

CERTIFIED MATERIAL TEST REPORT

Certified in accordance with EN 10204 - 3.1

CUSTOMER PO NUM	BER MILL ORDER NUMBER	CERTIFICAT	ION NUMBER	CERTIFICATION DATE		
621593-800802	5 2168-10	TDI000920		10/31/2022 R0		
MANUFACTURER:	TUBACEX DURANT, INC.	CUSTOMER:	SWAGELOK GRA	NDE PRAIRIE		
	362 COUNTRY CLUB RD		#100, 11025	89 AVENUE		
	DURANT, OK 74701		GRANDE PRAIRIE AB T8V 5B9			
	IIC A		CANADA			

PRODUCT DESCRIPTION:

BRIGHT ANNEALED 1.000''OD X 0.065''AW TP316/TP316L SEAMLESS TUBING

TECHNICAL REQUIREMENTS:

ASME SA213/SA213M-21, ASTM A213/A213M-21b, ASTM A269/A269M-15a(2019), SCS-00062-C

MARKING:

TUBACEX DURANT INC. - 1.000"OD x 0.065"AW - TP316/TP316L SMLS ASME SA213/SA213M, ASTM A213/A213M, ASTM A269/A269M - NACE MR0175 / MR0103 - NDE - COLD DRAWN/ANNEALED - MADE IN USA - HEAT# 560939 / 2168-10

PACKAGING INFORMATION:

PACKED PIECES	PACKED WEIGHT (LBS)	PACKED FOOTAGE (FT)
87	1,300	1,740

OES	CHEMICAL	COMPOSITION	(CHECK	ANALYSIS	PERCENTAGE	BY	WEIGHT)

HEAT NO	HEAT NO LOT NO MELT COUNT		COUNTR	MELT SOURCE		RAW MATERIAL VENDOR				STEEL MAKING PROCESS						
560939		216	8-10	S	SWEDEN SM		SMT SANDVIKEN		PEXCO				EF			
HEAT NO		С	Mn	Ni	Si	s	Cr	P	Cu	Мо	N	Co	Ti	Nb+Ta	Fe	Al
REQUIREMENTS:	MIN	0.000	0.000	10.000	0.000	0.005	16.000	0.000	INFO	2.000	INFO	-	-	-	-	-
	MAX	0.035	2.000	14.000	1.000	0.015	18.000	0.045	-	3.000	10 <u>2</u>	-	_	-	-	-
560939/L		0.014	1.580	11.330	0.400	0.0070	16.920	0.031	0.320	2.040	0.072	0.110	-	-	-	-
560939/C		0.015	1.590	11.470	0.400	0.0050	16.980	0.033	0.330	2.060	0.071	0.100	-	- 1	720	-

MECHANICAL PROPERTIES (TENSILE TESTED LONGITUDINALLY)

HEAT/LOT NO	SAMPLE	TEMP (F)	SAMPLE SIZE (IN)	TENSILE STRENGTH (PSI)	YIELD STRENGTH (PSI)	EL (%)	HARDNESS
REQUIREMENTS:				75,000 min	30,000 min	35 min	HRBW 90 MAX
560939/2168-10	6	70	1.0000 x 0.0680	97,700	50,900	47.5	83.6

Flare Test - PASS

Flattening Test - PASS

Eddy Current Test - PASS

100% Positive Material Identification performed

Plug shot through all tubes for ID cleaning

Heat treated at 2000 ^{0}F min for sufficient time to achieve uniform temperature throughout the wall thickness and atmospherically quenched

In accordance with NACE MR0175 / ISO15156

Material is DFARS compliant.

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

WORKS INSPECTOR:

Ricardo Monroy
Quality Manager
USA Date: 10/31/22

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 Tubacex Durant, Inc.