



**GEM-YEAR TESTING LABORATORY  
CERTIFICATE OF INSPECTION**

MANUFACTURER: GEM-YEAR INDUSTRIAL CO., LTD.

TEL: (0573) 84185001 (48Lines)

ADDRESS: NO.8GEM-YEAR  
ROAD,E.D.Z.JIASHAN,ZHEJIANG,P.R.CHINA

FAX: (0573) 84184488 84184567

PURCHASER: MAPTCO FASTENERS (AUST) PTY LTD

DATE: 2020/10/27

PO. NUMBER: MAP-2025M

PACKING NO: GEM200927003

COMMODITY: AS1252 FLAT ROUND WASHERS --

INVOICE NO: GEM/MAP-201026MEL

SIZE: M16

PART NO: G032

LOT NO: 1F2070062(1A20A05821)

SAMPLING PLAN:

ASME B18.18-2017/ASTM F1470-2018

SHIP QUANTITY: 2,400 PCS

HEAT NO: 20700585

HEADMARKS:

MATERIAL: 45A

COUNTRY OF ORIGIN: CHINA

FINISH: H. T. HOT DIP GAL PER ASTM  
A153/ASTM F2329

**PERCENTAGE COMPOSITION OF CHEMESTRY: TEST FACILITY :S**

Chemistry	C%	Cr%	Cu%	Mn%	Ni%	P%	S%	Si%
Spec.:MIN.	0.4200			0.5000				0.1700
MAX.	0.5000	0.2500	0.2500	0.8000	0.3000	0.0350	0.0350	0.3700
Test Value	0.4700	0.0600	0.0100	0.6100	0.0300	0.0120	0.0040	0.2200

**DIMENSIONAL INSPECTIONS: ACCORDING TO AS1252-1983 TEST FACILITY : M**

SAMPLED BY: ZHANGHUIJIN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
WASHER INSIDE DIAMETER	5 PCS	JB/T 9151		18.0000-18.4300 MM	18.0900-18.2900 MM	5	0
WASHER THICKNESS	5 PCS	JB/T 9151		3.1000-4.6000 MM	3.2600-3.4900 MM	5	0
SURFACE DISCONTINUITIES	29 PCS	IS06157.3			PASSED	29	0
WASHER OUTSIDE DIAMETER	5 PCS	JB/T 9151		32.4000-34.0000 MM	32.7900-33.0600 MM	5	0

**MECHANICAL PROPERTIES: ACCORDING TO AS1252-1996 TEST FACILITY : M**

SAMPLED BY: NIESUYING

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
CORE HARDNESS	15 PCS	IS0898.1		26-45 HRC	41-42 HRC	15	0
PLATING THICKNESS( μm)	20 PCS	ASTM B568		>=53	69.26-79.7	20	0

ALL TESTS ARE IN ACCORDANCE WITH THE METHODS PRESCRIBED IN THE APPLICABLE ASTM/SAE/ASME. SPECIFICATION. WE CERTIFY THAT THIS DATA IS A TRUE REPRESENTATION OF INFORMATION PROVIDED BY THE MATERIAL SUPPLIER AND OUR TESTING LABORATORY.

THE REPORT IS ISSUED ACCORDING TO ISO16228 F3.1(EN10204 3.1)

TYPE M: MANUFACTURER

TYPE S: SUPPLIER(STEEL MILL,PLATING SUB SUPPLIER,HEAT TREATMENT SUB SUPPLIER ETC.,)

WE CERTIFY THE PARTS ARE ROHS COMPLIANT.

SIGNATURE: