

#### **Bremick Pty Ltd**

ABN 68 000 496 131

290 Kurrajong Road Prestons 2170 NSW PO Box 6070 Alexandria NSW 2015 Tel: +61 2 8332 1501

Fax: +61 2 8332 1501

#### ATTESTATION OF PRODUCT CONFORMITY

**TEST REPORT NUMBER:** 55350-20045-8823120403 **DATE OF ISSUE:** 08/04/2025

**CERTIFICATE NUMBER:** 00120Q31689R6M/3302

Bremick Fasteners manufactured K0 8.8 STRUCTURAL ASSEMBLIES M20 x 45, job number 55350 to meet the technical requirements of AS/NZS 1252.1:2016, and comply with the verification testing requirements of AS/NZS 1252.2:2016.

Initial Type Third Party Testing has been conducted by Ningbo Zhongji Inspection of Machinery Parts Co, Ltd, an ILAC accredited laboratory.

The Assembly Test requirements (as required by AS/NZS1252.2:2016) have also been conducted by the same ILAC Laboratory.

The remainder of the testing requirements for AS/NZS 1252.2:2016 have been performed by the Bremick NATA accredited Laboratory that complies to ISO/IEC 17025. The Bremick NATA accreditation number is 15567.

Product K0 8.8 STRUCTURAL ASSEMBLIES M20 x 45, job number 55350 has been tested and complies with AS/NZS 1252.1:2016 and AS/NZS 1252.2:2016 and are supported by the attached documentation.

Authorised Bremick representative

Afshin Mohammadiazar, Quality and Technical Manager





# Certificate of Conformity of Factory Production Control

This certificate is issued to:

Manufacturer: Bremick PTY LTD

Approved factory No.4

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 construction product:

High-strength Structural Bolting Assemblies for Preloading.

This certificate attests that all provisions concerning the assessment and verification of constancy of performance and the performances described in Annex ZA of the standard(s)

EN 14399-1:2015 High-strength Structural Bolting Assemblies for Preloading - Part 1: General Requirements

under system 2+ are applied and that the factory production controls fulfil all the prescribed requirements set out above.

The attached Schedule, of the same date, details the manufacturing location(s), harmonised product standard and product parameters and shall form a part of this certificate.

This Certificate will remain valid as long as the test methods and/or 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 pl ant are not modified significantly.

Certificate No: 0343/CPR/0038/CPR/SHA/BJG00000073/A

Original Approval: 09 June 2018
Current Certificate: 09 June 2024
Expiry Date: 08 June 2027

LRQA Notified Body Number: 0343

Alfred Yao on behalf of LRQA Nederland B.V.

LRQA Nederland B.V. (Reg. no. 24247948) a private limited company registered in the Netherlands with registered office at George Hintzenweg 77, 3068 AX Rotterdam. A subsidiary of LRQA Group Limited.

LRQA Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'LRQA'. LRQA assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant LRQA entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

LRQ/\

I RQA

LRQ/

LROA

I PO/

IRQ/

LRQ/

LRQA

1004

LRQ/

LPOA

I PO

I DOV

I DO

DO/

\_\_\_\_

**LKGV** 

LRQ/

.RQA

LRQA





# Certificate of Conformity of Factory Production Control No: 0343/CPR/0038/CPR/SHA/BJG00000073/A Schedule

Manufacturer: Bremick PTY LTD

Approved factory No.4

Manufacturing Location and Products Standard, Grade and Size

- Bolt EN 14399-3

- Nut M (12-36) X (35-200) - 8.8/10.9 -HR

M (12-36) - 8/10 – HR

- Bolt EN 14399-4

- Nut M (12-36) X (35-200) - 10.9 -HV

M (12-36) - 10 – HV

- Washer EN 14399-5

D (12-36)

- Washer EN 14399-6

D (12-36)

Remark of surface coating type: Hot dip galvanizing, Phosphatizing, Dacromet;

Schedule Issue: 02

Date of Schedule Issue: 09 June 2024

LRQA Notified Body Number 0343

Alfred Yao on behalf of LRQA Nederland B.V.

LRQA Nederland B.V. (Reg. no. 24247948) a private limited company registered in the Netherlands with registered office at George Hintzenweg 77, 3068 AX Rotterdam.

A subsidiary of LRQA Group Limited.

LRQA Group Limited, its affiliates and subsidiaries and their respective officers, employees or agents are, individually and collectively, referred to in this clause as 'LRQA'. LRQA assumes no responsibility and shall not be liable to any person for any loss, damage or expense caused by reliance on the information or advice in this document or howsoever provided, unless that person has signed a contract with the relevant LRQA entity for the provision of this information or advice and in that case any responsibility or liability is exclusively on the terms and conditions set out in that contract.

Page 2 o

## Structural Assembly K0 Range



TEST REPORT No: 55350-20045-8823120403 DATE OF ISSUE: 12/02/2025 HEAD No:

#### **Product Information**

| CODE           | K08MG200451                           | JOB NUMBER          | 55350               |
|----------------|---------------------------------------|---------------------|---------------------|
| DESCRIPTION    | K0 8.8 STRUCTURAL ASSEMBLIES M20 x 45 | MANUFACTURE LOT QTY | 3375                |
| STANDARD       | AS 1252.1-2016                        | TEST QTY            | 5                   |
| QUALITY SYSTEM | GB/T19001-2016/ISO9001:2015           | CERTIFICATE NUMBER  | 00120Q31689R6M/3302 |

#### **Chemical Composition**

Complies to ISO898.1~2/AS4291.1~2

| PART     | HEAT No    | С %       | Mn %     | Р%        | S %       | В%        |
|----------|------------|-----------|----------|-----------|-----------|-----------|
| REQUIRED |            | 0.25~0.55 | N/A      | 0.035 max | 0.035 max | 0.003 max |
| BOLT     | 8823120403 | 0.4       | 0.7      | 0.015     | 0.008     | 0.0004    |
| REQUIRED |            | 0.58 max  | 0.25 min | 0.060 max | 0.150 max | N/A       |
| NUT      | 823120113  | 0.47      | 0.71     | 0.013     | 0.009     | 0.0005    |
| REQUIRED |            | N/A       | N/A      | N/A       | N/A       | N/A       |
| WASHER   | 23913156   | 0.45      | 0.71     | 0.017     | 0.007     | 0.0003    |

#### **Mechanical Properties**

Tested to AS/NZS1252.1-2016 Table B1

|               | BOLT                                   |           |
|---------------|--|-----------|
| TEST          | REQUIREMENT                            | RESULT    |
| Hardness      | d <= 16mm 22~32 HRC d > 16mm 23~34 HRC | 27.9-28.9 |
| Wedge Test 6º | d <= 16mm 800MPa d > 16mm 830 MPa      | 947       |
| Yield         | 660 MPa                                | 820       |
| Proof Stress  | d <= 16mm 580 MPa d > 16mm 600 MPa     | PASS      |

|                    | NUT         |           |
|--------------------|-------------|-----------|
| TEST               | REQUIREMENT | RESULT    |
| Hardness           | 24~36 HRC   | 28.4-28.9 |
| Proof Stress (min) | 1165 MPa    | PASS      |
|                    | WASHER      |           |
| Hardness           | 33~41 HRC   | 33.2-34.7 |

Hardness Test to ASTM E18 - Wedge test and proof load to ISO 898-1, Nut proof load test to AS 1252.1-2016

Assembly Test Tested to AS/NZS1252.1-2016

| TEST CONDITIONS         |                 | REQUIREMENT       |                           | RESULTS        |                       |                          |               |                            |                         |
|-------------------------|-----------------|-------------------|---------------------------|----------------|-----------------------|--------------------------|---------------|----------------------------|-------------------------|
| CLAMP<br>LENGTH<br>(mm) | No. OF<br>SHIMS | ROTATION<br>SPEED | LUBRICATION<br>CONDITIONS | BOLT<br>LENGTH | MIN NUT<br>Rotation º | TENSION<br>kn<br>Minimum | SAMPLE<br>No. | NUT<br>ROTATION<br>DEGREES | BOLT<br>TENSION<br>(kN) |
| N/A                     | N/A             | N/A               | N/A                       | N/A            | N/A                   | N/A                      | SAMPLE 1      | >210                       | 227                     |
|                         |                 |                   |                           |                |                       |                          | SAMPLE 2      | >210                       | 235                     |
|                         |                 |                   |                           |                |                       |                          | SAMPLE 3      | >210                       | 233                     |
|                         |                 |                   |                           |                |                       |                          | SAMPLE 4      | >210                       | 236                     |
|                         |                 |                   |                           |                |                       |                          | SAMPLE 5      | >210                       | 235                     |

#### Visual, Dimensions, Coating & Markings

| PART   | VISUAL<br>INSPECTION<br>ISO 6157-1. 2. |
|--------|--|
| BOLT   | PASS                                   |
| NUT    | PASS                                   |
| WASHER | PASS                                   |

| DIMENSIONS<br>AS/NZS1252-2016 |
|-------------------------------|
| PASS                          |
| PASS                          |
| PASS                          |

| COATING COMPLIES TO AS/NZS1214  REQUIREMENT 50 min |           |  |  |  |  |
|--|-----------|--|--|--|--|
| TYPE Αν μm   |           |  |  |  |  |
| HDG 52.3-53.4                                      |           |  |  |  |  |
| HDG 51.3-53.1                                      |           |  |  |  |  |
| HDG  | 52.1-53.6 |  |  |  |  |

| MARKINGS                        |
|---------------------------------|
| Bolt: BF 8.8 THREE RADIAL LINES |
| Nut : BF 8 THREE ARC LINES      |
| Washer : THREE NIBS             |

This certificate complies with AS/NZS1252.1-2016

\*The results relate only to the item tested\*

Name: Afshin Mohammadiazar Position: Quality Manager





## **TEST REPORT**

TEST REPORT No: 55350-20045-8823120403 DATE OF ISSUE: 12/02/2025

#### **PRODUCT DETAILS**

| ITEM CODE       | K08MG200451 | DESCRIPTION       | K0 8.8 STRUCT ASS GAL M20 X 45 |
|-----------------|-------------|-------------------|--------------------------------|
| BOLT HEAT No.   | 8823120403  | MATERIAL STANDARD | AS/NZS 1252-2016               |
| NUT HEAT No.    | 823120113   | JOB No.           | 55350                          |
| WASHER HEAT No. | 23913156    | HEAD MARK         |                                |

#### **BOLT**

PROOF LOAD TEST DATE: 1/03/2025

| DESCRIPTION  | Proof load testing of cla | Proof load testing of class 8.8 Bolt to SOP 22-07, AS/NZS 1252.1 and ISO 898.1 |                      |                |            |  |  |  |
|--------------|---------------------------|--|----------------------|----------------|------------|--|--|--|
| TEST METHOD  | Proof load to ISO 898.1   | Proof load to ISO 898.1 and ISO 6892-1   |                      |                |            |  |  |  |
| REQUIREMENTS | Minimum hold time 15 s    | Minimum hold time 15 seconds - min proof load 147.00 kN                        |                      |                |            |  |  |  |
|              | PROOF LOAD<br>(Kn)        | INITIAL LENGTH<br>(mm)   | FINAL LENGTH<br>(mm) | CHANGE<br>(mm) | COMPLIANCE |  |  |  |
| SAMPLE 1     | PASS                      | 0.00   | 0.01                 | 0.01           | COMPLIES   |  |  |  |
| SAMPLE 2     | PASS                      | 0.00   | 0.00                 | 0.00           | COMPLIES   |  |  |  |
| SAMPLE 3     | PASS                      | 0.00   | 0.01                 | 0.01           | COMPLIES   |  |  |  |
|              |                           |  |                      |                |            |  |  |  |

WEDGE LOAD TENSILE TEST TEST DATE: 5/03/2025

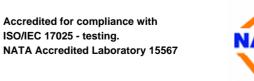
| DESCRIPTION  | Wedge test of class 8.8 E    | TEST TEMP °C                        |   |        |          |  |
|--------------|------------------------------|-------------------------------------|---|--------|----------|--|
| TEST METHOD  | Wedge test ISO 898.1 and     | Wedge test ISO 898.1 and ISO 6892-1 |   |        |          |  |
|              | TENSILE STRENGTH<br>Mpa (Rm) | COMPLIANCE                          |   |        |          |  |
| REQUIREMENTS | 830 MIN                      | 203 MIN                             | 6 | THREAD |          |  |
| SAMPLE 1     | 959                          | 234.90                              | 6 | THREAD | COMPLIES |  |
| SAMPLE 2     | 954                          | 233.70                              | 6 | THREAD | COMPLIES |  |
| SAMPLE 3     | 969                          | 237.40                              | 6 | THREAD | COMPLIES |  |

HARDNESS TEST DATE: 28/02/2025

| DESCRIPTION  | K0 8.8 STRUCT ASS GAL    | M20 X 45- AS/NZS 1252-  | 2016                  |                          |            |
|--------------|--------------------------|-------------------------|-----------------------|--------------------------|------------|
| TEST METHOD  | Rockwell Hardness test u | sing scale "C" from 98N | to 147N by the method | s of ASTM E18            |            |
| REQUIREMENTS | d <= 16mm 22-32 HRC - d  | l > 16mm 23-34 HRC      |                       |                          |            |
|              | AVERAGE * HARDNESS (HRC) | COMPLIANCE              | SAMPLE                | AVERAGE * HARDNESS (HRC) | COMPLIANCE |
| SAMPLE 1     | 30                       | COMPLIES                | SAMPLE 5              | 31                       | COMPLIES   |
| SAMPLE 2     | 30                       | COMPLIES                | SAMPLE 6              | 29                       | COMPLIES   |
| SAMPLE 3     | 30                       | COMPLIES                | SAMPLE 7              | 31                       | COMPLIES   |
| SAMPLE 4     | 31                       | COMPLIES                | SAMPLE 8              | 29                       | COMPLIES   |

<sup>\*</sup> Average of 3 measurements per sample







## **TEST REPORT**

TEST REPORT No: 55350-20045-8823120403 DATE OF ISSUE: 12/02/2025

#### **PRODUCT DETAILS**

| ITEM CODE       | K08MG200451 | DESCRIPTION       | K0 8.8 STRUCT ASS GAL M20 X 45 |
|-----------------|-------------|-------------------|--------------------------------|
| BOLT HEAT No.   | 8823120403  | MATERIAL STANDARD | AS/NZS 1252-2016               |
| NUT HEAT No.    | 823120113   | JOB No.           | 55350                          |
| WASHER HEAT No. | 23913156    | HEAD MARK         |                                |

#### **NUT**

TEST DATE: 6/01/2025 **PROOF LOAD** 

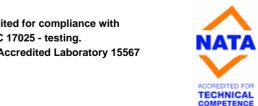
| DESCRIPTION  | Proof load testing of Nut to SOP 22-09, AS/NZS 1252 | 2.1 and ISO 898.2     | TEST TEMP ° C |
|--------------|---|-----------------------|---------------|
| TEST METHOD  | Proof load to ISO 898.2 and ISO 6892-1              |                       | 25            |
| REQUIREMENTS | Minimum hold time 15 seconds - Minimum proof loa    | d                     | 285.40 kN     |
|              | PROOF LOAD (Kn)                                     | NUT REMOVED BY FINGER | COMPLIANCE    |
| SAMPLE 1     | PASS  | YES                   | COMPLIES      |
| SAMPLE 2     | PASS  | YES                   | COMPLIES      |
| SAMPLE 3     | PASS  | YES                   | COMPLIES      |

TEST DATE: 28/02/2025 **HARDNESS** 

| DESCRIPTION  | K0 8.8 STRUCT ASS GAL    | M20 X 45- AS/NZS 1252-  | 2016                  |                          |            |
|--------------|--------------------------|-------------------------|-----------------------|--------------------------|------------|
| TEST METHOD  | Rockwell Hardness test u | sing scale "C" from 98N | to 147N by the method | s of ASTM E18            |            |
| REQUIREMENTS | 24 - 36 HRC              |                         |                       |                          |            |
|              | AVERAGE * HARDNESS (HRC) | COMPLIANCE              | SAMPLE                | AVERAGE * HARDNESS (HRC) | COMPLIANCE |
| SAMPLE 1     | 27                       | COMPLIES                | SAMPLE 5              | 30                       | COMPLIES   |
| SAMPLE 2     | 27                       | COMPLIES                | SAMPLE 6              | 28                       | COMPLIES   |
| SAMPLE 3     | 30                       | COMPLIES                | SAMPLE 7              | 30                       | COMPLIES   |
| SAMPLE 4     | 28                       | COMPLIES                | SAMPLE 8              | 30                       | COMPLIES   |
|              |                          |                         |                       |                          |            |

<sup>\*</sup> Average of 3 measurements per sample





### **TEST REPORT**

TEST REPORT No: 55350-20045-8823120403 DATE OF ISSUE: 12/02/2025

#### **PRODUCT DETAILS**

| ITEM CODE       | K08MG200451 | DESCRIPTION       | K0 8.8 STRUCT ASS GAL M20 X 45 |
|-----------------|-------------|-------------------|--------------------------------|
| BOLT HEAT No.   | 8823120403  | MATERIAL STANDARD | AS/NZS 1252-2016               |
| NUT HEAT No.    | 823120113   | JOB No.           | 55350                          |
| WASHER HEAT No. | 23913156    | HEAD MARK         |                                |

#### **WASHER**

TEST DATE: 28/02/2025 **HARDNESS** 

| DESCRIPTION  | K0 8.8 STRUCT ASS GAL       | . M20 X 45- AS/NZS 1252- | 2016                   |                          |            |
|--------------|-----------------------------|--------------------------|------------------------|--------------------------|------------|
| TEST METHOD  | Rockwell Hardness test u    | using scale "C" from 98N | to 147N by the methods | s of ASTM E18            |            |
| REQUIREMENTS | 33 - 41 HRC                 |                          |                        |                          |            |
|              | AVERAGE *<br>HARDNESS (HRC) | COMPLIANCE               | SAMPLE                 | AVERAGE * HARDNESS (HRC) | COMPLIANCE |
| SAMPLE 1     | 27                          | COMPLIES                 | SAMPLE 5               | 31                       | COMPLIES   |
| SAMPLE 2     | 27                          | COMPLIES                 | SAMPLE 6               | 29                       | COMPLIES   |
| SAMPLE 3     | 30                          | COMPLIES                 | SAMPLE 7               | 31                       | COMPLIES   |
| SAMPLE 4     | 28                          | COMPLIES                 | SAMPLE 8               | 29                       | COMPLIES   |

<sup>\*</sup> Average of 3 measurements per sample

Signed:

Afshin Mohammadiazar

Accredited for compliance with ISO/IEC 17025 - testing. NATA Accredited Laboratory 15567

TECHNICAL

**Issue Date:** 12/02/2025

> Note that this report is based on the products supplied to the laboratory and it remains the responsibility of the client to ensure the samples presented are representative of the whole batch. Reproduction of this report, other than in its entirety, must be approved by Bremick Pty Ltd

\*The results relate only to the item tested\*





#### **Bremick Pty Ltd**

ABN 68 000 496 131 290 Kurrajong Rd, Prestons 2170 PO Box 6070 Alexandria NSW 2015

Tel: +61 2 8332 1501 Fax: +61 2 9690 1474

3rd May 2021

#### Subject: AS/NZS 1252.1-2016 Assembly Test Limitation

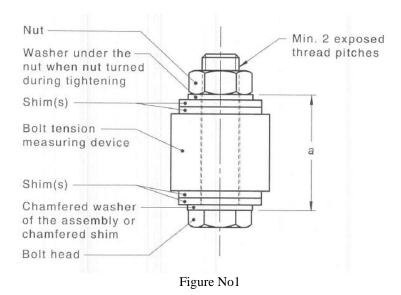
AS/NZS 1252.1-2016 specifies that structural bolts assemblies are required to meet Clause 1.5 to satisfy the requirements of the Standard.

The Test Standard to meet this requirement is EN 14399-2.

#### Limitations

Short bolts may prevent the test from being performed and the length will vary with diameter.

The minimum requirement is that two threads exist after tightening between the end of the bolt and the unloaded face on the nut, see Figure No 1.



The length limitations will prevent some short bolts from being test by the third party ILAC laboratory which is shown on our Assembly Test certificate.

When this document is supplied with the other certification it indicates that the short bolt could not be tested to the requirements specified in EN 14399-2 and that an Assembly Test Certificate will not be issued.



If you have any further questions please contact me on e-mail  $\underline{afshinm@bremick.com.au}$  , ph 02 83321560 or mob 0414282575

Yours sincerely,

Afshin Mohammadiazar,

Quality and Technical Manager.

# 产品质量证明书

#### INSPECTION CERTIFICATE

# 浙江华宏钢铁

ZHEJIANG HUAHONG STEEL

丽水华宏钢铁制品有限公司

LISHUI HUAHONG STEEIPRODUCTS CO., LTD.

订货单位:

杭州主肠供应链管理有限公司

发货单号:

22-2/回AV7230

证书编号:

202312220178 识别码: T2CQI1

产品名称:

无拥控冷热轧盘条

执行标准: GB/T 6478-2015

发徒日期:

2023-12-22

| -      |          |            |             |                 |        |                       |   | ********                                |         |            |   |     |                     | 化学/                 | 及分(w                                     | t%) .  |  |      |   | ,                 | *************************************** |   | *************************************** |                  |
|--------|----------|------------|-------------|-----------------|--------|-----------------------|---|---|---------|------------|---|-----|---------------------|---------------------|--|--------|--|------|---|-------------------|---|---|---|------------------|
| 200 FT | and the  | Lett. 1.64 | AT WATER TO | who belon to be | 24-49- | and the second second | C                                       | - Si                                    | Mn      | P          | 5                                       | Cr  | Ni                  | Cu                  | , V                                      | Mo     | A1                                     |      |   |                   |   | Ī |   |                  |
| 序号     | 牌号       | 规格         | 轧制批号        | 有物界等            | 件数     | 重量(t)                 | 2                                       | 2                                       | 2       | 3.         | - 3                                     | 2   | 2                   | -2                  | 3  | 2      | . 4                                    |      | İ | ***************** | Î                                       |   | -                                       |                  |
|        |          |            |             |                 |        |                       |   |   |         |            | *************************************** | 1=  | ×10 <sup>-1</sup> 2 | 2=x10 <sup>-2</sup> | 3-x10                                    | ° 4=%1 | 0-3                                    |      |   |                   |   |   |   |                  |
| 1      | ML 40Cr  | Φ20        | 0123120400  | 8823120406      | 13     | 26, 655               | 39                                      | 13                                      | - 68    | 9.         | 10                                      | 95  | 4                   | 9                   | б.                                       | 2:     | 84                                     |      |   |                   |   |   |   |                  |
| . 2    | ML40Cr   | d+20       | 0123120402  | 8823120408      | - 4    | 8. 256                | 40                                      | 15                                      | 69      | 17         | 8                                       | 96  | 4                   | 10                  | ~ i5                                     | 2      | 94                                     |      |   |                   |   |   |   |                  |
| 3      | 111.40Cr | Ф20        | 0123120401  | 8823120407      | - 1    | 2,040                 | 39                                      | 15                                      | 69.     | 14         | 10                                      | 98  | 1                   | 9                   | 6  | 2      | 35                                     |      |   |                   |   |   |   |                  |
| 4      | ML 10Cr  | Ф20        | 0123120397  | 8823120403      | 2      | 4. 019                | 40                                      | 14                                      | 70      | 19         | -8                                      | 98. | 5                   | 8                   | 6  | 1      | 127                                    |      |   |                   |   |   |   |                  |
|        |          | -3 4       |             |                 |        |                       |   |   |         | •          |   |     |                     |                     |  |        |  |      |   |                   |   |   |   |                  |
|        |          | 合          | it:         | <b>4</b>        | 20     | 40.950                | *************************************** | *************************************** | <b></b> | Summirring | <b></b>                                 | f.  |                     |                     | ·6-2000000000000000000000000000000000000 |        | ************************************** | , D. |   | ·                 | A                                       |   | Samuel Street Street                    | hannamananananan |

|             | <br>43 Maria 200 Maria 2 | 力学 | 性創 | 5 |   |   |   |     | T. | 金属为 | と余物 | - 46 | 2-) |      |    |                |                |          | 硬度 |            |   |      |
|-------------|--|----|----|---|---|---|---|-----|----|-----|-----|------|-----|------|----|----------------|----------------|----------|----|------------|---|------|
| 序号          |  |    |    |   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |   | 1 | I   | 3  |     | C 1 |      | )   | · VP | 冷弯 | 顶银             | 脱碳<br>(mm)     | 低倍       |    | 品粒度<br>(级) | 金相<br>组织                                | AKu2 |
|             |  |    |    |   |   | 粗 | 细 | 粗   | 细  | 粗   | 细   | 湘    | 细   | DS   |    |                | (mm)           |          |    | (家庭)       | 31137(                                  | (3)  |
| 1           | yr   | -  |    |   |   |   |   | • - |    |     |     |      |     |      |    | 合格<br>合格       | 10.0<br>10.0   | 合格<br>合格 |    |            |   |      |
| 2           |  |    |    |   |   |   |   |     |    |     |     |      |     |      |    | 合格<br>合合格      | 0.01<br>0.01   | 合格<br>合格 |    |            |   |      |
| 3           |  |    |    |   |   |   |   |     |    |     |     |      |     |      |    | 合格<br>合格<br>合格 | 0. 01<br>0. 01 | 合格<br>合格 |    |            |   |      |
| 4           |  |    |    |   |   |   |   |     |    |     |     |      |     |      |    | 合格<br>合格<br>合格 | 0.01<br>0.01   | 合格<br>合格 |    |            | *************************************** |      |
| Part of the |  |    |    |   |   |   |   |     |    |     |     |      |     |      |    |                |                |          |    |            |   |      |

注意事项: 1、质量证明书复印件不作有效证明文件。

- 2、外形尺寸、表面质量合格。
- 3、用户如有异议应及时告知牌号、批号、规格,并保留标牌、实物及标志。

签证人: 区

签发日期: 2023.12.22



|             | 客户名称<br>Sold To                 | 新昌云成商              | 贸有限公司           |             |                |                  |   |                         |                         |                        |                        |                         |                         | 产品名称<br>Product      |                               | 热轧盘              | 条 Ho     | t rolled | wirer | ods              |      |      |       |      |
|-------------|---------------------------------|--------------------|-----------------|-------------|----------------|------------------|---|-------------------------|-------------------------|------------------------|------------------------|-------------------------|-------------------------|----------------------|-------------------------------|------------------|----------|----------|-------|------------------|------|------|-------|------|
|             | 收货单位<br>Consignee               | 新昌云成商              | 贸有限公司           |             |                |                  |   |                         |                         |                        |                        |                         |                         | 是货编单-<br>elivery n   |                               | FB231            | 21400    | 061      |       | 证明书<br>Certifica |      | 2312 | 214Q0 | 0931 |
|             | 执行标准<br>Spec.                   | JIS G 3507         | -1:2010         | 牌<br>Gra    | 号<br>ade       | SWRCH            | 45K   |                         | 加工用<br>Purpo            |                        |                        |                         |                         | 客户编号<br>istomer i    |                               | N0234            | 174      |          |       | 订单纲<br>Order     |      | 023  | 2140  | 066  |
|             |                                 |                    |                 |             |                |                  |   |                         |                         |                        |                        |                         | Cus                     | 户采购案<br>st Order     | No.                           |                  |          |          |       | 证明书<br>Issue I   | Date | 2023 | 31214 |      |
|             | 产许可证号<br>provalcerf No.         |                    |                 | 钢筋<br>Bar N | 标识<br>Mark     |                  | -   |                         |                         |                        |                        |                         | Con                     | 交货状态<br>d. Of Suj    | pply                          | 热轧               |          |          |       | 车船<br>Train/Sh   |      | 苏DF  | V157  |      |
| 项次          | 轧制序号                            | 炉号                 | 尺寸及规格<br>产品尺寸   |             | al Desci<br>数量 | ription<br>重量    |   |                         |                         |                        | 成分 %<br>I Analysis     |                         |                         |                      | *E09<br>总碳<br>深<br>浸          | *O01<br>冷顶<br>锻试 |          |          |       |                  |      |      |       |      |
| Item<br>No. | Lot No.                         | Heat No.           | Product Si      |             | Qty            | Weight           | C<br>X10 <sup>-2</sup>  | Si<br>X10 <sup>-2</sup> | Mn<br>X10 <sup>-2</sup> | P<br>X10 <sup>-3</sup> | S<br>X10 <sup>-3</sup> | Cr<br>X10 <sup>-2</sup> | Ni<br>X10 <sup>-2</sup> | Cu X10 <sup>-2</sup> | 深度                            | 验验               |          |          |       |                  |      |      |       |      |
|             |                                 | 规格 Spe             | ecification     |             |                |                  | 42<br>48  | 10<br>35                | 60<br>90                | 30<br>MAX              | 35<br>MAX              | 20<br>MAX               | 20<br>MAX               | 30<br>MAX            | 0.3<br>MAX                    |                  |          |          |       |                  |      |      |       |      |
| 001         | K2312060041                     | 823120113          |                 | OTAL:       | 14             | 33.925<br>33.925 | 47  | 16                      | 71                      | 13                     | 9                      | 4                       | 2                       | 3                    | 0.14<br>0.14                  | OK               |          |          |       |                  |      |      |       |      |
| 注释<br>note  | *001=1/2;<br>外观、形状、尺<br>注:产品牌号以 | 寸和标识依据中<br>质量证明书为准 | 间检查记录判定         | <b>三为合格</b> | ACCOR          | RDING TO F       | PROCESS   | S INSPEC                | TION RE                 | ECORD,V                | TSUAL II               | NSPECTI                 | ON(SUR                  | FACE&S               | НАРЕ)                         | AND CHE          | ECK OF 1 | DIMENSI  | ON&MA | .RK: OK          |      |      |       |      |
| CE<br>0038  | of the material s               | pecification. Th   | e aging time sh | ould be     | 12 day         | s during No      | 成。11月、12月、1月、2月、3月时效12天,其它月份时效7天。It is at tested with satisfactory results in accordance with the requirements ovember, December, January, February and March, and 7 days during valid except stamped. 标志。Please inform us the steel grade and the heat number of under and the marking card. |                         |                         |                        |                        |                         |                         | Com<br>jı            | ich判》<br>ipreheidgme<br>idgme | nsive<br>nt      |          |          |       |                  |      |      |       |      |
| J. T. 607   | qualifiedmateria<br>维集用右限公司     |                    | pection on time |             |                |                  |   |                         |                         |                        | 10 8877                |                         |                         |                      |                               |                  | 1        | 9        |       | 8                |      |      | H 11  | 1    |

中天钢铁集团有限公司 地址:江苏省常州市中吴大道1号 热线:0519-88383868 传真:0519-88773074 中天钢铁集团(南通)有限公司 地址:江苏省南通市港东大道1号 热线:0513-52889999-5666 传真:0513-52887777



## 南京钢铁股份有限公司 NanJing Iron&Steel Co., Ltd.

# 质量证明书

# MILL TEST CERTIFICATE

钢号: Steel Grade

产品名称: 优质碳素结构钢 Product Quality Carbon Structural Steels

交货状态: 热乳

Condition As rolled

SPEC.

技术条件: Q/320116 NJGT 402-2022: N45DP

买方名称: 苏州友尼可紧固件有限公司 Buyer

客户编号: Buyer No.

IS4343

合同编号: Condition

证明书编号: Certficate No.

230828H00747

订单号: ORDER NO.

05423080033

发货通知单号: FS42308260026 Reference No.

许可证号: License, No.



| 轧制序号<br>LOT NO. | 声号<br>HRAT NO. | 规格长度<br>SIZE  | 件数<br>BUNDLES | <u>iri de</u><br>Weight | 化学<br>成分<br>ANALYSIS | G    | Si    | Mo    | P     | S     | Cu   | Ni   | Cr   |  |  |  |  |  |  |  |  |
|-----------------|----------------|---------------|---------------|-------------------------|----------------------|------|-------|-------|-------|-------|------|------|------|--|--|--|--|--|--|--|--|
|                 |                | - No.         |               | t                       |                      | %    | %     | %     | %     | %     | - %  | %    | %    |  | 80 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 |  | Transaction of the Printer of the Pr |  |  |  |  |
| L30527102       | 23913156       | 3.75*210*Coil | 8             | 40, 652                 | 熔炼                   | 0.48 | 0. 25 | 0, 68 | 0.024 | 0.003 | 0.02 | 0.02 | 0.04 |  |  |  |  |  |  |  |  |
|                 |                |               |               |                         |                      |      |       |       |       |       |      |      |      |  |  |  |  |  |  |  |  |
|                 |                |               |               |                         |                      |      |       |       |       |       |      |      |      |  |  |  |  |  |  |  |  |
|                 |                |               |               |                         |                      |      |       |       |       |       |      |      |      |  |  |  |  |  |  |  |  |

|           | 歷度故範             |   |
|-----------|------------------|---|
| 轧制序号      | 製度试验<br>Hardness |   |
| LOT NO.   |                  |   |
|           | HER              |   |
| L30527102 | 198              | - |
|           | 195              |   |
|           |                  |   |
|           |                  | - |
|           |                  | _ |
|           |                  |   |

硬度= 布氏硬度IBW10/3000

Romarks

外观和尺寸检验均合格 VISUAL INSPECTION (SURFACE) AND DIMENSION CHREAT OF

We hereby certify that the products in this MTC are manufactured and tested in accordance with the specification, meet the standards and technical requirements of the powers of the content. contain radiation elements.

答发人 Signature: - 23 -

签发日期 Issue Date: 2023/08/28

质量记录编号: JL100508/C