



**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-2029F
 COMMODITY: ISO 4014 HEX HEAD BOLT HALF THREAD CL 8.8
 SIZE: M16-2.00X110
 LOT NO: 1B2072336
 SHIP QUANTITY: 1,260 PCS
 HEADMARKS: GENIUS SYMBOL & 8.8
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/10/13
 PACKING NO: GEM200918002
 INVOICE NO: GEM/MAP-201014FRE
 PART NO: A911
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: 20200700
 MATERIAL: 40ACR
 FINISH: H. T. TRIVALENT ZINC PER ASTM F1941

PERCENTAGE COMPOSITION OF CHEMISTRY: TEST FACILITY :S

Chemistry	Al%	C%	Cr%	Mn%	P%	S%	Si%
Spec.:MIN.	0.0100	0.4000	0.2000	0.6000			
MAX.		0.4400	0.4000	0.9000	0.0250	0.0250	0.1000
Test Value	0.0220	0.4100	0.2700	0.7700	0.0120	0.0050	0.0700

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

SAMPLED BY: ZHONGLI

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
NOMINAL LENGTH	13 PCS	JB/T 9151		109.3000-110.7000 MM	109.3000-110.7000 MM	13	0
WIDTH ACROSS FLATS	3 PCS	JB/T 9151		23.6700-24.0000 MM	23.6700-23.9900 MM	3	0
MAJOR DIAMETER	3 PCS	JB/T 9151		15.6900-15.9600 MM	15.6900-15.9600 MM	3	0
BODY DIAMETER	3 PCS	JB/T 9151		15.7300-16.0000 MM	15.7300-16.0000 MM	3	0
THREAD LENGTH	13 PCS	JB/T 9151	38		38.1200-38.4600 MM	13	0
HEIGHT	3 PCS	JB/T 9151		9.8200-10.1800 MM	9.8200-10.1800 MM	3	0
SURFACE DISCONTINUITIES	18 PCS	IS06157.3			PASSED	18	0
WIDTH ACROSS CORNERS	3 PCS	JB/T 9151		Min. 26.7500 MM	26.7500-26.9700 MM	3	0
THREAD	3 PCS	JB/T 9151		6h GO 6h NOGO	PASSED	3	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
SURFACE HARDNESS	13 PCS	ASTM E384		Max. 350 HV	273-302 HV	13	0
TENSILE STRENGTH	3 PCS	IS0898.1		Min. 800 N/MM2	900-934 N/MM2	3	0
CORE HARDNESS	13 PCS	IS0898.1		22-32 HRC	28.6-30.9 HRC	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: