



**CERTIFICATE**

**No. A/18-770173 Rev 00**  
Date 2018-09-19 Page 1/3

INSPECTION CERTIFICATE acc to  
EN 10204 3.1

Processkontroll Items AB  
Box 2088  
444 02 STORA HÖGA  
SWEDEN

INSPECTION STAMP  
QA-TUBE

<b>Customer References</b>	Customer order 2018-09-19	<b>Sandvik References</b>	Order No. 522828 Subs No. 659185 ABSMT No. 300-86486 ABSMT Dispatch note 29159/54 C.Code 05
756903			
003-00991 ITEMS			

<b>Material description</b> SEAMLESS STAINLESS COLD FINISHED INSTRUMENTATION TUBING	<b>Steel/material Designations</b> Sandvik UNS 2RK65 N08904 EN no 1.4539
<b>Steel making process</b> Electric furnace	

<b>Technical requirements</b> ASTM A-269-15A, ASTM A-213-17 PED 2014/68/EU EN 10216-5 TC1 NACE MR0175/ISO 15156-3:2015
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<b>EXTENT OF DELIVERY</b>								
<b>It</b>	<b>Product designation</b>	<b>Heat</b>	<b>Lot</b>	<b>Pieces</b>	<b>Kg</b>	<b>M</b>		
02	THT-2RK65-12.7-1.24 12.70 X 1.24	048520	95686	40	86.0	240.00		
				<b>Total</b>	86.0	240.00		
<b>KEY TO HEAT</b>				<b>KEY TO LOT</b>				
<b>Heat Code</b>	<b>Heat No.</b>	<b>Lot Code</b>	<b>Lot No.</b>					
048520	547689	95686	0002000340					
<b>TEST RESULTS</b>								
<b>Chemical composition (weight%)</b>								
<b>Heat</b>	<b>C</b>	<b>Si</b>	<b>Mn</b>	<b>P</b>	<b>S</b>	<b>Cr</b>	<b>Ni</b>	<b>Mo</b>
048520	0.007	0.41	1.60	0.020	<0.0005	20.30	25.05	4.20
	<b>Cu</b>	<b>N</b>						
048520	1.38	0.058						

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

**Chemical composition, product (weight%)**

Lot	C	Si	Mn	P	S	Cr	Ni	Mo
95686	0.011	0.41	1.58	0.021	<0.001	20.24	24.98	4.22
	<b>Cu</b>	<b>N</b>						
95686	1.37	0.056						

**Tensile test at room temperature**

Lot	Yield strength		Tensile strength	Elongation	
	MPa	MPa	MPa	%	%
	Rp0.2	Rp1.0	Rm	A	2"
95686	298	343	648	40	39
	332	369	643	39	37
	328	366	643	39	38

**Hardness test**

Lot	Min	Max
	HRB	HRB
95686	79	79
	78	78

**Following controls/tests have been satisfactorily performed:**

- Flattening test.
- Flaring test
- 100% PMI-test.
- Intergranular corrosion test acc to ASTM A-262 PR.E
- Leak test: Eddy current test acc to ASTM A-1016.
- Visual inspection and dimensional control.

**Heat Treatment:**

Solution annealed and quenched.

**Marking:**

SANDVIK 2RK65 ASTM A213/A269 ASME SA213 COLD EN10216-5 TC1 EN10305-1 . EN 1.45  
39 COLD SML NDE 12.70 X 1.24 MM 1/2'' X 18 BWG/SWG HT 547689 SG LOT 0002000340  
MADE BY SANDVIK \*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 (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.

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 9001:2015.



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.

TEST RESULTS TRANSFERRED FROM CERTIFICATE NO 0002000340