



# GEM-YEAR TESTING LABORATORY

## CERTIFICATE OF INSPECTION

MANUFACTURER : GEM-YEAR INDUSTRIAL CO., LTD.  
ADDRESS : NO.8 GEM-YEAR  
ROAD, E.D.Z., JIASHAN, ZHEJIANG, P.R. CHINA

Tel: (0573)84185001(48Lines)  
Fax: (0573)84184488 84184567  
DATE : 2020/01/07

PURCHASER : MAPTCO FASTENERS (AUST) PTY LTD  
PO. NUMBER : MAP-1941F  
COMMODITY : ISO 4017 HEX HEAD BOLT FULL THREAD CL 10.9  
SIZE : M20-P2.50X140  
LOT NO : 1B19A1104  
SHIP QUANTITY : 600 PCS  
HEADMARKS : GENIUS SYMBOL & 10.9  
COUNTRY OF ORIGIN : CHINA

PACKING NO : GEM191219001  
INVOICE NO : GEM/MAP-200115FRE  
PART NO : A2382  
SAMPLING PLAN :  
ASME B18.18-2017/ASTM F1470-2018  
HEAT NO : 19106979-4  
MATERIAL : SCM435  
FINISH : H. T. TRIVALENT ZINC 5U  
HYDROGEN RELEASE

### PERCENTAGE COMPOSITION OF CHEMISTRY : TEST FACILITY : S

Chemistry	C%	Cr%	Mn%	Mo%	P%	S%	Si%
Spec. : MIN.	0.3300	0.9000	0.6000	0.1500			0.1500
MAX.	0.3800	1.2000	0.8500	0.3000	0.0250	0.0250	0.3500
Test Value	0.3500	0.9700	0.6800	0.1600	0.0200	0.0030	0.2000

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

SAMPLED BY : XJIAOJIAO

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC.	REJ.
MAJOR DIAMETER	3 PCS	JB/T 9151		19.6300-19.9500 MM	19.8500-19.8800 MM	3	0
WIDTH ACROSS CORNERS	3 PCS	JB/T 9151		Min. 33.5300 MM	34.0600-34.1200 MM	3	0
HEIGHT	3 PCS	JB/T 9151		12.2900-12.7100 MM	12.5900-12.6100 MM	3	0
NOMINAL LENGTH	13 PCS	JB/T 9151		139.2000-140.8000 MM	140.0800-140.3200 MM	13	0
WIDTH ACROSS FLATS	3 PCS	JB/T 9151		29.6700-30.0000 MM	29.9000-29.9600 MM	3	0
SURFACE DISCONTINUITIES	18 PCS	ISO6157.3			PASSED	18	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 : CHENXIN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC.	REJ.
CORE HARDNESS	13 PCS	ISO898.1		32-39 HRC	36.1-37.4 HRC	13	0
SURFACE HARDNESS	13 PCS	ASTM E384		Max. 390 HV	355-384 HV	13	0
TENSILE STRENGTH	3 PCS	ISO898.1		Min. 1,040 N/MM2	1,130-1,140 N/MM2	3	0

ALL TESTS ARE IN ACCORDANCE WITH THE METHODS PRESCRIBED IN THE APPLICABLE ASTM/SAE/ASME/MIL-STD-120 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 : 