

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			
	Customer	Order No.	Subs		Dispatch note
710753	order	267395	51379	94 06566	5/54
	2011-11-09	ABSMT No.	C.Cod	le	
		300-54499	46		
003-00991 ITEMS					
Material description	Steel/material Designations				
SEAMLESS STAINLESS COLD	FINISHED	Sandvik SS			
HYDRAULIC TUBING		3R60 2353			
Steel making process					
Electric furnace					
Technical requirements					
SS 219713					
Condition No -24					
EXTENT OF DELIVERY					
It Product designa		t Lot P		-	
01 THT-3R60-12-2 047728 96022 8 24.0 48.00					
12.00 X 2.00					
		Total	8	24.0	48.00
KEY TO HEAT			KEY TO LC)T	
Heat Code Heat No.				Lot Code	Lot No.
047728 527905				96022	357370
TEST RESULTS					
Chemical composition (we	aight%)				
Heat C Si	Mn	P S	}	Cr	Ni Mo
047728 0.017 0.41		0.033 0.			13.07 2.54
N	2.00			_ / • _ •	
047728 0.044					
017720 0.011					
Tensile test at room ter	neraturo				
		longilo gtmo		Florgati	
		ensile strength		Elongation	
MPa MPa		IPa		~%	
Lot Rp0.2 Rp1		lm.		A	
96022 269 302		97		59	
273 306	6 6	02		57	

Quality assurance - Ulrik Rodling / QA-manager Tube & Pipe MTC Service / Certificates

AB SANDVIK MATERIALS TECHNOLOGY Reg No. 556234-6832 VAT No. SE663000-060901 SE-81181 SANDVIKEN SWEDEN www.smt.sandvik.com mtc_service.smt@sandvik.com CERTIFICATE



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 00042359