



**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

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PURCHASER: MAPTCO FASTENERS (AUST) PTY LTD

DATE: 2020/08/24

PO. NUMBER: MAP-2022M

PACKING NO: GEM200804003

COMMODITY: ISO 4014 HEX HEAD BOLT HALF THREAD CL 8.8

INVOICE NO: GEM/MAP-200824MEL

SIZE: M12-1.75X220

PART NO: A3649

LOT NO: 1B2060279

SAMPLING PLAN:

ASME B18.18-2017/ASTM F1470-2018

SHIP QUANTITY: 2,320 PCS

HEAT NO: 20302394

HEADMARKS: GENIUS SYMBOL & 8.8

MATERIAL: 35ACR

COUNTRY OF ORIGIN: CHINA

FINISH: H. T. PLAIN

PERCENTAGE COMPOSITION OF CHEMISTRY: TEST FACILITY :S

Chemistry	Al%	C%	Cr%	Mn%	P%	S%	Si%
Spec.:MIN.	0.0100	0.3500	0.2000	0.6000			
MAX.		0.3900	0.4000	0.9000	0.0250	0.0250	0.1000
Test Value	0.0340	0.3700	0.2900	0.7900	0.0180	0.0020	0.0500

DIMENSIONAL INSPECTIONS: ACCORDING TO ISO4014-2011

TEST FACILITY : M

SAMPLED BY: HANFANGRONG

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
NOMINAL LENGTH	15 PCS	JB/T 9151		219.0000-221.0000 MM	220.5600-220.9000 MM	15	0
MAJOR DIAMETER	4 PCS	JB/T 9151		11.7000-11.9600 MM	11.7300-11.7600 MM	4	0
HEIGHT	4 PCS	JB/T 9151		7.3200-7.6800 MM	7.4000-7.5200 MM	4	0
BODY DIAMETER	4 PCS	JB/T 9151		11.7300-12.0000 MM	11.7500-11.8000 MM	4	0
WIDTH ACROSS FLATS	4 PCS	JB/T 9151		17.7300-18.0000 MM	17.7800-17.9000 MM	4	0
SURFACE DISCONTINUITIES	22 PCS	IS06157.3			PASSED	22	0
THREAD LENGTH	15 PCS	JB/T 9151	49		51.1200-51.4400 MM	15	0
WIDTH ACROSS CORNERS	4 PCS	JB/T 9151		Min. 20.0300 MM	20.4500-20.6200 MM	4	0
THREAD	15 PCS	JB/T 9151		6g GO 6g NOGO	PASSED	15	0

MECHANICAL PROPERTIES: ACCORDING TO ISO898.1-2013

TEST FACILITY : M

SAMPLED BY: WANGXIAOLAN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	4 PCS	ISO898.1		Min. 800 N/MM2	888-904 N/MM2	4	0
SURFACE HARDNESS	15 PCS	ISO898.1		Max. 350 HV	278-295 HV	15	0
CORE HARDNESS	15 PCS	ISO898.1		22-32 HRC	27.9-28.8 HRC	15	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: