



Bremick Pty Ltd

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ATTESTATION OF PRODUCT CONFORMITY

TEST REPORT NUMBER: 56786-24280-D32412708X1

DATE OF ISSUE: 05/02/2025

CERTIFICATE NUMBER: 00120Q31689R6M/3302

Bremick Fasteners manufactured K0 8.8 STRUCTURAL ASSEMBLIES M24 x 280, job number 56786 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 280, job number 56786 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

A handwritten signature in black ink, appearing to read "Afshin Mohammadiazar".

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)

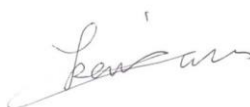
EN 14399-1:2015 High-strength Structural Bolting Assemblies for Preloading
– Part 1: General Requirements

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.

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.

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: 56786-24280-D32412708 DATE OF ISSUE: 05/02/2025 HEAD No: A23

Product Information

CODE	K08MG242801	JOB NUMBER	56786
DESCRIPTION	K0 8.8 STRUCTURAL ASSEMBLIES M24 x 280	MANUFACTURE LOT QTY	690
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	D32412708X1	0.35	0.72	0.008	0.007	0.0025
REQUIRED		0.58 max	0.25 min	0.060 max	0.150 max	N/A
NUT	G332004156	0.45	0.66	0.017	0.004	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	28-29	Hardness	24-36 HRC	30-31
Wedge Test 6 °	d <= 16mm 800MPa d > 16mm 830 MPa	959-968	Proof Stress (min)	1165 MPa	PASS
Yield	660 MPa	764-774	WASHER		
Proof Stress	d <= 16mm 580 MPa d > 16mm 600 MPa	PASS	Hardness	33-41 HRC	36-37

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)
/	/	/	Dry to touch	>7d<=11d	270	264	SAMPLE 1	275	299
							SAMPLE 2	277	300.5
							SAMPLE 3	279	300
							SAMPLE 4	276	301
							SAMPLE 5	278	298

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	67	Bolt : BF 8.8 THREE RADIAL LINES A23
NUT	PASS	PASS	HDG	68	Nut : BF 8 THREE ARC LINES
WASHER	PASS	PASS	HDG	69	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: 56786-24280-D32412708X1

DATE OF ISSUE: 5/02/2025

PRODUCT DETAILS

ITEM CODE	K08MG242801	DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 280
BOLT HEAT No.	D32412708X1	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	G332004156	JOB No.	56786
WASHER HEAT No.	HA3154593	HEAD MARK	A23

BOLT

PROOF LOAD

TEST DATE: 19/03/2025

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	278.04	278.05	0.00	COMPLIES
SAMPLE 2	PASS	278.26	278.27	0.00	COMPLIES
SAMPLE 3	PASS	278.45	278.45	0.00	COMPLIES

WEDGE LOAD TENSILE TEST

TEST DATE: 19/03/2025

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	940	332.00	6	THREAD	COMPLIES
SAMPLE 2	938	331.10	6	THREAD	COMPLIES
SAMPLE 3	925	326.60	6	THREAD	COMPLIES

HARDNESS

TEST DATE: 3/04/2025

DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 280- 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	30	COMPLIES	SAMPLE 5	30	COMPLIES
SAMPLE 2	30	COMPLIES	SAMPLE 6	29	COMPLIES
SAMPLE 3	31	COMPLIES	SAMPLE 7	29	COMPLIES
SAMPLE 4	30	COMPLIES	SAMPLE 8	28	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: 56786-24280-D32412708X1

DATE OF ISSUE: 5/02/2025

PRODUCT DETAILS

ITEM CODE	K08MG242801	DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 280
BOLT HEAT No.	D32412708X1	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	G332004156	JOB No.	56786
WASHER HEAT No.	HA3154593	HEAD MARK	A23

NUT

PROOF LOAD

TEST DATE: 20/03/2025

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		24
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: 3/03/2025

DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 280- 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	27	COMPLIES	SAMPLE 5	29	COMPLIES
SAMPLE 2	28	COMPLIES	SAMPLE 6	28	COMPLIES
SAMPLE 3	27	COMPLIES	SAMPLE 7	27	COMPLIES
SAMPLE 4	31	COMPLIES	SAMPLE 8	27	COMPLIES

* Average of 3 measurements per sample



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TEST REPORT

TEST REPORT No: 56786-24280-D32412708X1

DATE OF ISSUE: 5/02/2025

PRODUCT DETAILS

ITEM CODE	K08MG242801	DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 280
BOLT HEAT No.	D32412708X1	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	G332004156	JOB No.	56786
WASHER HEAT No.	HA3154593	HEAD MARK	A23

WASHER

HARDNESS

TEST DATE: 3/03/2025

DESCRIPTION	K0 8.8 STRUCT ASS GAL M24 X 280- 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	35	COMPLIES
SAMPLE 2	33	COMPLIES	SAMPLE 6	35	COMPLIES
SAMPLE 3	33	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:

5/02/2025

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



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

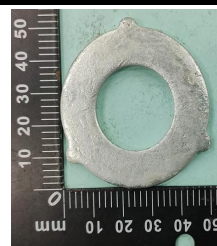
TEST REPORT

Report number: NBZJB202501135

Page 1 of 2

Receiving Date:	19, Jan., 2025
Test Date:	22, Jan., 2025~08, Feb., 2025
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	M24x280 8.8 HDG	Number of Sample(s)	3 PCS
Dimension	M24x280	Class	Bolt class 8.8 Nut class 8
Part Number	K08MG242801	PO No	56786-S
TRACE No	/	Heat Treatment Lot number	/
(Steel) Heat number	B:WB0124010007 N:22117502		
The information above is provided by the client. Our laboratory is not responsible for its authenticity			



Approved by
Manager

陈宏生

检验报告专用章
Reviewed by
Engineer

陈宏生

Test by
Engineer

范尚川



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: NBZJB202501135

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	292.7 kN 270°	Pass
				2A	297.0 kN 270°	Pass
				3A	294.0 kN 270°	Pass
	Equipment : Preload torque, Angle, axial force testing machine; NBZJ/SB-Z-JC-141 TCH-5000; Validity Of Calibration: 2025.5.16					





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	2	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= $\times 10^{-5}$																				
7	G332004156	24.0	22	49837	45	20	66	17	4	3	1	2	34		633	389			42.0	1/2	88.00		8		
															635	400			34.0	完好	89.00		9		
															639	404			40.0	1/2	89.00		9		
8	G332004156	24.0	9	20413	45	20	66	17	4	3	1	2	34		635	400			34.0	完好	89.00		9		
															639	404			40.0	1/2	89.00		9		
9	G332004156	24.0	5	11325	45	20	66	17	4	3	1	2	34		635	400			34.0	完好	89.00		9		
															639	404			40.0	1/2	89.00		9		
10	G332004156	24.0	22	49739	45	20	66	17	4	3	1	2	34		635	400			34.0	完好	89.00		9		
															639	404			40.0	1/2	89.00		9		
11	G332004156	24.0	4	9079	45	20	66	17	4	3	1	2	34		635	400			34.0	完好	89.00		9		
															639	404			40.0	1/2	89.00		9		
合 计 Total			62	140393	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 qualified 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																				签证人 VISA 





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.	

