

verified by Thyssenarupp materials NA, Anna Riggs
 Quantity: 156 LB
 Cust PO#: 72861 S 0F02233
 Customer: COPPER AND BRASS SALES, CANADA

(1 OF 1)
 2008-08-15
 Shipper#: 7F2872
 Cust Part#:

Anna C. Riggs
A10193

Crucible Specialty Metals
 A Division of Crucible Materials Corporation
 P.O. BOX 977
 SYRACUSE
 NEW YORK 13201

CERTIFICATE OF TEST

COPPER & BRASS SALES INC
 ATTN: ACCOUNTS PAYABLE
 22355 WEST ELEVEN MILE RD
 SOUTHFIELD MI 48034

SHIP TO
 COPPER & BRASS SALES
 10648 W LITTLE YORK, SUITE 400
 HOUSTON, TX 77041

OUR ORDER NO.
 P5-11299-8-01
 DATE
 06/23/08

CUSTOMER ORDER # & DATE W72749 ✓ <i>Pt: 399450</i>	CUSTOMER REQ. # <i>399450</i>	DISTRICT B PARSONS	SHIPPED FROM SYRACUSE
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DESCRIPTION OF MATERIAL
 CRU 316/316L RTA (P/N 399450-6)
 ASTM-A479-06A ASTM A276-06 AMS-5648K AMS-5653F ASME-SA479-07ED QQS-763F
 DFARS 252.225.7014 & 225.7002-3 (B) (1) COMPLIANT ROHS COMPLIANT

SIZE
 11 RD

MATERIAL NO.	CHEMICAL ANALYSIS										
	C	MN	P	S	SI	NI	CR	MO	CU	N	
A10193 ✓	.020	1.79	.029	.022	.63	10.14	16.56	2.26	.43	.083	

QUANTITY	HEAT NO.	MECHANICAL PROPERTIES				
		TENSILE PSI	YLD. 2X PSI	%ELONG4D	RED/AREA%	HARDNESS
4238 #	A10193	86,630	43,940	47.1	55.5	BHN 157

1ACRO TEST OK
 INTERGRANULAR CORROSION TEST OK.
 GRAIN SIZE # 5
 MATERIAL MELTED BY ELECTRIC FURNACE ARGON OXYGEN DECARBURIZATION REFINED.
 MATERIAL ANNEALED AT 1900 DEG. F. -- WATER QUENCHED.
 MATERIAL IS ROHS/WEEE COMPLIANT.

MATERIAL FREE FROM MERCURY CONTAMINATION AT TIME OF SHIPMENT
 WELD REPAIR PERFORMED
 MATERIAL MELTED IN U.S.A.

THANK YOU FOR SELECTING A QUALITY PRODUCT
 MANUFACTURED BY THE EMPLOYEES OF CRUCIBLE SPECIALTY METALS DC

SWORN TO AND SUBSCRIBED BEFORE ME THIS
 _____ DAY OF _____ 20____

THE ABOVE MATERIAL WAS MANUFACTURED AND TESTED IN ACCORDANCE WITH ABOVE SPECIFICATIONS AND IS IN CONFORMANCE WITH THOSE SPECIFICATION REQUIREMENTS.
 CRUCIBLE MATERIALS CORPORATION
 ACTING BY AND THROUGH ITS SPECIALTY METALS DIVISION

CERTIFIED BY *[Signature]*