

Ht # A15595

CERTIFICATE OF TEST

Crucible Specialty Metals
A Division of Crucible Materials Corporation
SYRACUSE
NEW YORK 13201

ASA ALLOYS INC 31 STEINWAY BLVD ETOBICOKE ONTARIO M9W6H6	SHIP TO ASA ALLOYS INC 4311-92ND AVENUE EDMONTON, ALBERTA T6B 3M7	OUR ORDER NO P5-10831-4- DATE 05/27/04
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CUSTOMER ORDER # & DATE 042603-CV	CUSTOMER REQ. #	DISTRICT B PARSONS	SHIPPED FROM SYRACUSE
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DESCRIPTION OF MATERIAL

CRU 316/316L RTA SIZE 10 RD

AMS-5653F AMS-5648K AMS-005-763 ASTM-A276-03 ASTM-A193-01B

ASTM-A479-03 ASTM-A182-02 (CHEM & MECH) ASME-SA182-01ED (CHEM & MECH)

ASME-SA479-01ED ASME-SA193-01ED MIL-S-7720A NACE-MR-01-75-01

EN 10204 3.1B

AT NO.	CHEMICAL ANALYSIS											
A15393	C	MM	P	S	SI	NI	CR	MO	CO	CU	N	
	.026	1.83	.028	.026	.68	11.27	16.84	2.11	.12	.36	.093	

QUANTITY	HEAT NO.	MECHANICAL PROPERTIES				
4494 #	A15393	TENSILE PSI	YLD. 22% PSI	ELONG 2IN	RED. AREA %	HARDNESS
		34,500	40,800	58.0	62.0	3MM 143

HACRO TEST OK

INTERGRANULAR CORROSION TEST OK.

GRAIN SIZE # 4

E 11660

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

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

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

NOTARY PUBLIC

THE ABOVE MATERIAL WAS MANUFACTURED AND TESTED IN ACCORDANCE WITH ABOVE SPECIFICATIONS AND IS IN CONFORMANCE WITH SPECIFICATION REQUIREMENTS.

CRUCIBLE MATERIALS CORPORATION
 ACTING BY AND THROUGH ITS SPECIALTY METALS DIVISION

CERTIFIED BY: *William P. Minter*
 QUALITY ASSURANCE REPRESENTATIVE