



**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-2016M
 COMMODITY: ISO 4014 HOT FORM HEX BOLT HALF THREAD CL 10.9
 SIZE: M33-3.50X110
 LOT NO: 1B2043144
 SHIP QUANTITY: 240 PCS
 HEADMARKS: GENIUS SYMBOL & 10.9
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/08/24
 PACKING NO: GEM200804003
 INVOICE NO: GEM/MAP-200824MEL
 PART NO: A2844
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: 16201656-4
 MATERIAL: 42CRMOA
 FINISH: H. T. PLAIN

PERCENTAGE COMPOSITION OF CHEMISTRY: TEST FACILITY :S

Chemistry	C%	Cr%	Mn%	Mo%	P%	S%	Si%
Spec.:MIN.	0.3800	0.9000	0.5000	0.1500			0.1700
MAX.	0.4500	1.2000	0.8000	0.2500	0.0250	0.0250	0.3700
Test Value	0.4100	1.0600	0.6600	0.1640	0.0090	0.0030	0.2100

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

SAMPLED BY: HANFANGRONG

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
MAJOR DIAMETER	3 PCS	JB/T 9151		32.5300-32.9400 MM	32.6000-32.6400 MM	3	0
SURFACE DISCONTINUITIES	15 PCS	IS06157.3			PASSED	15	0
HEIGHT	3 PCS	JB/T 9151		20.5800-21.4200 MM	20.8900-21.0600 MM	3	0
NOMINAL LENGTH	11 PCS	JB/T 9151		108.2500-111.7500 MM	110.7800-111.0300 MM	11	0
WIDTH ACROSS CORNERS	3 PCS	JB/T 9151		Min. 55.3700 MM	56.3200-56.6100 MM	3	0
WIDTH ACROSS FLATS	3 PCS	JB/T 9151		49.0000-50.0000 MM	49.5100-49.6700 MM	3	0
THREAD	11 PCS	JB/T 9151		6g GO 6g NOGO	PASSED	11	0

MECHANICAL PROPERTIES: ACCORDING TO ISO898.1-2013 TEST FACILITY : M

SAMPLED BY: TANGHAO

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	3 PCS	ISO898.1		Min. 1,040 N/MM2	1,108-1,137 N/MM2	3	0
CORE HARDNESS	11 PCS	ISO898.1		32-39 HRC	35.7-36.9 HRC	11	0
SURFACE HARDNESS	11 PCS	ASTM E384		Max. 390 HV	356-378 HV	11	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: