

**CERTIFICATE****No. A/13-307087 Rev 00**
Date 2013-01-16 Page 1/2INSPECTION CERTIFICATE acc to
EN 10 204 3.1Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDENINSPECTION STAMP
QA-TUBE

Customer References 712319 003-00991 ITEMS Customer order 2013-01-16		Sandvik References Order No. Subs No. ABSMT Dispatch note 317936 542356 39746/54 ABSMT No. C.Code 300-79212 29																																																																																																
Material description SEAMLESS STAINLESS COLD FINISHED INSTRUMENTATION TUBING Steel making process Electric furnace		Steel/material Designations Sandvik AISI 3R60 TP316/TP316L EN no 1.4435																																																																																																
Technical requirements ASTM A-213-11A AW, ASME SA-213-ED-10 AD-11A AW, ASTM A-269-10 NACE MR0175/ISO 15156-3:2009 PED 97/23/EC EN 10216-5 TC1 HRB MAX 80																																																																																																		
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Quality assurance - Per Eriksson / QA-manager MTC Service / Certificates																																																																																																		

**CERTIFICATE****No. A/13-307087****Rev 00****Date 2013-01-16****Page 2/2****Hardness test**

	Min	Max
Lot	HRB	HRB
52256	79	80

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 min 1040° C.

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 1.24 MM 1/2'' X 18 BWG/SWG HT 534271 SS LOT 52256 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.

The certificate is produced with EDP and valid without signature.