



**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-2031M
 COMMODITY: ISO 4014 HEX HEAD BOLT HALF THREAD CL 10.9
 SIZE: M24-3.00X150
 LOT NO: 1B2073126
 SHIP QUANTITY: 440 PCS
 HEADMARKS: GENIUS SYMBOL & 10.9
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/10/27
 PACKING NO: GEM200927003
 INVOICE NO: GEM/MAP-201026MEL
 PART NO: A1433
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: C376196A
 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 | 0.9500 | 0.6100 | 0.1700 | 0.0300 | 0.0060 | 0.0010 | 0.2250 |

DIMENSIONAL INSPECTIONS: ACCORDING TO ISO4014-2011 TEST FACILITY : M

SAMPLED BY: XUJIAOJIAO

| INSPECTIONS ITEM | SAMPLE | TEST METHOD | REF | SPECIFIED | ACTUAL RESULT | ACC | REJ |
|-------------------------|--------|-------------|-----|----------------------|----------------------|-----|-----|
| WIDTH ACROSS CORNERS | 3 PCS | JB/T 9151 | | Min. 39.9800 MM | 40.4800-40.5600 MM | 3 | 0 |
| NOMINAL LENGTH | 13 PCS | JB/T 9151 | | 149.2000-150.8000 MM | 149.2900-149.3700 MM | 13 | 0 |
| THREAD LENGTH | 13 PCS | JB/T 9151 | 60 | | 67.7400-68.0800 MM | 13 | 0 |
| HEIGHT | 3 PCS | JB/T 9151 | | 14.7900-15.2100 MM | 14.9600-15.0600 MM | 3 | 0 |
| SURFACE DISCONTINUITIES | 18 PCS | ISO6157.3 | | | PASSED | 18 | 0 |
| WIDTH ACROSS FLATS | 3 PCS | JB/T 9151 | | 35.3800-36.0000 MM | 35.6700-35.6900 MM | 3 | 0 |
| BODY DIAMETER | 3 PCS | JB/T 9151 | | 23.6700-24.0000 MM | 23.8800-23.9000 MM | 3 | 0 |
| MAJOR DIAMETER | 3 PCS | JB/T 9151 | | 23.5800-23.9500 MM | 23.6300-23.6600 MM | 3 | 0 |
| THREAD | 13 PCS | JB/T 9151 | | 6h GO 6h NOGO | PASSED | 13 | 0 |

MECHANICAL PROPERTIES: ACCORDING TO ISO 898.1-2013 TEST FACILITY : M

SAMPLED BY: RENSHUWEN

| INSPECTIONS ITEM | SAMPLE | TEST METHOD | REF | SPECIFIED | ACTUAL RESULT | ACC | REJ |
|------------------|--------|-------------|-----|------------------|-------------------|-----|-----|
| TENSILE STRENGTH | 3 PCS | ISO898.1 | | Min. 1,040 N/MM2 | 1,077-1,082 N/MM2 | 3 | 0 |
| CORE HARDNESS | 13 PCS | ISO898.1 | | 32-39 HRC | 35.9-37.1 HRC | 13 | 0 |
| SURFACE HARDNESS | 13 PCS | ASTM E384 | | Max. 390 HV | 336-355 HV | 13 | 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: