

CERTIFICATE

No. A/14-455498 Rev 00

Date 2014-11-05 Page 1/2

INSPECTION CERTIFICATE acc to EN 10 204 3.1

SEAMLESS STAINLESS COLD FINISHED

Processkontroll Items AB Box 2088 444 02 STORA HÖGA

INSPECTION STAMP QA-TUBE

Customer References

Customer

order

2014-10-30

003-00991 ITEMS

751114

Sandvik References

SWEDEN

Order No. Subs No. ABSMT Dispatch note

386452 580622 34527/54

ABSMT No. C.Code 300-21216 46

HYDRAULIC TUBING

Material description Steel/material Designations

Sandvik SS 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-3R60-8-1.5 539447 30532 24 35.0 144.00

8.00 X 1.50

Total 24 35.0

TEST RESULTS

Chemical composition (weight%)

Heat C Si Mn Ρ S \mathtt{Cr} Νi Mo 2.55

0.029 539447 0.020 0.38 1.59 0.009 17.44 13.07

N

539447 0.036

Tensile test at room temperature

Yield strength Tensile strength Elongation

MPa MPa MPa % Lot Rp0.2 Rp1.0 RmΑ 30532 275 314 556 50

Following controls/tests have been satisfactorily performed:

- Flattening test.
- PMI-test.
- Intergranular corrosion test acc. to EN ISO3651-2, Method A.

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



- 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.