



**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-2011S
 COMMODITY: ISO 4014 HEX HEAD BOLT HALF THREAD CL 10.9
 SIZE: M12-1.75X220
 LOT NO: 1B2030940
 SHIP QUANTITY: 2,400 PCS
 HEADMARKS: GENIUS SYMBOL & 10.9
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/08/03
 PACKING NO: GEM200715011
 INVOICE NO: GEM/MAP-200803SYD
 PART NO: A2704
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: 19365291
 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	0.3400	0.9900	0.6400	0.1800	0.0300	0.0090	0.0010	0.2300

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

SAMPLED BY: YUQIAN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
NOMINAL LENGTH	15 PCS	JB/T 9151		219.0000-221.0000 MM	219.9500-220.3600 MM	15	0
MAJOR DIAMETER	4 PCS	JB/T 9151		11.7000-11.9600 MM	11.7800-11.8500 MM	4	0
HEIGHT	4 PCS	JB/T 9151		7.3200-7.6800 MM	7.4500-7.5200 MM	4	0
BODY DIAMETER	4 PCS	JB/T 9151		11.7300-12.0000 MM	11.7800-11.8200 MM	4	0
WIDTH ACROSS FLATS	4 PCS	JB/T 9151		17.7300-18.0000 MM	17.8000-17.8800 MM	4	0
SURFACE DISCONTINUITIES	22 PCS	IS06157.3			PASSED	22	0
THREAD LENGTH	15 PCS	JB/T 9151	49		50.2500-50.6500 MM	15	0
WIDTH ACROSS CORNERS	4 PCS	JB/T 9151		Min. 20.0300 MM	20.2000-20.6000 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: WANGXIAOLAN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	4 PCS	IS0898.1		Min. 1,040 N/MM2	1,108-1,128 N/MM2	4	0
CORE HARDNESS	15 PCS	IS0898.1		32-39 HRC	34.9-36.5 HRC	15	0
SURFACE HARDNESS	15 PCS	ASTM E384		Max. 390 HV	342-362 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: