



**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-2029F
 COMMODITY: HEX CAP SCREW GR-8
 SIZE: 1/2-13X1-1/2 NC
 LOT NO: 1B2072371
 SHIP QUANTITY: 10,800 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: D022
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: C376214A
 MATERIAL: SCM435
 FINISH: H. T. TRIVALENT ZINC 5U HYDROGEN
 RELEASE

PERCENTAGE COMPOSITION OF CHEMISTRY: TEST FACILITY :S

Chemistry	C%	Cr%	Mn%	Mo%	Ni%	P%	S%	Si%
Spec.:MIN.	0.3300	0.9000	0.6000	0.1500				0.1500
MAX.	0.3800	1.2000	0.8500	0.3000	0.2500	0.0250	0.0250	0.3500
Test Value	0.3600	1.0200	0.6600	0.1700	0.0200	0.0080	0.0010	0.2400

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

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
WIDTH ACROSS CORNERS	4 PCS	JIS B1071		21.3400-21.9900 MM	21.3900-21.4200 MM	4	0
MAJOR DIAMETER	4 PCS	JIS B1071		12.3900-12.6600 MM	12.4600-12.5100 MM	4	0
WIDTH ACROSS FLATS	4 PCS	JIS B1071		18.7000-19.0500 MM	18.8900-18.9200 MM	4	0
NOMINAL LENGTH	15 PCS	JIS B1071		36.5800-38.1000 MM	37.4000-37.5000 MM	15	0
SURFACE DISCONTINUITIES	29 PCS	ASTM F788/F788M			PASSED	29	0
HEIGHT	4 PCS	JIS B1071		7.6800-8.2000 MM	7.7600-7.8100 MM	4	0
THREAD	15 PCS	JIS B1071		3A GO 2A NOGO	PASSED	15	0

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

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	4 PCS	ASTM F606/F606M		Min. 150 KSI	159-161 KSI	4	0
SURFACE HARDNESS	15 PCS	ASTM F606/F606M		Max. 58.6 HR30N	52-56 HR30N	15	0
CORE HARDNESS	15 PCS	ASTM F606/F606M		33-39 HRC	35-37 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: