SANDVIK

CERTIFICATE

No. A/17-640186

Date 2017-02-23

Page 1/2

Rev 00

INSPECTION CERTIFICATE acc to EN 10204 3.1

Bandak Lunde AS Hantovegen 328

3825 LUNDE I TELEMARK

NORWAY

INSPECTION STAMP QA-TUBE

824293/ 407714

Customer References

Customer

2017-02-21

order

||470082

Order No. Subs No. ABSMT Dispatch note

470082 625162 39775/54

ABSMT No. C.Code 300-59420 64

Sandvik References

125-06911 SVERDRUP S

Material description

SEAMLESS STAINLESS COLD FINISHED

TUBE IN METRIC SIZES

Steel/material Designations

Sandvik W.nr 3R60 1.4435 DIN EN no X 2 CRNIMO 18 14 3 1.4435

Steel making process

Electric furnace

Technical requirements

DIN 17458 Testing class 1 PED 2014/68/EU EN 10216-5 TC1

NACE MR0175/ISO 15156-3:2015

EXTENT OF DELIVERY

 It
 Product designation
 Heat
 Lot
 Pieces
 Kg
 M

 01
 TST-3R60-60.3-2
 545517
 57726
 10
 183.0
 61.58

 60.30
 X 2.00

Total 10 183.0 61.58

Tolerances according to EN ISO 1127: D3/T3

TEST RESULTS

Chemical composition (weight%)

Si Heat C Mn Ρ S \mathtt{Cr} Νi Mo 0.032 0.008 545517 0.42 1.58 17.26 2.63 0.021 13.09

N

545517 0.039

Tensile test at room temperature

Yield strength Tensile strength Elongation

 MPa
 MPa
 MPa
 %

 Lot
 Rp0.2
 Rp1.0
 Rm
 A

 57726
 317
 358
 611
 52

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



CERTIFICATE

No. A/17-640186

Date 2017-02-23

Rev 00 Page 2/2

Hardness test

 Min
 Max
 Avg

 Lot
 HRB
 HRB
 HRB

 57726
 73
 73
 73

Following controls/tests have been satisfactorily performed:

- Flaring test
- PMI-test.
- Intergranular corrosion test acc. to EN ISO3651-2, Method A.
- Leak test: Eddy current test acc to EN ISO 10893-1
- Visual inspection and dimensional control.

Heat Treatment:

Solution annealed and quenched.

Marking:

SANDVIK 3R60 EN 10216-5 TC1 EN 1.4435 CFD 60.30 X 2.00 MM HT 545517 SS LOT 577 26 *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 (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 9001:2008.

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.