



GEM-YEAR TESTING LABORATORY

CERTIFICATE OF INSPECTION

MANUFACTURER : GEM-YEAR INDUSTRIAL CO., LTD.
ADDRESS : NO.8 GEM-YEAR
ROAD,E.D.Z.,JIASHAN,ZHEJIANG,P.R.CHINA

Tel: (0573)84185001(48Lines)
Fax: (0573)84184488 84184567
DATE : 2020/03/10

PURCHASER : MAPTCO FASTENERS (AUST) PTY LTD
PO. NUMBER : MAP-1941M
COMMODITY : ISO 4017 HEX HEAD BOLT FULL THREAD CL 8.8
SIZE : M20-P2.50X60
LOT NO : 1B19A1100
SHIP QUANTITY : 1,300 PCS
HEADMARKS : GENIUS SYMBOL & 8.8
COUNTRY OF ORIGIN : CHINA

PACKING NO : GEM200103002
INVOICE NO : GEM/MAP-200317MEL
PART NO : A1109
SAMPLING PLAN :
ASME B18.18-2017/ASTM F1470-2018
HEAT NO : 196D5754
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	0.4200	0.9600	0.7400	0.0140	0.0030	0.1700

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	3PCS	JB/T 9151		19.6300-19.9500 MM	19.8600-19.8700 MM	3	0
WIDTH ACROSS CORNERS	3PCS	JB/T 9151		Min. 33.5300 MM	33.8200-33.8300 MM	3	0
HEIGHT	3PCS	JB/T 9151		12.2900-12.7100 MM	12.5200-12.5500 MM	3	0
NOMINAL LENGTH	13PCS	JB/T 9151		59.4000-60.6000 MM	60.0500-60.2300 MM	13	0
WIDTH ACROSS FLATS	3PCS	JB/T 9151		29.6700-30.0000 MM	29.8600-29.8700 MM	3	0
SURFACE DISCONTINUITIES	18PCS	ISO6157.3			PASSED	18	0
THREAD	13PCS	JB/T 9151		6g G0 6g NOG0	PASSED	13	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	13PCS	ISO898.1		23-34 HRC	30-32 HRC	13	0
SURFACE HARDNESS	13PCS	ASTM E384			303-325 HV	13	0
TENSILE STRENGTH	3PCS	ISO898.1		Min. 830 N/MM2	912-913 N/MM2	3	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 : _____