



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

MANUFACTURER: GEM-YEAR INDUSTRIAL CO., LTD.

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

FAX: (0573) 84184488 84184567

PURCHASER: MAPTCO FASTENERS (AUST) PTY LTD

DATE: 2020/07/07

PO. NUMBER: MAP-2014F

PACKING NO: GEM200521014

COMMODITY: AS1252 FLAT ROUND WASHERS --

INVOICE NO: GEM/MAP-200708 FRE

SIZE: M24

PART NO: G098

LOT NO: 1F2060229(1A20613851)

SAMPLING PLAN:

ASME B18.18-2017/ASTM F1470-2018

SHIP QUANTITY: 600 PCS

HEAT NO: 20603484

HEADMARKS:

MATERIAL: 45A

COUNTRY OF ORIGIN: CHINA

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

PERCENTAGE COMPOSITION OF CHEMISTRY: 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	0.4400	0.0700	0.0300	0.6000	0.0300	0.0080	0.0050	0.2400

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

SAMPLED BY: ZHANGHUIJIN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
WASHER OUTSIDE DIAMETER	3 PCS	JB/T 9151		48.4000-50.0000 MM	48.8900-49.1600 MM	3	0
SURFACE DISCONTINUITIES	15 PCS	IS06157.3			PASSED	15	0
WASHER THICKNESS	3 PCS	JB/T 9151		3.4000-4.6000 MM	3.5600-3.7800 MM	3	0
WASHER INSIDE DIAMETER	3 PCS	JB/T 9151		26.0000-26.5200 MM	26.1100-26.2900 MM	3	0

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

SAMPLED BY: WANGXIAOLAN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
CORE HARDNESS	11 PCS	IS0898.1		26-45 HRC	38-42 HRC	11	0
PLATING THICKNESS(μm)	5 PCS	ASTM B568		>=53	61.11-92	5	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: