



# HEARTLAND PRECISION FASTENERS INC

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New Century, Kansas 66031

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EAR: ECCN 9A991d SCHEDULE B: 7318.15.9000

CAGE CODE: 0ZC82 CERTIFICATE OF CONFORMANCE

HEARTLAND PRECISION FASTENERS, INC CERTIFIES THAT THE FASTENERS IN THIS SHIPMENT HAVE BEEN MANUFACTURED IN ACCORDANCE WITH HPFI'S QUALITY SYSTEM MANUAL, HPQM-001, REVISION H, APPLICABLE DRAWINGS, SPECIFICATIONS AND CONTRACT REQUIREMENTS. DIMENSIONAL, MECHANICAL, METALLURGICAL AND FINISH TESTS WERE PERFORMED AND CONFORM TO SAID SPECIFICATIONS. TRACEABILITY INFORMATION IS MAINTAINED AND ON FILE BY LOT NUMBER PER HPQP-018. WE CERTIFY THAT THIS LOT WAS MANUFACTURED FREE FROM MERCURY, RADIUM, ALPHA SOURCE CONTAMINATION AND OZONE DEPLETING SUBSTANCES.

PAGE 1 OF 1

WENCOR WEST, INC.  
1535 N. 1100 W.  
SOUTH BLDG, WEST DOCK 2 & 3  
SPRINGVILLE, UT 84663-0514

QTY: 45,808

PO#: SL4BAFYFS #1

\* F51416

PART: NAS1102E3-10	REVISION: 10	LOT NO: 45499	CERT DATE: 5/12/14
DESCRIPTION: SCREW, MACHINE-FLAT 100° HEAD, FULL THREAD, OFFSET CRUC.-NO RIB		MFG. DATE: 4/23/14	
DFARS 252.225-7009 COMPLIANT		IN-PROCESS INIT. DATE: 2/5/14	
PROCUREMENT SPEC: NAS4003	REVISION: 11	HEADMARK: NAS1102-3E	
MATERIAL SPEC: AMS 5737	REVISION: P	GRADE: A286	QUANTITY MANUFACTURED: 45,808
RAW MAT. CERT: SEE ATTACHED	HEAT: 569676	SUPPLIER: CARPENTER	

**MECHANICAL TESTING**

ULTIMATE TENSILE STRENGTH				DOUBLE SHEAR STRENGTH		HARDNESS	
POUNDS	FRACTURE	POUNDS	FRACTURE	POUNDS		ROCKWELL C SCALE	
3,808	THREAD	3,790	THREAD	VALIDATION ACCEPTABLE		NOT APPLICABLE	
3,822	THREAD	3,752	THREAD	<b>WENCOR LLC RECEIVED MAY 16 2014</b>			
3,781	THREAD	3,764	THREAD				
3,765	THREAD	3,786	THREAD				
3,787	THREAD	3,789	THREAD				
MIN: 3,180							
Ka: 2.34							
X1-KaS1: 3,736							

MAGNETIC PERMEABILITY PER ASTM A342/A342M: PASS  
RECESS TORQUE: PASS

**METALLURGICAL TESTING**

MAG=100x	SAMPLE SIZE: 8	DISCONTINUITIES: ACCEPTABLE	CONTAMINATION: NONE	GRAIN SIZE: 7	GRAIN FLOW: ACCEPTABLE	MICROSTRUCTURE: SATISFACTORY
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**SPECIAL PROCESSES**

HEAT TREATMENT:	PER AMS2759/3 REV. E		
FINISH:	PASSIVATE METHOD 1, TYPE 2, CLASS 1 PER AMS2700(E)		
THREADS:	.1900-32 UNJF-3A STANDARD PER AS8879(D)		
NDT:	FLUORESCENT PENETRANT PER ASTM E 1417-13	ACCEPT: 67	REJECT: 0
STAMP:	AUTHORIZED QUALITY REPRESENTATIVE CODY GRISHAM <i>Cody Grisham</i>		



HPF 1801 REV. B DATED 4/21/10 THE ORIGINAL OF THIS CERTIFICATE HAS A RAISED SEAL & SHALL NOT BE REPRODUCED EXCEPT IN FULL, WITHOUT WRITTEN APPROVAL OF HPFI LABORATORY. ISO 9001: 2008 AND AS9100: 2009 MADE IN THE UNITED STATES OF AMERICA