

METALLURGICAL TEST REPORT

Certificate: 833937 02
Customer: 0305 802

Date: 2/17/2023 Page: 1
Steel: 316/316L
Finish: HRAP

Your Order: 114354

NAS Order: AN 1011491 01

Corrosion: ASTM A262/15;180Bend-OK

PRODUCT DESCRIPTION:

STAINLESS STEEL COIL, HRAP; UNS 31600/31603
ASTM A240/22a,A480/20a,A666/15;ASME SA240/19,SA480/19,SA666/19
CHEM ONLY ON FOLLOWING ASTM: A276/17,A479/20,A484/20b,A312/21
CHEM ONLY ON FOLLOWING ASME: SA312/19,SA479/19
AMS 5507H/5524M X MRK;
NACE MR0175/ISO 15156-3:2015 A , MR0103/07; QQS766D-A X MAG PERM
MIN. SOLUTION ANNEAL TEMP 1900F, WATER QUENCHED

REMARKS:

Mat'l is Free of Mercury Contamination. No weld repairs.
EN 10204:2004 3.1; RoHS 1, 2 & 3 Compliant
Material is Free of Radioactive Contamination
Steel Making Process: EAF, AOD, & Cont. Casting
Product Mfg.by a Quality Mgt.Sys. in Conf. w/ISO 9001
*Melted & Manufactured in the USA; Mat'l is DFARs Compliant
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| Product ID # | Coil # | Thickness | Width | Weight | -----Length----- | Mark | Pieces | COMMODITY CODE |
|--------------|------------|-----------|---------|--------|------------------|--------|--------|----------------|
| 02X12K B | * 02X12K B | .2500 | 48.0000 | 18,290 | COIL | 433.50 | 1 | 1 168408 |

ANAB, ISO/IEC 17025, Certificate# L2323

CHEMICAL ANALYSIS

CM(Country of Melt) ES(Spain) US(United States) ZA(South Africa) JP(Japan)

Chemical Analysis per ASTM A751/20

| HEAT | CM | C % | CR % | CU % | MN % | MO % | N % | NI % | P % | S % |
|------|----|-------|---------|-------|--------|--------|-------|---------|-------|-------|
| X12K | US | .0170 | 16.6180 | .5220 | 1.3665 | 2.1145 | .0439 | 10.0850 | .0365 | .0020 |
| | | SI % | | | | | | | | |
| | | .4485 | | | | | | | | |

MECHANICAL PROPERTIES

| Product ID # | Coil # | l o c | d i r | UTS KSI | 20C KSI | .2% YS KSI | 20C ELONG %-2" | % Hard RB | Tail Hard |
|--------------|----------|-------------|-------------|------------|------------|------------------|----------------------|-----------------|--------------|
| 02X12K B | 02X12K B | F | T | 90.02 | | 48.36 | 49.69 | 86.50 | 87.00 |

NAS hereby certifies that the analysis on this certification is correct. Based upon the results and the accuracy of the test methods used, the material meets the specifications stated. These results relate only to the items tested and this report cannot be reproduced, except in its entirety, without the written approval of NAS.

Technical
Dept. Mgr.


KRIS LARK 2/20/2023