



**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: M20-2.50X140

LOT NO: 1B2072355

SHIP QUANTITY: 1,440 PCS

HEADMARKS: GENIUS SYMBOL & 8.8

COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)

FAX: (0573) 84184488 84184567

DATE: 2020/10/27

PACKING NO: GEM201014002

INVOICE NO: GEM/MAP-201030FRE

PART NO: A1173

SAMPLING PLAN:

ASME B18.18-2017/ASTM F1470-2018

HEAT NO: 20201176

MATERIAL: ML40CR

FINISH: H. T. TRIVALENT ZINC PER ASTM F1941

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	0.4100	1.0100	0.7000	0.0110	0.0040	0.1500

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

SAMPLED BY: WUMENGJIE

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
BODY DIAMETER	3 PCS	JB/T 9151		19.6700-20.0000 MM	19.8100-19.8300 MM	3	0
HEIGHT	3 PCS	JB/T 9151		12.2900-12.7100 MM	12.3500-12.4100 MM	3	0
THREAD LENGTH	13 PCS	JB/T 9151	52		55.4500-55.9700 MM	13	0
WIDTH ACROSS FLATS	3 PCS	JB/T 9151		29.6700-30.0000 MM	29.8200-29.8800 MM	3	0
NOMINAL LENGTH	13 PCS	JB/T 9151		139.2000-140.8000 MM	139.8800-140.3600 MM	13	0
WIDTH ACROSS CORNERS	3 PCS	JB/T 9151		Min. 33.5300 MM	33.9800-34.0500 MM	3	0
MAJOR DIAMETER	3 PCS	JB/T 9151		19.6300-19.9500 MM	19.8100-19.8300 MM	3	0
SURFACE DISCONTINUITIES	18 PCS	IS06157.3			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: GUOXIAOLEI

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
SURFACE HARDNESS	13 PCS	ASTM E384		Max. 365 HV	296-310 HV	13	0
CORE HARDNESS	13 PCS	IS0898.1		23-34 HRC	28-30 HRC	13	0
TENSILE STRENGTH	3 PCS	IS0898.1		Min. 830 N/MM2	830-848 N/MM2	3	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: