# CERTIFICATE

A03/Z02 **No. V/21-031980** **Rev 00**
**Date** 2021-11-18 **Page** 1/2

**A02/Z03**
INSPECTION CERTIFICATE acc to
EN 10204 3.1

INSPECTION STAMP
QA-TUBE

**A06**
PROCESSKONTROLL ITEMS AB
BOX 2088
444 02 STORA HÖGA
SWEDEN

**Customer References** A07
761888

**Sandvik References** A08

| Order No. | Subs No. | Dispatch note |
|---|---|---|
| 578544 | 172161 | 194583 |

| Suppl. No | C.Code |
|---|---|
| 172161 | 58 |

**Material description** B01/B04
SEAMLESS STAINLESS COLD FINISHED
HYDRAULIC TUBING

**Steel/material Designations** B02

| Sandvik | EN no |
|---|---|
| 5R75 | 1.4571 |

| Metallurgical process | Origin | C70 |
|---|---|---|
| Electric furnace | Sweden | |

**Technical requirements** B03
PED 2014/68/EU EN 10216-5 TC1
NACE MR0175/ISO 15156-3:-2015
HRB MAX 90

**EXTENT OF DELIVERY** B07-B13

| It | Product designation | Heat | Lot | Kg | M |
|---|---|---|---|---|---|
| 01 | THT-5R75-18-2.5<br>18.00 X 2.50 | 557075 | 17661 | 11.6 | 12.00 |
| | | | Total | 11.6 | 12.00 |

**TEST RESULTS**
**Chemical composition (weight%)**

| Heat | C | Si | Mn | P | S | Cr | Ni | Mo | Ti | N |
|---|---|---|---|---|---|---|---|---|---|---|
| 557075 | 0.036 | 0.46 | 1.19 | 0.028 | 0.005 | 16.80 | 12.20 | 2.03 | 0.38 | 0.013 |

**Tensile test at room temperature**

| Lot | Yield strength MPa Rp0.2 | Yield strength MPa Rp1.0 | Tensile strength MPa Rm | Elongation % A |
|---|---|---|---|---|
| 17661 | 252 | 284 | 570 | 57 |
| | 252 | 284 | 567 | 54 |

**Quality assurance -** Sofia Åkesson / Q-Manager A05/Z02
MTC Service / Certificates

**Hardness test**

| Lot | Min HRB | Max HRB |
|---|---|---|
| 17661 | 77 | 79 |

**Following controls/tests have been satisfactorily performed:**
- Flattening test.
- 100% 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 5R75 EN10216-5 TC1 EN 1.4571 CFA 18.00 X 2.50 MM HT 557075 SS LOT 1766
1 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.

No unauthorized alterations. The contents of this Inspection
Certificate may not be modified or revised in any way without the
prior written approval of 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.