

**CERTIFICATE****No. A/15-495233 Rev 00**
Date 2015-04-23 Page 1/2INSPECTION CERTIFICATE acc to
EN 10 204 3.1Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDENINSPECTION STAMP
QA-TUBE

Customer References		Sandvik References							
751771	Customer order 2015-04-21	Order No. 402956	Subs No. 589632						
003-00991	ITEMS	ABSMT No. 300-28851	Dispatch note 45532/54						
Material description SEAMLESS STAINLESS COLD FINISHED HYDRAULIC TUBING		Steel/material Designations 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-3R60-6-1 6.00 X 1.00	048071	34070	167	123.0	1002.00			
				Total	167	123.0 1002.00			
KEY TO HEAT									
Heat Code		Heat No.							
048071		538980							
TEST RESULTS									
Chemical composition (weight%)									
Heat	C	Si	Mn	P	S	Cr	Ni	Mo	
048071	0.018	0.43	1.79	0.028	0.0080	17.22	13.15	2.52	
		N							
048071	0.034								
Tensile test at room temperature									
		Yield strength		Tensile strength		Elongation			
		MPa	MPa	MPa		%			
Lot	Rp0.2	Rp1.0	Rm	A					
34070	269	309	556	60					
	270	310	559	57					
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.