



**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-2022S
 COMMODITY: ISO 4017 HEX HEAD BOLT FULL THREAD CL 8.8
 SIZE: M24-3.00X50
 LOT NO: 1B2060254
 SHIP QUANTITY: 840 PCS
 HEADMARKS: GENIUS SYMBOL & 8.8
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/10/16
 PACKING NO: GEM200918001
 INVOICE NO: GEM/MAP-201019SYD
 PART NO: A1356
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: 20107925
 MATERIAL: ML40CR
 FINISH: H. T. TRIVALENT ZINC PER ASTM F1941

PERCENTAGE COMPOSITION OF CHEMISTRY: TEST FACILITY :S

| Chemistry | C% | Cr% | Mn% | P% | S% | Si% |
|------------|--------|--------|--------|--------|--------|--------|
| Spec.:MIN. | 0.3800 | 0.9000 | 0.6000 | | | |
| MAX. | 0.4500 | 1.2000 | 0.9000 | 0.0350 | 0.0350 | 0.3000 |
| Test Value | 0.4200 | 1.0000 | 0.7100 | 0.0160 | 0.0020 | 0.1500 |

DIMENSIONAL INSPECTIONS: ACCORDING TO ISO4017-2014 TEST FACILITY : M

SAMPLED BY: ZHONGLI

| INSPECTIONS ITEM | SAMPLE | TEST METHOD | REF | SPECIFIED | ACTUAL RESULT | ACC | REJ |
|-------------------------|--------|-------------|-----|--------------------|--------------------|-----|-----|
| NOMINAL LENGTH | 13 PCS | JB/T 9151 | | 49.5000-50.5000 MM | 49.5000-50.5000 MM | 13 | 0 |
| WIDTH ACROSS FLATS | 3 PCS | JB/T 9151 | | 35.3800-36.0000 MM | 35.3800-36.0000 MM | 3 | 0 |
| HEIGHT | 3 PCS | JB/T 9151 | | 14.7900-15.2100 MM | 14.7900-15.2100 MM | 3 | 0 |
| WIDTH ACROSS CORNERS | 3 PCS | JB/T 9151 | | Min. 39.9800 MM | 39.9800-39.9900 MM | 3 | 0 |
| MAJOR DIAMETER | 3 PCS | JB/T 9151 | | 23.5800-23.9500 MM | 23.5800-23.9500 MM | 3 | 0 |
| SURFACE DISCONTINUITIES | 18 PCS | ISO6157.3 | | | PASSED | 18 | 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 |
|------------------|--------|-------------|-----|-------------|---------------|-----|-----|
| SURFACE HARDNESS | 13 PCS | ASTM E384 | | Max. 365 HV | 282-298 HV | 13 | 0 |
| CORE HARDNESS | 13 PCS | ISO898.1 | | 23-34 HRC | 28.1-30.5 HRC | 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: