



**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-2022M
 COMMODITY: HEX CAP SCREW WITH THREAD LENGTH CHANGE GR-8
 SIZE: 3/4-10X2-1/2 NC T/L:2"
 LOT NO: 1B2060239
 SHIP QUANTITY: 1,920 PCS
 HEADMARKS: GENIUS SYMBOL & 6 RADIAL LINES
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/08/24
 PACKING NO: GEM200804003
 INVOICE NO: GEM/MAP-200824MEL
 PART NO: D332
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: C376205A
 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	0.3500	0.9700	0.6200	0.1900	0.0100	0.0070	0.0020	0.2200

**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
BODY DIAMETER	4 PCS	JIS B1071		18.8300-19.0500 MM	18.9100-18.9600 MM	4	0
THREAD LENGTH	15 PCS	JIS B1071		50.8000-55.8000 MM	54.4600-54.6800 MM	15	0
WIDTH ACROSS FLATS	4 PCS	JIS B1071		27.9400-28.5200 MM	27.9400-28.0000 MM	4	0
SURFACE DISCONTINUITIES	22 PCS	ASTM F788/F788M			PASSED	22	0
HEIGHT	4 PCS	JIS B1071		11.6100-11.9600 MM	11.6800-11.7200 MM	4	0
MAJOR DIAMETER	4 PCS	JIS B1071		18.7700-19.0100 MM	18.8100-18.8600 MM	4	0
NOMINAL LENGTH	15 PCS	JIS B1071		61.4700-63.0700 MM	62.4100-62.5800 MM	15	0
WIDTH ACROSS CORNERS	4 PCS	JIS B1071		31.8600-32.9900 MM	32.0600-32.1200 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: ZHAOQING**

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	4 PCS	ASTM F606/F606M		Min. 150 KSI	169-173 KSI	4	0
SURFACE HARDNESS	15 PCS	ASTM E384		Max. 58.6 HV	50-53.8 HV	15	0
CORE HARDNESS	15 PCS	ASTM F606/F606M		33-39 HRC	36-38 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: