

**CERTIFICATE****No. A/15-499309 Rev 00**
Date 2015-05-12 Page 1/3INSPECTION CERTIFICATE acc to
EN 10 204 3.1Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDENINSPECTION STAMP
QA-TUBE

Customer References		Sandvik References	
751863	Customer order 2015-05-12	Order No. 405045	Subs No. 590729
003-00991 ITEMS		ABSMT No. 300-29805	Dispatch note 46770/54
		C.Code 21	

Material description	Steel/material Designations
SEAMLESS STAINLESS COLD FINISHED	Sandvik UNS 254 SMO S31254 EN no 1.4547
Steel making process Electric furnace	

Technical requirements
ASTM A-213-13 AW, ASME SA-213-ED-13 AW, ASTM A-269-13 NACE MR0175/ISO 15156-3:2009 PED 97/23/EC EN 10216-5 TC1 HRB MAX 90

EXTENT OF DELIVERY								
It	Product designation			Heat	Lot	Pieces	Kg	M
02	THT-254SMO-9.53-1.65			541000	41291	1	2.0	6.00
9.53 X 1.65								
Total						1	2.0	6.00
TEST RESULTS								
Chemical composition (weight%)								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
541000	0.010	0.44	0.62	0.025	0.0007	20.13	17.80	6.06
	Cu	N						
541000	0.54	0.197						
Chemical composition, product (weight%)								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
541000	0.015	0.45	0.63	0.027	<0.001	20.07	17.84	6.12
	Cu	N						
541000	0.55	0.20						
Tensile test at room temperature								
Yield strength			Tensile strength		Elongation			
	MPa	MPa		MPa	%	%		
Lot	Rp0.2	Rp1.0		Rm	A	4D		
41291	398	450		728	49	48		

Quality assurance - Lars-Åke Bergqvist / QA-manager
MTC Service / Certificates

**Hardness test**

Lot	HRB	
41291	82	82
	83	82
	81	82
	82	81
	80	81
	81	81

Corrosion test

According to ASTM G-48A, 50 °C for 24 hours.

No pitting corrosion found at 20x enlargement.

Specimen weight loss

Lot	g/m2
41291	0.07
	0.07
	0.04

Following controls/tests have been satisfactorily performed:

- Flattening test.
- Flaring test
- PMI-test.
- Leak test: Eddy current test acc to EN 10246-2, ASME SA-1016.
- Visual inspection and dimensional control.

Heat Treatment:

Solution annealed and quenched.

Marking:

SANDVIK 254 SMO ASTM/ASME A/SA-213AW A-269 EN 10216-5 TC1 COLD AW UNS S31254 E
N 1.4547 CFA SMLS NDE 9.53 X 1.65 MM 0.375 X 0.065 HT 541000 SS LOT 41291 MADE
BY SANDVIK IN SWEDEN *QA-TUBE*

The raw material is free from radioactive contamination.

Material free from mercury contamination.

Approved acc. AD 2000-Merkblatt W0 and certified acc. to
Pressure Equipment Directive (97/23/EC) by
TUEV NORD; notified body, reg.no. 0045.

The number of tests are based on the size of the manufacturing lot
before cutting to finished lengths.

The delivered products comply with the specifications and
requirements of the order.

The material is manufactured according to a Quality system,
approved and registered to ISO 9001:2008.



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