

**CERTIFICATE****No. A/10-949771****Rev 00****Date 2010-03-24****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	
708404	Customer order 2010-03-05	Order No. 188069	Subs No. 166143
003-00991	ITEMS	ABSMT No. 300-18173	ABSMT Dispatch note 48417/54 C.Code 46

Material description	Steel/material Designations
SEAMLESS STAINLESS COLD FINISHED INSTRUMENTATION 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-3R60-3.18-0.71 3.18 X .71	047153	98045	6	2.0	36.00		
				Total	6	2.0	36.00	
KEY TO HEAT				KEY TO LOT				
Heat Code		Heat No.		Lot Code		Lot No.		
047153		420541		98045		164371		
TEST RESULTS								
Chemical composition (weight%)								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
047153	0.016	0.39	1.48	0.029	0.009	17.25	13.07	2.53
Tensile test at room temperature								
Lot	Yield strength		Tensile strength		Elongation			
	MPa	MPa	MPa		%			
	Rp0.2	Rp1.0	Rm		A			
	98045	387	423	606		41		
	347	379	566		43			
Quality assurance - Per Eriksson/ QA-manager Tube & Pipe MTC Service / Certificates								

**Hydrostatic test**

Lot Mpa
98045 8.0

Following controls/tests have been satisfactorily performed:

- Flattening test.
- PMI-test.
- Intergranular corrosion test acc. to EN ISO3651-2, Method A.
- 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 30068