



Atlas Specialty Steels

A Division of Slater Stainless Corp.
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Product Certification Report

Report Number: **3044441**

Certified on Oct 25, 2002 Page 1 of 1

Slater Order I.D. 0219174 014		Order Date 7/18/02	Commodity Code		Melt Date 6/06/02
Dim 1 4.2500	Dim 2 .0000	Dim 3 .0000	Heat I.D. 73304	Customer I.D. 002320	Customer Purchase Order P001494
Product Shape Rounds		Product Surface HR & Rough Turned			Customer Grade 316/316L
Length (Inches) 168.000 Min. 192.000 Max.			Bill of Lading # 291083	Weight	

Ship To

ASA ALLOYS - EDMONTON
 4311 92nd AVENUE
 EDMONTON, AB T6B 3M7

Sold To

ASA ALLOYS - EDMONTON
 4311 92ND STREET
 EDMONTON, AB T6B 3M7

Lifts: 0077 0078 0079

ASA SPEC 04/97
 NACE MR0175-01
 ASTM A 484-00
 ASME SA182-98
 ASTM A193-00 B8M CL 1
 AMS 5653F

CONDITION A
 PWA LCS APPROVED
 ASTM A479-00
 ASME SA479-98
 ASME SA193-98 B8M CL 1
 ASTM A276-00A

MILS 7720A AM 2
 QQS 763 F
 ASTM E112-96
 ASTM A182-00b
 AMS 5648K

CHEMICAL ANALYSIS

C	Mn	P	S	Si	Cr	Ni	Mo	Cu	Co	N
.014	1.83	.028	.024	.48	17.28	10.23	2.04	.44	.142	.065
HB 140										

TENSILE PROPERTIES

TS (PSI)	.2%YS (PSI)	%EL(2")	%RA
80500	36200	58.5	77.8

GRAIN SIZE ASTM E112

GRAIN SIZE
5

ASTM A 262 PRAC E(A Utilized)

OXALIC
OK

Corrosion tested to A262 Practice E - satisfactory

Solution Anneal 1900 deg.F. - Water quench

Micro structure - satisfactory

Macro etch - satisfactory

No repair welding was performed.

Material contains no metallic mercury or mercury compounds.

Grain size per ASTM E112-96

Chemical testing performed to one or several of the following ASTM methods: E415, E572, E1019, E1085, E1086

Material has been controlled to P&WA 300 and LCS to Man. Sec. F17 P&WA

Heat Code: AQ-DZU

Material conforms to listed specifications.

Quality system is registered to ISO 9002.

Results relate only to the items tested. Certification shall not be reproduced except in full, without the written approval of Slater Steels Corporation. Consult material safety data sheet (MSDS) for hazard info.

I hereby certify that the reported figures are correct as contained in the records of the corporation.

Manager Laboratory Services

R. Walter