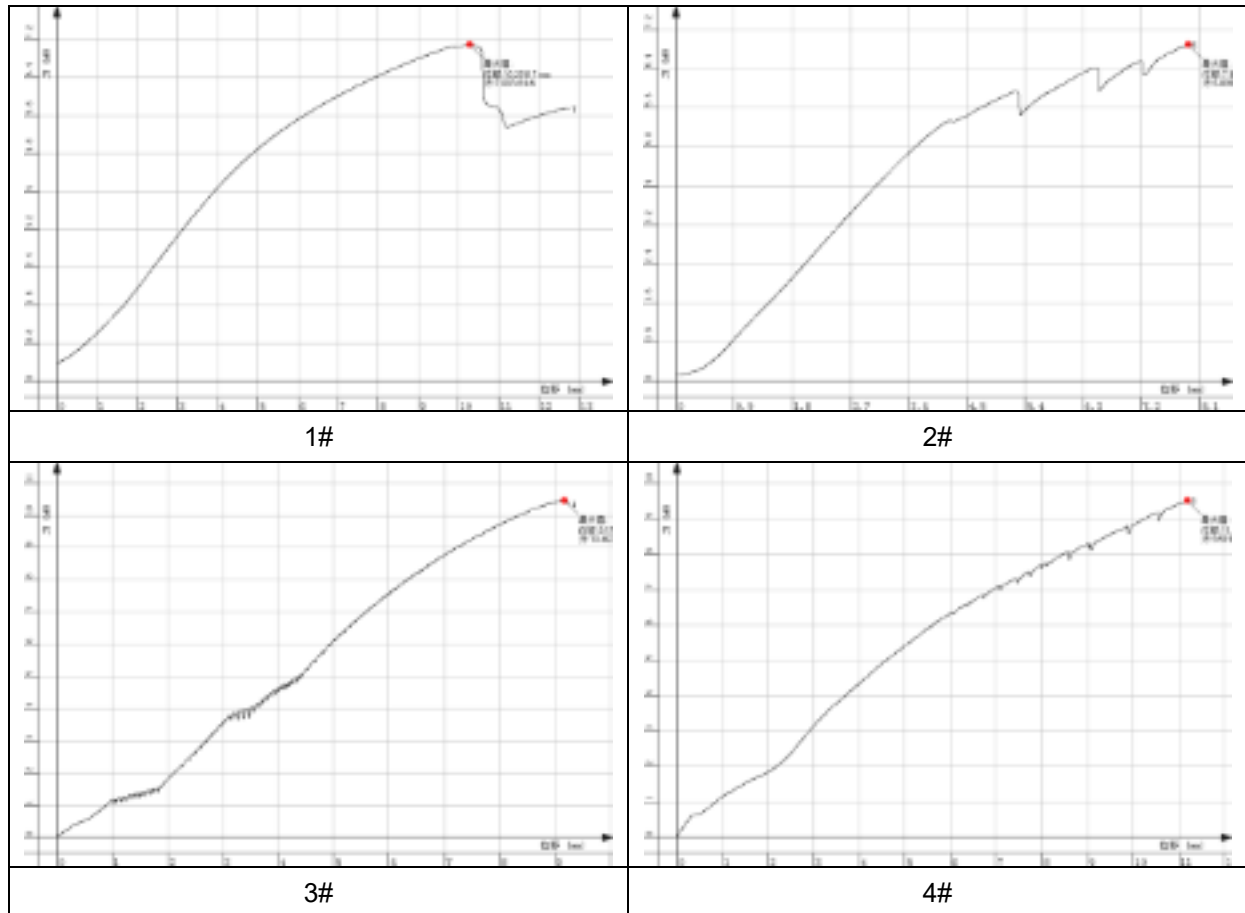
## TEST REPORT

No. : XMIN1804002487ML

Date : Apr 27, 2018

Page: 6 of 6

Test curve:



\*\*\*\*\* End of report\*\*\*\*\*

# TEST REPORT

No. : XMIN2107008206ML

Date : Jul 30, 2021

Page: 1 of 3



Sample Name : AL6005-T5 SAMPLE

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\*\*\*\*\*

Date of Receipt : Jul 29, 2021

Testing Start Date : Jul 29, 2021

Testing End Date : Jul 30, 2021

Test result(s) : For further details, please refer to the following page(s)  
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for  
SGS-CSTC Standards Technical  
Services Co., Ltd Xiamen Branch  
Testing Center



Hank Li  
Authorized signatory



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# TEST REPORT

No. : XMIN2107008206ML

Date : Jul 30, 2021

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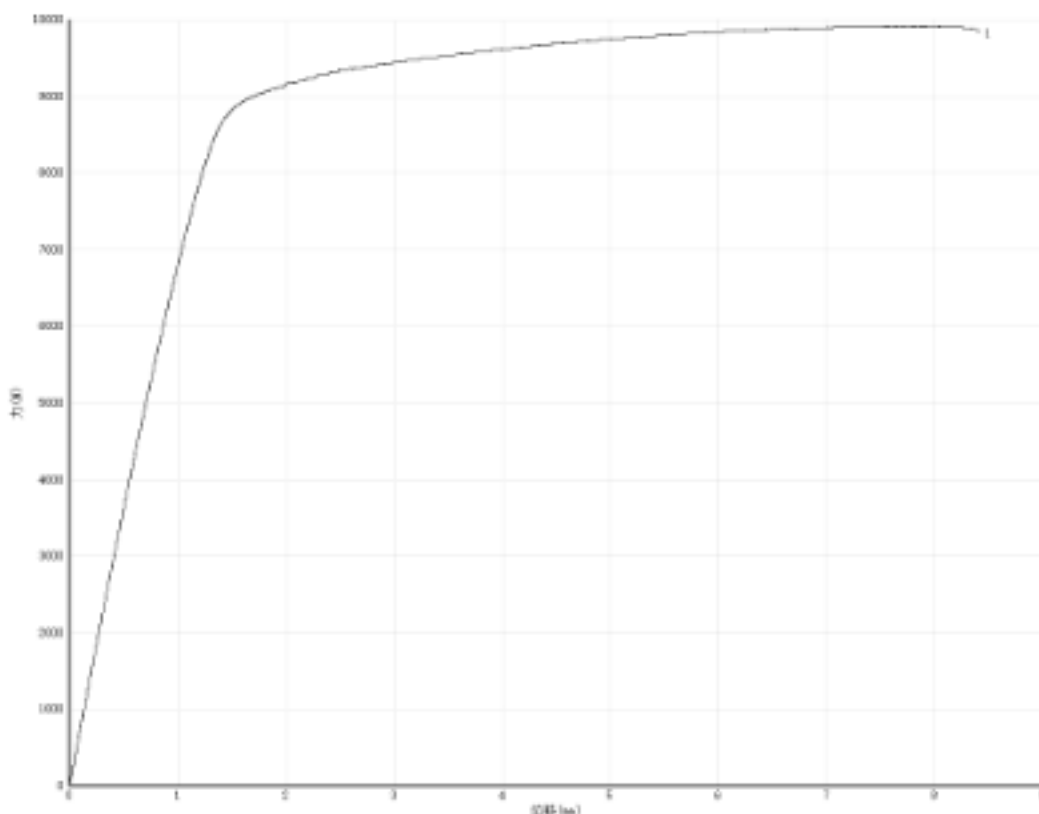
Tensile Test:

Test Method: GB/T 228.1-2010

Test item	Specimen type	Tensile strength ( $R_m$ ) (MPa)	Proof strength ( $R_{p0.2}$ ) (MPa)	Elongation after fracture( $A_{50mm}$ ) $L_0=50mm$ (%)
Result	Rectangular specimen $b_0=25mm$	289	256	12.0

Note: specimen machined by client.

Force-displacement curve :



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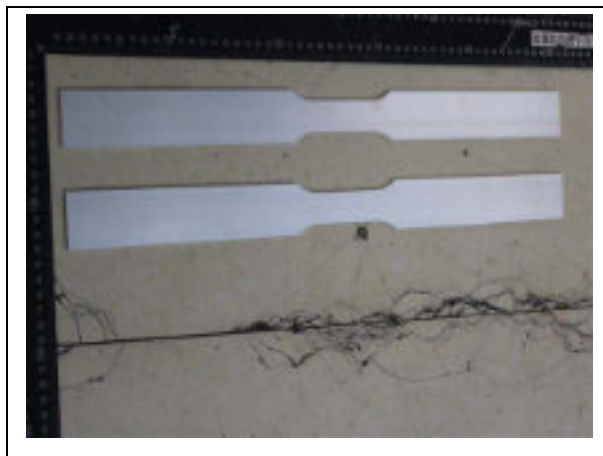
# TEST REPORT

No. : XMIN2107008206ML

Date : Jul 30, 2021

Page: 3 of 3

Original Sample Photo:



\*\*\*\*\* End of report\*\*\*\*\*

## TEST REPORT

No. : XMIN1901000348ML

Date : Jan 24, 2019

Page: 1 of 3

CUSTOMER NAME:

ADDRESS:

Sample Name : SOLAR SUPPORT: BEAM CONNECTOR&PILLAR&BASE

Product Specification : L=80&□50×50&L=110

Material and Mark : AL6005-T5

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

\*\*\*\*\*

SGS Ref. No. : XMIN190100092CCM

Date of Receipt : Jan 15, 2019

Testing Start Date : Jan 15, 2019

Testing End Date : Jan 24, 2019

Test result(s) : For further details, please refer to the following page(s)  
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Signed for  
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Services Co., Ltd Xiamen Branch  
Testing Center

*Hank Li*

Hank Li

Authorized signatory



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## TEST REPORT

No. : XMIN1901000348ML

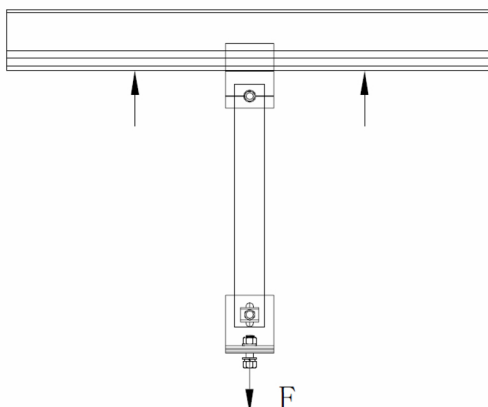
Date : Jan 24, 2019

Page: 2 of 3

Pull test:

Test method: according to the client's requirements, fixed the sample on the test machine as the following sketch. Apply the pull force as a rate of 5mm/min till destruction. Determine the maximum force.

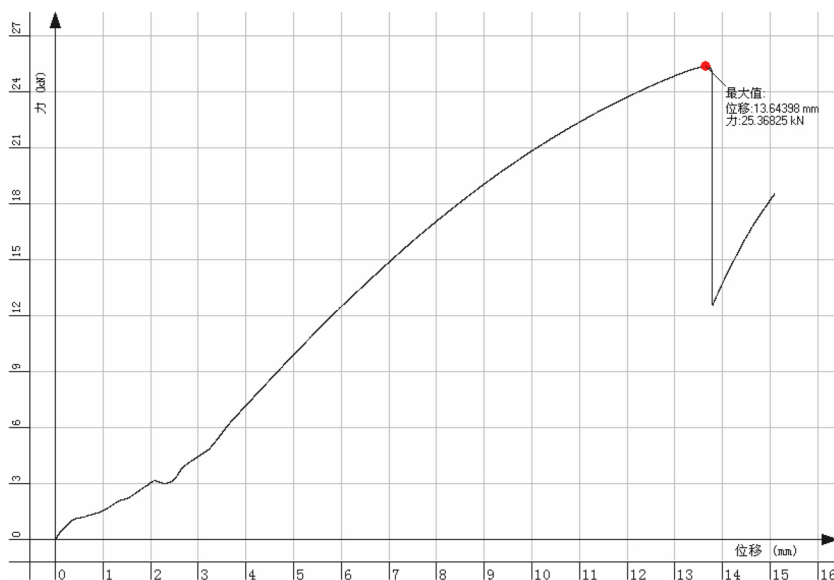
Test sketch:



Test Result:

Test item	Maximum force(KN)
Pull Test	25.37

Test curve:



Force-displacement curve



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## TEST REPORT

No. : XMIN1901000348ML

Date : Jan 24, 2019

Page: 3 of 3

Test Photo:

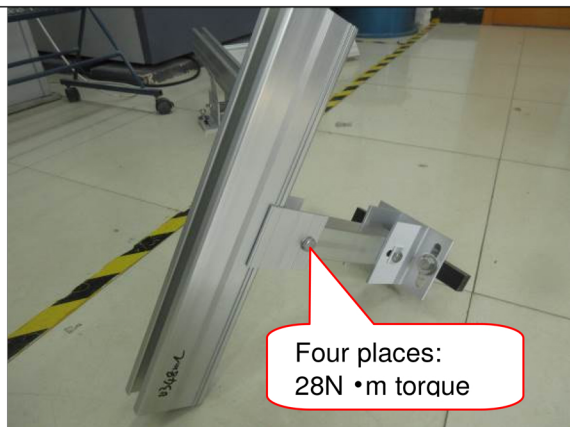


Photo 1: Sample



Photo 2: Before test



Photo 3: During the test



Photo 4: The sample after test

\*\*\*\*\* End of report\*\*\*\*\*



# CERTIFICATE

Conformity of the Factory Production Control

0035-CPR-1090-1.03429.TÜVRh.2024.002

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

Construction product	Structural components and kits for aluminium structures to EXC2 according to EN 1090-3
Intended use	for load-bearing structures in all types of buildings
CE-marking method	ZA.3.2 and ZA.3.4 acc. to EN 1090-1:2009+A1:2011
Manufacturer	produced by or for Huanbin Xiaohong Metal Products Co., Ltd. No. 1, Huanbin Road, Huanbin Town, Jingmen City, Hubei Province, China
Manufacturing plant <small>Production facility of the manufacturer</small>	Huanbin Xiaohong Metal Products Co., Ltd. No. 1, Huanbin Road, Huanbin Town, Jingmen City, Hubei Province, China
Confirmation	This certificate attests that all provisions concerning the assessment and verification of constancy of performance described in Annex ZA of the harmonised standard EN 1090-1:2009+A1:2011 under system 2+ are applied, and that the factory production control fulfills all the prescribed requirements stated therein.
Date of first issue	10.07.2023
Next Surveillance audit	09.08.2025
Period of validity	This certificate will remain valid as long as the test methods and/or the factory production control requirements included in the harmonised standard used to assess the performance of the declared characteristics do not change, and the product and the manufacturing conditions in the plant are not modified significantly.
Remarks	see reverse
Place and date of issue	Cologne, 29.06.2024 Huanbin Xiao

Dipl.-Ing. Makowka  
Head of certification body

Certificate number: 0035-CPR-1090-1.03429.TÜVRh.2024.002

Remarks	The Notified Body - 0035 TÜV Rheinland Industrie Service GmbH has performed the initial inspection of the/of manufacturing plant(s) and of the factory production control and performs the continuous surveillance, assessment and approval of the factory production control.
---------	--

#### General provisions

The conditions of the standard EN 1090-1:2009+A1:2011, from section B. 4.1 until including section B. 4.4, must be fulfilled.

The requirements of EN 1090-1:2009 + A1: 2011, section B. 4.3 are observed. These refer to the annual statements to be submitted in writing of the manufacturer to the Notified Body.

The General Terms and Conditions of the TÜV Rheinland Industrie Service GmbH apply in the currently valid version.

# TEST REPORT

No. : XMIN2107008205ML

Date : Jul 30, 2021

Page: 1 of 3



Sample Name : Q235B SAMPLE

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\*\*\*\*\*

Date of Receipt : Jul 29, 2021

Testing Start Date : Jul 29, 2021

Testing End Date : Jul 30, 2021

Test result(s) : For further details, please refer to the following page(s)  
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for  
SGS-CSTC Standards Technical  
Services Co., Ltd Xiamen Branch  
Testing Center



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## TEST REPORT

No. : XMIN2107008205ML

Date : Jul 30, 2021

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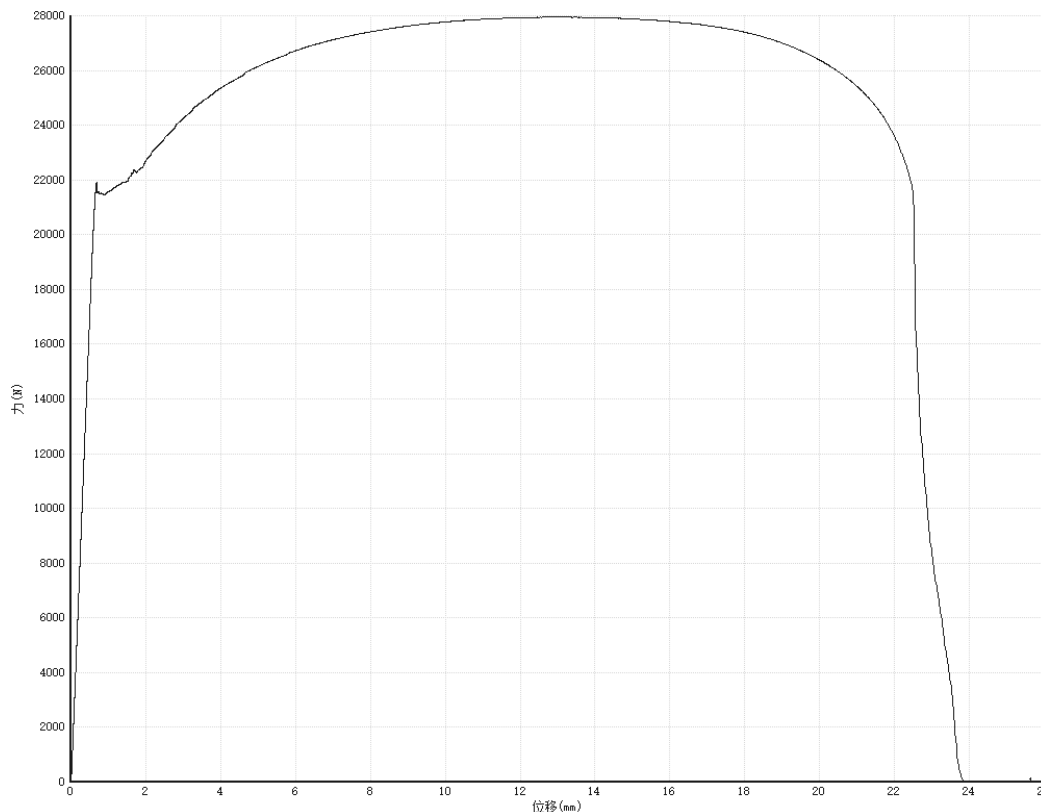
Tensile Test:

Test Method: GB/T 228.1-2010

Test item	Specimen type	Tensile strength ( $R_m$ ) (MPa)	Upper yield strength ( $R_{eH}$ ) (MPa)	Elongation after fracture(A) $L_0 = 5.65 \sqrt{S_0}$ (%)
Result	Rectangular specimen $b_0=25\text{mm}$	374	293	40.0

Note: specimen machined by client.

Force-displacement curve:



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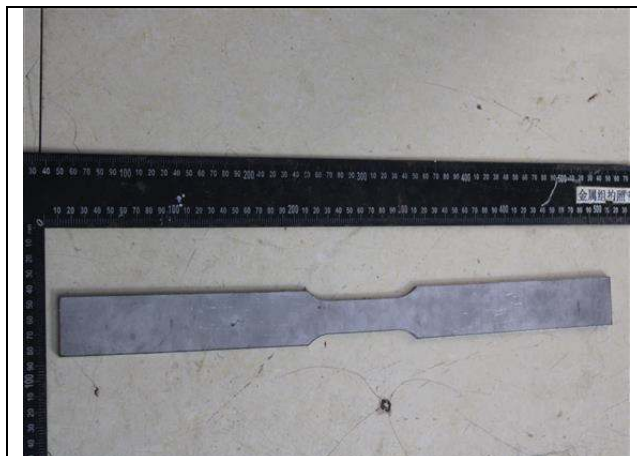
## TEST REPORT

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Original Sample Photo:



\*\*\*\*\* End of report\*\*\*\*\*

## TEST REPORT

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CUSTOMER NAME:

ADDRESS:

Sample Name : SUS304 SAMPLE

Above information and sample(s) was/were submitted and confirmed by the client. SGS, however, assumes no responsibility to verify the accuracy, adequacy and completeness of the sample information provided by client.

\*\*\*\*\*

Date of Receipt : 2023-10-30

Testing Period : 2023-10-30 ~ 2023-11-03

Test result(s) : For further details, please refer to the following page(s)  
(Unless otherwise stated the results shown in this test report refer only to the sample(s) tested)

Signed for  
SGS-CSTC Standards Technical  
Services Co.,Ltd. Xiamen Branch.

*Hank Li*

Hank Li  
Authorized signatory



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## TEST REPORT

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### 1. Chemical Composition Analysis

Test Method: N:OES

Others:GB/T 11170-2008

Product Standard: GB/T 24511-2017

Element	C	Si	Mn	P	S	Cr	Ni	N
Req.,%	≤0.08	≤0.75	≤2.00	≤0.035	≤0.015	18.00 ~20.00	8.00 ~10.50	≤0.10
002Result ,%	0.03	0.50	1.42	0.030	<0.001	18.07	8.01	0.06
Conclusion	Pass	Pass	Pass	Pass	Pass	Pass	Pass	Pass

Note: The requirement was extracted from type 06Cr19Ni10 (digital No.S30408) in GB/T 24511-2017.

### 2. Tensile Test

Test Method: GB/T 228.1-2021

Product standard: GB/T 24511-2017

Test item	Specimen type	Tensile strength ( $R_m$ ) (MPa)	Proof strength ( $R_{P0.2}$ ) (MPa)	Elongation after fracture(A) $L_o = 5.65\sqrt{S_0}$ (%)	Con.
Req.	-	≥520	≥220	≥40	-
002	Rectangular specimen $b_0=12.5\text{mm}$	694	323	59.0	Pass

Note: The requirement was specified in GB/T 24511-2017 type S30408 (06Cr19Ni10) .



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Sample Photo

Unless otherwise stated, this report provides a declaration of conformity according to whether the test results are within the specified limits or specifications without considering the measurement uncertainty.

\*\*\*\*\*End of report\*\*\*\*\*



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