

HEAT E150496 ORDER 658694/ 06 BOL 0233084 * CERTIFICATION

SHIP TO:
ROLLED ALLOYS
4942 W. ROSECRANS AVENUE
HAWTHORNE 902500000

ROLLED ALLOYS

Receiving Inspection
By: 
Date: 11/3/18

----- YOUR ORDER & DATE -----
0123528-LOS 3/18/15 CUST# 0773001 CUST TAG#0009410

----- ITEM DESCRIPTION -----
GRADE 316L/316 Ship Condition CONDA
Size 316L RND HRART CONDA 8.0000 x 144.000 RL
Country of Melt: UNITED KINGDOM Country of Mfg.: UNITED KINGDOM
NAFTA Country of Origin is Country of Melt

No weld repair
Free of mercury contamination, Free of radiation contamination
No WEEE relevant substances; Meets EU electrical ROHS

Total Bundles 1 Total Weight 4735 Approx. Hot Red. Ratio 10:1

WO 2063012 Bundles: 1A

AMS 5648L, 5653H
ASME SA182 2007-2013 Ed
ASME SA479 2007-2013 Ed.
ASTM A182 15
ASTM A276-15
ASTM A479/A479M 14
ASTM A320 11 B8M Class 1
NACE MR0175-09, ISO 15156:09
Federal Spec QQ-S-763F
UNS S31603, AISI 316L
EN 10204 Type 3.1 Document
EN 10272 GR 1.4404 chemistry
DFARS 225.7002-3(B)(1)
EN 10204 Type 3.1 Document
NACE MR0175-09, ISO 15156:09

----- SPECIFICATIONS -----
SAE AMS-00-S-763D
ASME SA193 2013 Edition
ASME SA320 B8M CL1, 2013 Ed.
ASTM A262 14 Practice A/E
ASTM A314 13a
ASTM A484 15
ASTM A193 14 B8M
DFARS 252.225.7009 10/4/11
UNS S31600, AISI 316
Prodec Quality
RA-53 RAM 316L
Butech BU-36 Rev 2
NACE MR0103-10
Sol Ann 1850F min/Rapid Cool
DFARS 252.225.7009 10/4/11

----- MECHANICAL & OTHER TESTS -----
Hardness as shipped (142 HB)
Hardness as shipped 76 HRB
Grain size 7.0
Micro OK
Intergranular corrosion OK
Tensile strength, KSI (MPa) 86.5 (596)
0.2% Yield Strngth, KSI (MPa) 41.5 (286)
Elongation % in 4D 54.0
Reduction of area % 76.0

-- Continued --

HEAT # E150496



TRACER # 0003877FD

Nov 15/18

M.F. Marquis

INS



Certificate of Test

Page: 2
* 08/14/15

HEAT E150496 ORDER 658694/ 06 BOL 0233084 * CERTIFICATION

SHIP TO:
ROLLED ALLOYS
4942 W. ROSECRANS AVENUE

HAWTHORNE 902500000

----- CHEMICAL COMPOSITION -----

Carbon (C)	.017	Manganese (Mn)	1.600
Phosphorus (P)	.027	Sulphur (S)	.023
Silicon (Si)	.340	Chromium (Cr)	16.590
Nickel (Ni)	10.090	Cobalt (Co)	.431
Copper (Cu)	.310	Moly (Mo)	2.010
Nitrogen (N)	.078	Columbium (Cb)	.033
Titanium (Ti)	.006	Aluminum (Al)	.005
Tin (Sn)	.007	Tantalum (Ta)	.005
Vanadium (V)	.050	Tungsten (W)	.128
Columbium/ Tantalum (Cb+Ta)	.038		
Iron (Fe)	Balance		
Melt Practice	EAF		
Refining Practice	AOD		
De-long Ferrite	.6		

Knowingly & willfully falsifying or concealing a material act on this form, or making false, fictitious or fraudulent statements or representations herein could constitute a felony punishable under federal statutes. We hereby certify that the test results shown in this report are correct and accurate as contained in the records of the company and are in compliance with the specifications, codes, and standards listed above.

M.F. Marcanio, Quality Manager

HEAT # E150496



TRACER # 0003R77FN

M.F. Marcanio