



CERTIFICATE

No. A/11-141489

Rev 00

Date 2011-02-24

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INSPECTION CERTIFICATE acc to
EN 10 204 3.1

Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDEN

INSPECTION STAMP
QA-TUBE

Customer References		Sandvik References		
ROGER WIBBLING	Customer order 2011-01-27	Order No. 230009	Subs No. 198804	ABSMT Dispatch note 31254/54
003-00991 ITEMS		ABSMT No. 300-36990	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-3R60-16-2 16.00 X 2.00	047663	95585	39	165.0	234.00		
				Total	39	165.0 234.00		
KEY TO HEAT			KEY TO LOT					
Heat Code	Heat No.		Lot Code	Lot No.				
047663	527052		95585	4848346/1-2				
TEST RESULTS								
Chemical composition (weight%)								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
047663	0.016	0.37	1.51	0.031	0.011	17.19	13.12	2.67
	N							
047663	0.038							
Tensile test at room temperature								
	Yield strength		Tensile strength		Elongation			
	MPa	MPa	MPa	%				
Lot	Rp0.2	Rp1.0	Rm	A				
95585	256	294	567	54				
	250	298	561	52				
	253	289	570	54				

Quality assurance - Ulrik Rodling / QA-manager Tube & Pipe
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 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.

TEST RESULTS TRANSFERRED FROM CERTIFICATE NO A110122