

**CERTIFICATE****No. A/11-143766****Rev 00****Date 2011-03-04****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						
709400	Customer order 2010-11-16	Order No. 220818	Subs No. 191581 ABSMT No. 300-32641 C.Code 46					
003-00991 ITEMS		ABSMT Dispatch note 31875/54						
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-3R60-8-1.5 8.00 X 1.50	527381	25333	20	30.0	120.00		
Total				20	30.0	120.00		
TEST RESULTS								
Chemical composition (weight%)								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
527381	0.015	0.36	1.79	0.029	0.008	17.30	13.09	2.54
	N							
527381	0.042							
Tensile test at room temperature								
	Yield strength		Tensile strength		Elongation			
	MPa	MPa	MPa		%			
Lot	Rp0.2	Rp1.0	Rm		A			
25333	257	291	549		60			
	256	291	547		60			
	260	294	548		60			
Following controls/tests have been satisfactorily performed:								
- Flattening test.								
Quality assurance - Ulrik Rodling / QA-manager Tube & Pipe								
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 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.

The certificate is produced with EDP and valid without signature.