



**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 4014 HEX HEAD BOLT HALF THREAD CL 10.9
 SIZE: M12-1.75X100
 LOT NO: 1B2090770
 SHIP QUANTITY: 5,250 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: A615
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: C376622A
 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	0.2100	0.0800	0.0060	0.0040	0.2600

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

SAMPLED BY: XUJIAOJIAO

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
NOMINAL LENGTH	15 PCS	JB/T 9151		99.3000-100.7000 MM	100.1200-100.3000 MM	15	0
SURFACE DISCONTINUITIES	22 PCS	ISO6157.3			PASSED	22	0
HEIGHT	4 PCS	JB/T 9151		7.3200-7.6800 MM	7.5700-7.6600 MM	4	0
BODY DIAMETER	4 PCS	JB/T 9151		11.7300-12.0000 MM	11.7900-11.8100 MM	4	0
WIDTH ACROSS FLATS	4 PCS	JB/T 9151		17.7300-18.0000 MM	17.8200-17.8500 MM	4	0
THREAD LENGTH	15 PCS	JB/T 9151	30		34.3500-34.6700 MM	15	0
MAJOR DIAMETER	4 PCS	JB/T 9151		11.7100-11.9600 MM	11.7600-11.8100 MM	4	0
WIDTH ACROSS CORNERS	4 PCS	JB/T 9151		Min. 20.0300 MM	20.4400-20.5500 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: ZHONGLI

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	4 PCS	ISO898.1		Min. 1,040 N/MM2	1,098-1,099 N/MM2	4	0
CORE HARDNESS	15 PCS	ISO898.1		32-39 HRC	34.5-35 HRC	15	0
SURFACE HARDNESS	15 PCS	ASTM E384		Max. 390 HV	290-295 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: