

2RX6.

NORTH AMERICAN STAINLESS INSPECTION CERTIFICATE



North American Stainless
 6870 Highway 42 East
 Ghent, Kentucky 41045-9615
 Telephone: (502) 347-6000
 FAX: (502) 347-6001

Email: customerservice@northamericanstainless.com

2007 / 25850	DATE 9/04/2007
PACKING LIST # 2007 /85688	NUMBER 1
GRADE NAS-264 P.O.# :01-33874	
AISI (316L/316)	Item Code:48970

CUSTOMER A.M. CASTLE & COMPANY	TOLERANCE A484 Rough Turn	PRODUCT Round bar, hot rolled, annealed, rough turned.
-----------------------------------	------------------------------	---

ORDER NUMBER	MARK# / PROD ID	HEAT NUM	WEIGHT
LN36469	69002/BB65290	2RX6	1008

CASTLE METALS CORP.

DATE RCVD 9/5/07
 IAC 14836
 APPROVED BY *[Signature]*

REQUIREMENTS AISI	LENGTH 12.00 ft SIZE 3.1250 Inches
----------------------	---------------------------------------

MECHANICAL PROPERTIES								
HEAT NUM	Rm UTS KSI	Rp 0.2 VS KSI	Rp 1.0 VS KSI	Z% RA	ELONG A 4 L4d	HARDNESS HB	RESILIENCE J	A% %L _d 5
2RX6	84	41	46	69	55	156		
Required Values	75 115	30 100		50 100		140 223		000000

SURFACE AND DIMENSION CONTROL

WITHOUT OBJECTIONS

INTERGRANULAR CORROSION
ASTM A262-02a
PRACTICE E-
Acceptable

CHEMICAL COMPOSITION %														
CH	HEAT	CM(Country of Melt) ES(Spain) US(United States)												
		C	P	S	Si	Mn	Cr	Ni	Mo	Ti	N	Cu	Co	Al
US	2RX6	.0261	.0348	.0255	.3216	1.4712	16.7195	10.5867	2.0788	.0047	.0532	.3891	.2752	.0029
REQUIRED VALUES		.0300	.0450	.0300	1.0000	2.0000	16.0000 18.0000	10.0000 14.0000	2.0000 3.0000		.1000			

STEELMAKING PROCESS

EAF+AOD+CC

OBSERVATIONS/SPECIFICATIONS

UNS-S31600, UNS-S31603, PRELED, ASTM A193-03(EXC PAR 6.3), AASTM A484-03, AMS 5648K, EN 10204 3.1B
 AMS 5653P, ASME SA193-04(EXC PAR 6.3), ASME SA479-04, AMS QQS-763A, MIL-S7720, ASTM A479-04, ASTM A276-04
 ASTM A182/02(CHEM ONLY), ASME SA182/04(CHEM ONLY) Macro and Micro test: Satisfactory
 GRAIN SIZE = 6-8

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.

QUALITY INSPECTOR

[Signature]

Eric Hess
Quality Control Representative

09-05-'07 07:58 FROM- T-851 P009/010 F-054