

**CERTIFICATE****No. A/13-322357****Rev 00****Date 2013-03-21****Page 1/2**INSPECTION CERTIFICATE acc to
EN 10 204 3.1Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDENINSPECTION STAMP
QA-TUBE**Customer References**Customer
712483/HOLMGREN order
2013-02-18

003-00991 ITEMS**Sandvik References**Order No. Subs No. ABSMT Dispatch note
321986 544704 44117/54
ABSMT No. C.Code
300-81217 03**Material description**SEAMLESS STAINLESS COLD FINISHED
HYDRAULIC TUBING**Steel making process**
Electric furnace**Steel/material Designations**Sandvik SS
3R60 2353**Technical requirements**SS 219713
Condition No -24**EXTENT OF DELIVERY**

It	Product designation	Heat	Lot	Pieces	Kg	M
01	THT-3R60-16-2 16.00 X 2.00	047903	98259	39	165.0	234.00
				Total	39	165.0 234.00

KEY TO HEATHeat Code Heat No.
047903 534464**KEY TO LOT**Lot Code Lot No.
98259 4855733/1-2**TEST RESULTS****Chemical composition (weight%)**

Heat	C	Si	Mn	P	S	Cr	Ni	Mo
047903	0.019	0.40	1.73	0.029	0.006	17.51	13.20	2.54
N								
047903	0.040							

Tensile test at room temperature

Lot	Yield strength		Tensile strength	Elongation
	MPa	MPa	MPa	%
98259	Rp0.2	Rp1.0	Rm	A
	243	278	579	57

Quality assurance - Per Eriksson / 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.

The certificate is produced with EDP and valid without signature.

TEST RESULTS TRANSFERRED FROM CERTIFICATE NO A130215