

**CERTIFICATE****No. A/14-416629 Rev 00**  
**Date 2014-04-30 Page 1/2**INSPECTION CERTIFICATE acc to  
EN 10 204 3.1Processkontroll Items AB  
Box 2088  
444 02 STORA HÖGA  
SWEDENINSPECTION STAMP  
QA-TUBE

<b>Customer References</b>  750421/Holmgren  003-00991 ITEMS		Customer order 2014-04-30		<b>Sandvik References</b> Order No. Subs No. ABSMT Dispatch note 368349 570876 22676/54 ABSMT No. C.Code 300-13080 29																																																																																																						
<b>Material description</b> SEAMLESS STAINLESS COLD FINISHED INSTRUMENTATION TUBING          <b>Steel making process</b> Electric furnace		<b>Steel/material Designations</b> Sandvik AISI 3R60 TP316/TP316L EN no 1.4435																																																																																																								
<b>Technical requirements</b> 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																																																																																																										
<b>EXTENT OF DELIVERY</b> <table border="1"><thead><tr><th>It</th><th>Product designation</th><th>Heat</th><th>Lot</th><th>Pieces</th><th>Kg</th><th>M</th></tr></thead><tbody><tr><td>01</td><td>THT-3R60-12.7-2.11 12.70 X 2.11</td><td>538459</td><td>25366</td><td>2</td><td>7.0</td><td>12.00</td></tr><tr><td colspan="4">Total</td><td>2</td><td>7.0</td><td>12.00</td></tr></tbody></table>								It	Product designation	Heat	Lot	Pieces	Kg	M	01	THT-3R60-12.7-2.11 12.70 X 2.11	538459	25366	2	7.0	12.00	Total				2	7.0	12.00																																																																														
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<b>Quality assurance - Lars-Åke Bergqvist / QA-manager</b> <b>MTC Service / Certificates</b>																																																																																																										

**Hardness test**

	Min	Max
Lot	HRB	HRB
25366	76	78

**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 12.70 X 2.11 MM 1/2" X 14 BWG/SWG HT 538459 SS LOT 25366 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.