



# 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

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DATE : 2020/01/04

PURCHASER : MAPTCO FASTENERS (AUST) PTY LTD  
PO. NUMBER : MAP-1941M  
COMMODITY : HEX CAP SCREW GR-8  
SIZE : 7/8-9X3 NC  
LOT NO : 1B19A1131  
SHIP QUANTITY : 840 PCS  
HEADMARKS : GENIUS SYMBOL & 6 RADIAL LINES  
COUNTRY OF ORIGIN : CHINA

PACKING NO : GEM191224003  
INVOICE NO : GEM/MAP-200106MEL  
PART NO : D684  
SAMPLING PLAN :  
ASME B18.18-2017/ASTM F1470-2018  
HEAT NO : T710607G  
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	0.3400	0.9300	0.6500	0.1600	0.0110	0.0050	0.1900

**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	50.8		55.4900-55.6100 MM	13	0
MAJOR DIAMETER	3 PCS	JIS B1071		21.8300-22.1700 MM	22.0300-22.0500 MM	3	0
BODY DIAMETER	3 PCS	JIS B1071		22.0000-22.2200 MM	22.1000-22.1100 MM	3	0
WIDTH ACROSS CORNERS	3 PCS	JIS B1071		37.2200-38.5000 MM	38.0400-38.0600 MM	3	0
HEIGHT	3 PCS	JIS B1071		13.4900-14.3000 MM	14.0300-14.0400 MM	3	0
NOMINAL LENGTH	13 PCS	JIS B1071		72.6500-76.2000 MM	75.0600-75.2600 MM	13	0
WIDTH ACROSS FLATS	3 PCS	JIS B1071		32.6400-33.3200 MM	33.0300-33.0500 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	36-37 HRC	13	0
SURFACE HARDNESS	13 PCS	ASTM F606/F606M		Max. 58.6 HR30N	54.2-55.8 HR30N	13	0
TENSILE STRENGTH	3 PCS	ASTM F606/F606M		Min. 150 KSI	161-163 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 :