



CERTIFICATE

No. A/10-999272

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. 185887	ABSMT Dispatch note 17242/54
003-00991	ITEMS	ABSMT No. 300-29324	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
--

EXTENT OF DELIVERY									
It	Product designation	Heat	Lot	Pieces	Kg	M			
01	THT-3R60-12-1.5 12.00 X 1.50	047464	94148	10	24.0	60.00			
				Total	10	24.0	60.00		
KEY TO HEAT					KEY TO LOT				
Heat Code	Heat No.		Lot Code		Lot No.				
047464	523828		94148		4845852/1-1				
TEST RESULTS									
Chemical composition (weight%)									
Heat	C	Si	Mn	P	S	Cr	Ni	Mo	
047464	0.016	0.43	1.67	0.029	0.007	17.19	13.03	2.52	
	N								
047464	0.034								
Tensile test at room temperature									
	Yield strength		Tensile strength		Elongation				
	MPa	MPa	MPa		%				
Lot	Rp0.2	Rp1.0	Rm		A				
94148	247	279	554		60				
	256	275	565		60				

**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 A100667