

M A T E R I A L C E R T I F I C A T E

Date: 08/01/2012

No. 201221731W

SNPR55 80 80 EC53694

Sandvik Materials Technology, Tubular Products Area

P.O. Box 1220, Scranton, PA US 18501, Ph: 570-585-7500

Plant Location: 982 Griffin Pond Road, Clarks Summit, PA 18411

Sold To: 8442

Ship To:

SWAGELOK MANUFACTURING COMPANY

EDMONTON VALVE & FITTING INC

INDEPENDENCE OH

EDMONTON AB

Customer Order No: W81352

Certification Date: 20120606

Sandvik Order No: 103256/1

Work Order/Lot: 172342

SS-T1-S-020-20

ASTM A213-10a, ASTM A269-10, ASME SA213, ASME Section II, 2010 Edition

Cold Finished BRIGHT ANNEALED Seamless Tube

Type TP316/TP316L (UNS S31600/S31603)

Size: .063" X .020"

Heat: 531102

ANALYSIS %

	C	Si	Mn	P	S	Cr	Ni
Heat	.011	.38	1.73	.027	.009	16.96	11.30
Prod	.013	.38	1.73	.028	.008	16.93	11.27
	Fe	Mo	Cu	Al	Pb		
Heat		2.03	.26				
Prod		2.03	.27				

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

Country Of Origin: Germany

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 has been eddy current tested in accordance with ASTM A450, ASTM A1016 and is acceptable.

Material has been manufactured/supplied in accordance with Sandvik Materials Technology Quality Manual-Standard Products Revision 12 dated May 29, 2012. Quality system has been approved to ISO 9001:2008. (Cert# GBG0000502,30AU13) Certificate produced in accordance with EN 10204 3.1 (formerly EN 10204 3.1.B)

Melt Method: Electric Arc Furnace

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

Stephen Knight, Quality Engr.

10 (SD213/269XHT R23) (10) (GWW)

Sandvik Steel Certificate Electronic Reprint - Valid without signature.