



**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-2011M
 COMMODITY: ISO4016 HEX BOLT T/L CHANGE CL 4.6
 SIZE: M20-2.50X120
 LOT NO: 1B203A227(1A20710291)
 SHIP QUANTITY: 3,600 PCS
 HEADMARKS: GENIUS SYMBOL & 4.6
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/08/03
 PACKING NO: GEM200706008
 INVOICE NO: GEM/MAP-200803MEL
 PART NO: M654
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: 196D4681
 MATERIAL: ML08
 FINISH: HOT DIP GALVANIZED PER ASTM
 A153/ASTM F2329

PERCENTAGE COMPOSITION OF CHEMISTRY: TEST FACILITY :S

Chemistry	A1%	C%	Mn%	P%	S%	Si%
Spec.:MIN.	0.0200	0.0500	0.2000			
MAX.		0.1200	0.5000	0.0350	0.0350	0.1000
Test Value	0.0430	0.0600	0.3600	0.0140	0.0090	0.0200

DIMENSIONAL INSPECTIONS: ACCORDING TO ISO 4016 TEST FACILITY : M

SAMPLED BY: YUQIAN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
MAJOR DIAMETER	4 PCS	JB/T 9151		19.6700-20.0000 MM	19.8200-19.8800 MM	4	0
THREAD LENGTH	15 PCS	JB/T 9151		75.0000-79.0000 MM	75.9700-76.4100 MM	15	0
NOMINAL LENGTH	15 PCS	JB/T 9151		119.3000-120.7000 MM	119.8700-120.0600 MM	15	0
BODY DIAMETER	4 PCS	JB/T 9151		19.1600-20.8400 MM	19.9500-20.0000 MM	4	0
WIDTH ACROSS FLATS	4 PCS	JB/T 9151		29.1600-30.0000 MM	29.6200-29.7900 MM	4	0
WIDTH ACROSS CORNERS	4 PCS	JB/T 9151		Min. 32.9500 MM	34.2200-34.2900 MM	4	0
HEIGHT	4 PCS	JB/T 9151		11.6000-13.4000 MM	12.4600-12.6900 MM	4	0
SURFACE DISCONTINUITIES	22 PCS	ISO6157.3			PASSED	22	0
THREAD	15 PCS	JB/T 9151		nut	PASSED	15	0

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

SAMPLED BY: TANGHAO

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
ELONGATION	4 PCS	ISO898.1		Min. 22 %	28.7-30 %	4	0
TENSILE STRENGTH	4 PCS	ISO898.1		Min. 400 N/MM2	487-503 N/MM2	4	0
CORE HARDNESS	15 PCS	ISO898.1		67-95 HRB	85.8-89.4 HRB	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: