

**CERTIFICATE**

No. A/10-999271 Rev 00
Date 2010-09-29 Page 1/2

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	
709143	Customer order 2010-09-22	Order No. 213500	Subs No. 185886
003-00991 ITEMS		ABSMT No. 300-29323	Dispatch note 17247/54
		C.Code 46	

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-3R60-8-1.5 8.00 X 1.50	047360	94743	20	30.0	120.00		
				Total	20	30.0 120.00		
KEY TO HEAT			KEY TO LOT					
Heat Code	Heat No.		Lot Code	Lot No.				
047360	523714		94743	351647				
TEST RESULTS								
Chemical composition (weight%)								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
047360	0.018	0.38	1.63	0.033	0.010	17.33	13.14	2.54
	N							
047360	0.039							
Tensile test at room temperature								
	Yield strength		Tensile strength		Elongation			
	MPa	MPa	MPa		%			
Lot	Rp0.2	Rp1.0	Rm		A			
94743	286	319	602		65			
	261	293	580		71			
Quality assurance - Per Eriksson/ 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 00040034