



Plant Location: 982 Griffin Pond Road, Clarks Summit, PA 18411
 Sold To: 10000530 Ship To:
 GRAND PRAIRIE FLUID SYSTEM TEC GRANDE PRAIRIE FLUID SYSTEM TE
 WINNIPEG MB GRANDE PRAIRIE AB
 Customer Order No: 8000119 Certification Date: 20210120
 Sandvik Order No: 374148/3

Work Order/Lot: 0002014279

 SWAGELOK SMS-00333 Rev. D, ASTM A632-19, SWAGELOK SQS-00012 Rev. Z

Cold Finished BRIGHT ANNEALED Seamless Tube
 Type MT 316/MT 316L/TP316/TP316L

Size: .125" X .035"
 Heat: 559461

ANALYSIS %

	C	Si	Mn	P	S	Cr	Ni
Heat	.017	.38	1.66	.034	.011	17.18	13.03
Prod	.018	.37	1.60	.035	.009	17.19	13.11
	Fe	Mo	Cu	Al	Pb		
Heat	2.62	.28					
Prod	2.64	.29					

Mechanical Tests:

Yield Strength				Tensile Strength		Elongation in %				Reduction Of Area
0.2%		1.0%								
psi	MPa	psi	MPa	psi	MPa	E2"	E10"	E4d	E5d	%
42190	291.0	N/A		79750	550.0	56	N/A	N/A	N/A	N/A
45960	317.0			80040	552.0	56				

Hardness Test Results: 79HRBW, 79HRBW

Flattening Test per ASTM A450/A1016 and ASME SA450/SA1016:

0

Tensile Test sample width (1=Full-Size 2=1/2" Strip): 1

Country Of Origin: Germany

Material Does Qualify for NAFTA

100% Positive Material Identification performed

All material subjected to a final solution annealing heat treatment with material at a temperature of 1900 deg. F minimum followed by rapid quenching to below 800 deg. F in less than three (3) minutes.

The material has not come in contact with Mercury or Mercury containing compounds.

No welding has been performed on this material.

Material was 100% eddy current tested in accordance with ASTM A450, ASTM A1016 and is acceptable.

Material is capable of passing the ASTM A262 Practice "E".

Inspection certificate produced in accordance with EN 10204 3.1 (formerly EN 10204 3.1.B).

No unauthorized alterations. The contents of this Inspection Certificate may not be modified or revised in any way without the prior written approval of Sandvik Materials Technology. Unauthorized alterations to the Inspection

MATERIAL CERTIFICATE

Cert#: 2100000448

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Certificate, including introduction of false, fictitious or fraudulent statements or entries, may be punishable by fines, imprisonment, or both. This Inspection Certificate may be copied only in the manner and for the purposes specified in EN 10204:2004, Section 6. Contravention of this notice will be prosecuted to the fullest extent of the applicable law(s).

Material has been manufactured/supplied in accordance with Sandvik Materials Technology Quality Manual-Commercial Products Revision 2 dated June 18, 2019. Quality system has been approved to ISO 9001:2015 (Cert# 10213298, 31AUG19) No unauthorized alterations. The content of this inspection certificate may not be modified or revised in any way without the prior written approval of Sandvik Materials Technology. Unauthorized alterations to the inspection certificate, including introduction of false, fictitious or fraudulent statements or entries, may be punishable by fines, imprisonment, or both.

Contravention of this notice will be prosecuted to the fullest extent of the applicable laws.

This is to certify that the contents of this certificate are correct and accurate as contained in Sandvik's records, and that all above test results and operations performed are in compliance with the requirements of the purchase order and the specification(s) listed above.

Electronically Generated Certificate-Valid without signature
John Scherer, Quality Manager
10 (SWINST=1/8-316 R4) (10) CF (UJ6492)