



**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-1941M
 COMMODITY: ISO 4017 HEX HEAD BOLT FULL THREAD CL 10.9
 SIZE: M12-1.75X50
 LOT NO: 1B2060748
 SHIP QUANTITY: 4,200 PCS
 HEADMARKS: GENIUS SYMBOL & 10.9
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/08/03
 PACKING NO: GEM200706008
 INVOICE NO: GEM/MAP-200803MEL
 PART NO: A518
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: C376248A
 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	0.9900	0.6600	0.1900	0.0200	0.0080	0.0030	0.2200

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

SAMPLED BY: YANGLI

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
NOMINAL LENGTH	13 PCS	JB/T 9151		49.5000-50.5000 MM	49.8700-49.9900 MM	13	0
SURFACE DISCONTINUITIES	18 PCS	ISO6157.3			PASSED	18	0
HEIGHT	3 PCS	JB/T 9151		7.3200-7.6800 MM	7.3500-7.3800 MM	3	0
WIDTH ACROSS FLATS	3 PCS	JB/T 9151		17.7300-18.0000 MM	17.7800-17.8200 MM	3	0
MAJOR DIAMETER	3 PCS	JB/T 9151		11.7100-11.9600 MM	11.8000-11.8300 MM	3	0
WIDTH ACROSS CORNERS	3 PCS	JB/T 9151		Min. 20.0300 MM	20.4500-20.4800 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: NIESUYING

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	3 PCS	ISO898.1		Min. 1,040 N/MM2	1,086-1,090 N/MM2	3	0
CORE HARDNESS	13 PCS	ISO898.1		32-39 HRC	36-38 HRC	13	0
SURFACE HARDNESS	13 PCS	ASTM E384		Max. 390 HV	375-381 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: