

Final test report for the order shown below.
#T143916 CUSTOMER:ATLANTIS INDUSTRIES INC P.O:DARKO
12.500 DATE:10-03-08 SIGNATURE:SUSIE WICKLAND

CUST. PART#:

OUTOKUMPU

Certificate of Test

R960696

* CERTIFICATION *

HEAT E91269 ORDER 610142/ 01 BOL 0205520 BUNDLE 2006738/1E 01/28/10

SHIP TO:
EARLE M. JORGENSEN COMPANY
1900 MITCHELL BLVD./ BAY 3

E91269

SCHAUMBURG 601930000

----- YOUR ORDER & DATE -----
P283615423 1/28/10 CUST# 0548001 CUST TAG#509378

----- ITEM DESCRIPTION -----
GRADE 316L/316 Ship Condition CONDA
Size 316L RND HRART CONDA 8.5000 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 2 Bundle Weight 9835

----- SPECIFICATIONS -----
AMS 5648K, 5653F SAE AMS-QQ-S-763B
ASME SA182 E07 A07,A08 & A09 ASME SA193 E07
ASME SA479 E07,A07,A08 & A09 ASME SA320 B8M CL1 E04 A05
ASTM A182 09 ASTM A262 98 Practice E
ASTM A276 08a ASTM A479/A479M 09
ASTM A484 09 ASTM A320 08 B8M Class 1
ASTM A193 09 DIN 50049/EN 10204 3.1B
Federal Spec QQ-S-763F Process Annealed 1750F min
DFARS 252.225.7014 6/05 NACE MR0175-03, ISO 15156:03

----- MECHANICAL & OTHER TESTS -----
Hardness as shipped (141 HB)
Hardness as shipped 76 HRB Tensile strength,KSI (MPa) 82.0 (565)
Grain size 5.5 0.2% Yield Strngth,KSI(MPa) 32.3 (223)
Micro OK
Intergranular corrosion OK
Macro OK Elongation % in 4D 55.0
Reduction of area % 75.0

----- CHEMICAL COMPOSITION -----
Carbon (C) .018 Manganese (Mn) 1.670
Phosphorus (P) .033 Sulphur (S) .027
Silicon (Si) .328 Chromium (Cr) 16.480
Nickel (Ni) 10.070 Cobalt (Co) .252
Copper (Cu) .370 Moly (Mo) 2.040
Nitrogen (N) .062 Columbium (Cb) .028
Titanium (Ti) .001 Aluminum (Al) .004
Tin (Sn) .008 Boron (B) .001
Tantalum (Ta) .006 Vanadium (V) .050
Columbium/
Tantalum (Cb+Ta) .034
Iron (Fe) Balance
Melt Practice EAF
Refining Practice AOD
De-long Ferrite

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

M.F. Marcanio