



New Castle Stainless Plate, LLC

# Certificate of Analysis and Tests

Page: 1

OUR ORDER 0295104 - 01

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

SOLD TO:

SHIP TO:

----- YOUR ORDER & DATE -----  
 S6080-2 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 MR0175-2015/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 HREW 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

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 DOUBMAN, QUALITY ASSURANCE MANAGER

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

New Castle Stainless Plate, LLC  
 549 West State Road 38  
 New Castle, Indiana 47362

ZTFK  
C232017

ANS