



CERTIFICATE

No. A/15-508803

Rev 00

Date 2015-06-23

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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		
751962	Customer order 2015-06-02	Order No. 407097	Subs No. 591800	ABSMT Dispatch note 48249/54
003-00991	ITEMS	ABSMT No. 300-30753	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			
02	THT-3R60-16-2 16.00 X 2.00	048153	93476	20	84.0	120.00			
				Total	20	84.0	120.00		
KEY TO HEAT					KEY TO LOT				
Heat Code	Heat No.		Lot Code		Lot No.				
048153	541662		93476		180222				
TEST RESULTS									
Chemical composition (weight%)									
Heat	C	Si	Mn	P	S	Cr	Ni	Mo	
048153	0.020	0.39	1.79	0.028	0.009	17.31	13.14	2.53	
	N								
048153	0.035								
Tensile test at room temperature									
	Yield strength		Tensile strength		Elongation				
	MPa	MPa	MPa	MPa	%				
Lot	Rp0.2	Rp1.0	Rm	A					
93476	271	313	563	44					
	287	331	565	41					
	266	308	561	43					

Quality assurance - Lars-Åke Bergqvist / QA-manager
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 raw material is free from radioactive contamination.

Material free from mercury contamination.

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 9001:2008.

No unauthorized alterations. The contents of this Inspection Certificate may not be modified or revised in any way without the prior written approval of AB Sandvik Materials Technology. Unauthorized alterations to the Inspection Certificate, including introduction of false, fictitious or fraudulent statements or entries, may be punishable by fines, imprisonment, or both. This Inspection Certificate may be copied only in the manner and for the purposes specified in Section 6 of EN 10204:2004. Contravention of this notice will be prosecuted to the fullest extent of applicable law.

The certificate is produced with EDP and valid without signature.

TEST RESULTS TRANSFERRED FROM CERTIFICATE NO 46940