

Bremick Pty Ltd

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ATTESTATION OF PRODUCT CONFORMITY**TEST REPORT NUMBER:** 56540-24200-824091142**DATE OF ISSUE:** 15/01/2025**CERTIFICATE NUMBER:** 00120Q31689R6M/3302

Bremick Fasteners manufactured K0 8.8 STRUCTURAL ASSEMBLIES M24 x 200, job number 56540 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 M24 x 200, job number 56540 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. 3

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 plant are not modified significantly.

Certificate No:	0343/CPR/SHA/BJG6041035/01
Original Approval:	10 November 2016
Current Certificate:	01 April 2024
Expiry Date:	09 November 2025
LRQA Notified Body Number:	0343



Kevin Wu on behalf of LRQA Nederland B.V.

Certificate of Conformity of Factory Production Control No: 0343/CPR/SHA/BJG6041035/01 Schedule

Manufacturer: **Bremick PTY LTD**
Approved factory No. 3

Manufacturing Location and Products	Standard, Grade and Size
Bremick approved factory 3	
-Bolt	EN14399-3
-Nut	M (12-36) X (30-200) — 8.8/10.9 — HR M (12-36) — 8/10—HR
-Bolt	EN14399-4
-Nut	M (12-36) X (30-200) — 10.9 — HV M (12-36) — 10 — HV
-Bolt	EN14399-10
-Nut	M (12-36) X (30-200) —10.9 — HRC M (12-36) — 10 — HRC
-Washer	EN14399-5 D (12-36)
-Washer	EN14399-6 D (12-36)
Remark of finished surface coating type: hot dip galvanizing, electrolytic zinc plating, black/self-color	

Schedule Issue: 03
Date of Schedule Issue: 01 April 2024
LRQA Notified Body Number 0343



Kevin Wu on behalf of LRQA Nederland B.V.

Structural Assembly K0 Range

TEST REPORT No: 56540-24200-824091142 DATE OF ISSUE: 15/01/2025 HEAD No: A17

Product Information

CODE	K08MG242001	JOB NUMBER	56540
DESCRIPTION	K0 8.8 STRUCTURAL ASSEMBLIES M24 x 200	MANUFACTURE LOT QTY	880
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	C %	Mn %	P %	S %	B %
REQUIRED		0.25~0.55	N/A	0.035 max	0.035 max	0.003 max
BOLT	824091142	0.33	0.84	0.013	0.004	0.0025
REQUIRED		0.58 max	0.25 min	0.060 max	0.150 max	N/A
NUT	J22407955	0.44	0.64	0.014	0.003	0
REQUIRED		N/A	N/A	N/A	N/A	N/A
WASHER	HA3154593	0.44	0.72	0.013	0.003	0

Mechanical Properties Tested to AS/NZS1252.1-2016 Table B1

BOLT			NUT		
TEST	REQUIREMENT	RESULT	TEST	REQUIREMENT	RESULT
Hardness	d <= 16mm 22~32 HRC d > 16mm 23~34 HRC	26-27	Hardness	24~36 HRC	29-30
Wedge Test 6 °	d <= 16mm 800MPa d > 16mm 830 MPa	941-950	Proof Stress (min)	1165 MPa	PASS
Yield	660 MPa	755-763	WASHER		
Proof Stress	d <= 16mm 580 MPa d > 16mm 600 MPa	PASS	Hardness	33~41 HRC	35-36

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 °	TENSION kN MINIMUM	SAMPLE No.	NUT ROTATION DEGREES	BOLT TENSION (kN)
161	3	4	Dry to touch	>7d<=11d	270	264	SAMPLE 1	275	302
							SAMPLE 2	277	303
							SAMPLE 3	279	301.5
							SAMPLE 4	280	299
							SAMPLE 5	278	298.5

Visual, Dimensions, Coating & Markings

VISUAL INSPECTION ISO 6157-1. 2.		DIMENSIONS AS/NZS1252-2016	COATING COMPLIES TO AS/NZS1214 REQUIREMENT 50 min		MARKINGS
PART			TYPE	Av µm	
BOLT	PASS	PASS	HDG	58	Bolt : BF 8.8 THREE RADIAL LINES A17
NUT	PASS	PASS	HDG	59	Nut : BF 8 THREE ARC LINES
WASHER	PASS	PASS	HDG	60	Washer : THREE NIBS

This certificate complies with AS/NZS1252.1-2016
The results relate only to the item tested

Name: Afshin Mohammadiazar Signature : 

Position: Quality Manager

TEST REPORT

TEST REPORT No: 56540-24200-824091142

DATE OF ISSUE: 15/01/2025

PRODUCT DETAILS

ITEM CODE	K08MG242001	DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 200
BOLT HEAT No.	824091142	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	J22407955	JOB No.	56540
WASHER HEAT No.	HA3154593	HEAD MARK	A17

BOLT

PROOF LOAD

TEST DATE: 1/03/2025

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 and ISO 6892-1				TEST TEMP °C
REQUIREMENTS	Minimum hold time 15 seconds - min proof load			212.00 kN	26
	PROOF LOAD (Kn)	INITIAL LENGTH (mm)	FINAL LENGTH (mm)	CHANGE (mm)	COMPLIANCE
SAMPLE 1	PASS	0.00	0.01	0.01	COMPLIES
SAMPLE 2	PASS	0.00	0.01	0.01	COMPLIES
SAMPLE 3	PASS	0.00	0.01	0.01	COMPLIES

WEDGE LOAD TENSILE TEST

TEST DATE: 1/03/2025

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	Wedge test ISO 898.1 and ISO 6892-1				26
	TENSILE STRENGTH Mpa (Rm)	ULTIMATE TENSILE LOAD Kn (Fm)	WEDGE ANGLE	FRACTURE LOCATION	COMPLIANCE
REQUIREMENTS	830 MIN	293 MIN	6	THREAD	
SAMPLE 1	946	334.00	6	THREAD	COMPLIES
SAMPLE 2	934	329.70	6	THREAD	COMPLIES
SAMPLE 3	958	338.00	6	THREAD	COMPLIES

HARDNESS

TEST DATE: 5/03/2025

DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 200- 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)	COMPLIANCE	SAMPLE	AVERAGE * HARDNESS (HRC)	COMPLIANCE
SAMPLE 1	29	COMPLIES	SAMPLE 5	28	COMPLIES
SAMPLE 2	27	COMPLIES	SAMPLE 6	30	COMPLIES
SAMPLE 3	28	COMPLIES	SAMPLE 7	29	COMPLIES
SAMPLE 4	29	COMPLIES	SAMPLE 8	27	COMPLIES

* Average of 3 measurements per sample



M5/M7 Logistics Park, Warehouse 4B,
290 Kurrajong Road, Prestons NSW 2170

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



TEST REPORT

TEST REPORT No: 56540-24200-824091142

DATE OF ISSUE: 15/01/2025

PRODUCT DETAILS

ITEM CODE	K08MG242001	DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 200
BOLT HEAT No.	824091142	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	J22407955	JOB No.	56540
WASHER HEAT No.	HA3154593	HEAD MARK	A17

NUT

PROOF LOAD

TEST DATE: 22/02/2025

DESCRIPTION	Proof load testing of Nut to SOP 22-09, AS/NZS 1252.1 and ISO 898.2		TEST TEMP °C
TEST METHOD	Proof load to ISO 898.2 and ISO 6892-1		26
REQUIREMENTS	Minimum hold time 15 seconds - Minimum proof load		411.20 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: 4/03/2025

DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 200- AS/NZS 1252-2016				
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)	COMPLIANCE	SAMPLE	AVERAGE * HARDNESS (HRC)	COMPLIANCE
SAMPLE 1	30	COMPLIES	SAMPLE 5	30	COMPLIES
SAMPLE 2	29	COMPLIES	SAMPLE 6	30	COMPLIES
SAMPLE 3	29	COMPLIES	SAMPLE 7	32	COMPLIES
SAMPLE 4	30	COMPLIES	SAMPLE 8	30	COMPLIES

* Average of 3 measurements per sample



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TEST REPORT

TEST REPORT No: 56540-24200-824091142

DATE OF ISSUE: 15/01/2025

PRODUCT DETAILS

ITEM CODE	K08MG242001	DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 200
BOLT HEAT No.	824091142	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	J22407955	JOB No.	56540
WASHER HEAT No.	HA3154593	HEAD MARK	A17

WASHER

HARDNESS

TEST DATE: 4/03/2025

DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 200- AS/NZS 1252-2016				
TEST METHOD	Rockwell Hardness test using scale "C" from 98N to 147N by the methods of ASTM E18				
REQUIREMENTS	33 - 41 HRC				
	AVERAGE * HARDNESS (HRC)	COMPLIANCE	SAMPLE	AVERAGE * HARDNESS (HRC)	COMPLIANCE
SAMPLE 1	33	COMPLIES	SAMPLE 5	33	COMPLIES
SAMPLE 2	33	COMPLIES	SAMPLE 6	33	COMPLIES
SAMPLE 3	34	COMPLIES	SAMPLE 7	34	COMPLIES
SAMPLE 4	34	COMPLIES	SAMPLE 8	33	COMPLIES

* Average of 3 measurements per sample

Signed:



Afshin Mohammadiazar

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



Issue Date:

15/01/2025

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



M5/M7 Logistics Park, Warehouse 4B, 290 Kurrajong Road, Prestons NSW 2170



中国认可
国际互认
检测
TESTING
CNAS L4800

Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

TEST REPORT

Report number: NBZJB202412165

Page 1 of 2

Receiving Date:	11, Dec., 2024
Test Date:	13, Dec., 2024~16, Dec., 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	M24x200 8.8 HDG	Number of Sample(s)	3 PCS
Dimension	M24x200	Class	Bolt class 8.8 Nut class 8
Part Number	K08MG242001	PO No	56540-S
TRACE No	/	Heat Treatment Lot number	/
(Steel) Heat number	B:824091142 N:J22407955		
The information above is provided by the client. Our laboratory is not responsible for its authenticity			



Approved by
Manager

[Signature]

Audit by
Engineer



Test by
Engineer

[Signature]



中国认可
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检测
TESTING
CNAS L4800

Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

TEST REPORT

Report number: NBZJB202412165


Page 2 of 2

NO.	Test Items	Test Method	Requirement	Test Results		Item Conclusion
1	Assembly test	EN 14399-2:2015	Bolt tension force ≥ 264 kN Nut rotation Degrees ≥ 270°	1A	295.7 kN 270°	Pass
				2A	301.5 kN 270°	Pass
				3A	302.3 kN 270°	Pass
	Equipment : Microcomputer controlled torsion tester; NBZJ/SB-Z-JC-110 WNJ-3000; Validity Of Calibration: 2025.05.16					



THE END



客户名称 Sold To		上海挚源商贸有限公司						产品名称 Product		热轧盘条 Hot rolled wire rods															
收货单位 Consignee		上海挚源商贸有限公司						提货编单号 Delivery no.		FB2411151011		证明书编号 Certificate no.		241115Q00703											
执行标准 Spec.		Q/320412 ZTG 5003-2024		牌号 Grade		10B33		加工用途 Purpose				客户编号 Customer no.		0201152		订单编号 Order no.		02411151298							
												客户采购案号 Cust Order No.				证明书日期 Issue Date		20241115							
生产许可证号 Approvalcerf No.				钢筋标识 Bar Mark						交货状态 Cond. Of Supply		热轧		车船号 Train/Ship No.		苏GA2712									
项次 Item No.	轧制序号 Lot No.	炉号 Heat No.	尺寸及规格Material Description			化学成分 % Chemical Analysis											*E09 总脱碳层深度	*O01 冷顶锻试验							
			产品尺寸 Product Size	数量 件 Qty	重量 t Weight	C	Si	Mn	P	S	Cr	Ni	Cu	Mo	Al	Ti									B
						X10 ⁻²	X10 ⁻²	X10 ⁻²	X10 ⁻³	X10 ⁻³	X10 ⁻²	X10 ⁻²	X10 ⁻²	X10 ⁻³	X10 ⁻³	X10 ⁻⁴									mm
规格 Specification			30 36	30 MAX	70 100	25 MAX	25 MAX	30 MAX	20 MAX	20 MAX	10 MAX	20 MIN	20 50	8 35	0.24 MAX										
001	K2408230013	824080262	Φ24mm	2	4.797	32	6	79	13	2	18	1	3	0	27	31	21	0.13	OK						
001	K2410130035	824091142	Φ24mm	12	28.053	33	4	84	13	4	18	2	2	0	29	35	25	0.12 / 0.14 0.14 /	OK OK OK OK OK						
			TOTAL:			14	32.85																		
注释 note		*O01=1/2; 外观、形状、尺寸和标识依据中间检查记录判定为合格 ACCORDING TO PROCESS INSPECTION RECORD,VISUAL INSPECTION(SURFACE&SHAPE) AND CHECK OF DIMENSION&MARK: OK 注：产品牌号以质量证明书为准																							
CE 0038		1、兹证明本表所列产品，均依材料规格制造及试验，并且符合规范之要求。11月、12月、1月、2月、3月时效12天，其它月份时效7天。It is to certify that the products described herein have been manufactured and tested with satisfactory results in accordance with the requirements of the material specification. The aging time should be 12 days during November, December, January, February and March , and 7 days during the other months. 2、品质证明书影本不作有效证明文件。The copy of this Certificate is invalid except stamped. 3、用户验收后使用，如有异议应详细告知其牌号，炉号，并保留实物及标志。Please inform us the steel grade and the heat number of under qualifiedmaterial(s) found in inspection on time, and keep the material(s) and the marking card.										质量管理处 GENERAL MANAGER, REASEARCH and DEVELOPMENT DEPARTMENT:						综合判定 Comprehensive judgment							
																		合格							



江苏沙钢集团有限公司
Jiangsu Shagang Group CO., LTD.

高速线材质量证明书

沙 钢

High-speed Wire Rod Quality Certificate

SG03B-1914E

江苏省张家港市锦丰镇 邮编: 215625
Jinfeng, Zhangjiagang, Jiangsu, P. R. CHINA
TEL: (0512) 58568866, 58568829
FAX: (0512) 58550366, 58550818

订货单位CUSTOMER	宁波办事处	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X35D0001Q022
牌号STEEL GRADE	SWRCH45K	提货单号DELIVERY	230614061002	发货日期DATE OF DELIVERY	20230616
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	2306140610 029349	3 签发日期DATE OF ISSUE	20230616
		用途USE		精炼方式REFINING MATHOD	炉外精炼

序号 NO	炉批号 HEAT NO.	直径 Dia. mm.	盘数 Coils	重量 kg	化学成分CHEMICAL COMPOSITION %										拉伸试验TENSILE TEST					顶锻 试验 H. T.	硬度 试验 HRB	脱碳层 D. of. D	晶粒度 Micro- Grade	索氏体 Sorbite %	备注 REMARKS
					C	Si	Mn	P	S	Cr	Ni	Cu	Al		Rm	ReL	A	A11.3	Z						
					2	2	2	3	3	2	2	2	3		MPa										
1= $\times 10^{-1}$ 2= $\times 10^{-2}$ 3= $\times 10^{-3}$ 4= $\times 10^{-4}$ 5= $\times 10^{-5}$																									
1	J22407955	24.0	2	4544	44	19	64	14	3	3	1	1	36		616 619	371 389			41.0 41.0	完好 1/2	86.00 87.00		8 8		
合计 Total			2	4544	说明 NOTES	本质量证明书适用于合金类线材;本产品不含有任何辐射元素。It is guaranteed that the products don't contain radiochemical impurities. *1. H. T.—Head-colding Test; *2 D. of D.—Depth of Decarburization;																			
综合判定 FINAL RESULT	合格 PASS	注意事项 ATTENTIVE ITEMS			1. 质量证明书复印件不作有效证明文件, 除非盖章; The copy of this Certificate is not valid except stamped. 2. 用户验货后使用如有异议应及时告知炉号、牌号, 并保留实物及标志。Please inform us the steel grade and the heat number of under quanlified material(s) found in inspection on time,and keep the material(s) and the marking card 3. 离扎丝组结处近端为轧制成品头部。The coil head is marked by the binding															质检印章 SEAL			签证人 VISA		

Made in China

CN-code 722790

We herewith confirm that no russian raw material was used



产品质量证明书

CERTIFICATE OF PRODUCT QUALITY




宁波钢铁有限公司
Ningbo Iron & Steel Co.,Ltd
中国 宁波市北仑区霞浦临港二路168号
No.168,Lingang 2 Road,Xiapu,Beilun District,Ningbo,China
TEL: 86-574-86859187 FAX: 86-574-86859900-1750

H0299

客户名称 SOLD TO	浙商中拓集团股份有限公司				产品名称 PRODUCT	热轧钢卷 Hot Rolled Coil			
收货人名称 SEND TO	浙商中拓集团股份有限公司				应收凭单号码 AR.NO.	AR2310007003	证明书编号 CERTIFICATE NO.	231031H0299	
标准 SPEC.	GB/T 711-2017; 45; 建议不露天储存				牌号 STEEL GRADE	客户编号 CUSTOMER NO.	00107531	订单编号 ORDER NO.	32N01222J
					45	交运日期 SHIPPING DATE	2023/10/31	证明书日期 T/C ISSUE DATE	2023/10/31
检验 INSP.	NINGBOSTEEL MILL INSPECTION			工厂许可证编号 WORKS APPROVAL LETTER NO.	客户采购案号 CUST. ORDER NO.		T/C	1/0	

项次 ITEM NO.	产品序号 SLAB NO.	钢卷编号 COIL NO.	熔炼号 HEAT NO.	尺寸及规格 MATERIAL DESCRIPTION					化学成分 CHEMICAL ANALYSIS %								拉伸试验 A01 G.L.=565S			备注 REMARK			
				厚度 THICK mm	宽度 WIDTH mm	长度 LENGTH mm	数量 QTY	重量 WEIGHT t	C	Si	Mn	P	S	Cr	Ni	Cu	屈服 YS	抗拉 TS Rm	伸长 率 EL A				
14	HA3154593	3A115067	N326467	4.00	1250	C	1	21.840	44	28	72	13	3	1	0	1		691	27.5				
				TOTAL: 1 21.840																			

SURVEYOR		注释 NOTES	A01 GAGE LENGTH 标距 Rm等同σb 565S: 5.65*SQRT(S) A 原始标距为5.65sqrt(S)的断后伸长率 化学成分: 熔炼分析
		兹证明本表所列产品, 均依材料规范制造及试验, 并且符合规范的要求。	
		WE HEREBY CERTIFY THAT MATERIAL DESCRIBED HEREIN HAS BEEN MANUFACTURED AND TESTED WITH SATISFACTORY IN ACCORDANCE WITH THE REQUIREMENT OF THE ABOVE MATERIAL SPECIFICATION.	
			

Made in China

CN-code 722830

We herewith confirm that no russian raw material was used

23105945