

**CERTIFICATE****No. A/10-103534****Rev 00****Date 2010-10-14****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		
709242	Customer order 2010-10-12	Order No.	Subs No.	ABSMT Dispatch note
		216098	187898	18900/54
003-00991	ITEMS	ABSMT No.	C.Code	
		300-30459	03	

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-3R60-25-3 25.00 X 3.00	525857	18659	2	19.0	12.00
				Total	2	19.0 12.00

TEST RESULTS									
Chemical composition (weight%)									
Heat	C	Si	Mn	P	S	Cr	Ni	Mo	
525857	0.015	0.38	1.61	0.033	0.010	17.26	13.16	2.51	
	N								
525857	0.036								

Tensile test at room temperature					
Lot	Yield strength		Tensile strength		Elongation
	MPa	MPa	MPa		%
18659	Rp0.2	Rp1.0	Rm		A
	287	324	572		58
	290	327	571		57

Following controls/tests have been satisfactorily performed:
- Ring expansion test
- PMI-test.

Quality assurance - Per Eriksson/ QA-manager Tube & Pipe
MTC Service / Certificates



- 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.