

INSPECTION CERTIFICATE acc to EN 10204 3.1

Processkontroll Items AB Box 2088 444 02 STORA HÖGA SWEDEN

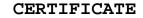
INSPECTION STAMP QA-TUBE

Customer References		Sandvik References			
	Customer	Order No.	Subs No.	ABSMT Dispatch	n note
752907	order	429484	603635	13348/54	
	2016-01-25	ABSMT No.	C.Code		
		300-41160	15		
003-00991 ITEMS			20		
Material description		Steel/mate:	rial Degi	mationg	
SEAMLESS STAINLESS COLD	FINICUED	Sandvik	LIAI DEBIÇ	AISI	
	FINISHED	3R60			
HYDRAULIC TUBING				TP316/TP316L	
		EN no			
		1.4435			
Steel making process					
Electric furnace					
Technical requirements					1
ASTM A-213-15A AW, ASME	SA-213-ED-13	AW. ASTM A	-269-14		
NACE MR0175/ISO 15156-3:		110, 110111 11	209 11		
PED 97/23/EC EN 10216-5	101				
HRB MAX 80					
EXTENT OF DELIVERY					
It Product designa	tion Heat	t Lot P	ieces	Ka M	

-	Product THT-3R60 18.00 X		ion	Heat 542269	Lot 44739	Pieces 5	Kg 19.		4 . 00
					Total	5	19.	0 30	.00
TEST RES	ULTS								
Chemical	composi	tion (wei	.ght%)						
Heat	C	Si	Mn	Р		S	Cr	Ni	Mo
542269	0.021	0.40	1.58	0.03	30 (0.007	17.29	13.07	2.52
	N								
542269	0.050								
Chemical composition, product (weight%)									
Heat	C	Si	Mn	P		S	Cr	Ni	Mo
542269	0.020	0.42	1.59	0.03	31 (0.007	17.43	13.12	2.55
	N								
542269	0.044								

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						
		trength MPa	Tensile strength MPa	Elongation %%		
Lot 44739	Rp0.2 302		Rm 614	A 2"		
44739	301		614	47 47 47 47		
Hardness test	-					
	Min	Max				
Lot 44739	HRB 76	HRB 78				
Ballandara area				- F J -		
- Flattening	test.	STS NAVE DEE	n satisfactorily per	riormed:		
- Flaring tes - PMI-test.	st					
- Intergranul			c to ASTM A-262 PR.H			
- Leak test: - Visual insp	-		c to EN 10246-2, ASN al control.	ME SA-1016.		
Heat Treatmer	·+ •					
		a temperatur	e of Min 1040° C and	d quenched.		
Marking:						
SANDVIK 3R60 ASTM/ASME A/SA-213 A-269 EN 10216-5 TC1 EN 10305-1 COLD AW EN 1.4						
435 TP316/316L CFA SMLS NDE 18.00 X 1.50 MM HT 542269 SS LOT 44739 MADE BY SAN DVIK IN SWEDEN *QA-TUBE*						
The raw material is free from radioactive contamination.						
Material free from mercury contamination.						
			0 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.						
The certificate is produced with the and valid without signature.						