

INSPECTION CERTIFICATE acc to EN 10 204 3.1

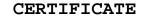
Processkontroll Items AB Box 2088 444 02 STORA HÖGA SWEDEN

INSPECTION STAMP QA-TUBE

Customer References	Sandvik References						
	Customer	Order No.	Subs No.	ABSMT Dispatch note			
713430	order	350269	560669	14976/54			
	2013-11-07	ABSMT No.	C.Code				
		300-94757	15				
003-00991 ITEMS							
Material description	Steel/material Designations						
SEAMLESS STAINLESS COLD	FINISHED	Sandvik	-	AISI			
HYDRAULIC TUBING		3R60		TP316/TP316L			
		EN no					
		1.4435					
Stool molting process							
Steel making process Electric furnace							
Technical requirements							
ASTM A-213-13 AW, ASME SA-213-ED-10 AD-11A AW, ASTM A-269-13							
NACE MR0175/ISO 15156-3:2009							
PED 97/23/EC EN 10216-5	TC1						
HRB MAX 80							
EXTENT OF DELIVERY							
It Product designa	tion Hea	t Lot P	ieces	Ka M			

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





Tensile test		—					
		strength	Tensile strength	-			
Lot	MPA Rp0 2	MPa Rp1.0	MPa Rm	%% A 2"			
98890		343	568	A 2 4 4 4 4			
	285		562	43 45			
Hardness test							
Lot	Min HRB	Max HRB					
98890	нкь 70	нкь 70					
<pre>Following controls/tests have been satisfactorily performed: - Flattening test Flaring test - PMI-test.</pre>							
- Intergranular corrosion test acc to ASTM A-262 PR.E - Leak test: Eddy current test acc to EN 10246-2, ASME SA-1016.							
- Leak test: Eddy current test acc to EN 10246-2, ASME SA-1016. - Visual inspection and dimensional control.							
Heat Treatment:							
Solution anne	ealed at	a temperature	e of Min 1040° C and	quenched.			
Marking: SANDVIK 3R60 ASTM/ASME A/SA-213AW/A-269 EN 10216-5 TC1 EN 10305-1 TP 316/TP 31 6L EN 1.4435 M S PK1 NDE 16.00 X 1.00 MM HT 536843 SG LOT 175952 MADE BY SANDV IK *QA-TUBE*							
The raw material is free from radioactive contamination.							
Material free from mercury contamination.							
Approved acc. AD 2000-Merkblatt W0 and certified acc. to Pressure Equipment Directive (97/23/EC) by TUEV NORD; notified body, reg.no. 0045.							
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 43323