



GEM-YEAR TESTING LABORATORY

CERTIFICATE OF INSPECTION

MANUFACTURER : GEM-YEAR INDUSTRIAL CO., LTD.
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ROAD, E.D.Z., JIASHAN, ZHEJIANG, P.R. CHINA

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DATE : 2019/12/17

PURCHASER : MAPTCO FASTENERS (AUST) PTY LTD
PO. NUMBER : MAP-1938M
COMMODITY : AS1252 FLAT WASHER INNER DAI CHANGE --
SIZE : M20 ID:21.25
LOT NO : 1E19BF012 (1A2019C0161)
SHIP QUANTITY : 50,300 PCS
HEADMARKS :

PACKING NO : GEM191031002
INVOICE NO : GEM/MAP-191216MEL
PART NO : G049
SAMPLING PLAN :
ASME B18.18-2017/ASTM F1470-2018
HEAT NO : 19608822
MATERIAL : 45

COUNTRY OF ORIGIN : CHINA

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

PERCENTAGE COMPOSITION OF CHEMISTRY : TEST FACILITY : S

Chemistry	C%	Mn%	Ni%	P%	S%	Si%
Spec. : MIN.	0.4200	0.5000				0.1700
MAX.	0.5000	0.8000	0.3000	0.0350	0.0350	0.3700
Test Value	0.4900	0.6200	0.0100	0.0110	0.0150	0.2600

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

SAMPLED BY : ZHANG HUI JING

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC.	REJ.
WASHER OUTSIDE DIAMETER	5 PCS	JB/T 9151		37.4000-39.0000 MM	37.9400-38.2300 MM	5	0
WASHER INSIDE DIAMETER	5 PCS	JB/T 9151		20.9500-21.2500 MM	21.0300-21.0800 MM	5	0
WASHER THICKNESS	5 PCS	JB/T 9151		3.1000-4.6000 MM	3.9900-4.1800 MM	5	0
SURFACE DISCONTINUITIES	29 PCS	ISO6157.3			PASSED	29	0

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

SAMPLED BY : TANGHAO

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC.	REJ.
AFTER HOT DIP GALVANIZING	15 PCS	ISO898.1		26-45 HRC	34.3-36.9 HRC	15	0
PLATING THICKNESS (μ m)	29 PCS	ASTM B568		>=53	53.72-59.64	29	0

ALL TESTS ARE IN ACCORDANCE WITH THE METHODS PRESCRIBED IN THE APPLICABLE ASTM/SAE/ASME/MIL-STD-120 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.,)

SIGNATURE : _____