



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

MANUFACTURER: GEM-YEAR INDUSTRIAL CO., LTD.

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

PURCHASER: MAPTCO FASTENERS (AUST) PTY LTD

PO. NUMBER: MAP-2014F

COMMODITY: AS1252 FLAT ROUND WASHERS --

SIZE: M24

LOT NO: 1F2060225(1A20900711)

SHIP QUANTITY: 875 PCS

HEADMARKS:

COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)

FAX: (0573) 84184488 84184567

DATE: 2020/09/09

PACKING NO: GEM200824007

INVOICE NO: GEM/MAP-200911FRE

PART NO: G087

SAMPLING PLAN:

ASME B18.18-2017/ASTM F1470-2018

HEAT NO: 20603484

MATERIAL: 45A

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	48.8900-49.2600 MM	3	0
SURFACE DISCONTINUITIES	18 PCS	IS06157.3			PASSED	18	0
WASHER THICKNESS	3 PCS	JB/T 9151		3.4000-4.6000 MM	3.6500-3.9500 MM	3	0
WASHER INSIDE DIAMETER	3 PCS	JB/T 9151		26.0000-26.5200 MM	26.1130-26.4900 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	13 PCS	IS0898.1		26-45 HRC	39.5-42.5 HRC	13	0
PLATING THICKNESS( μm)	8 PCS	ASTM B568		>=53	58.89-87.12	8	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: