



CERTIFICATE

No. A/07-732609 Rev 00
Date 2007-11-22 Page 1/2INSPECTION CERTIFICATE acc to
EN 10 204 3.1Ahlseil Sverige AB Norrköping
Box 904
601 19 NORRKÖPINGINSPECTION STAMP
QA-TUBE

Customer References		Sandvik References						
34293928-140	Customer order 2007-11-22	Order No. 136974	Subs No. 31039					
005-12161	AHLSELLVVS	ABSMT No. 300-59130	ABSMT Dispatch note 20669/54					
Material description SEAMLESS STAINLESS COLD FINISHED HYDRAULIC TUBING		Steel/material Designations						
Steel making process Electric furnace		Sandvik 3R60	EN no 1.4435					
Technical requirements PED 97/23/EC EN 10216-5 TC1								
EXTENT OF DELIVERY								
It	Product designation	Heat	Lot	Pieces	Kg	M		
01	THT-3R60-16-1.5 16.00 X 1.50	515127	20480	1	3.0	6.00		
Total				1	3.0	6.00		
TEST RESULTS								
Chemical composition (weight%)								
Heat	C	Si	Mn	P	S	Cr	Ni	Mo
515127	0.022	0.39	1.64	0.030	0.007	17.27	13.19	2.52
N								
515127	0.045							
Tensile test at room temperature								
	Yield strength		Tensile strength		Elongation			
	MPa	MPa	MPa		%			
Lot	Rp0.2	Rp1.0	Rm		A			
20480	307	352	597		49			
Following controls/tests have been satisfactorily performed:								
- Flattening test								
- PMI-test.								
- Leak test: Eddy current test acc to EN 10246-2								
Quality assurance - Per Eriksson/ QA-manager Tube & Pipe								
MTC Service / Certificates								



- Visual inspection and dimensional control.

Heat Treatment:

Solution annealed and quenched.

Marking:

SANDVIK 3R60 ASTM/ASME A/SA-213AW A-269 NFA 49-117 EN 10216-5 TC1 SS 2353-22 W
NR 1.4435 Z2CND17-13 EN 1.4435 TP316/316L M S PK1 NDE 16.00 X 1.50 MM HT 51512
7 SS LOT 20480 DIN 2391 COLD *QA-TUBE*

Approved acc. AD 2000-Merkblatt W0 and certified acc. to
Pressure Equipment Directive (97/23/EC) by
TUEV NORD GmbH; 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.

The certificate is produced with EDP and valid without signature.