



**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-2011M
 COMMODITY: HEX CAP SCREW GR-8
 SIZE: 5/8-18X6 NF
 LOT NO: 1B2030905
 SHIP QUANTITY: 900 PCS
 HEADMARKS: GENIUS SYMBOL & 6 RADIAL LINES
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/06/17
 PACKING NO: GEM200528003
 INVOICE NO: GEM/MAP-200620MEL
 PART NO: E458
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: C376215A
 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 | 0.9600 | 0.6300 | 0.1700 | 0.0200 | 0.0090 | 0.0040 | 0.2300 |

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

SAMPLED BY: TAOJIAMIN

| INSPECTIONS ITEM | SAMPLE | TEST METHOD | REF | SPECIFIED | ACTUAL RESULT | ACC | REJ |
|-------------------------|--------|-----------------|------|----------------------|----------------------|-----|-----|
| SURFACE DISCONTINUITIES | 15 PCS | ASTM F788/F788M | | | PASSED | 15 | 0 |
| BODY DIAMETER | 3 PCS | JIS B1071 | | 15.6800-15.8700 MM | 15.7500-15.7900 MM | 3 | 0 |
| WIDTH ACROSS CORNERS | 3 PCS | JIS B1071 | | 26.7000-27.5000 MM | 26.9000-26.9800 MM | 3 | 0 |
| WIDTH ACROSS FLATS | 3 PCS | JIS B1071 | | 23.4200-23.8200 MM | 23.5600-23.7500 MM | 3 | 0 |
| THREAD LENGTH | 11 PCS | JIS B1071 | 38.1 | | 41.1000-41.6500 MM | 11 | 0 |
| NOMINAL LENGTH | 11 PCS | JIS B1071 | | 149.8600-152.4000 MM | 149.9000-150.0000 MM | 11 | 0 |
| HEIGHT | 3 PCS | JIS B1071 | | 9.6100-10.2300 MM | 9.8100-9.9500 MM | 3 | 0 |
| MAJOR DIAMETER | 3 PCS | JIS B1071 | | 15.6200-15.8300 MM | 15.7500-15.8000 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: DAIWENTING

| INSPECTIONS ITEM | SAMPLE | TEST METHOD | REF | SPECIFIED | ACTUAL RESULT | ACC | REJ |
|------------------|--------|-----------------|-----|-----------------|---------------|-----|-----|
| SURFACE HARDNESS | 11 PCS | ASTM F606/F606M | | Max. 58.6 HR30N | 54-56 HR30N | 11 | 0 |
| TENSILE STRENGTH | 3 PCS | ASTM F606/F606M | | Min. 150 KSI | 165-166 KSI | 3 | 0 |
| CORE HARDNESS | 11 PCS | ASTM F606/F606M | | 33-39 HRC | 35.4-37.6 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: