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Sandvik Materials Technology

Product Area Tube

982 Griffin Pond Rd, Clarks Summit, PA US 18411, Ph: 570-585-7500

MATERIAL CERTIFICATE

Cert#: 190019525

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

Sold To: 554999
 PAC STAINLESS LTD.
 HOUSTON TX

Customer Order No: 58050H
 Sandvik Order No: 365230/1

Ship To:
 PAC STAINLESS LTD.
 HOUSTON TX

Certification Date: 20190724

Work Order/Lot: 292882

Norsok M-650/ M-630 MDS D58, ASTM A789-18, ASME SA-789
 ASME Section II, 2017 Edition, NACE MR0103-2016 (Duplex)

Cold Finished BRIGHT ANNEALED Seamless Tube
 Type SAF 2507/UNS S32750

Size: .750" X .065" AW
 Heat: 555496

Material Manufacturer: Sandvik Materials Technology, USA

ANALYSIS %		Si	Mn	P	S	Cr	Ni
Heat	C	.29	.46	.022	.0005	25.53	6.49
Prod	C	.30	.47	.022	.001	25.42	6.54
Heat	Fe	Mo	Ti	Cu	Al	Pb	N
Prod	Fe	3.83	.004	.13	.012		.299
		3.85	.003	.13	.010		.30
Heat	O	Ce	PRE				
Prod	O	.01	42.953				
		.01	42.925				

Mechanical Tests:		Yield Strength		Tensile Strength		Elongation in %				Reduction Of Area %
0.2%	1.0%	psi	MPa	psi	MPa	E2"	E10"	E4d	E5d	%
110000	758.6		N/A	141000	972.4	30	N/A	N/A	N/A	N/A

Hardness Test Results: 24HRC, 25HRC

Ferrite percentage per ASTM E-562 (%): 46
 Corrosion test to A923 Method C, (mdd): 1 Result: 0
 Flare Test per ASTM A450/A1016 and ASME SA450/SA1016: Acceptable

Material has less than 0.05% of sigma and other deleterious minor phases and is free of grain boundary carbides. Examined at 100x minimum magnification.

Acceptable
 Tensile Test sample width (1=Full-Size 2=1/2" Strip): 1
 This material complies with DFARS 252.225-7001 (2016)
 This material does not comply with DFARS 252.225-7008 (2013)
 This material complies with DFARS 252.225-7009 (2014)
 This material does not comply with FAR 52.225-1 (2009)
 This material complies with FAR 52.225-5 (1999)

Country Of Origin: United States
 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

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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-Commercial Products Revision 2 dated June 18, 2019. Quality system has been approved to ISO 9001:2015 (Cert# 10047907, 02JAN18)

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.

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 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).

Melt Source: SMT SANDVIKEN, SWEDEN

Melt Method: Electric Arc Furnace-AOD Refining

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.

John Scherer, Quality Mgr-Tube
10 (PAC2507 R25) (15) CP (TV3141)


Authorized Representative

Fredrick Tomlinson
Quality Technician
SMT US

