

A19953

S O L D T O	A M CASTLE, INC 3400 N WOLF RD FRANKLIN PARK, IL 60131	S H I P T O	A M CASTLE, INC 3400 N WOLF RD FRANKLIN PARK, IL 60131	OUR ORDER NO. P5-18057-7-01
				DATE 06/02/08
CUSTOMER ORDER NO 01-40761		CUSTOMER REQ NO		DISTRICT B PARSONS
				SHIPPED FROM SYRACUSE

DESCRIPTION OF MATERIAL

CRU 316/316L RT A IAC 31026 SIZE
16 RD
 AMC-3316-98 REV 28 ASTM-A182-07A (CHEM & MECH) A193-07 (EX PAR 6.3)
 A276-06 A479-06A ASME-SA182-07ED (CHEM & MECH) ASME-SA193-07ED (EX PAR 6.3)
 ASME-SA479-07ED AMS-5648K AMS-5653F UNS# S31600/31603 NACE MR-01-75
 DFARS 252.225.7014 ALT 1 AND 225.7002-3 (B) (1) COMPLIANT

HEAT NO.

CHEMICAL ANALYSIS

A19953	C	MN	P	S	SI	NI	CR	MO	CO	CU	N
	.020	1.72	.029	.024	.58	10.28	16.33	2.09	.15	.46	.077

QUANTITY

HEAT NO.

MECHANICAL PROPERTIES

5992 # A19953	TENSILE PSI	YLD.2%PSI	%ELONG4D	RED/AREA%	HARDNESS
	77,950	33,140	59.8	62.8	BHN 151

MACRO TEST OK
 GRAIN SIZE # 4
 INTERGRANULAR CORROSION TEST OK PER ASTM A262, PRACTICE E.
 MATERIAL ANNEALED AT 1900 DEG. F. - WATER QUENCHED.

MATERIAL FREE FROM CONTINUOUS CARBIDE NETWORK.
 CRUCIBLE MATERIALS CORP. VENDOR #18610.
 MATERIAL INGOT CAST.

NAFTA - YES
 REVISED COPY - ORIGINAL CERT DTD 05/23/08

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

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

CERTIFIED BY

DANA A. CUSANO - QUALITY ASSURANCE REPRESENTATIVE