



CERTIFICATE

No. A/14-462050

Rev 00

Date 2014-12-03

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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		
751279	Customer order 2014-12-03	Order No. 389895	Subs No. 582522	ABSMT Dispatch note 36668/54
003-00991	ITEMS	ABSMT No. 300-22780	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
02	THT-254SMO-9.53-1.65 9.53 X 1.65	536770	26695	2	4.0	12.00
				Total	2	4.0 12.00

TEST RESULTS

Chemical composition (weight%)

Heat	C	Si	Mn	P	S	Cr	Ni	Mo
536770	0.012	0.43	0.57	0.020	<0.0005	20.00	17.78	6.04
	Cu	N						
536770	0.55	0.22						

Chemical composition, product (weight%)

Heat	C	Si	Mn	P	S	Cr	Ni	Mo
536770	0.012	0.44	0.58	0.022	<0.001	20.06	17.76	6.09
	Cu	N						
536770	0.55	0.22						

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

**Tensile test at room temperature**

Lot	Yield strength		Tensile strength	Elongation	
	MPa	MPa	MPa	%	%
	Rp0.2	Rp1.0	Rm	A	4D
26695	359	402	709	53	50
	357	400	707	53	50

Hardness test

Lot	HRB	
26695	82	83
	82	82
	84	83
	82	84
	84	82
	83	82

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
26695	0.27
	0.19
	0.31

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 UNS S31254 EN 1.4547
COLD SMLS NDE 9.53 X 1.65 MM 0.375 X 0.065 HT 536770 SS LOT 26695 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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