

#### **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 9690 1474

#### ATTESTATION OF PRODUCT CONFORMITY

**TEST REPORT NUMBER:** 55350-20160-8823120408 **DATE OF ISSUE:** 17/01/2025

**CERTIFICATE NUMBER:** 00120O31689R6M/3302

Bremick Fasteners manufactured K0 8.8 STRUCTURAL ASSEMBLIES M20 x 160, 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 160, 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: 55350-20160-8823120408 DATE OF ISSUE: 17/01/2025 HEAD No:

#### **Product Information**

CODE	K08MG201601	JOB NUMBER	55350
DESCRIPTION	K0 8.8 STRUCTURAL ASSEMBLIES M20 x 160	MANUFACTURE LOT QTY	6510
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	8823120408	0.4	0.69	0.017	0.008	0.0005
REQUIRED		0.58 max	0.25 min	0.060 max	0.150 max	N/A
NUT	823120113	0.44	0.75	0.016	0.006	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	27.8-29.1
Wedge Test 6 º	d <= 16mm 800MPa d > 16mm 830 MPa	955
Yield	660 MPa	843
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 LENGTH (mm)	No. OF SHIMS	ROTATION SPEED	LUBRICATION CONDITIONS	BOLT LENGTH	MIN NUT Rotation <sup>o</sup>	TENSION kn Minimum	SAMPLE No.	NUT ROTATION DEGREES	BOLT TENSION (kN)
125	3	3	Dry to touch	160.7-161.6	270	204	SAMPLE 1	270	231
							SAMPLE 2	270	231
							SAMPLE 3	270	230
							SAMPLE 4	270	229
							SAMPLE 5	270	231

#### Visual, Dimensions, Coating & Markings

PART	VISUAL INSPECTION ISO 6157-1. 2.
BOLT	PASS
NUT	PASS
WASHER	PASS

DIMENSIONS AS/NZS1252-2016
PASS
PASS
PASS

COATING COMPLIES TO AS/NZS1214  REQUIREMENT 50 min						
TYPE Αν μm						
HDG	52.1-52.8					
HDG 51.3-53.1						
HDG	HDG 52.1-53.6					

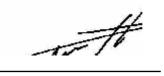
MARKINGS
Bolt: BF 8.8 THREE RADIAL LINES
Nut : BF 8 THREE ARC LINES
Washer : THREE NIBS

This certificate complies with AS/NZS1252.1-2016

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

Name: Afshin Mohammadiazar Position: Quality Manager

Signature :



# **TEST REPORT**

TEST REPORT No: 55350-20160-8823120408 DATE OF ISSUE: 17/01/2025

#### **PRODUCT DETAILS**

ITEM CODE	K08MG201601	DESCRIPTION	K0 8.8 STRUCT ASS GAL M20 X 160
BOLT HEAT No.	8823120408	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	823120113	JOB No.	55350
WASHER HEAT No.	23913156	HEAD MARK	

## **BOLT**

PROOF LOAD TEST DATE: 5/03/2025

DESCRIPTION	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 (Kn)	INITIAL LENGTH (mm)	FINAL LENGTH (mm)	CHANGE (mm)	COMPLIANCE		
SAMPLE 1	PASS	0.01	0.00	-0.01	COMPLIES		
SAMPLE 2	PASS	0.00	0.00	0.00	COMPLIES		
SAMPLE 3	PASS	0.00	0.00	0.00	COMPLIES		

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

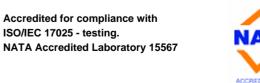
DESCRIPTION Wedge test of class 8.8 Bolt to SOP 22-05, AS/NZS 1252.1 and ISO 898.1					TEST TEMP ° C
TEST METHOD	<del></del>	Wedge test ISO 898.1 and ISO 6892-1			
	TENSILE STRENGTH Mpa (Rm)	COMPLIANCE			
REQUIREMENTS	830 MIN	203 MIN	10	THREAD	
SAMPLE 1	908	222.40	10	THREAD	COMPLIES
SAMPLE 2	913	223.70	10	THREAD	COMPLIES
SAMPLE 3	910	222.90	10	THREAD	COMPLIES

HARDNESS TEST DATE: 6/03/2025

DESCRIPTION	K0 8.8 STRUCT ASS GA	L M20 X 160- AS/NZS 1252	-2016												
TEST METHOD	Rockwell Hardness test	using scale "C" from 98N	to 147N by the methods	of ASTM E18											
REQUIREMENTS	d <= 16mm 22-32 HRC -	d > 16mm 23-34 HRC													
	AVERAGE * HARDNESS (HRC)	HARDNESS (HRC) COMPLIANCE SAMPLE HARDNESS (HRC) COMPLIANCE													
SAMPLE 1	31	COMPLIES	SAMPLE 5	29	COMPLIES										
SAMPLE 2	30	COMPLIES	SAMPLE 6	29	COMPLIES										
SAMPLE 3	29	29 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: 55350-20160-8823120408 DATE OF ISSUE: 17/01/2025

#### **PRODUCT DETAILS**

ITEM CODE	K08MG201601	DESCRIPTION	K0 8.8 STRUCT ASS GAL M20 X 160
BOLT HEAT No.	8823120408	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	823120113	JOB No.	55350
WASHER HEAT No.	23913156	HEAD MARK	

### **NUT**

PROOF LOAD TEST DATE: 6/01/2025

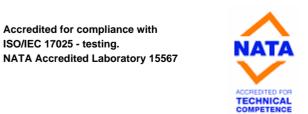
DESCRIPTION	Proof load testing of Nut to SOP 22-09, AS/NZS 1252	2.1 and ISO 898.2	TEST TEMP ° C
TEST METHOD		25	
REQUIREMENTS	Minimum hold time 15 seconds - Minimum proof loa	d	285.40 kN
	PROOF LOAD (Kn)	NUT REMOVED BY FINGER	COMPLIANCE
SAMPLE 1	PASS	YES	COMPLIES
SAMPLE 2	PASS	YES	COMPLIES
SAMPLE 3	PASS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

HARDNESS TEST DATE: 28/02/2025

DESCRIPTION	K0 8.8 STRUCT ASS GA	L M20 X 160- AS/NZS 1252	2-2016												
TEST METHOD	Rockwell Hardness test	using scale "C" from 98N	to 147N by the methods	of ASTM E18											
REQUIREMENTS	24 - 36 HRC														
	AVERAGE * HARDNESS (HRC)	HARDNESS (HRC) COMPLIANCE SAMPLE HARDNESS (HRC) COMPLIANCE													
SAMPLE 1	27	COMPLIES	SAMPLE 5	30	COMPLIES										
SAMPLE 2	27	COMPLIES	SAMPLE 6	28	COMPLIES										
SAMPLE 3	30	30 COMPLIES SAMPLE 7 30 COMPLIE													
SAMPLE 4	28	COMPLIES	SAMPLE 8	30	COMPLIES										

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





## **TEST REPORT**

TEST REPORT No: 55350-20160-8823120408 DATE OF ISSUE: 17/01/2025

#### **PRODUCT DETAILS**

ITEM CODE	K08MG201601	DESCRIPTION	K0 8.8 STRUCT ASS GAL M20 X 160
BOLT HEAT No.	8823120408	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	823120113	JOB No.	55350
WASHER HEAT No.	23913156	HEAD MARK	

### **WASHER**

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

DESCRIPTION	K0 8.8 STRUCT ASS GAL	M20 X 160- AS/NZS 1252	2-2016													
TEST METHOD	Rockwell Hardness test u	using scale "C" from 98N	to 147N by the methods	of ASTM E18												
REQUIREMENTS	33 - 41 HRC															
	AVERAGE * HARDNESS (HRC)	HARDNESS (HRC)  COMPLIANCE  SAMPLE  HARDNESS (HRC)  COMPLIANCE														
SAMPLE 1	27	HARDNESS (HRC) HARDNESS (HRC)														
SAMPLE 2	27	COMPLIES	SAMPLE 6	29	COMPLIES											
SAMPLE 3	30	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:** 17/01/2025

> 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\*









# Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

# **TEST REPORT**

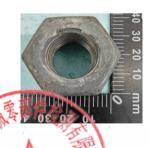
Report number:	NBZJB202412016	Page 1 of 2
Receiving Date:	26, Nov., 2024	
Test Date:	27, Nov., 2024~28, Nov., 2024	
Sample Source:	Supplied by client	
Name of Client	Bremick Pty Ltd	
Address	88 Dalmeny Avenue, Rosebery NSW 2018	
Test Requirements	AS/NZS 1252.1:2016 The technical requirement supplied by client	

Description	K0 8.8 STRUCT ASS GAL M20 X 160	Number of Sample(s)	3 PCS
Dimension	M20 X 160	Class	Bolt class 8.8 Nut class 8
Part Number	K08MG201601	PO No	55350
TRACE No	/	Heat Treatment Lot number	/
(Steel ) Heat number	B:882	23120408 N:82312011	3

The information above is provided by the client. Our laboratory is not responsible for its authenticity

6.02

Approved by Manager







Test by Engineer







# Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

## **TEST REPORT**

Report number: Page 2 of 2 NBZJB202412016 Item NO. Test Items Test Results Test Method Requirement Conclusion 219.0 kN Bolt tension force 1A Pass 270° 229.7 kN ≥ 183 kN Assembly test EN 14399-2:2015 Nut rotation 2A Pass 270° Degrees 1 232.0 kN ЗА ≥ 270° **Pass** 270° Equipment: Microcomputer controlled torsion tester; NBZJ/SB-Z-JC-110 WNJ-3000; Validity Of Calibration: 2025.5.16



# 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	100 100 101 TH	ZH 400	er ra v	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		-	
	- M.46Cr Ф20 0123120400									***************************************	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. 236	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	£	f.			·6-2000000000000000000000000000000000000		**************************************	, D.		·	A		Samuel Street Street	hannamananananan

	力学性能		***************************************		***************************************		T.	金属为	く余物	- 16							硬度					
序号					*************		1	l I	3		0 1 1		)	142	冷弯	顶银	脱碳 (mm)	低倍		品粒度 (级)	金相 组织	AKu2
						粗	细	粗	细	粗	细	湘	细	DS			(mm)			(政)	组织	(3)
1		pp-2020-20-12-17-13-20-18-14	-					, .								合格 合格	0. 01 10 .0	合格 合格				
2																合格 合合格	0.01 0.01	合格 合格				
3																合格 合格 合格	0. 01 0. 01	合格 合格				
4																合格 合格 合格	0.01 0.01	合格 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 Sold To	新昌云成商	贸有限公司											产品名称 Product		热轧盘	条 Ho	t rolled	wirer	ods				
	收货单位 Consignee	新昌云成商	贸有限公司											是货编单- elivery n		FB231	21400	061		证明书 Certifica		2312	214Q0	0931
	执行标准 Spec.	JIS G 3507	-1:2010	牌 Gra	号 ade	SWRCH	45K		加工用 Purpo					客户编号 istomer i		N0234	174			订单编 Order		023	2140	066
													Cus	户采购案 st Order	No.					证明书 Issue I	Date		31214	
	产许可证号 provalcerf No.			钢筋 Barl	标识 Mark		-						Con	交货状态 d. Of Su	pply	热轧				车船 Train/Sh		苏DF	V157	
项次	轧制序号	炉号	尺寸及规格 产品尺寸		al Desci 数量	ription 重量					成分 % I Analysis				*E09 总碳深度	*O01 冷顶 锻试								
Item No.	Lot No.	Heat No.	Product Si		Qty	Weight	C X10 <sup>-2</sup>	Si X10 <sup>-2</sup>	Mn X10 <sup>-2</sup>	P X10 <sup>-3</sup>	S X10 <sup>-3</sup>	Cr X10 <sup>-2</sup>	Ni X10 <sup>-2</sup>	Cu X10 <sup>-2</sup>	深度	验验								
		规格 Spe	ecification				42 48	10 35	60 90	30 MAX	35 MAX	20 MAX	20 MAX	30 MAX	0.3 MAX									
001	K2312060041	823120113		OTAL:	14	33.925 33.925	47	16	71	13	9	4	2	3	0.14 0.14	OK								
注释 note	*001=1/2; 外观、形状、尺 注:产品牌号以														.RK: OK									
CE 0038	of the material specification. The aging time should be 12 days during November, December, January, February and March, a											n, and 7	7 days dı	uring	GENEI DE	VELO	ANAGE PMENT	量管理处 AGER, REASEARCH and INT DEPARTMENT:			综合判定 Comprehensiv judgment 合格		nsive nt	
J- T 4-1	qualifiedmateria 维集用右限八司		spection on time								10 8877						2.	9	rry				<u> </u>	

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 LOT NO.	力号 HBAT NO.	规格长度 SIZE	件数 BUNDLES	<u>旅</u> 健 WEIGHT	化学 成分 ANALYSTS	G	Si	Mo	P	S	Cu	Ni	Cr				Property of the second		and the state of t		
		301		t		%	%	%	%	%	- %	%	%				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 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