



New Castle Stainless Plate, LLC

Certificate of Analysis and Tests

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OUR ORDER 0295104 - 01

HEAT & PIECE 863572-1A 08/24/17

SOLD TO: STAINLESS PLATE PRODUCTS
1235 MANOR ROAD
C/O OF CIGAS RT 82 NORTH
COATESVILLE PA 19320

SHIP TO: STNLS. PROC. C/O CIGAS MACHINE
S. WASHINGTON ST. & LAUREL ST.
PH: 610-384-1278
POTTSTOWN PA 19464

----- YOUR ORDER & DATE -----
S6080-P 7/20/17

----- ITEM DESCRIPTION -----
HEAT & PIECE 863572 - 1A
WEIGHT 20725
FINISH 1
GRADE 316L / 316
DIMENSIONS 5.500 X 72.000 X 180.000 EXACT
UNS-S31603 / UNS-S31600

----- SPECIFICATIONS -----
*** MFG IN NEW CASTLE, IN, USA
AMS 5507G WITH EXCEPTIONS
ASTM A240-16 ASME SA240-15ED
ASTM A167-91
ASTM A666-15 ANN COND ONLY
MELTED ELECTRIC ARC METHOD
ASTM A262-15 PRACTICE A
NACE MR0103-2012
NO GRIPPER MARKS
FROM SLABS IMPORTED FROM BRITAIN
AMS 5524L WITH EXCEPTIONS
ASTM A480-16B ASMESA480 15ED
ASTM A262-15 PRACTICE E
ASTM A312-15 CHM&MECH ONLY
REFINED A.O.D. PROCESS
NACE MRO175-2015/ISO 15156-3
QQ-S-766D AMENDIII EX.P4.5.2
NO WELD REPAIRS

PLATES & TEST PCS SOLUTION ANNEALED @ 1900 DEGREES FAHRENHEIT MINIMUM.
THEN WATER COOLED OR RAPIDLY COOLED BY AIR
FREE FROM MERCURY CONTAMINATION AT CURRENT DETECTION LIMITS
HOT ROLLED, ANNEALED & PICKLED (HRAP)

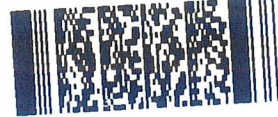
----- MECHANICAL & OTHER TESTS -----

HARDNESS HRBW 73
GRAIN SIZE 2
YIELD STRENGTH (PSI) 47750
TENSILE STRENGTH (PSI) 79970
INTERGRANULAR CORROSION OK
ELONGATION % IN 2" 53.4
REDUCTION OF AREA % 54.4

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

CARBON (C) .017
MANGANESE (MN) 1.65
PHOSPHORUS (P) .033
SULFUR (S) .001
SILICON (SI) .37
CHROMIUM (CR) 16.17
NICKEL (NI) 10.02
COBALT (CO) .23
COPPER (CU) .56
MOLY (MO) 2.00
NITROGEN (N) .08
COLUMBIUM (CB) .039
TITANIUM (TI) .026
ALUMINUM (AL) .009
TIN (SN) .014
TANTALUM (TA) .001

PO # 1PP012094 QO # CAN-00029473
HEAT #: 863572-1a
MILL TAG: 1246



27FK

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

James Douberman
New Castle Stainless Plate, LLC
549 West State Road 35
New Castle, Indiana 47362

JAMES DOUBMAN, QUALITY ASSURANCE MANAGER

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

ANS