

QUALITY CERTIFICATE

JD/Q4-902-04 A/0

NINGBO JINDING FASTENING PIECE CO., LTD

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Customer: MAPTCO FASTENERS(AUST)PTY LTD.,	Date : 2020-07-21
Product: IS04017	Contract No: 20JDMFC049A
Class: 8.8	Invoice No: 2007-69183314
Size: 16X180	Lot No: 3641310006
Marking: JDF 8.8	Order No.
Quantity: 3.525 mpcs	Part No. A954
Country of Origin: CHINA	Production Date 2020-05-15
Dimensions Of SPEC: TEST FACILITY: Manufacturer	Certificate No.: 202006231851

Inspection Items	Standard	Result	Sample	Pass
Visual Appearance	-----	OK	30	30
Body Diameter	/	/	20	20
Thread	Go	6hT	20	20
	No Go	6gZ	20	20
Width Across Flats	24-23.16	23.83-23.91	20	20
Width Across Corners	min 26.17	27.28-27.31	20	20
Major Diameter	15.682-15.962	15.75-15.78	20	20
Head Height	9.71-10.29	9.99-10.03	20	20
Total Length	178-182	180.0-180.3	20	20
Thread Length	min 174	175-176.5	20	20
Key Engagement	/	/	20	20
Head Diameter	/	/	20	20

Mechanical Properties TEST FACILITY: Manufacturer				
CharacTeristics	Standard	Result	Sample	Pass
Core Hardness [HRC]	22-32	30-30.5	10	10
Wedge Strength [Mpa]	min 800	932-946	8	8
Tensile Strength [Mpa]	min 800	936-941	8	8
Yield Strength ,0.2% offset [Mpa]	min 640	690-793	8	8
Elongation [%]	min 12	13-18	8	8
Reduction Of area [%]	min 52	53.6-59.6	8	8
Proof Load [kN]	91	91	4	4
Impact test [Akv/J]				
Decarburization	E≥1/2H1 HVO.3	306.29 310.21 313.74	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	Mo	B
10B33-16 E12001540	0.33	0.18	0.79	0.014	0.003	0.15				0.0019
Thickness [UM]	min 5			12.0-12.7			20		20	

Surface Coating: ZPCr3+ 5 μm (coating test method: X ray according to ISO3497-2000 standard test method for measurement of coating thickness by X-Ray spectrometry)

Thread Specification: ISO 965-2 1998, PART 2: 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: ISO 4017-2011, HEXAGON HEAD SCREWS - 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

Plating Specification: ISO 4042-2018, FASTENERS - ELECTROPLATED COATINGS

The MFR 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