

**CERTIFICATE****No. A/15-520672 Rev 00**
Date 2015-09-01 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		
752236	Customer order 2015-08-24	Order No. 414765	Subs No. 595669	ABSMT Dispatch note 03360/54
003-00991	ITEMS	ABSMT No. 300-34224	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-3R60-12-1.5 12.00 X 1.50	048106	45199	40	96.0	240.00
				Total	40	96.0 240.00

KEY TO HEAT	
Heat Code	Heat No.
048106	538074

TEST RESULTS								
Chemical composition (weight%)								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
048106	0.018	0.38	1.65	0.031	0.0060	17.41	13.10	2.53
		N						
048106	0.048							

Tensile test at room temperature					
Lot	Yield strength		Tensile strength		Elongation
	MPa	MPa	MPa		%
	Rp0.2	Rp1.0	Rm		A
45199	267	306	561		52

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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