

**CERTIFICATE****No. A/16-583454 Rev 00**
Date 2016-06-07 Page 1/2INSPECTION CERTIFICATE acc to
EN 10204 3.1Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDENINSPECTION STAMP
QA-TUBE

Customer References		Sandvik References	
753399	Customer order 2016-05-12	Order No. 441191	Subs No. 609984
003-00991	ITEMS	ABSMT No. 300-46679	Dispatch note 22436/54
		C.Code 46	

Material description	Steel/material Designations
SEAMLESS STAINLESS COLD FINISHED HYDRAULIC 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-3R60-8-1.5		048249	57052	17	24.0	102.00	
	8.00 X 1.50							
					Total	17	24.0	
							102.00	
KEY TO HEAT								
Heat Code		Heat No.						
048249		544223						
TEST RESULTS								
Chemical composition (weight%)								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
048249	0.020	0.43	1.64	0.031	0.0070	17.17	13.45	2.52
	N							
048249	0.035							
Tensile test at room temperature								
	Yield strength		Tensile strength		Elongation			
	MPa	MPa	MPa		%			
Lot	Rp0.2	Rp1.0	Rm		A			
57052	259	298	562		54			
Quality assurance - Lars-Åke Bergqvist / QA-manager								
MTC Service / Certificates								

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

- 100% Flattening test acc to EN ISO 8492.
- 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.