

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

TEST REPORT NUMBER: 55818-16045-24D03952 **DATE OF ISSUE:** 08/04/2025

ATTESTATION OF PRODUCT CONFORMITY

CERTIFICATE NUMBER: 00120Q31689R6M/3302

Bremick Fasteners manufactured K0 8.8 STRUCTURAL ASSEMBLIES M16 x 45, job number 55818 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 M16 x 45, job number 55818 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.

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Certificate of Conformity of Factory Production Control No: 0343/CPR/0038/CPR/SHA/BJG00000073/ASchedule

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

0343 **LRQA Notified Body Number**

Alfred Yao on behalf of LRQA Nederland B.V.

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LRQA NL BV CPR Certificate Template Rev 0 2024-01

Structural Assembly K0 Range



TEST REPORT No: 55818-16045-24D03952 DATE OF ISSUE: 21/02/2025 HEAD No:

Product Information

CODE	K08MG160451	JOB NUMBER	55818
DESCRIPTION	K0 8.8 STRUCTURAL ASSEMBLIES M16 x 45	MANUFACTURE LOT QTY	4200
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	24D03952	0.42	0.73	0.018	0.006	0.0004
REQUIRED		0.58 max	0.25 min	0.060 max	0.150 max	N/A
NUT	B2-2404034-0	0.44	0.75	0.013	0.006	0.0003
REQUIRED		N/A	N/A	N/A	N/A	N/A
WASHER	23912748	0.42	0.73	0.018	0.006	0.0004

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	27.3-28.2
Wedge Test 6º	d <= 16mm 800MPa d > 16mm 830 MPa	924
Yield	640 MPa	808
Proof Stress	d <= 16mm 580 MPa d > 16mm 600 MPa	PASS

NUT						
TEST	REQUIREMENT	RESULT				
Hardness	24~36 HRC	27.5-28.7				
Proof Stress (min)	1165 MPa	PASS				
WASHER						
Hardness	33~41 HRC	33.6-34.5				

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 º	TENSION kn Minimum	SAMPLE No.	NUT ROTATION DEGREES	BOLT TENSION (kN)
20	1	3	Dry to touch	45.2-45.9	210	134	SAMPLE 1	>210	139
							SAMPLE 2	>210	141
							SAMPLE 3	>210	140
	·						SAMPLE 4	>210	144
	·						SAMPLE 5	>210	145

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 51.2-52.7					
HDG 51.4-53.3					
HDG 51.1-53.5					

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: 55818-16045-24D03952 DATE OF ISSUE: 21/02/2025

PRODUCT DETAILS

ITEM CODE	K08MG160451	DESCRIPTION	K0 8.8 STRUCT ASS GAL M16 X 45
BOLT HEAT No.	24D03952	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	B2-2404034-0	JOB No.	55818
WASHER HEAT No.	23912748	HEAD MARK	

BOLT

PROOF LOAD TEST DATE: 2/04/2025

DESCRIPTION	Proof load testing of clas	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 a	and ISO 6892-1			TEST TEMP ° C			
REQUIREMENTS	Minimum hold time 15 se	Minimum hold time 15 seconds - min proof load 94.50 kN						
	PROOF LOAD (Kn)							
SAMPLE 1	PASS	43.94	43.95	0.01	COMPLIES			
SAMPLE 2	PASS	44.31	44.32	0.00	COMPLIES			
SAMPLE 3	PASS	44.13	44.14	0.01	COMPLIES			

WEDGE LOAD TENSILE TEST TEST DATE: 2/04/2025

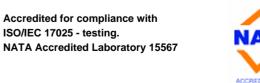
DESCRIPTION	Wedge test of class 8.8 E	TEST TEMP ° C			
TEST METHOD	Wedge test ISO 898.1 and	24			
	TENSILE STRENGTH Mpa (Rm)	COMPLIANCE			
REQUIREMENTS	800 MIN	130 MIN	6	THREAD	
SAMPLE 1	890	139.80	6	THREAD	COMPLIES
SAMPLE 2	894	140.40	6	THREAD	COMPLIES
SAMPLE 3	909	142.70	6	THREAD	COMPLIES

HARDNESS TEST DATE: 3/04/2025

DESCRIPTION	K0 8.8 STRUCT ASS GAL	K0 8.8 STRUCT ASS GAL M16 X 45- AS/NZS 1252-2016												
TEST METHOD	Rockwell Hardness test u	Rockwell Hardness test using scale "C" from 98N to 147N by the methods of ASTM E18												
REQUIREMENTS	d <= 16mm 22-32 HRC - d	d > 16mm 23-34 HRC												
	AVERAGE * HARDNESS (HRC)	COMPLIANCE	SAMPLE	AVERAGE * HARDNESS (HRC)	COMPLIANCE									
SAMPLE 1	28	COMPLIES	SAMPLE 5	29	COMPLIES									
SAMPLE 2	28	COMPLIES	SAMPLE 6	30	COMPLIES									
SAMPLE 3	27	COMPLIES	SAMPLE 7	28	COMPLIES									
SAMPLE 4	28	COMPLIES	SAMPLE 8	27	COMPLIES									

^{*} Average of 3 measurements per sample







TEST REPORT

TEST REPORT No: 55818-16045-24D03952 DATE OF ISSUE: 21/02/2025

PRODUCT DETAILS

ITEM CODE	K08MG160451	DESCRIPTION	K0 8.8 STRUCT ASS GAL M16 X 45
BOLT HEAT No.	24D03952	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	B2-2404034-0	JOB No.	55818
WASHER HEAT No.	23912748	HEAD MARK	

NUT

PROOF LOAD TEST DATE: 1/04/2025

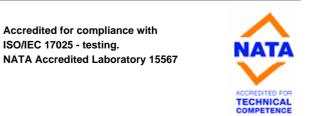
DESCRIPTION	Tree read teeting of read to the Paris Teeting and the teeting											
TEST METHOD Proof load to ISO 898.2 and ISO 6892-1												
REQUIREMENTS	Minimum hold time 15 seconds - Minimum proof loa	d	182.90 kN									
	PROOF LOAD (Kn)	NUT REMOVED BY FINGER	COMPLIANCE									
SAMPLE 1	PASS	YES	COMPLIES									
SAMPLE 2	PASS	YES	COMPLIES									
SAMPLE 3	PASS	YES	COMPLIES									

HARDNESS TEST DATE: 3/04/2025

DESCRIPTION	K0 8.8 STRUCT ASS GAI	K0 8.8 STRUCT ASS GAL M16 X 45- AS/NZS 1252-2016													
TEST METHOD	Rockwell Hardness test	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	27	COMPLIES										
SAMPLE 2	29	COMPLIES	SAMPLE 6	27	COMPLIES										
SAMPLE 3	28	COMPLIES	SAMPLE 7	27	COMPLIES										
SAMPLE 4	27	COMPLIES	SAMPLE 8	27	COMPLIES										

^{*} Average of 3 measurements per sample





TEST REPORT

TEST REPORT No: 55818-16045-24D03952 DATE OF ISSUE: 21/02/2025

PRODUCT DETAILS

ITEM CODE	K08MG160451	DESCRIPTION	K0 8.8 STRUCT ASS GAL M16 X 45
BOLT HEAT No.	24D03952	MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	B2-2404034-0	JOB No.	55818
WASHER HEAT No.	23912748	HEAD MARK	

WASHER

HARDNESS TEST DATE: 3/04/2025

DESCRIPTION	K0 8.8 STRUCT ASS GAL	M46 V 45 A C/N/7C 4252	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	35	COMPLIES	SAMPLE 5	36	COMPLIES							
SAMPLE 2	37	COMPLIES	SAMPLE 6	36	COMPLIES							
SAMPLE 3	35	COMPLIES	SAMPLE 7	37	COMPLIES							
SAMPLE 4	35	COMPLIES	SAMPLE 8	35	COMPLIES							

^{*} Average of 3 measurements per sample

Signed:

Afshin Mohammadiazar

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

Issue Date:

21/02/2025

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









Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

TEST REPORT

Report number:	NBZJB202412179	Page 1 of 2
Receiving Date:	11, Dec., 2024	
Test Date:	12, Dec., 2024~12, 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	K0 8.8 STRUCT ASS GAL M16 X 45	Number of Sample(s)	3 PCS
Dimension	M16 X 45	Class	Bolt class 8.8 Nut class 8
Part Number	K08MG160451	PO No	55818
TRACE No	/	Heat Treatment Lot number	/
(Steel) Heat number	B:240	003952 N:B2-2404034	-0

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







Approved by Manager Reviewed by

Test by







Ningbo Zhongji Inspection of Machinery Parts Co.,Ltd

TEST REPORT

Report number: Page 2 of 2 NBZJB202412179 Item NO. Test Items Test Results Test Method Requirement Conclusion 140.2 kN Bolt tension force 1A Pass 210° ≥ 117 kN 139.8 kN Assembly test EN 14399-2:2015 Nut rotation 2A Pass 210° Degrees 1 137.1 kN ЗА ≥ 210° **Pass** 210°

Equipment: Microcomputer controlled torsion tester; NBZJ/SB-Z-JC-110 WNJ-3000;

Validity Of Calibration: 2025.5.16





芜湖新兴铸管有限责任公司 产品质量证明书

NO.

20240531200231

地址: 芜湖市三山区春洲路2号

收货单位Purchaser

宁波日高金属精线材料有限公司

产品名称Name

冷镦冷挤压用钢热轧盘条

牌号Steel Grade

ML40Cr

技术标准Specification

Q/340208WHXX03-2020

车号Wagon No

4887474

发货日期Date of issuance

2024-05-31

交货状态Delivery status 热轧

尺寸规格Size specifications @ 16mm

	I	, DCTTV	Cry Status	1/17 +L					で可规格Siz	e specificat	ions Φ16mm				3.55 种 34	
序 号 No.	批号 Batch n		炉号 Heat number	件数 Number	重量 Weight (t)	长度 Length	下屈服的 Yeld Stre MPa	虽度 ngth	抗拉强度 Tensile Strength MPa	断后伸长率 Percentage of elongation A %	率	1/2顶锻结 果 hot_upset1/ 2	生产日期 Production Date	尺寸外形和 表面质量 Dimensions and surface quality		7.00
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2	-															
3									v							
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3														17550.	-	811

总件数: 27

运输计划号: WS2024060052405003

制单人: 许鹏飞 审核人:徐琨

产品质量证明书内



常熟市龙腾特种钢有限公司 CHANGSHU LONGTENG SPECIAL STEEL CO., LTD

产品质量证明书

MILL TEST CERTIFICATE

订货单位:宁波富林金属材料有限公司(高线)

Purchaser:

产品名称: 热轧圆盘条

产品执行标准:LTZ2408-2023-9

Product Name:

Dimensional Standard:

质保书编号: T24110200098

Cartificate No.

日期:2024年11月02日

1	OCT HOLE																	Date:									
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1	02405041	11 B1	-2405316	45%	. 024	7	15.	351	0.45	0. 22	0.66	0,018	0.005	0, 10	0.01	0.02	0,005	0.002	0.002	0, 001	0.0016	0. 0013	0.0002				
2	6240504	12 82	2404034-0	494	©24	28	61.	848	0.46	0. 22	0.67	0.018	0.007	0. 10	0.01	0.03	0.006	0.002	0.002	0.001	0.0019	0.0019	0.0003	1	1	1	+
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南京钢铁股份有限公司 NanJing Iron&Steel Co., Ltd.

质量证明书

MILL TEST CERTIFICATE

苏州友尼可紧固件有限公司

钢号: Steel Grade

产品名称:

优质碳素结构钢

Product

Quality Carbon Structural Steels

交货状态:

技术条件:

Condition As-rolled

Q/320116 NJGT 402-2022 : N45DP

SPEC.

买方名称:

Buyer 客户编号: Buyer No.

JS4343

合同编号: Condition 证明书编号:

230826H00475 Certficate No.

订单号: ORDER NO. 0S423080033

发货通知单号: Reference No.

FS42308250005

许可证号: License. No.

轧制序号 LOT NO.	炉号 HEAT NO.	规格长度 SIZE	件数 BUNDLES	重量 WEIGHT	化学 成分 ANALYSIS	С	Si	Mn	Р	S	Cu	Ni	Cr							
		men		t		%	%	%	%	%	%	%	%							
L30563801	23912748	3.15*190*Coil	7	35. 536	熔炼	0.42	0. 25	0, 73	0. 018	0.006	0.02	0.02	0.04							
		;																		

轧制序号	便度试验 便度试验 Hardness	
LOT NO.		
	HBW	
L30563801	206	
	207	
Commission of the same		

说明

硬度=布氏硬度HBW10/3000

Remarks

1、兹证明本文所列产品,均依材料标准制造及试验,并符合标准及订单技术要求,不含有辐射性。

We hereby certify that the products in this MTC are manufactured and tested in accordance with the specification, meet the standards and technical requirement

contain radiation elements.

签发日期 Issue Date: 2023/08/26

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

质量记录编号: JL100508/C

质量负责人 Principal: 李强