

QUALITY CERTIFICATE

NINGBO JINDING FASTENING PIECE CO., LTD

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Customer:	MAPTCO FASTENERS(AUST)PTY LTD.,	Date :	2020-07-21
Product:	HEX CAP SCREWS	Contract No:	20JDMFC068A
Class:	8	Invoice No:	2007-69183314
Size:	5/16-18X3(Full Thread)	Lot No:	3645300021
Marking:	JDF six radius	Order No.	
Quantity:	8.400 mpcs	Part No.	D1022
Country of Origin:	CHINA	Production Date	2020-05-08
Dimensions Of SPEC:	TEST FACILITY: Manufacturer	Certificate No.:	202006231259

Inspection Items	Standard	Result	Sample	Pass
Visual Appearance	-----	OK	30	30
Body Diameter	/	/	20	20
Thread	Go	3A	OK	20
	No Go	2A	OK	20
Width Across Flats	0.500-0.489	0.490-0.491	20	20
Width Across Corners	0.577-0.557	0.559-0.559	20	20
Major Diameter	0.303-0.311	0.306-0.309	20	20
Head Height	0.211-0.195	0.206-0.207	20	20
Total Length	2.940-3.000	2.974-2.975	20	20
Thread Length	mi n 2.861	2.866-2.870	20	20
Key Engagement	/	/	20	20
Head Diameter	/	/	20	20

Mechanical Properties		TEST FACILITY: Manufacturer			
CharacTeristics	Standard	Result	Sample	Pass	
Surface Hardness [30N]	max 58.6	53.0-53.5	10	10	
Core Hardness [HRC]	33-39	34.0-34.5	10	10	
Wedge Strength [psi]	mi n 150000	155582-157759	8	8	
Yield Strength , 0.2% offset [psi]	mi n 130000	139472-148906	8	8	
Elongation [%]	mi n 12	13-17	8	8	
Reduction Of area [%]	mi n 35	38.1-52.3	8	8	
Proof Load [Ib]	6300	6300	4	4	
Impact test [Akv/J]					
Decarburization	N \geq 2/3H1 HVO.3	367.78 354.19 363.15	6	6	
HV(2) \geq HV(1)-30, HV(3) \leq HV(1)+30	G 0.0006max		6	6	

CHEMICAL COMPOSITION(%)		TEST FACILITY: Supplier									
Heat No	C	Si	Mn	P	S	Cr	Ni	Cu	Mb	B	
XGML40CR-8 E12001250XX	0.40	0.20	0.70	0.017	0.003	0.99		0.02			
Thickness [UM]	mi n 5					13.3-15.5		20		20	
Surface Coating:	ZPCr3+ 5 μ m (coating test method: X ray according to ASTM B568-98(2014) standard test method for measurement of coating thickness by X-Ray spectrometry)										

Thread Specification: ASME B1.1 2008, UNIFIED INCH SCREW THREADS(UN AND UNR THREAD FORM)

Sampling Dimension Specification: ASME B18.18-2017 inspection and quality assurance for high-volume machine assembly fasteners

Dimension Specification: ASME B18.2.1 2012, HEX CAP SCREWS

Sampling mechanical properties specification: ASTM F1470 2018 Standard Guide for Fastener Sampling for Specified Mechanical Properties and Performance Inspection

Mechanical Properties: SAE J429 2014, MECHANICAL AND MATERIAL REQUIREMENTS FOR EXTERNALLY THREADED FASTENERS

Surface Defect: ASTM F788/F788M-2013, SURFACE DISCONTINUITIES OF BOLTS, SCREWS, AND STUDS

Plating Specification: ASTM 1941 2016, Electrodeposited Coatings On Threaded Fasteners

The MTR shall include a statement that the products supplied are in compliance with all the requirements of the order.

THE REPORT IS ISSUED ACCORDING TO ISO16228 F3.1(EN10204 3.1)

Quality Control Supervisor	Quality Control Manager
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沈健秋