

**CERTIFICATE****No. A/10-124705 Rev 00**
Date 2010-12-30 Page 1/2INSPECTION CERTIFICATE acc to
EN 10 204 3.1Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDENINSPECTION STAMP
QA-TUBE

Customer References 709536 003-00991 ITEMS Customer order 2010-12-13		Sandvik References Order No. Subs No. ABSMT Dispatch note 224569 195185 25721/54 ABSMT No. C.Code 300-34744 46																																																																																	
Material description SEAMLESS STAINLESS COLD FINISHED HYDRAULIC TUBING Steel making process Electric furnace		Steel/material Designations Sandvik SS 5R75 2350																																																																																	
Technical requirements SS 219713 Condition No -24																																																																																			
EXTENT OF DELIVERY <table border="1"><thead><tr><th>It</th><th>Product designation</th><th>Heat</th><th>Lot</th><th>Pieces</th><th>Kg</th><th>M</th></tr></thead><tbody><tr><td>01</td><td>THT-5R75-8-1.5</td><td>047531</td><td>94866</td><td>7</td><td>10.0</td><td>42.00</td></tr><tr><td></td><td>8.00 X 1.50</td><td>047531</td><td>94867</td><td>33</td><td>49.0</td><td>198.00</td></tr><tr><td colspan="4"></td><td>Total</td><td>40</td><td>59.0 240.00</td></tr></tbody></table> <table border="0"><tr><td colspan="2">KEY TO HEAT</td><td colspan="2">KEY TO LOT</td></tr><tr><td>Heat Code</td><td>Heat No.</td><td>Lot Code</td><td>Lot No.</td></tr><tr><td>047531</td><td>524804</td><td>94866</td><td>352409</td></tr><tr><td></td><td></td><td>94867</td><td>352410</td></tr></table> TEST RESULTS Chemical composition (weight%) <table border="1"><thead><tr><th>Heat</th><th>C</th><th>Si</th><th>Mn</th><th>P</th><th>S</th><th>Cr</th><th>Ni</th><th>Mo</th></tr></thead><tbody><tr><td>047531</td><td>0.034</td><td>0.55</td><td>1.16</td><td>0.027</td><td>0.001</td><td>16.73</td><td>12.15</td><td>2.08</td></tr><tr><td></td><td>Ti</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>047531</td><td>0.42</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table>				It	Product designation	Heat	Lot	Pieces	Kg	M	01	THT-5R75-8-1.5	047531	94866	7	10.0	42.00		8.00 X 1.50	047531	94867	33	49.0	198.00					Total	40	59.0 240.00	KEY TO HEAT		KEY TO LOT		Heat Code	Heat No.	Lot Code	Lot No.	047531	524804	94866	352409			94867	352410	Heat	C	Si	Mn	P	S	Cr	Ni	Mo	047531	0.034	0.55	1.16	0.027	0.001	16.73	12.15	2.08		Ti								047531	0.42							
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Quality assurance - Per Eriksson/ QA-manager Tube & Pipe MTC Service / Certificates																																																																																			

**CERTIFICATE****No. A/10-124705****Rev 00****Date 2010-12-30****Page 2/2****Tensile test at room temperature**

Lot	Yield strength		Tensile strength	Elongation
	MPa	MPa	MPa	%
	Rp0.2	Rp1.0	Rm	A
94866	281	315	593	59
	297	332	617	59
94867	283	314	610	60
	285	315	601	59

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 00040120
00040120