



**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: ISO 4017 HEX HEAD BOLT FULL THREAD CL 8.8
 SIZE: M16-2.00X90
 LOT NO: 1B2030952
 SHIP QUANTITY: 1,875 PCS
 HEADMARKS: GENIUS SYMBOL & 8.8
 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: A899
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: 20302396
 MATERIAL: 40ACR
 FINISH: H. T. PLAIN

PERCENTAGE COMPOSITION OF CHEMISTRY: TEST FACILITY :S

Chemistry	C%	Cr%	Mn%	P%	S%	Si%
Spec.:MIN.	0.4000	0.2000	0.6000			
MAX.	0.4400	0.4000	0.9000	0.0250	0.0250	0.1000
Test Value	0.4100	0.2700	0.7700	0.0100	0.0020	0.0500

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

SAMPLED BY: ZHANGHONGYUN

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
WIDTH ACROSS FLATS	4 PCS	JB/T 9151		23.6700-24.0000 MM	23.6800-23.9800 MM	4	0
MAJOR DIAMETER	4 PCS	JB/T 9151		15.6900-15.9600 MM	15.6900-15.9300 MM	4	0
NOMINAL LENGTH	15 PCS	JB/T 9151		89.3000-90.7000 MM	89.5300-90.6300 MM	15	0
WIDTH ACROSS CORNERS	4 PCS	JB/T 9151		Min. 26.7500 MM	26.7900-26.8400 MM	4	0
HEIGHT	4 PCS	JB/T 9151		9.8200-10.1800 MM	9.8600-10.1200 MM	4	0
SURFACE DISCONTINUITIES	22 PCS	IS06157.3			PASSED	22	0
THREAD	15 PCS	JB/T 9151		6g GO 6g NOGO	PASSED	15	0

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

SAMPLED BY: SHACONGBIAO

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	4 PCS	IS0898.1		Min. 800 N/MM2	861-862 N/MM2	4	0
CORE HARDNESS	15 PCS	IS0898.1		22-32 HRC	28-30 HRC	15	0
SURFACE HARDNESS	15 PCS	ASTM E384		Max. 350 HV	286-292 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: