



**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 4014 HEX HEAD BOLT HALF THREAD CL 10.9  
 SIZE: M20-2.50X80  
 LOT NO: 1B2060251  
 SHIP QUANTITY: 1,600 PCS  
 HEADMARKS: GENIUS SYMBOL & 10.9  
 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: A1131  
 SAMPLING PLAN:  
 ASME B18.18-2017/ASTM F1470-2018  
 HEAT NO: C376148A  
 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	0.3600	0.9800	0.6300	0.1900	0.0200	0.0060	0.0010	0.2100

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

SAMPLED BY: XUJIAOJIAO

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
HEIGHT	4 PCS	JB/T 9151		12.2900-12.7100 MM	12.5200-12.5800 MM	4	0
WIDTH ACROSS FLATS	4 PCS	JB/T 9151		29.6700-30.0000 MM	29.6800-29.7600 MM	4	0
NOMINAL LENGTH	15 PCS	JB/T 9151		79.4000-80.6000 MM	79.6900-79.8300 MM	15	0
THREAD LENGTH	15 PCS	JB/T 9151	46		52.0400-52.3900 MM	15	0
SURFACE DISCONTINUITIES	22 PCS	ISO6157.3			PASSED	22	0
BODY DIAMETER	4 PCS	JB/T 9151		19.6700-20.0000 MM	19.7000-19.7300 MM	4	0
WIDTH ACROSS CORNERS	4 PCS	JB/T 9151		Min. 33.5300 MM	33.7600-33.8000 MM	4	0
MAJOR DIAMETER	4 PCS	JB/T 9151		19.6300-19.9500 MM	19.7200-19.8200 MM	4	0
THREAD	15 PCS	JB/T 9151		6h GO 6h NOGO	PASSED	15	0

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

SAMPLED BY: NIESUYING

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
CORE HARDNESS	15 PCS	ISO898.1		32-39 HRC	35-37 HRC	15	0
SURFACE HARDNESS	15 PCS	ASTM E384		Max. 390 HV	372-382 HV	15	0
TENSILE STRENGTH	4 PCS	ISO898.1		Min. 1,040 N/MM2	1,138-1,163 N/MM2	4	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: