

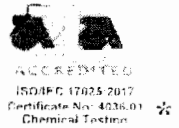


575 STATE FAIR BLVD.
SOLVAY, NY 13209

Certificate of Test

Cert Date: 08/08/19

REVISED COPY ORIGINAL SENT 10/26/18



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CIL ORDER NO.
P5-12457-8-01

HEAT NO.
A13819

CIL INSIDE SALES REP.
E JONES

SHIPPED FROM
SOLVAY, NY USA

CUSTOMER P.O.
P034865

CUSTOMER PART NO.

QUANTITY SHIPPED 7910 LBS.

ALL MELTING DONE IN USA.

DESCRIPTION OF MATERIAL

SIZE
CRU 316/316L RT A 24.000 RD
AMS-5648-L AMS-5653-H AMS-QQ-S-763-B ASME SA-182-17ED (CHEM & MECH)
ASME SA-479-17ED ASTM-A182-16 (CHEM & MECH) ASTM-A262-15 PRACTICE A/E
ASTM-A276-17 ASTM-A479-17 ASTM-A484-18 QQS-763F UNS S31600/S31603
ANSI/NACE MR0175/ISO 15156-3 2ND ED 2009-10-15

CHEMICAL ANALYSIS *

C	MN	P	S	SI	NI	CR	MO	CO	CU	N
.012	1.82	.031	.023	.55	10.48	16.73	2.10	.10	.20	.075

AS SHIPPED PROPERTIES

HARDNESS
BHN 150

LONGITUDINAL

TENSILE PSI 80,010 SONIC/MACRO ACCEPTABLE GRAIN SIZE 3.0
YLD. 2% PSI 39,630
% ELONG4D 57.9
RED/AREA% 74.2

THE REQUIREMENTS OF ASTM A262 PRACTICE E HAVE BEEN SATISFIED.

AS SHIPPED MATERIAL CONDITION

MATERIAL ANNEALED AT 1950 DEG. F. - HELD 30 MINUTES AT TEMP-WATER QUENCHED.

THANK YOU FOR SELECTING A QUALITY PRODUCT OF NAFTA ORIGIN MANUFACTURED WITH PRIDE AT CRUCIBLE INDUSTRIES, LLC LOCATED IN SOLVAY, NY USA IN COMPLIANCE WITH FAR 52.255-1 AND FAR 52.225-5. WE PROVIDE MATERIAL FREE OF MERCURY CONTAMINATION AND RATIONS. NO WELD REPAIR IS DONE. CRUCIBLE INDUSTRIES LLC HOLD A CERTIFICATE OF REGISTRATION TO AS9100D/EN 9100:2016 / JISQ 9100:2016, ISO 9001:2015 - ANSI/ISO/ASQ Q9001-2015, PRESSURE EQUIPMENT DIRECTIVE (PED) ANNEX I, PARAGRAPH 4.3 of 2014/68/EU or 97/23/EC 7/2. WE WORK UNDER THE GUIDELINES OF ASME SECTION III SUBSECTION NCA 3850. WE ARE COMPLIANT WITH ROHS DIRECTIVE 2011/65/EU, REACH (EC 1907/2006), EN 10204:2004 3.1, AND DFARS 252.225.7001, 7002, 7008, 7009, 7014 ALTERNATE 1. MATERIAL TESTING IS PERFORMED ON A PROLONGATION OF THE BAR IN COMPLIANCE WITH INDUSTRY STANDARDS ASTM A370, E8, E10, E18, E23, E45, E112, E381, E604. *ACCREDITED CHEMICAL TESTING IS PERFORMED IN COMPLIANCE WITH INDUSTRY STANDARDS ASTM E572, E1019, E1066, E322, E415 AND E1085. THE RECORDING OF FALSE, FICTITIOUS OR FRAUDULENT STATEMENTS ON THIS DOCUMENT MAY BE PUBLISHED AS A FELONY UNDER FEDERAL STATUTES, INCLUDING FEDERAL LAW TITLE 18, CHAPTER 47. PRODUCTS, TECHNICAL DATA, TECHNOLOGY AND SERVICES OF CRUCIBLE INDUSTRIES LLC ARE SUBJECT TO US EXPORT CONTROLS UNDER THE APPLICABLE LAWS AND REGULATIONS OF THE UNITED STATES.

Marshal Lassiter

MARSHAL LASSITER - SPECIFICATION EXAMINER

William P. Mastroe

WILLIAM MASTROE - MANAGER OF QUALITY AND PROCESS ENGINEERING

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