

QUALITY CERTIFICATE

NINGBO JINDING FASTENING PIECE CO., LTD

XI JINGTANG JIULONGHU NINGBO CHINA TEL: +86-574-86530122 FAX: +86-574-86530858

Customer:	MAPTCO FASTENERS(AUST)PTY LTD.,	Date :	2020-07-21
Product:	HEX CAP SCREWS	Contract No:	20JDMFC068A
Class:	8	Invoice No:	2007-69183314
Size:	9/16-12X2-1/2	Lot No:	3645300023
Marking:	JDF six radius	Order No.	
Quantity:	4.200 mpcs	Part No.	D728
Country of Origin:	CHINA	Production Date	2020-05-20
Dimensions Of SPEC:	TEST FACILITY: Manufacturer	Certificate No.:	202006231955

Inspection Items	Standard	Result	Sample	Pass
Visual Appearance	-----	OK	30	30
Body Diameter	0.554-0.563	0.559-0.560	20	20
Thread	Go	2A	OK	20
	No Go	2A	OK	20
Width Across Flats	0.812-0.798	0.804-0.805	20	20
Width Across Corners	0.938-0.910	0.923-0.928	20	20
Major Diameter	0.550-0.561	0.555-0.556	20	20
Head Height	0.371-0.348	0.360-0.363	20	20
Total Length	2.500-2.420	2.469-2.474	20	20
Thread Length	mi n 1.375	1.417-1.417	20	20
Key Engagement	/	/	20	20
Head Diameter	/	/	20	20

Mechanical Properties		TEST FACILITY: Manufacturer			
CharacTeristics	Standard	Result			
Surface Hardness [30N]	max 58.6	54.0-54.5	10	10	
Core Hardness [HRC]	33-39	34.5-35.0	10	10	
Wedge Strength [psi]	mi n 150000	158195-160081	8	8	
Yield Strength , 0.2% offset [psi]	mi n 130000	141649-147310	8	8	
Elongation [%]	mi n 12	14-16	8	8	
Reduction Of area [%]	mi n 35	41.5-50.0	8	8	
Proof Load [Ib]	21800	21800	4	4	
Impact test [Akv/J]					
Decarburization	N ≥ 2/3H1 HVO.3	356.06 364.41 355.96	6	6	
HV(2) ≥ HV(1) - 30, HV(3) ≤ 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-16	E12001248XX	0.41	0.19	0.69	0.019	0.002	0.97		0.02		
Thickness	[UM]							20	20		
Surface Coating:	BLACK										

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

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