



**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-2003F
 COMMODITY: HEX CAP SCREW GR-8
 SIZE: 1-8X6-1/2 NC
 LOT NO: 1B2020501
 SHIP QUANTITY: 330 PCS
 HEADMARKS: GENIUS SYMBOL & 6 RADIAL LINES
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/07/07
 PACKING NO: GEM200521014
 INVOICE NO: GEM/MAP-200708 FRE
 PART NO: D280
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: C376189A
 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 | 0.9800 | 0.6500 | 0.2000 | 0.0400 | 0.0090 | 0.0010 | 0.2200 |

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

SAMPLED BY: XUJIAOJIAO

| INSPECTIONS ITEM | SAMPLE | TEST METHOD | REF | SPECIFIED | ACTUAL RESULT | ACC | REJ |
|-------------------------|--------|-----------------|------|----------------------|----------------------|-----|-----|
| WIDTH ACROSS FLATS | 3 PCS | JIS B1071 | | 37.3200-38.1000 MM | 37.5100-37.6000 MM | 3 | 0 |
| HEIGHT | 3 PCS | JIS B1071 | | 15.0200-15.9200 MM | 15.6100-15.6600 MM | 3 | 0 |
| BODY DIAMETER | 3 PCS | JIS B1071 | | 25.1500-25.4000 MM | 25.2000-25.2500 MM | 3 | 0 |
| WIDTH ACROSS CORNERS | 3 PCS | JIS B1071 | | 42.5500-43.9900 MM | 42.8800-42.9200 MM | 3 | 0 |
| NOMINAL LENGTH | 11 PCS | JIS B1071 | | 160.0200-165.1000 MM | 161.7800-161.9200 MM | 11 | 0 |
| SURFACE DISCONTINUITIES | 15 PCS | ASTM F788/F788M | | | PASSED | 15 | 0 |
| THREAD LENGTH | 11 PCS | JIS B1071 | 63.5 | | 68.5800-68.7800 MM | 11 | 0 |
| MAJOR DIAMETER | 3 PCS | JIS B1071 | | 24.9700-25.3400 MM | 25.1400-25.1600 MM | 3 | 0 |
| THREAD | 11 PCS | JIS B1071 | | 3A GO 2A NOGO | PASSED | 11 | 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 | 3 PCS | ASTM F606/F606M | | Min. 150 KSI | 160-161 KSI | 3 | 0 |
| CORE HARDNESS | 11 PCS | ASTM F606/F606M | | 33-39 HRC | 36-37 HRC | 11 | 0 |
| SURFACE HARDNESS | 11 PCS | ASTM F606/F606M | | Max. 58.6 HR30N | 52-56 HR30N | 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: