

**CERTIFICATE****No. A/13-382138****Rev 00****Date 2013-12-06****Page 1/2**INSPECTION CERTIFICATE acc to  
EN 10 204 3.1Processkontroll Items AB  
Box 2088  
444 02 STORA HÖGA  
SWEDENINSPECTION STAMP  
QA-TUBE

<b>Customer References</b>		<b>Sandvik References</b>						
713526	Customer order 2013-11-29	Order No. 352795	Subs No. 562087					
003-00991	ITEMS	ABSMT No. 300-95951	Dispatch note 12783/54					
<b>Material description</b> SEAMLESS STAINLESS COLD FINISHED HYDRAULIC TUBING		<b>Steel/material Designations</b> Sandvik SS 3R60 2353						
<b>Steel making process</b> Electric furnace								
<b>Technical requirements</b> SS 219713 Condition No -24								
<b>EXTENT OF DELIVERY</b>								
It	Product designation	Heat	Lot	Pieces	Kg	M		
01	THT-3R60-12-1.5 12.00 X 1.50	537168	21377	45	108.0	270.00		
Total				45	108.0	270.00		
<b>TEST RESULTS</b>								
<b>Chemical composition (weight%)</b>								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
537168	0.020	0.44	1.60	0.030	0.009	17.36	13.16	2.53
	N							
537168	0.044							
<b>Tensile test at room temperature</b>								
	Yield strength		Tensile strength		Elongation			
	MPa	MPa	MPa		%			
Lot	Rp0.2	Rp1.0	Rm		A			
21377	276	316	560		55			
<b>Following controls/tests have been satisfactorily performed:</b>								
- Flattening test.								
- PMI-test.								
- Intergranular corrosion test acc. to EN ISO3651-2, Method A.								
<b>Quality assurance - Ulrik Rodling / QA-manager</b>								
<b>MTC Service / Certificates</b>								



- 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.

No unauthorized alterations. The contents of this Inspection Certificate may not be modified or revised in any way without the prior written approval of AB Sandvik Materials Technology. Unauthorized alterations to the Inspection Certificate, including introduction of false, fictitious or fraudulent statements or entries, may be punishable by fines, imprisonment, or both. This Inspection Certificate may be copied only in the manner and for the purposes specified in Section 6 of EN 10204:2004. Contravention of this notice will be prosecuted to the fullest extent of applicable law.

The certificate is produced with EDP and valid without signature.