



GEM-YEAR TESTING LABORATORY CERTIFICATE OF INSPECTION

MANUFACTURER : GEM-YEAR INDUSTRIAL CO., LTD.
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DATE : 2020/01/04

PURCHASER : MAPTCO FASTENERS (AUST) PTY LTD
PO. NUMBER : MAP-1946M
COMMODITY : ISO 4017 HEX HEAD BOLT FULL THREAD CL 8.8
SIZE : M20-P2.50X50
LOT NO : 1B19B0841
SHIP QUANTITY : 1,500 PCS
HEADMARKS : GENIUS SYMBOL & 8.8
COUNTRY OF ORIGIN : CHINA

PACKING NO : GEM191224003
INVOICE NO : GEM/MAP-200106MEL
PART NO : A1098
SAMPLING PLAN :
ASME B18.18-2017/ASTM F1470-2018
HEAT NO : 195D6133
MATERIAL : ML40CR
FINISH : H. T. PLAIN

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	0.3900	0.9300	0.7600	0.0150	0.0030	0.2100

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

SAMPLED BY : ZHONGHY

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC.	REJ.
MAJOR DIAMETER	4PCS	JB/T 9151		19.6300-19.9500 MM	19.8600-19.8700 MM	4	0
WIDTH ACROSS CORNERS	4PCS	JB/T 9151		Min. 33.5300 MM	33.8300-33.8500 MM	4	0
HEIGHT	4PCS	JB/T 9151		12.2900-12.7100 MM	12.5200-12.5300 MM	4	0
NOMINAL LENGTH	15PCS	JB/T 9151		49.5000-50.5000 MM	50.0500-50.1900 MM	15	0
WIDTH ACROSS FLATS	4PCS	JB/T 9151		29.6700-30.0000 MM	29.8600-29.8900 MM	4	0
SURFACE DISCONTINUITIES	22PCS	ISO6157.3			PASSED	22	0
THREAD	15PCS	JB/T 9151		6g G0 6g NOG0	PASSED	15	0

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

SAMPLED BY : NSYING

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC.	REJ.
CORE HARDNESS	15PCS	ISO898.1		23-34 HRC	30-32 HRC	15	0
SURFACE HARDNESS	15PCS	ASTM E384			293-315 HV	15	0
TENSILE STRENGTH	4PCS	ISO898.1		Min. 830 N/MM2	912-927 N/MM2	4	0

ALL TESTS ARE IN ACCORDANCE WITH THE METHODS PRESCRIBED IN THE APPLICABLE ASTM/SAE/ASME/MIL-STD-120 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 : _____