A15471. A15471.

SP 425.50-A

Crucible Specialty Metals
A Division of Crucible Materials Corporation

P.O. BOX 977
SYRACUSE
NEW YORK 13201

CERTIFICATE OF TEST

37512 (E)

SOLD TO: ASA ALLOYS INC 81 STEINWAY BLVD ETOBICOKE ONTARIO M9W6H6	SHIP TO: ASA ALLOYS INC 81 STEINWAY BLVD ETOBICOKE ONTARIO M9W6H6 03	OUR ORDER NO. P5-10367-4-01 DATE 09/22/04

CUSTOMER ORDER # & DATE	CUSTOMER REQ. #	DISTRICT	SHIPPED FROM
042387-CV		B PARSONS	SYRACUSE

DESCRIPTION OF MATERIAL

SIZE

CRU 316/316L RTA 6.250 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

CHEMICAL ANALYSIS

HEAT NO.	C	MN	P	S	SI	NI	CR	MO	CO	CU	N
A15471	.018	1.71	.024	.023	.61	10.41	16.61	2.08	.11	.49	.085

MECHANICAL PROPERTIES

QUANTITY	HEAT NO.	TENSILE PSI	YLD.2%PSI	%ELONG2IN	RED/AREA%	HARDNESS
6337 #	A15471	80,285	37,803	59.5	69.2	BHN 142

MACRO TEST OK

INTERGRANULAR CORROSION TEST OK.

GRAIN SIZE # 6

MATERIAL ANNEALED AT 1900 DEG. F. - WATER QUENCHED.

REVISED COPY - ORIGINAL CERT DATED 06/15/04

MATERIAL FREE FROM MERCURY CONTAMINATION AT TIME OF SHIPMENT
NO WELD REPAIR PERFORMED
MATERIAL MELTED IN U.S.A.

THANK YOU FOR SELECTING A QUALITY PRODUCT

MANUFACTURED BY THE EMPLOYEES OF CRUCIBLE SPECIALTY METALS WE

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 THOSE SPECIFICATION REQUIREMENTS.

CRUCIBLE MATERIALS CORPORATION
ACTING BY AND THROUGH ITS SPECIALTY METALS DIVISION

CERTIFIED BY: William E Mastroe
QUALITY ASSURANCE REPRESENTATIVE

WILLIAM E MASTROE- MANAGER QUALITY ASSURANCE