



**Bremick Pty Ltd**

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**ATTESTATION OF PRODUCT CONFORMITY**

**TEST REPORT NUMBER:** 57054-1600W-H23030268

**DATE OF ISSUE:** 30/01/2025

**CERTIFICATE NUMBER:** 00120Q31689R6M/3302

Bremick Fasteners manufactured K0 STRUCTURAL FLAT WASHERS M16, job number 57054 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 STRUCTURAL FLAT WASHERS M16, job number 57054 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: 57054-1600W-H23030268      DATE OF ISSUE: 30/01/2025      HEAD No:

Product Information

CODE	WK0MG1600W2	JOB NUMBER	57054
DESCRIPTION	K0 STRUCT WASHERS GAL M16	MANUFACTURE LOT QTY	38400
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		N/A	N/A	N/A	N/A	N/A
NUT	N/A	N/A	N/A	N/A	N/A	N/A
REQUIRED		N/A	N/A	N/A	N/A	N/A
WASHER	H23030268	0.46	0.58	0.021	0.002	0

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

BOLT			NUT		
TEST	REQUIREMENT	RESULT	TEST	REQUIREMENT	RESULT
Hardness	N/A	N/A	Hardness	N/A	N/A
Wedge Test	N/A	N/A	Proof Stress (min)	N/A	N/A
Yield	N/A	N/A	WASHER		
Proof Stress	N/A	N/A	Hardness	33~41 HRC	37-38

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	N/A	N/A	HDG	N/A	N/A
WASHER	PASS	PASS	HDG	67	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: 57054-1600W-H23030268

DATE OF ISSUE: 30/01/2025

## PRODUCT DETAILS

ITEM CODE	WK0MG1600W2	DESCRIPTION	K0 STRUCT WASHERS GAL M16
BOLT HEAT No.		MATERIAL STANDARD	AS/NZS 1252-2016
NUT HEAT No.		JOB No.	57054
WASHER HEAT No.	H23030268	HEAD MARK	

## WASHER

### HARDNESS

TEST DATE: 29/03/2025

DESCRIPTION	K0 STRUCT WASHERS 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	33 - 41 HRC				
	AVERAGE * HARDNESS (HRC)	COMPLIANCE	SAMPLE	AVERAGE * HARDNESS (HRC)	COMPLIANCE
SAMPLE 1	36	COMPLIES	SAMPLE 5	36	COMPLIES
SAMPLE 2	35	COMPLIES	SAMPLE 6	33	COMPLIES
SAMPLE 3	37	COMPLIES	SAMPLE 7	34	COMPLIES
SAMPLE 4	36	COMPLIES	SAMPLE 8	36	COMPLIES

\* Average of 3 measurements per sample

Signed:

  
Afshin Mohammadiazar

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



Issue Date: 30/01/2025

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





浙江元立金属制品集团有限公司  
ZHEJIANG YUANLI METAL PRODUCT GROUP CO.,LTD  
产品质量证明书  
Product Quality Certificate

浙江. 遂昌. 上江工业园区  
ShangJiang Industrial Park, SuiChang, Zhejiang, P.R.CHINA  
TEL: (0578) 8185935 邮编: 323300  
FAX: (0578) 8195050 POST CODE: 323300  
浙KK7910

订货单位 Purchaser	杭州宇健特殊钢有限公司	钢号 Steel Grade	45#	出库单号 Delivery NO.	230416012, 230416013
执行标准 Standard	GB/T8749-2021	总重量 Total WEIGHT	37.16	质保书号 Certification	11002821-1
产品名称 Product Name	优质带钢	交货状态 Delivery Condition	热轧	签发日期 Date of Delivery	2023-04-16

序号 NO	炉批号 Heet NO.	规格 (mm) SIZE	件数 QTY	钢号 Steel Grade	化学成份 Chemical Composition %												碳化物		
					C	Si	Mn	P	S	Cr	Ni	Mo	Cu	Ti	AL	V	网状	带状	液析
1	H23030268	190*4.1	1	45#	0.46	0.23	0.58	0.021	0.002	0.044	0.017	0.005	0.036						
2	H23040422	170*3.0	20	45#	0.44	0.22	0.58	0.017	0.005	0.041	0.013	0.004	0.026						
3																			
4																			
5																			
6																			
7																			

序号 NO	物理性能Physical Capability						顶锻 Upsetting		显微组织 Microstructure		非金属夹杂物(级)Non Metallic inclusion								冷弯 180°
											A类		B类		C类		D类		
	Rel/Rp0.2 (Mpa)	Rm (Mpa)	A(%)	Z(%)	Akv (J)	热轧硬 度	热	冷	晶粒度 (级)	脱碳层 (mm)	粗系	细系	粗系	细系	粗系	细系	粗系	细系	
1	471	705	22.5			92.0				0.072									
2	477	750	20.0			92.0				0.072									
3																			
4																			
5																			
6																			
7																			

总计 [Total] 21 件

说明	1.材料的表面质量和外形尺寸均合格, 酸浸低倍组织中白点、宏观夹杂等标准规定不允许有的缺陷, 均保证符合标准出。Dimensions and surfaces are qualified. No defect in the macrostructure of steels. Hereby certify that all is in accordance with relevant standard. 2.有异议时, 来函请标明钢号、炉号、规格、发货单号、原因, 提供质量证明书并将实物保管好。If there is any objection, please provide, Steel grade, Heet NO, dimension, Delivery NO., reasons and quality certificate. Please keep the products original. 3.建议按生产日期15天后使用 Please use after 15 days of the production date.	质检印章 SEAL	签证人 VISA 李秉伟
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