



**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-2022F  
 COMMODITY: HOT FORM HEX CAP SCREW GR-8  
 SIZE: 1-1/4-12X9-1/2 NF  
 LOT NO: 1B2060319  
 SHIP QUANTITY: 384 PCS  
 HEADMARKS: GENIUS SYMBOL & 6 RADIAL LINES  
 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: E827  
 SAMPLING PLAN:  
 ASME B18.18-2017/ASTM F1470-2018  
 HEAT NO: 16201656-4  
 MATERIAL: 42CRMOA  
 FINISH: H. T. PLAIN

PERCENTAGE COMPOSITION OF CHEMISTRY: TEST FACILITY :S

Chemistry	C%	Cr%	Mn%	Mo%	P%	S%	Si%
Spec.:MIN.	0.3800	0.9000	0.5000	0.1500			0.1700
MAX.	0.4500	1.2000	0.8000	0.2500	0.0250	0.0250	0.3700
Test Value	0.4100	1.0600	0.6600	0.1640	0.0090	0.0030	0.2100

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

SAMPLED BY: WUMENGJIE

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
NOMINAL LENGTH	11 PCS	JIS B1071		235.7200-241.3000 MM	236.7200-237.2400 MM	11	0
MAJOR DIAMETER	3 PCS	JIS B1071		31.4200-31.7000 MM	31.6000-31.6300 MM	3	0
SURFACE DISCONTINUITIES	15 PCS	ASTM F788/F788M			PASSED	15	0
WIDTH ACROSS FLATS	3 PCS	JIS B1071		46.0300-47.6200 MM	46.7400-46.8900 MM	3	0
THREAD LENGTH	11 PCS	JIS B1071	76.2		77.5700-78.1300 MM	11	0
BODY DIAMETER	3 PCS	JIS B1071		31.4800-31.7500 MM	31.6300-31.6500 MM	3	0
WIDTH ACROSS CORNERS	3 PCS	JIS B1071		52.4800-54.9900 MM	53.5300-53.5800 MM	3	0
HEIGHT	3 PCS	JIS B1071		19.0300-20.6500 MM	20.1400-20.1800 MM	3	0
THREAD	3 PCS	JB/T 9151		2A GO 2A NOGO	PASSED	3	0

MECHANICAL PROPERTIES: ACCORDING TO SAE J429-2014 TEST FACILITY : M

SAMPLED BY: HONGZHENGUI

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	3 PCS	IS0898.1		Min. 150	169-171	3	0
SURFACE HARDNESS	11 PCS	ASTM F606/F606M		Max. 58.6 HR30N	51.7-55.8 HR30N	11	0
CORE HARDNESS	11 PCS	ASTM F606/F606M		33-39 HRC	36.2-37.8 HRC	11	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: