

**CERTIFICATE****No. A/18-719116****Rev 00****Date 2018-02-06****Page 1/3**INSPECTION CERTIFICATE acc to
EN 10204 3.1Processkontroll Items AB
Box 2088
444 02 STORA H@GA
SWEDENINSPECTION STAMP
QA-TUBE**Customer References**

756010

Customer
order
2018-02-02

003-00991 ITEMS

Sandvik ReferencesOrder No. Subs No. ABSMT Dispatch note
504892 645208 14303/54
ABSMT No. C.Code
300-75952 21**Material description**

SEAMLESS STAINLESS COLD FINISHED

Steel making process

Electric furnace+AOD

Steel/material DesignationsSandvik UNS
254 SMO S31254
EN no
1.4547**Technical requirements**ASTM A-213-15A AW, ASME SA-213-ED-13 AW, ASTM A-269-14
NACE MR0175/ISO 15156-3:2015, PED 2014/68/EU EN 10216-5 TC1
NORSOK M-630 ED.6, NORSOK MDS R18 REV.5
HRB MAX 90**EXTENT OF DELIVERY**

It	Product designation	Heat	Lot	Pieces	Kg	M
01	THT-254SMO-8-1 8.00 X 1.00	540917	02163	1	1.0	6.00

Total 1 1.0 6.00

KEY TO LOT

Lot Code	Lot No.
02163	43545

TEST RESULTS**Chemical composition (weight%)**

Heat	C	Si	Mn	P	S	Cr	Ni	Mo
540917	0.008	0.44	0.52	0.020	0.0005	20.05	17.81	6.04
	Cu	N						
540917	0.62	0.198						

Quality assurance - Sofia Åkesson / Q-Manager
MTC Service / Certificates

**CERTIFICATE**

No. A/18-719116 Rev 00
Date 2018-02-06 Page 2/3

Chemical composition, product (weight%)

Heat	C	Si	Mn	P	S	Cr	Ni	Mo
540917	0.010	0.45	0.52	0.020	<0.001	20.09	17.81	6.10
	Cu	N						
540917	0.63	0.20						

Tensile test at room temperature

Lot	Yield strength		Tensile strength	Elongation	
	MPa	MPa	MPa	%	%
	Rp0.2	Rp1.0	Rm	A	4D
02163	398	458	725	45	44

Hardness test

Lot	HRB	
02163	87	89
	89	89

Corrosion test according to ASTM G-48A, 50°C for 24 hours.

In delivery condition.

No pitting corrosion found at 20x enlargement.

Specimen weight loss

Lot	g/m ²
02163	0.08

Following controls/tests have been satisfactorily performed:

- Flattening test.
- Flaring test
- 100% PMI-test.
- Leak test: Eddy current test acc to EN ISO 10893-1, ASME SA-1016.
- Visual inspection and dimensional control.

Heat Treatment:

Bright annealed at min 1150°C/0.5 minutes and quenched in water/forced gas.

Marking:

SANDVIK 254 SMO ASTM A213/A269 ASME SA213 COLD EN10216-5 TC1 AW UNS S31254 EN 1.4547 CFA SML NDE 8.00 X 1.00 MM 0.315 X 0.039 HT 540917 SS LOT 43545 MADE IN SWEDEN *QA-TUBE*

The raw material is free from radioactive contamination.

Material free from mercury contamination.

No welding or weld repair.

NORSOK M-650 QTR NO: QTR6Mo_BA215

NORSOK M-650 QTR NO: QTR6Mo_BA

Approved acc. AD 2000-Merkblatt W0 and certified acc. to Pressure Equipment Directive (2014/68/EU, Annex 1 para 4.3) 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.



CERTIFICATE

No. A/18-719116 **Rev 00**
Date 2018-02-06 **Page 3/3**

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.

No unauthorized alterations. The contents of this Inspection Certificate may not be modified or revised in any way without the prior written approval of AB 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 Section 6 of EN 10204:2004. Contravention of this notice will be prosecuted to the fullest extent of applicable law.

The certificate is produced with EDP and valid without signature.