

CERTIFICATE

No. A/10-942560 Rev 00

Date 2010-02-26 Page 1/2

INSPECTION CERTIFICATE acc to EN 10 204 3.1

Processkontroll Items AB Box 2088 444 02 STORA HÖGA SWEDEN

INSPECTION STAMP QA-TUBE

Customer References

Customer

order

2010-02-22

003-00991 ITEMS

708351

Sandvik References

Order No. Subs No. ABSMT Dispatch note

186295 164710 46801/54

ABSMT No. C.Code 300-17389 46

Material description

SEAMLESS STAINLESS COLD FINISHED

HYDRAULIC TUBING

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 M Kg

02 THT-3R60-16-2 047297 92864 60 253.0 360.00 16.00 X 2.00

Total 60 253.0 360.00

KEY TO HEAT KEY TO LOT

Heat No. Lot Code Lot No. Heat Code

047297 522493 92864 4844119/1-1

TEST RESULTS

Chemical composition (weight%)

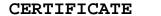
Heat C Si Mn P \mathtt{Cr} Νi Mo S

0.027 0.009 17.26 047297 0.023 0.35 1.63 13.29 2.52

N

047297 0.042

> Quality assurance - Per Eriksson/ QA-manager Tube & Pipe MTC Service / Certificates



No. A/10-942560 I

Rev 00

Date 2010-02-26 Page 2/2





Tensile test		temperature strength MPa	Tensile strength MPa	Elongation %
Lot	Rp0.2	Rp1.0	Rm	A
92864	257	289	571	54
	253	289	571	56
	253	286	577	55
	254	285	569	55

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 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.

The certificate is produced with EDP and valid without signature.

TEST RESULTS TRANSFERRED FROM CERTIFICATE NO A100005