

**CERTIFICATE**

A03/Z02

No. A/20-905159**Rev****00****Date**

2020-08-13

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A02/Z03

INSPECTION CERTIFICATE acc to
EN 10204 3.1

A06

PROCESSKONTROLL ITEMS AB
BOX 2088
444 02 STORA HÖGA
SWEDEN

INSPECTION STAMP

QA-TUBE

Customer References A07 759847/ JOSEFIN Customer order 2020-08-12 003-00991 ITEMS	Sandvik References A08 Order No. Subs No. ABSMT Dispatch note 557928 687571 22943/54 ABSMT No. C.Code 300-22892 05																																																																																													
Material description B01/B04 SEAMLESS STAINLESS COLD FINISHED INSTRUMENTATION TUBING Metallurgical process C70 Electric furnace	Steel/material Designations B02 Sandvik UNS 2RK65 N08904 EN no 1.4539																																																																																													
Technical requirements B03 ASTM A-269-15A, ASTM A-213-19 PED 2014/68/EU EN 10216-5 TC1 NACE MR0175/ISO 15156-3:-2015																																																																																														
EXTENT OF DELIVERY B07-B13 <table border="1" style="width: 100%; border-collapse: collapse;"> <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>02</td> <td>THT-2RK65-12.7-1.24 12.70 X 1.24</td> <td>558052</td> <td>24516</td> <td>30</td> <td>63.0</td> <td>180.00</td> </tr> <tr> <td colspan="4"></td> <td style="text-align: right;">Total</td> <td>30</td> <td>63.0 180.00</td> </tr> </tbody> </table> TEST RESULTS Chemical composition (weight%) <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Heat</th> <th>C</th> <th>Si</th> <th>Mn</th> <th>P</th> <th>S</th> <th>Cr</th> <th>Ni</th> <th>Mo</th> </tr> </thead> <tbody> <tr> <td>558052</td> <td>0.011</td> <td>0.43</td> <td>1.81</td> <td>0.020</td> <td>0.0005</td> <td>20.24</td> <td>24.84</td> <td>4.20</td> </tr> <tr> <td></td> <th>Cu</th> <th>N</th> <td colspan="6"></td> </tr> <tr> <td>558052</td> <td>1.46</td> <td>0.058</td> <td colspan="6"></td> </tr> </tbody> </table> Chemical composition, product (weight%) <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Heat</th> <th>C</th> <th>Si</th> <th>Mn</th> <th>P</th> <th>S</th> <th>Cr</th> <th>Ni</th> <th>Mo</th> </tr> </thead> <tbody> <tr> <td>558052</td> <td>0.010</td> <td>0.41</td> <td>1.81</td> <td>0.020</td> <td><0.001</td> <td>20.27</td> <td>24.87</td> <td>4.21</td> </tr> <tr> <td></td> <th>Cu</th> <th>N</th> <td colspan="6"></td> </tr> <tr> <td>558052</td> <td>1.47</td> <td>0.055</td> <td colspan="6"></td> </tr> </tbody> </table>		It	Product designation	Heat	Lot	Pieces	Kg	M	02	THT-2RK65-12.7-1.24 12.70 X 1.24	558052	24516	30	63.0	180.00					Total	30	63.0 180.00	Heat	C	Si	Mn	P	S	Cr	Ni	Mo	558052	0.011	0.43	1.81	0.020	0.0005	20.24	24.84	4.20		Cu	N							558052	1.46	0.058							Heat	C	Si	Mn	P	S	Cr	Ni	Mo	558052	0.010	0.41	1.81	0.020	<0.001	20.27	24.87	4.21		Cu	N							558052	1.47	0.055						
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Quality assurance - Sofia Åkesson / Q-Manager A05/Z02 MTC Service / Certificates																																																																																														

A01

 AB SANDVIK MATERIALS TECHNOLOGY Reg No. 556234-6832 VAT No. SE556234683201
 SE-81181 SANDVIKEN SWEDEN www.materials.sandvik mtc_service.smt@sandvik.com


Tensile test at room temperature

Lot	Yield strength		Tensile strength	Elongation	
	MPa	MPa	MPa	%	%
	Rp0.2	Rp1.0	Rm	A	2"
24516	341	375	638	41	39
	340	372	643	39	38
	338	366	627	43	40

Hardness test

Lot	Min	Max
	HRB	HRB
24516	75	77
	76	77
	75	76
	77	77
	76	77
	75	75

Following controls/tests have been satisfactorily performed:

- Flattening test.
- Flaring test
- 100% PMI-test.
- Intergranular corrosion test acc to ASTM A-262 PR.E
- Leak test: Eddy current test acc to ASTM A-1016.
- Visual inspection and dimensional control.

Heat Treatment:

Solution annealed and quenched.

Marking:

SANDVIK 2RK65 ASTM A213/A269 COLD EN10216-5 TC1 AW UNS N08904 EN 1.4539 CFA SM
L NDE 12.70 X 1.24 MM 1/2'' X 18 BWG/SWG HT 558052 SS LOT 24516 MADE IN SWEDEN
QA-TUBE

The raw material is free from radioactive contamination.

Material free from mercury contamination.

No welding or weld repair.

Approved acc. AD 2000-Merkblatt W0 and certified acc. to
Pressure Equipment Directive (2014/68/EU, Annex 1 para 4.3) 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 9001:2015.





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The certificate is produced with EDP and valid without signature.

