

## Certificate of Analysis and Tests

Page:

OUR ORDER 0298042 - 11 HEAT & PIECE 865103-4A 02/07/19

SOLD TO: SANDMEYER STEEL COMPANY SHIP TO: SANDMEYER STEEL COMPANY

ONE SANDMEYER LANE ONE SANDMEYER LANE

PA 19116 PHILADELPHIA PHILADELPHIA PA 19116

----- YOUR ORDER & DATE ------11/19/18

HEAT & PIECE 865103 - 4A 13521 WEIGHT

FINISH

NO WELD REPAIRS

410 UNS-S41000 GRADE DIMENSIONS 3.500 X 96.000 X 138.000 EXACT

SPECIFICATIONS

\*\*\* MFG IN NEW CASTLE, IN, USA FROM SLABS IMPORTED FROM BRITAIN ASTM A240-18 ASME SA240-17E ASTM A480-18A ASMESA480 17ED AMS 5504M EXCEPT LINE MARK 2014/68/EU PED #224/2017/MUC 2014/68/EU ANNEX I PARA 4.3 LIST HEAT/PCE/SIZE ON INVCE REQUIRES PRODUCT ANALYSIS NON STANDARD PROPERTIES REQD ASTM E112-13 NO GRIPPER MARKS

HOT ROLLED, ANNEALED, & DESCALED FREE FROM MERCURY CONTAMINATION AT CURRENT DETECTION LIMITS ANNEALED AT 1300 DEGREES FAHRENHEIT MINIMUM.

71 HARDNESS HRBW

GRAIN SIZE YIELD STRENGTH (PSI) TENSILE STRENGTH (PSI) 33225 INTERGRANULAR CORROSION ELONGATION % IN 2"
REDUCTION OF AREA % 35.7 59.8 HARDNESS RESPONSE RC 36

THE RECORDING OF FALSE, FICTITIOUS OR FRADULENT STATEMENTS MAY BE PUNISHABLE AS A FELONY UNDER FEDERAL STATUTE

- CHEMICAL COMPOSITION ---- PRODUCT ANALYSIS --------------------(C) .11 (C) .10 CARBON (MN) (MN) MANGANESE .020 PHOSPHORUS (P) (P)

.001 (S ) .011 (S) SULFUR .32 12.38 SILICON (SI) (SI) (CR) CHROMIUM (CR) .22 .24 NICKEL (NI) (NI) .02 .01 COBALT (CO) (CO) (CU) .05 (CU) COPPER .05 .02 MOLY (MO) (MO) NITROGEN (N) .04 (N) TITANIUM (TI) .001 (TI)

(AL) .001 .001 ALUMINUM (AL) .003 TIN (SN) (SN) .001 TANTALUM (TA) .001 (TA)

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