



**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-2036M
 COMMODITY: ISO 4017 HEX HEAD BOLT FULL THREAD CL 10.9
 SIZE: M20-2.50X50
 LOT NO: 1B17C0484
 SHIP QUANTITY: 2,500 PCS
 HEADMARKS: GENIUS SYMBOL & 10.9
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/09/28
 PACKING NO: GEM200824005
 INVOICE NO: GEM/MAP-200929MEL
 PART NO: A1099
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: A379736A
 MATERIAL: SCM435
 FINISH: H. T. TRIVALENT ZINC 5U HYDROGEN
 RELEASE

PERCENTAGE COMPOSITION OF CHEMISTRY: TEST FACILITY :S

Chemistry	C%	Cr%	Mn%	Mo%	P%	S%	Si%
Spec.:MIN.	0.3300	0.9000	0.6000	0.1500			0.1500
MAX.	0.3800	1.2000	0.8500	0.3000	0.0250	0.0250	0.3500
Test Value	0.3600	1.0000	0.6500	0.1900	0.0060	0.0010	0.2400

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

SAMPLED BY: XUJIAOJIAO

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
NOMINAL LENGTH	15 PCS	JB/T 9151		49.5000-50.5000 MM	49.8700-49.9700 MM	15	0
WIDTH ACROSS FLATS	4 PCS	JB/T 9151		29.6700-30.0000 MM	29.7900-29.8200 MM	4	0
HEIGHT	4 PCS	JB/T 9151		12.2900-12.7100 MM	12.3900-12.4100 MM	4	0
SURFACE DISCONTINUITIES	29 PCS	IS06157.3			PASSED	29	0
WIDTH ACROSS CORNERS	4 PCS	JB/T 9151		Min. 33.5300 MM	33.8800-33.9000 MM	4	0
MAJOR DIAMETER	4 PCS	JB/T 9151		19.6300-19.9500 MM	19.7900-19.8200 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: JINSHENGXIA

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	4 PCS	IS0898.1		Min. 1,040 N/MM2	1,100-1,128 N/MM2	4	0
CORE HARDNESS	15 PCS	IS0898.1		32-39 HRC	34.8-37.5 HRC	15	0
SURFACE HARDNESS	15 PCS	ASTM E384		Max. 390 HV	348-376 HV	15	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: