



CERTIFICATE

No. A/14-397942 Rev 00
Date 2014-02-14 Page 1/2

INSPECTION CERTIFICATE acc to
EN 10 204 3.1

Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDEN

INSPECTION STAMP
QA-TUBE

Customer References		Sandvik References	
713740	Customer order 2014-02-14	Order No. 360363	Subs No. 566284
003-00991	ITEMS	ABSMT No. 300-99287	Dispatch note 17471/54 C.Code 21

Material description SEAMLESS STAINLESS COLD FINISHED	Steel/material Designations 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-10 AD-11A 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
01	THT-254SMO-12.7-1.65 12.70 X 1.65	536289	22099	6	16.0	36.00
				Total	6	16.0 36.00

TEST RESULTS
Chemical composition (weight%)

Heat	C	Si	Mn	P	S	Cr	Ni	Mo
536289	0.009	0.42	0.60	0.023	<0.0005	20.20	17.85	6.05
	Cu	N						
536289	0.66	0.20						

Chemical composition, product (weight%)

Heat	C	Si	Mn	P	S	Cr	Ni	Mo
536289	0.010	0.44	0.60	0.024	<0.001	20.32	17.92	6.10
	Cu	N						
536289	0.67	0.20						

Tensile test at room temperature

Lot	Yield strength		Tensile strength		Elongation	
	MPa	MPa	MPa		%	%
	Rp0.2	Rp1.0	Rm	A	2"	
22099	351	399	702	53	51	

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

**Hardness test**

Lot	HRB	
22099	87	85
	86	85

Following controls/tests have been satisfactorily performed:

- Flattening test.
- Flaring test
- PMI-test.
- Corrosion test acc to ASTM G48A, 50 degrees C/24H.
- 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 UNS S31254 EN 1.4547
COLD SMLS NDE 12.70 X 1.65 MM 0.500 X 0.065 HT 536289 SS LOT 22099 MADE BY SA
NDVIK 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.

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.