

INSPECTION CERTIFICATE acc to Processkontroll Items AB EN 10204 3.1

Box 2088 444 02 STORA HÖGA SWEDEN

INSPECTION STAMP QA-TUBE

| Customer References | Sandvik References | | | | |
|---|--------------------|-----------------------------|----------|------------|------------|
| | Customer | Order No. | Subs No. | ABSMT Disp | oatch note |
| 753812/HOLMGREN | order | 452769 | | | |
| | 2016-09-05 | ABSMT No. | | 20027/01 | |
| | 2010-09-05 | | | | |
| | | 300-51644 | 46 | | |
| 003-00991 ITEMS | | | | | |
| | | | | | |
| Material description | Steel/mate | Steel/material Designations | | | |
| SEAMLESS STAINLESS COL | D FINISHED | Sandvik SS | | | |
| HYDRAULIC TUBING | | 3R60 | | 2353 | |
| | | | | 2000 | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Steel making process | | | | | |
| Electric furnace | | | | | |
| | | | | | |
| Technical requirements | | | | | |
| SS 219713 | | | | | |
| Condition No -24 | | | | | |
| Condition No -24 | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| EXTENT OF DELIVERY | | | | | |
| It Product design | nation Hea | t Lot F | vieces | Kg | М |
| 01 THT-3R60-6-1 | | 264 58817 | 20 | 15.0 1 | 20.00 |
| 6.00 X 1.00 | | | | | |
| | | | | | |
| | | Total | 20 | 15.0 1 | 20.00 |
| KEY TO HEAT | | IOCUI | 20 | 10.0 | 20.00 |
| | | | | | |
| Heat Code Heat No | • | | | | |
| 048264 544658 | | | | | |
| | | | | | |
| TEST RESULTS | | | | | |
| Chemical composition (| weight%) | | | | |
| Heat C Si | Mn | P S | C C | r Ni | Mo |
| 048264 0.019 0.37 | 1.54 | 0.031 0. | 0110 17. | | 2.52 |
| N | | | | | |
| 048264 0.042 | | | | | |
| 010201 0.012 | | | | | |
| | | | | | |
| Tensile test at room t | | | | | |
| Yield st | | ensile stre | | ongation | |
| | | IPa | 8 | | |
| Lot Rp0.2 R | p1.0 R | m | A | | |
| 58817 302 3 | | 69 | 58 | | |
| | C C | | | | |
| | | | | | |
| | | | | | |
| Quality assurance - Lars-Åke Bergqvist / QA-manager | | | | | |
| Quality assurance - Lars-Ake Bergqvist / QA-manager MTC Service / Certificates | | | | | |
| | MIC Service | / Certifica | ITES | | |

AB SANDVIK MATERIALS TECHNOLOGY Reg No. 556234-6832 VAT No. SE663000-060901 SE-81181 SANDVIKEN SWEDEN www.smt.sandvik.com mtc_service.smt@sandvik.com CERTIFICATE



Following controls/tests have been satisfactorily performed:

- Flattening test 100% according to EN ISO 8492
- PMI-test.
- Intergranular corrosion test acc. to EN ISO3651-2, Method A.
- Leak test: Eddy current test acc to SS $114301/114305\ \text{El}$
- 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.

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.