



**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-2031F
 COMMODITY: ISO 8676 HEX HD BOLT FINE THREAD FULL THERAD CL 8.8
 SIZE: M16-1.50X45 NF
 LOT NO: 1B2081004
 SHIP QUANTITY: 3,000 PCS
 HEADMARKS: GENIUS SYMBOL & 8.8
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/09/09
 PACKING NO: GEM200824007
 INVOICE NO: GEM/MAP-200911FRE
 PART NO: B333
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: 16306114-4
 MATERIAL: X40ACR
 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.	0.0200	0.4000	0.2000	0.7000			
MAX.		0.4300	0.4000	0.9000	0.0250	0.0150	0.1000
Test Value	0.0200	0.4000	0.2530	0.7600	0.0110	0.0040	0.0600

DIMENSIONAL INSPECTIONS: ACCORDING TO ISO 8676 TEST FACILITY : M

SAMPLED BY: HANFANGRONG

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
WIDTH ACROSS FLATS	4 PCS	JB/T 9151		23.6700-24.0000 MM	23.7500-23.8600 MM	4	0
NOMINAL LENGTH	15 PCS	JB/T 9151		44.5000-45.5000 MM	44.7800-45.0300 MM	15	0
HEIGHT	4 PCS	JB/T 9151		9.8200-10.1800 MM	9.9100-10.0600 MM	4	0
WIDTH ACROSS CORNERS	4 PCS	JB/T 9151		Min. 26.7500 MM	27.1200-27.3000 MM	4	0
MAJOR DIAMETER	4 PCS	JB/T 9151		15.7400-15.9600 MM	15.7800-15.8200 MM	4	0
SURFACE DISCONTINUITIES	22 PCS	ISO6157.3			PASSED	22	0
THREAD	15 PCS	JB/T 9151		6h GO 6h NOGO	PASSED	15	0

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

SAMPLED BY: DAIWENTING

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	4 PCS	ISO898.1		Min. 800 N/MM2	900-925 N/MM2	4	0
CORE HARDNESS	15 PCS	ISO898.1		22-32 HRC	28.5-30.6 HRC	15	0
SURFACE HARDNESS	15 PCS	ASTM E384		Max. 350 HV	275-299 HV	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: