

**CERTIFICATE****No. A/16-576148****Rev 00****Date 2016-05-04****Page 1/2**INSPECTION CERTIFICATE acc to
EN 10204 3.1Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDENINSPECTION STAMP
QA-TUBE

Customer References		Sandvik References	
753368	Customer order 2016-05-02	Order No. 440061	Subs No. 609413
003-00991 ITEMS		ABSMT No. 300-46150	Dispatch note 20284/54
		C.Code 46	

Material description	Steel/material Designations
SEAMLESS STAINLESS COLD FINISHED INSTRUMENTATION TUBING	Sandvik SS 3R60 2353
Steel making process Electric furnace	

Technical requirements
SS 219713 Condition No -24

EXTENT OF DELIVERY									
It	Product designation			Heat	Lot	Pieces	Kg	M	
01	THT-3R60-12.7-1.24 12.70 X 1.24			048225	54098	10	21.0	60.00	
						Total	10	21.0	60.00
KEY TO HEAT									
Heat Code		Heat No.							
048225		543793							
TEST RESULTS									
Chemical composition (weight%)									
Heat	C	Si	Mn	P	S	Cr	Ni	Mo	
048225	0.016	0.38	1.55	0.030	0.0090	17.24	13.11	2.52	
N									
048225	0.047								
Tensile test at room temperature									
		Yield strength		Tensile strength		Elongation			
		MPa	MPa	MPa		%			
Lot		Rp0.2	Rp1.0	Rm		A			
54098		295	331	578		55			
Quality assurance - Lars-Åke Bergqvist / QA-manager									
MTC Service / Certificates									

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

- Flattening test.
- PMI-test.
- Intergranular corrosion test acc. to EN ISO3651-2, Method A.
- Leak test: Eddy current test acc to SS 114301/114305 E1
- Visual inspection and dimensional control.

Heat Treatment:

Solution annealed and quenched.

The raw material is free from radioactive contamination.

Material free from mercury contamination.

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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The certificate is produced with EDP and valid without signature.