

C-54361200 H-EG0995 P-040124

OUTOKUMPU

Certificate of Test



* CERTIFICATION *

HEAT E60995

ORDER 0487155/009 SON D60016 BOL 0140219 TAG 1819527 11/27/06

SHIP TO:
EQUIPMENT STORAGE CORP.
7450 SOUTH ASHLAND AVE.

CHICAGO

IL 60636

----- YOUR ORDER & DATE -----
40124-2 11/27/06 CUST# CORMET01 CUST TAG#I/C# 54361200

----- ITEM DESCRIPTION -----
GRADE 316L/316
Size 316L HRART RND BAR 6-1/4 STD Country of Melt: BRI
Ship Condition A Country of Mfg.: SWE
NAFTA Country of Origin is Country of Melt

Total Bundles 1 SON Weight 2618

----- SPECIFICATIONS -----
AMS 5648K, 5653F SAE-AMS QQ-S-763
ASME SA193 E04 A06 ASME SA479 E04 A06
ASME SA320 B8M CL1 E04 A05 ASTM A262 98 PRACTICE E
ASTM A276 05A ASTM A479 06
ASTM A484 06A ASTM A320 04 B8M CLASS 1
ASTM A193 04B DIN 50049/EN 10204 3.1B
FEDERAL SPEC. QQ-S-763F PRODEC QUALITY
SOLUTION ANNEALED CONDITION FREE OF CONT. CARBIDE NETWORK
NO WELD REPAIR FREE OF MERCURY CONTAMINATION
DFARS 252.225.7014 6/05

----- MECHANICAL & OTHER TESTS -----
Test Condition A
Hardness as shipped (146 HBW)
Hardness as shipped 78 HRBS
Grain size 6.0 Tensile strength, KSI (MPa) 82.4 (568)
Micro OK 0.2% Yield Strngth, KSI(MPa) 34.7 (239)
Intergranular corrosion OK
Macro OK Elongation % in 4D 62.0
Reduction of area % 75.0

----- CHEMICAL COMPOSITION -----
Carbon (C) .018 Manganese (Mn) 1.670
Phosphorus (P) .034 Sulphur (S) .026
Silicon (Si) .550 Chromium (Cr) 16.490
Nickel (Ni) 10.090 Cobalt (Co) .350
Copper (Cu) .500 Moly (Mo) 2.040
Nitrogen (N) .061 Columbium (Cb) .016
Titanium (Ti) .003 Aluminum (Al) .005
Tin (Sn) .010 Tantalum (Ta) .006
Vanadium (V) .050 .000
Columbium/
Tantalum (Cb+Ta) .016
Iron (Fe) Balance
Melt Practice EAF
Refining Practice AOD
De-long Ferrite

EMLP APPROV

DEC 01 2006

BY: SPB

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

Outokumpu Stainless Bar, Inc.
3043 Crenshaw Pkwy.
Richburg, SC 29729

M.F. Marcanio

1396