

CERTIFICATE

No. A/16-605885 Rev 00

Date 2016-09-27 Page 1/2

INSPECTION CERTIFICATE acc to EN 10204 3.1

Processkontroll Items AB Box 2088

444 02 STORA HÖGA SWEDEN

INSPECTION STAMP QA-TUBE

Customer References

Sandvik References

Customer Order No. Subs No. ABSMT Dispatch note 753873 454395 616792 29125/54 order

ABSMT No. C.Code 300-52463 46 2016-09-21

003-00991 ITEMS

Material description

Steel/material Designations Sandvik SEAMLESS STAINLESS COLD FINISHED SS

HYDRAULIC TUBING 3R60 2353

Steel making process

Electric furnace

Technical requirements

SS 219713

Condition No -24

EXTENT OF DELIVERY

It Product designation Heat Lot Pieces Kg M 02 THT-3R60-12-1.5 24.0 60.00

048287 15235 10 12.00 X 1.50

Total 10 24.0 60.00

KEY TO HEAT

Heat No. Heat Code 048287 544852

TEST RESULTS

Chemical composition (weight%)

Heat C Si Mn P \mathtt{Cr} Νi Mo S

0.031 0.0090 17.21 048287 0.022 0.46 1.61 13.12 2.64

N 048287 0.036

Tensile test at room temperature

Yield strength Tensile strength Elongation

MPa MPa MPa % Rp0.2 Rp1.0 RmLot. Α 15235 319 352 580 50

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



Following controls/tests have been satisfactorily performed:

- Flattening test.
- PMI-test.
- Intergranular corrosion test acc. to EN ISO3651-2, Method A.
- Leak test: Eddy current test acc to SS 114301/114305 E1
- 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.