

**CERTIFICATE****No. A/14-424305****Rev 00****Date 2014-06-04****Page 1/2**INSPECTION CERTIFICATE acc to
EN 10 204 3.1Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDENINSPECTION STAMP
QA-TUBE

Customer References 750559/Holmgren 003-00991 ITEMS Customer order 2014-06-04		Sandvik References Order No. Subs No. ABSMT Dispatch note 371976 572899 25008/54 ABSMT No. C.Code 300-14758 15																																																																									
Material description SEAMLESS STAINLESS COLD FINISHED HYDRAULIC TUBING Steel making process Electric furnace		Steel/material Designations Sandvik AISI 3R60 TP316/TP316L EN no 1.4435																																																																									
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																																																																											
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Quality assurance - Lars-Åke Bergqvist / QA-manager MTC Service / Certificates																																																																											

**Tensile test at room temperature**

	Yield strength		Tensile strength	Elongation	
	MPa	MPa	MPa	%	%
Lot	Rp0.2	Rp1.0	Rm	A	2"
23634	270	308	590	53	59
	268	308	589	54	61

Hardness test

Lot	Min	Max
	HRB	HRB
23634	75	75

Following controls/tests have been satisfactorily performed:

- Flattening test.
- Flaring test
- PMI-test.
- Intergranular corrosion test acc to ASTM A-262 PR.E
- Leak test: Eddy current test acc to EN 10246-2, ASME SA-1016.
- Visual inspection and dimensional control.

Heat Treatment:

Solution annealed at a temperature of Min 1040° C and quenched.

Marking:

SANDVIK 3R60 ASTM/ASME A/SA-213AW A-269 EN 10216-5 TC1 EN 10305-1 EN 1.4435 TP 316/316L COLD SMLS NDE 25.00 X 3.00 MM HT 538075 SS LOT 23634 MADE BY SANDVIK IN SWEDEN *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.