



METALLURGICAL TEST REPORT

NORTH AMERICAN STAINLESS
6870 HIGHWAY 42 EAST
GHENT, KY 41045

6870 HIGHWAY 42 EAST

Certificate: 453377 2
Customer: 007035 001

Mail To:
RYERSON CANADA INC.
161 THE WEST MALL
TORONTO, ON M9C4V8

453377

Ship To:
RYERSON CANADA INC.
161 THE WEST MALL
TORONTO, ON M9C4V8

Date: 2/17/2009 Page: 1

Steel: 316L/316

Finish: CF

Your Order: 659142

NAS Order: IN 0059884 09

Corrosion: ASTM A262-02a PRACTICE E-

PRODUCT DESCRIPTION:

Round bar, annealed, smooth turned, cold finished ASTM-A-484-00 UNS-S-31600, UNS-S-31603, ASTM A276/04, EN 10204 3.1B, QQS-763F, ASTM A479/04, SAE AMS 5648K, MIL-S862B ASME SA479/04, MIL-S7720(CHEM ONLY), ASTM A182-02(CHEM ONLY), ASTM A320/03 CL 1 GR B8M, ASME SA18 2/04(CHEM ONLY), ASME SA320/04 CL 1 GR B8M, ASME SA193/04 CL 1 GR B8M(EXC. HARDNESS & PAR 6.3), ASTM A193/03 CL 1 G R B8M(EXC. HARDNESS & PAR 6.3), ASTM A314/97(CHEM ONLY), NACE MR0175(MID RADIUS S ONLY & EXCEPT COLD DRAWN BAR), SAE AMS 5653F, HEATED TO 1900F MIN & QUENCHED(HEATING TIME & TEMP APPROPRIATE FOR OPTIMUM QUALITY)

REMARKS:

Melted & Manufactured in the USA. Product complies w/ requirements of EU directive 2002.95.EC.RoHS. Material Free from Mercury contamination. No weld repair. NAS certifies the analysis on certification is correct & the material meets specs stated.

Product Id	Skid #	Diameter	Size	Weight	-----Length-----	Mark	Pieces	Commodity Code
BC1025 2		2.2500		1,328	144.00	13	1	71643225

CHEMICAL ANALYSIS CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

HEAT	CM	C	CO	CR	CU	MN	MO	N	NI	P
453377	US	.0186	.3860	17.4153	.4947	1.4971	2.0747	.0529	10.6364	.0372
		S	SI							
		.0204	.2925							

MECHANICAL PROPERTIES

Product Id	1 d	o 1	HB	.2 YS	UTS	RA	.1 YS	Elo-4D	Oxalic
	c r	No.	KSI	KSI	%	KSI	%	P/F	
BC1025 2	C L		156.00	40.00	86.00	68.00	44.00	55.00	1.00

NAS hereby certifies that the analysis on this certification is correct and the material meets the specifications stated.

QC ENGINEER

ERIC HESS

2/17/2009