

## QUALITY CERTIFICATE

NINGBO JINDING FASTENING PIECE CO., LTD

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Customer:	MPTCO FASTENERS(AUST)PTY LTD. ,	Date :	2020-07-21
Product:	DIN960	Contract No:	20JDMFC088A
Class:	10.9	Invoice No:	2007-69183314
Size:	24X2X130	Lot No:	3651180025
Marking:	JDF 10.9	Order No.	
Quantity:	0.520 mpcs	Part No.	B1205
Country of Origin:	CHINA	Production Date	2020-06-12
Dimensions Of SPEC:	TEST FACILITY: Manufacturer	Certificate No.:	202007237048

Inspection Items		Standard	Result	Sample	Pass					
Visual Appearance		-----	OK	30	30					
Body Diameter		23.67-24	23.72-23.75	20	20					
Thread	Go	6gT	OK	20	20					
	No Go	6gZ	OK	20	20					
Width Across Flats		36-35.38	35.51-35.60	20	20					
Width Across Corners		min 39.98	40.86-41.00	20	20					
Major Diameter		23.682-23.962	23.75-23.77	20	20					
Head Height		15.22-14.78	14.85-15.00	20	20					
Total Length		129.2-130.8	129.86-130.00	20	20					
Thread Length		min 60	62.00-62.00	20	20					
Key Engagement		/	/	20	20					
Head Diameter		/	/	20	20					
Mechanical Properties TEST FACILITY: Manufacturer										
CharacTeristics		Standard	Result							
Core Hardness	[HRC]	32-39	36.0-36.5	10	10					
Wedge Strength	[Mpa]	min 1040	1169-1175	8	8					
Tensile Strength	[Mpa]	min 1040	1170-1171	8	8					
Yield Strength ,0.2% offset	[Mpa]	min 940	1006-1019	8	8					
Elongation	[%]	min 9	12.1-12.8	8	8					
Reduction Of area	[%]	min 48	54.6-55.9	8	8					
Proof Load	[kN]	319	319	4	4					
Impact test	[AkV/J]									
Decarburization		E/mm E≥2/3HI HV0.3	350.58 366.07 345.72	6	6					
HV(2) ≥HV(1) -30, HV(3) ≤HV(1) +30		G 0.015max		6	6					
CHEMICAL COMPOSITION(%) TEST FACILITY: Supplier										
Heat No	C	Si	Mn	P	S	Cr	Ni	Cu	Mb	B
XGML40CR-25 331906369	0.40	0.20	0.69	0.014	0.004	0.96	0.02	0.02		
Thickness	[UM]						20		20	
Surface Coating:	BLACK									
Thread Specification: ISO 965-1 1998:LIMITS OF SIZES FOR GENERAL PURPOSE EXTERNAL AND INTERNAL SCREW THREADS - MEDIUM QUALITY										
sampling dimension specification: ISO3269 2000 inspection and quality assurance for high-volume machine assembly fasteners										
Dimension Specification: DIN 960-1990, HEXAGON HEAD BOLTS WITH FINE PITCH THREAD(PRODUCT GRADES A AND B)										
sampling mechanical properties specification: ISO3269 2000 Standard Guide for Fastener Sampling for Specified Mechanical Properties and Performance Inspection										
Mechanical Properties: ISO 898-1 2013, MECHANICAL PROPERTIES OF FASTENERS MADE OF CARBON STEEL AND ALLOY STEEL -PART 1: BOLTS, SCREWS AND STUDS										
Surface Defect: ISO 6157-1:1988, FASTENERS - SURFACE DISCONTINUITIES -PART 1:BOLTS, SCREWS AND STUDS FOR GENERAL REQUIREMENTS										
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		



沈健秋