



# GEM-YEAR TESTING LABORATORY

## CERTIFICATE OF INSPECTION

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

Tel: (0573)84185001(48Lines)  
Fax: (0573)84184488 84184567  
DATE : 2020/03/10

PURCHASER : MAPTCO FASTENERS (AUST) PTY LTD  
PO. NUMBER : MAP-1946M  
COMMODITY : HEX CAP SCREW GR-8  
SIZE : 3/4-10X3-1/2 NC  
LOT NO : 1B19B0861  
SHIP QUANTITY : 1,440 PCS  
HEADMARKS : GENIUS SYMBOL & 6 RADIAL LINES  
COUNTRY OF ORIGIN : CHINA

PACKING NO : GEM200103002  
INVOICE NO : GEM/MAP-200317MEL  
PART NO : D344  
SAMPLING PLAN :  
ASME B18.18-2017/ASTM F1470-2018  
HEAT NO : 19109059-4  
MATERIAL : SCM435  
FINISH : H. T. PLAIN

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

Chemistry	C%	Cr%	Mn%	Mo%	P%	S%	Si%
Spec. : MIN.	0.3300	0.9000	0.6000	0.1500			0.1500
MAX.	0.3800	1.2000	0.8500	0.3000	0.0250	0.0250	0.3500
Test Value	0.3500	0.9600	0.6800	0.1700	0.0160	0.0040	0.2300

**DIMENSIONAL INSPECTIONS : ACCORDING TO ASME B18.2.1-2012 TEST FACILITY: M**

SAMPLED BY : ZHONGHY

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC.	REJ.
THREAD LENGTH	13 PCS	JIS B1071	44.45		47.2300-47.4300 MM	13	0
MAJOR DIAMETER	3 PCS	JIS B1071		18.6800-19.0000 MM	18.8600-18.8700 MM	3	0
BODY DIAMETER	3 PCS	JIS B1071		18.8300-19.0500 MM	18.9300-18.9300 MM	3	0
WIDTH ACROSS CORNERS	3 PCS	JIS B1071		31.8600-32.9900 MM	32.3200-32.3300 MM	3	0
HEIGHT	3 PCS	JIS B1071		11.5600-12.2600 MM	11.8600-11.8800 MM	3	0
NOMINAL LENGTH	13 PCS	JIS B1071		86.3600-88.9000 MM	87.6600-87.8400 MM	13	0
WIDTH ACROSS FLATS	3 PCS	JIS B1071		27.9400-28.5700 MM	28.1200-28.1300 MM	3	0
SURFACE DISCONTINUITIES	18 PCS	ASTM F788/F788M			PASSED	18	0
THREAD	13 PCS	JIS B1071		2A GO 2A NOGO	PASSED	13	0

**MECHANICAL PROPERTIES : ACCORDING TO SAE J 429-2014 TEST FACILITY: M**

SAMPLED BY : NSYING

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC.	REJ.
CORE HARDNESS	13 PCS	ASTM F606/F606M		33-39 HRC	36-38 HRC	13	0
SURFACE HARDNESS	13 PCS	ASTM F606/F606M		Max. 58.6 HR30N	52.4-56 HR30N	13	0
TENSILE STRENGTH	3 PCS	ASTM F606/F606M		Min. 150 KSI	161-162 KSI	3	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.)

WE CERTIFY THE PARTS ARE ROHS COMPLIANT.

SIGNATURE : 