



**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-2029F
 COMMODITY: ISO 4017 HEX HEAD BOLT FULL THREAD CL 10.9
 SIZE: M16-2.00X45
 LOT NO: 1B2072332
 SHIP QUANTITY: 3,000 PCS
 HEADMARKS: GENIUS SYMBOL & 10.9
 COUNTRY OF ORIGIN: CHINA

TEL: (0573) 84185001 (48Lines)
 FAX: (0573) 84184488 84184567
 DATE: 2020/10/13
 PACKING NO: GEM200918002
 INVOICE NO: GEM/MAP-201014FRE
 PART NO: A842
 SAMPLING PLAN:
 ASME B18.18-2017/ASTM F1470-2018
 HEAT NO: C376628A
 MATERIAL: SCM435
 FINISH: H. T. TRIVALENT ZINC 5U HYDROGEN
 RELEASE

PERCENTAGE COMPOSITION OF CHEMISTRY: TEST FACILITY :S

Chemistry	C%	Cr%	Mn%	Mo%	Ni%	P%	S%	Si%
Spec.:MIN.	0.3300	0.9000	0.6000	0.1500				0.1500
MAX.	0.3800	1.2000	0.8500	0.3000	0.2500	0.0250	0.0250	0.3500
Test Value	0.3500	0.9900	0.6400	0.2000	0.0400	0.0050	0.0030	0.2400

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

SAMPLED BY: YANGLI

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
WIDTH ACROSS FLATS	4 PCS	JB/T 9151		23.6700-24.0000 MM	23.7400-23.8500 MM	4	0
NOMINAL LENGTH	15 PCS	JB/T 9151		44.5000-45.5000 MM	44.8500-44.9600 MM	15	0
MAJOR DIAMETER	4 PCS	JB/T 9151		15.6900-15.9600 MM	15.7800-15.8900 MM	4	0
WIDTH ACROSS CORNERS	4 PCS	JB/T 9151		Min. 26.7500 MM	27.4100-27.4300 MM	4	0
HEIGHT	4 PCS	JB/T 9151		9.8200-10.1800 MM	10.0700-10.1800 MM	4	0
SURFACE DISCONTINUITIES	29 PCS	IS06157.3			PASSED	29	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: NIESUYING

INSPECTIONS ITEM	SAMPLE	TEST METHOD	REF	SPECIFIED	ACTUAL RESULT	ACC	REJ
TENSILE STRENGTH	4 PCS	IS0898.1		Min. 1,040 N/MM2	1,099-1,282 N/MM2	4	0
CORE HARDNESS	15 PCS	IS0898.1		32-39 HRC	36-37 HRC	15	0
SURFACE HARDNESS	15 PCS	ASTM E384		Max. 390 HV	360-378 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: