

**CERTIFICATE****No. A/15-489200****Rev 00****Date 2015-03-27****Page 1/2**INSPECTION CERTIFICATE acc to
EN 10 204 3.1Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDENINSPECTION STAMP
QA-TUBE

Customer References		Sandvik References	
751666	Customer order 2015-03-20	Order No. 400037	Subs No. 588138
003-00991 ITEMS		ABSMT No. 300-27539	ABSMT Dispatch note 43720/54
		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	M
01	THT-3R60-20-2.5 20.00 X 2.50	541116	38271	50	300.00
Total				50	300.00

TEST RESULTS								
Chemical composition (weight%)								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
541116	0.017	0.42	1.61	0.029	0.008	17.40	13.15	2.56
	N							
541116	0.039							

Tensile test at room temperature				
Lot	Yield strength		Tensile strength	
	MPa	MPa	MPa	Elongation %
38271	Rp0.2	Rp1.0	Rm	A
	287	327	587	52
	283	323	585	52
	283	323	586	52

Following controls/tests have been satisfactorily performed:
- Flattening test.**Quality assurance - Lars-Åke Bergqvist / QA-manager**
MTC Service / Certificates



- 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.