



**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-2025M
 COMMODITY: ISO 4014 HEX HEAD BOLT HALF THREAD CL 10.9
 SIZE: M12-1.75X150
 LOT NO: 1B2062380
 SHIP QUANTITY: 3,600 PCS
 HEADMARKS: GENIUS SYMBOL & 10.9
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/09/04
 PACKING NO: GEM200821004
 INVOICE NO: GEM/MAP-200906MEL
 PART NO: A664
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: C376214A
 MATERIAL: SCM435
 FINISH: H. T. PLAIN

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	1.0200	0.6600	0.1700	0.0200	0.0080	0.0010	0.2400

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

SAMPLED BY: ZHANGHONGYUN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
SURFACE DISCONTINUITIES	22 PCS	IS06157.3			PASSED	22	0
HEIGHT	4 PCS	JB/T 9151		7.3200-7.6800 MM	7.5000-7.5200 MM	4	0
BODY DIAMETER	4 PCS	JB/T 9151		11.7300-12.0000 MM	11.8600-11.8800 MM	4	0
THREAD LENGTH	15 PCS	JB/T 9151	36		37.8700-39.0600 MM	15	0
WIDTH ACROSS FLATS	4 PCS	JB/T 9151		17.7300-18.0000 MM	17.8600-17.8800 MM	4	0
MAJOR DIAMETER	4 PCS	JB/T 9151		11.7100-11.9600 MM	11.8600-11.8800 MM	4	0
NOMINAL LENGTH	15 PCS	JB/T 9151		149.2000-150.8000 MM	150.0300-150.2600 MM	15	0
WIDTH ACROSS CORNERS	4 PCS	JB/T 9151		Min. 20.0300 MM	20.2100-20.2400 MM	4	0
THREAD	15 PCS	JB/T 9151		6g GO 6g 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
TENSILE STRENGTH	4 PCS	IS0898.1		Min. 1,040 N/MM2	1,121-1,122 N/MM2	4	0
CORE HARDNESS	15 PCS	IS0898.1		32-39 HRC	33-35 HRC	15	0
SURFACE HARDNESS	15 PCS	ASTM E384		Max. 390 HV	375-382 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: