

CERTIFICATE

No. A/15-516995

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Rev 00

INSPECTION CERTIFICATE acc to EN 10 204 3.1

Processkontroll Items AB Box 2088 444 02 STORA HÖGA

INSPECTION STAMP QA-TUBE

Customer References

Sandvik References Order No. Subs No. ABSMT Dispatch note

SWEDEN

Customer 752191/ Johansson order

595161 413837 02652/54

2015-08-12

ABSMT No. C.Code 300-33765 13

003-00991 ITEMS

Material description Steel/material Designations

SEAMLESS STAINLESS COLD FINISHED Sandvik UNS INSTRUMENTATION TUBING 2RK65 N08904

Steel making process

Electric furnace

Technical requirements

ASTM A-269-13

TEST RESULTS

43548

EXTENT OF DELIVERY It Product designation Heat Kg Lot Pieces M

01 THT-2RK65-12.7-1.24 542074 43548 30 65.0 180.00 12.70 X 1.24

Total 30 65.0 180.00

Chemical composition (weight%)

Heat C Si Mn P S CrΝi Mo 542074 0.012 0.43 1.55 0.022 0.0005 20.27 24.99 4.23

Cu N 542074 1.38 0.060

Chemical composition, product (weight%)

0.44

Lot C Si Mn P S \mathtt{Cr} Νi Mo <0.001 0.024

20.19

25.03

4.24

Cu N

43548 0.058 1.37

0.014

Quality assurance - Lars-Ake Bergqvist / QA-manager MTC Service / Certificates

1.54



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Tensile test at room temperature

 Yield strength
 Tensile strength
 Elongation

 MPa
 MPa
 %

 Lot
 Rp0.2
 Rm
 2"

 43548
 330
 622
 46

 325
 619
 44

Hardness test

	Min	Max
Lot	HRB	HRB
43548	76	78

Following controls/tests have been satisfactorily performed:

- Flaring test
- PMI-test.
- Leak test: Eddy current test acc to ASTM A-1016.
- Visual inspection and dimensional control.

Heat Treatment:

Solution annealed and quenched.

The raw material is free from radioactive contamination.

Material free from mercury contamination.

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.

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The certificate is produced with EDP and valid without signature.