

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:** 54549-16K08-G232011568**DATE OF ISSUE:** 29/10/2024**CERTIFICATE NUMBER:** 00120Q31689R6M/3302

Bremick Fasteners manufactured K0 CL.8 STRUCTURAL NUTS M16, job number 54549 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 CL.8 STRUCTURAL NUTS M16, job number 54549 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

Structural Assembly K0 Range

TEST REPORT No:54549-16K08-G232011568

DATE OF ISSUE:29/10/2024

HEAD No:

Product Information

CODE	NSTMG16K082	JOB NUMBER	54549
DESCRIPTION	K0 CL.8 STRUCT NUT GAL M16	MANUFACTURE LOT QTY	20250
STANDARD	AS 1252.1-2016	TEST QTY	0
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		N/A	N/A	N/A	N/A	N/A
BOLT	N/A	N/A	N/A	N/A	N/A	N/A
REQUIRED		0.58 max	0.25 min	0.060 max	0.150 max	N/A
NUT	G232011568	0.45	0.62	0.013	0.004	0.0005
REQUIRED		N/A	N/A	N/A	N/A	N/A
WASHER	N/A	N/A	N/A	N/A	N/A	N/A

Mechanical Properties

Tested to AS/NZS1252.1-2016 Table B1

BOLT			NUT		
TEST	REQUIREMENT	RESULT	TEST	REQUIREMENT	RESULT
Hardness	N/A	N/A	Hardness	24~36 HRC	27.5-28.7
Wedge Test	N/A	N/A	Proof Stress (min)	1165 MPa	PASS
Yield	N/A	N/A	WASHER		
Proof Stress	N/A	N/A	Hardness	N/A	N/A

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)
N/A	N/A	N/A	N/A	N/A			SAMPLE 1	N/A	N/A
							SAMPLE 2	N/A	N/A
							SAMPLE 3	N/A	N/A
							SAMPLE 4	N/A	N/A
							SAMPLE 5	N/A	N/A

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	N/A	N/A	HDG	N/A	N/A
NUT	PASS	PASS	HDG	52.3-53.4	Nut : BF 8 THREE ARC LINES
WASHER	N/A	N/A	HDG	N/A	N/A

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: 54549-16K08-G232011568

DATE OF ISSUE: 14/10/2024

PRODUCT DETAILS

ITEM CODE	NSTMG16K082	DESCRIPTION	K0 CL.8 STRUCT NUT GAL M16
BOLT HEAT No.		MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.	G232011568	JOB No.	54549
WASHER HEAT No.		HEAD MARK	

NUT

PROOF LOAD

TEST DATE: 17/09/2024

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		18
REQUIREMENTS	Minimum hold time 15 seconds - Minimum proof load		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: 30/09/2024

DESCRIPTION	K0 CL.8 STRUCT NUT GAL M16- 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	28	COMPLIES
SAMPLE 2	28	COMPLIES	SAMPLE 6	28	COMPLIES
SAMPLE 3	27	COMPLIES	SAMPLE 7	28	COMPLIES
SAMPLE 4	28	COMPLIES	SAMPLE 8	28	COMPLIES

* Average of 5 measurements per sample

Signed:



Afshin Mohammadiazar

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



Issue Date:

14/10/2024

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



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	宁波富林金属材料有限公司	用户代码CUSTOMER CODE		合同号CONTRACT NO.	X2CA0024Q008	
牌号STEEL GRADE	SWRCH45K	提货单号DELIVERY	KMD489	发货日期DATE OF DELIVERY	20221218	
交 货 标 准 SPECIFICATION	Q/320582 SGY303-2018	质证书号CERTIFICATE NO.	KMD4892561	1	签发日期DATE OF ISSUE	20221218
		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					顶端 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	G232011244	20.0	20	44853	45	21	62	14	4	3	3	5	24		637	372			30.0	完好	85.8		9				
															651	384			32.0		87.5		9				
2	G232011369	22.0	16	35586	44	22	64	14	4	3	3	5	24		625	359			32.0	完好	86.4		8				
															626	372			34.0		88.6		8				
3	G232011568	24.0	20	44982	45	22	62	13	4	3	3	6	26		633	368			34.0	完好	86.2		9				
															636	374			36.0		88.4		9				
合计 Total			56	125421	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	

