

INSPECTION CERTIFICATE acc to EN 10204 3.1

Processkontroll Items AB Box 2088 444 02 STORA HÖGA SWEDEN

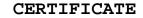
INSPECTION STAMP QA-TUBE

Customer References	Sandvik References				
	Customer	Order No.	Subs No.	ABSMT Dispatch note	
753429	order	441798	610256	21379/54	
	2016-05-18	ABSMT No.		,	
	2010 05 10				
		300-46950	29		
003-00991 ITEMS					
Material description		Steel/mate:	rial Desig	gnations	
SEAMLESS STAINLESS COLD	FINISHED	Sandvik		AISI	
INSTRUMENTATION TUBING		3R60		TP316/TP316L	
		EN no			
		1.4435			
		11.4435			
Steel making process					
Electric furnace					
Technical requirements		L			
=	ר תים 10 גיס		260 1E7		
ASTM A-213-15C AW, ASME					
NACE MR0175/ISO 15156-3:	•	RU103/ISO 1	7495:2015		
PED 97/23/EC EN 10216-5	TC1				
HRB MAX 80					
EVTENT OF DELTVEDY					

EXTENT	OF DEFIAE	RY							
It	Product	designat	ion	Heat	Lot	Pieces	Kg	M	1
03	THT-3R60	-19.05-2.	41	544802	54614	2	12.	0 12.	00
	19.05 X	2.41							
					Total	2	12.	0 12.	00
TEST RE	TEST RESULTS								
	l composi	tion (wei	.qht%)						
Heat	c -	Si	Mn	Р		S	Cr	Ni	Mo
544802	0.020	0.38	1.64	0.0	31 (	0.010	17.35	13.10	2.64
	Ti	Al	N						
544802	<0.003	0.003	0.043						
Chemical composition, product (weight%)									
Heat	C	Si	Mn	Р		S	Cr	Ni	Mo
544802	0.019	0.39	1.63	0.0	30 (	0.011	17.31	13.07	2.62
	N								
544802	0.043								
1									

Quality assurance - Lars-Åke Bergqvist / QA-manager 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"	
54614		323	587	54 57	
	297	327	588	53 56	
Hardness test					
Hardness test	Min	Max			
Lot	HRB	HRB			
54614	76	78			
- Flattening - Flaring tes - PMI-test.	test. st		satisfactorily per		
- Leak test:	Eddy cur		to ASTM A-262 PR.E to EN ISO 10893-1, l control.		
Heat Treatmen Solution anne		a temperature	e of Min 1040° C and	d quenched.	
435 TP316/316	5L CFA SM		X 2.41 MM 3/4'' X 1	EN 10305-1 COLD AW EN 1. L3 BWG HT 544802 SS LOT 5	
The raw material is free from radioactive contamination.					
Material free from mercury contamination.					
Pressure Equi	.pment Di	)-Merkblatt W0 rective (97/2 pody, reg.no.		. to	
		are based on t nished lengths	he size of the manu	afacturing lot	
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.					