

Sold by Thyssenkrupp Materials NA, Anna 1995
Quantity: 531 LB
List PO#: DARKO
Customer: ATLANTIS INDUSTRIES

Anna C. Reizer 845526-2A

2008-10-27
Shipper#: UA0078
Cust Part#:

Outokumpu Stainless Plate, Inc.

**OUTO
KUMPU**

Certificate of Analysis and Tests

OUR ORDER 0265458 - 01

HEAT & PIECE 845526-2A 09/25/08

SOLD TO: COPPER & BRASS SALES
PO BOX 5116
SOUTHFIELD MI 48086

SHIP TO: COPPER & BRASS SALES
2923 TECHNOLOGY DR.
PH: 248-844-4851
ROCHESTER HILLS MI 48309

----- YOUR ORDER & DATE -----

CZ5749

8/01/08

TAG# 412909-4

----- ITEM DESCRIPTION -----

HEAT & PIECE 845526 - 2A
WEIGHT 8367
FINISH 1
GRADE 316LP / 316P UNS-S31603 / UNS-S31600
DIMENSIONS 3.000 X 60.000 X 159.000 EXACT

----- SPECIFICATIONS -----

*** MFG IN NEW CASTLE, IN, USA
AMS 5507F WITH EXCEPTIONS
ASTM A240-08 ASME SA240 07ED
AVESTA MACH TEST PER SPO20
NO WEEE RELEVANT SUBSTANCES
NO WELD REPAIRS
ASTM A262-02A PRACTICE A
PRODEC QUALITY

FROM SLABS IMPORTED FROM BRITAIN
AMS 5524K WITH EXCEPTIONS
ASTM A480-08 ASME SA480 07E
MEETS EU ELECTRICAL ROHS
NO GRIPPER MARKS

ASTM A262-02A PRACTICE E

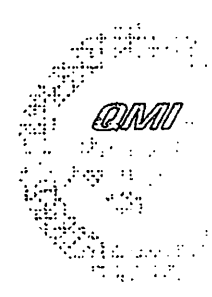
PLATES & TEST PCS SOLUTION ANNEALED @ 1950 DEGREES FAHRENHEIT MINIMUM.
THEN WATER COOLED OR RAPIDLY COOLED BY AIR
FREE FROM MERCURY CONTAMINATION AT CURRENT DETECTION LIMITS
HOT ROLLED, ANNEALED & PICKLED (HRAP)

----- MECHANICAL & OTHER TESTS -----

HARDNESS RB 76
GRAIN SIZE 6
YIELD STRENGTH (PSI) 39156
TENSILE STRENGTH (PSI) 82390
INTERGRANULAR CORROSION OK
ELONGATION % IN 2" 55.2
REDUCTION OF AREA % 59.5

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

CARBON	(C)	.025
MANGANESE	(MN)	1.45
PHOSPHORUS	(P)	.029
SULFUR	(S)	.022
SILICON	(SI)	.53
CHROMIUM	(CR)	16.71
NICKEL	(NI)	10.09
COBALT	(CO)	.21
COPPER	(CU)	.36
MOLY	(MO)	2.07
NITROGEN	(N)	.05
COLUMBIUM	(CB)	.026
TITANIUM	(TI)	.002
ALUMINUM	(AL)	.006
TIN	(SN)	.007
TANTALUM	(TA)	.004



WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE AND TESTED IN ACCORDANCE WITH THE LISTED SPECIFICATION(S) AND THAT THE RESULTS OF ALL TESTS ARE ACCEPTABLE.

JAMES DOUBMAN, QUALITY ASSURANCE MANAGER

CERTIFICATE IN CONFORMANCE WITH EN10204-95 3.1.B/EN10204-2004 3.1

James Douman
Outokumpu Stainless Plate, Inc.
PO Box 370
New Castle, Indiana 47362