



CERTIFICATE

No. A/16-552767

Rev 00

Date 2016-01-27

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INSPECTION CERTIFICATE acc to
EN 10204 3.1

Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDEN

INSPECTION STAMP
QA-TUBE

Customer References		Sandvik References		
752545	Customer order 2015-10-29	Order No. 421569	Subs No. 599254	ABSMT Dispatch note 12315/54
003-00991	ITEMS	ABSMT No. 300-37508	C.Code 46	

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
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EXTENT OF DELIVERY						
It	Product designation	Heat	Lot	Pieces	Kg	M
01	THT-3R60-20-2.5 20.00 X 2.50	543653	48993	50	323.0	300.00
				Total	50	323.0 300.00

TEST RESULTS								
Chemical composition (weight%)								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
543653	0.019	0.42	1.59	0.032	0.007	17.27	13.19	2.62
	N							
543653	0.037							

Tensile test at room temperature					
	Yield strength		Tensile strength		Elongation
	MPa	MPa	MPa		%
Lot	Rp0.2	Rp1.0	Rm		A
48993	280	321	599		48
	279	320	600		50

Following controls/tests have been satisfactorily performed:
- 100% Flattening test acc to EN ISO 8492.
- 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.