



# 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

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DATE : 2020/03/10

PURCHASER : MAPTCO FASTENERS (AUST) PTY LTD  
PO. NUMBER : MAP-1946M  
COMMODITY : ISO 4014 HEX HEAD BOLT HALF THREAD CL 8.8  
SIZE : M24-P3.00X230  
LOT NO : 1B19BC137  
SHIP QUANTITY : 480 PCS  
HEADMARKS : GENIUS SYMBOL & 8.8  
COUNTRY OF ORIGIN : CHINA

PACKING NO : GEM200103002  
INVOICE NO : GEM/MAP-200317MEL  
PART NO : A3195  
SAMPLING PLAN :  
ASME B18.18-2017/ASTM F1470-2018  
HEAT NO : 19503388-3  
MATERIAL : ML40CR  
FINISH : H. T. PLAIN

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

Chemistry	C%	Cr%	Mn%	P%	S%	Si%
Spec. : MIN.	0.3800	0.9000	0.6000			
MAX.	0.4500	1.2000	0.9000	0.0350	0.0350	0.3000
Test Value	0.4000	0.9900	0.6700	0.0130	0.0020	0.1800

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

SAMPLED BY : FCHUN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC.	REJ.
THREAD LENGTH	13 PCS	JB/T 9151	73		79.7200-79.9400 MM	13	0
MAJOR DIAMETER	3 PCS	JB/T 9151		23.5800-23.9500 MM	23.7300-23.7500 MM	3	0
BODY DIAMETER	3 PCS	JB/T 9151		23.6700-24.0000 MM	23.7600-23.7700 MM	3	0
WIDTH ACROSS CORNERS	3 PCS	JB/T 9151		Min. 39.9800 MM	40.5300-40.6500 MM	3	0
HEIGHT	3 PCS	JB/T 9151		14.7900-15.2100 MM	14.9200-14.9900 MM	3	0
NOMINAL LENGTH	13 PCS	JB/T 9151		229.0000-231.0000 MM	229.9400-230.1600 MM	13	0
WIDTH ACROSS FLATS	3 PCS	JB/T 9151		35.3800-36.0000 MM	35.5600-35.5900 MM	3	0
SURFACE DISCONTINUITIES	18 PCS	ISO6157.3			PASSED	18	0
THREAD	13 PCS	JB/T 9151		6g GO 6g NOGO	PASSED	13	0

**MECHANICAL PROPERTIES : ACCORDING TO ISO 898.1-2013 TEST FACILITY: M**

SAMPLED BY : LSHWEN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC.	REJ.
CORE HARDNESS	15 PCS	ISO898.1		23-34 HRC	28.1-30.5 HRC	15	0
SURFACE HARDNESS	15 PCS	ASTM E384			295-304 HV	15	0
TENSILE STRENGTH	4 PCS	ISO898.1		Min. 830 N/MM2	911-945 N/MM2	4	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 :