

# QUALITY CERTIFICATE

Customer: NSS FASTENERS  
Product: EN14399-4 ASSEMBLE  
Class: 10.9  
Size: 20X75  
Marking: JDF 10.9 HV A05  
Quantity: 2.475 mpcs

Country of Origin: CHINA

Dimensions Of SPEC: TEST FACILITY: Manufacturer

Date: 2018-11-01  
Contract No: 18JDNSS237Y  
Invoice No: 18-00431178  
Lot No: 3545120029  
Order No: 452294  
Part No: AMTHSFG20075  
Production Date: 2018-08-12  
Certificate No.: 2018062702006

Inspection Items		Standard	Result	Sample	Pass
Visual Appearance		-----	OK	20	20
Body Diameter		19.16-20.84	19.77-19.80	20	20
Thread	Go	6gT	OK	20	20
	No Go	6gZ	OK	20	20
Width Across Flats		32-31	31.12-31.35	20	20
Width Across Corners		min 35.03	35.89-36.00	20	20
Major Diameter		19.623-19.958	19.80-19.83	20	20
Head Height		12.1-13.9	12.78-12.90	20	20
Total Length		73.5-76.5	74.74-75.00	20	20
Thread Length		min 33	34-35	20	20
Key Engagement		/	/	20	20
Head Diameter		/	/	20	20

Mechanical Properties TEST FACILITY: Manufacturer

CharacTeristics		Standard	Result		
Core Hardness [HRC]		32-39	34-35	10	10
Wedge Strength [Mpa]		min 1040	1116-1122	8	8
Tensile Strength [Mpa]		min 1040	1119-1119	8	8
Yield Strength [Mpa]		min 940	1017-1043	8	8
Elongation [%]		min 9	12.7-13.9	8	8
Reduction Of area [%]		min 48	55.7-58.3	8	8
Proof Load [kN]		203	203	4	4
Impact test [AkV/J]					
Decarburization		E/mm $E \geq 2/3H1$ HVO.3	347.29 365.87 369.12	6	6
HV2>=HV1-30, HV3<=HV1+30		G 0.015max		6	6

CHEMICAL COMPOSITION(%) TEST FACILITY: Supplier

Heat No	C	Si	Mn	P	S	Cr	Ni	Cu	Mo	B
XGML40CR J21802524	0.40	0.20	0.70	0.014	0.004	1.015	0.018	0.015		
Thickness [UM]						20		20		

Surface Coating: BLACK

Thread Specification: ISO 965-2, 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: EN 14399-4 SYSTEM HV---HEXAGON BOLT AND NUT ASSEMBLIES

Sampling Properties specification: ISO3269 2000 Standard Guide for Fastener Sampling for Specified Mechanical Properties and Performance

Sampling Properties: EN 898-1, MECHANICAL PROPERTIES OF FASTENERS MADE OF CARBON STEEL AND ALLOY STEEL --PART 1: BOLTS, SCREWS AND STUDS

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

Quality Control Supervisor

Quality Control Manager

沈健秋

# QUALITY CERTIFICATE

Customer: NSS FASTENERS

Date : 2018-11-01

Marking: JDF 10 HV A05

Invoice No: 18-00431178

Class: 10

Order No. 452294

Quantity: 16.875 mpcs

DESCRIPTION: EN14399-4 20

Country of Origin:CHINA

Certificate No.: 2018062702007

DIMENSIONS OF SPEC TEST FACILITY:Manufacturer

Inspection Items	Standard	Result
VISUAL APPEARANCE	-----	OK
WIDTH ACROSS FLATS	32-31	31.2-31.35
WIDTH ACROSS Corners	min 35.03	35.3-35.8
HEIGHT	16-14.9	15.2-15.5

MECHANICAL PROPERTIES TEST FACILITY:Manufacturer

CHARACTERISTICS	Standard	Result
HARDNESS [HRC]	26-36	30.8-32.5
PROOF LOAD [kN]	min 259.7	261.5-274.2
COATING THICKNESS [UM]		

CHEMICAL COMPOSITION(%) TEST FACILITY:Supplier

MILL HEAT	C	Si	Mn	P	S	Cr	Ni	Cu	Mo	B
B17120016	0.44	0.19	0.69	0.007	0.005	0.031	0.015	0.043		

Surface Coating: BLACK

The information on chemical composition is based on the test

certificate received from the steel mill or supplier

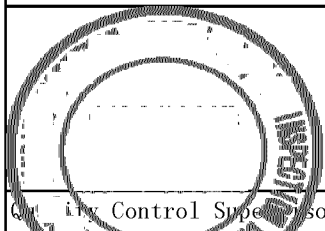
Material described in this document has been inspected under the parameters

set forth and found to be in conformance with the physical requirement

We certify the above product meets specific requirement

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)

	<p>Quality Control Supervisor</p>	<p>沈健秋</p> <p>Quality Control Manager</p>
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# QUALITY CERTIFICATE

Customer: NSS FASTENERS

Date : 2018-11-01

Marking: JDF H A05

Invoice No: 18-00431178

Class: /

Order No. 452294

Quantity: 33.750 mpcs

DESCRIPTION: EN14399-6 20

Country of Origin:CHINA

Certificate No.: 2018062702007

DIMENSIONS OF SPEC TEST FACILITY:Manufacturer

Inspection Items	Standard	Result
VISUAL APPEARANCE	-----	OK
INTERNAL DIAMETER	21.33-21	21.15-21.2
EXTERNAL DIAMETER	37-36.38	36.7-36.8
HEIGHT	3.7-4.3	3.95-3.99

MECHANICAL PROPERTIES TEST FACILITY:Manufacturer

CHARACTERISTICS	Standard	Result
HARDNESS [HRC]	31.5-39	33-35.6
COATING THICKNESS [UM]		

CHEMICAL COMPOSITION(%) TEST FACILITY:Supplier

MILL HEAT	C	Si	Mn	P	S	Cr	Ni	Cu	Mo	B
823571-1	0.47	0.29	0.68	0.011	0.004					

Surface Coating: BLACK

The information on chemical composition is based on the test

certificate received from the steel mill or supplier

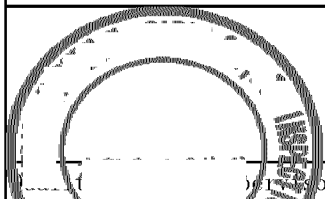
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	_____ Quality Control Manager
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