

SALEM TUBE

CERTIFIED MATERIAL TEST REPORT
 Certified in accordance with EN 10204 - 3.1

TUBACEX
GROUP

CUSTOMER PO NUMBER 620554	MILL ORDER NUMBER 2645102	CERTIFICATION NUMBER 173094	CERTIFICATION DATE 12/11/2019
MANUFACTURER: SALEM TUBE, INC. 951 FOURTH ST GREENVILLE, PA 16125 - USA		CUSTOMER:	

PRODUCT DESCRIPTION:
 BRIGHT ANNEALED 0.125"OD X 0.020"AW TP316/TP316L SEAMLESS TUBING

TECHNICAL REQUIREMENTS:
 ASME SA213/SA213M-17, ASTM A213/A213M-18b, ASTM A269/A269M-15a RB

MARKING:
 SALEM TUBE, INC. 0.125"OD X 0.020"AW TP316/TP316L SMLS ASME SA213/SA213M-17, ASTM A213/A213M-18b, ASTM A269/A269M-15a, RB NACE MR0175/MR0103 NDE COLD DRAWN MADE IN USA 2645102

PACKAGING INFORMATION
 CERTIFICATE NUMBER
 173094

DES CHEMICAL COMPOSITION (CHECK ANALYSIS PERCENTAGE BY WEIGHT)

HEAT NO	LOT NO	MELT COUNTRY	MELT SOURCE	RAW MATERIAL VENDOR	STEEL MAKING PROCESS
V81374	R1	JAPAN	KOBELCO	OKAYA	EF

HEAT NO	C	Mn	Ni	Si	S	Cr	P	Cu	Mo	N	Co
REQUIREMENTS:	0.035max	2.000max	10.000 - 14.000	1.000max	0.0300max	16.000 - 18.000	0.045max	-	2.000 - 3.000	-	-
V81374/L	0.0190	1.7000	11.2400	0.4700	0.00200	16.5500	0.0310	0.2000	2.0800	0.0600	-
V81374/C	0.0180	1.6900	11.2400	0.4500	0.00300	16.8200	0.0310	0.1900	2.0700	0.0600	-

MECHANICAL PROPERTIES (TENSILE TESTED LONGITUDINALLY)

HEAT/LOT NO	SAMPLE	TEMP (F)	SAMPLE SIZE (IN)	TENSILE STRENGTH (PSI)	YIELD STRENGTH (PSI)	EL(%)	HARDNESS
REQUIREMENTS:				75000min	30000min	35min	HRBW 80 max
V81374/R1	1	74	0.1230 x 0.0210	78000	32700	54	60 HRBW
V81374/R1	2	74	0.1230 x 0.0210	76900	33400	52	60 HRBW

Flare Test - Pass; Flattening Test - Pass; Eddycurrent Test - Pass;
 PMI Test- Pass; Material is DFARS compliant.
 In accordance with NACE MR0175
 Heat treated at 2000 F min for sufficient time to achieve uniform
 temperature throughout the wall thickness and rapidly quenched in hydrogen atmosphere.

In accordance with Shoeller Bleckman Specification 002 rev 1

- * Cold drawn - Made in the USA
- * Produced without contact with Mercury or other metals that are liquid at ambient temperature.
- * No class I ozone depleting chemicals were used in the manufacture of this product.
- * Produced without weld repair.

We hereby certify that the material herein has been manufactured and tested in accordance with the listed specifications and that all the results of all tests conform to specification. This test report shall not be reproduced except in full without the written approval of Salem Tube, Inc.

WORKS INSPECTOR:

Fred Kelley
 Fred Kelley
 Quality Manager
 USA Date: 12/11/2019