

KONTROLLINTYG enligt
EN 10 204 3.1

Processkontroll Items AB
Box 2088
444 02 STORA HÖGA
SWEDEN

INSPEKTIONSSTÄMPEL
QA-TUBE

Kundreferenser		Sandvik Referenser						
708137/HOLMGREN	kundorder 2009-12-17	Order Nr. 178435	Subs Nr. 158587					
003-00991	ITEMS	ABSMT Nr. 300-13814	ABSMT Packnota 40766/54					
Materialbeskrivning SÖMLÖSA ROSTFRIA KALLBEARBETADE INSTRUMENTRÖR		Stål/materialbeteckningar Sandvik SS 3R60 2353						
Smältmetod Elektrisk ugn								
Tekniska fordringar/krav SS 219713 Tillståndssiffra -24								
LEVERANSOMFATTNING								
Pos	Produktbeteckning	Charge	AO	Antal	Kg	M		
01	THT-3R60-12.7-1.24 12.70 X 1.24	047272	99949	25	54.0	150.00		
				Summa	25	54.0 150.00		
NYCKEL TILL CHARGE				NYCKEL TILL AO				
Charge kod		Charge Nr.		Ao kod		Ao Nr.		
047272		522466		99949		4842946/1-1		
PROVNINGSRESULTAT								
Kemisk sammansättning (vikts%)								
Charge	C	Si	Mn	P	S	Cr	Ni	Mo
047272	0.018	0.41	1.75	0.028	0.008	17.27	13.14	2.54
N								
047272	0.037							
Dragprovning vid rumstemperatur								
Sträckgräns			Brottgräns		Förlängning			
MPa MPa			MPa		%			
Ao	Rp0.2	Rp1.0	Rm		A			
99949	236	275	544		53			
	239	273	542		55			
Kvalitetssäkring - Per Eriksson/ QA-manager Tube & Pipe MTC Service / Certificates								



Följande kontroller/provningar har utförts med tillfredställande res:

- Plattningsprov
- PMI-provning.
- Interkristallin korrosionsprovning enligt EN ISO3651-2, Metod A.
- Täthetsprovning: Induktivprovning enl SS 114301/114305 E1
- Visuell inspektion och dimensionskontroll.

Värmebehandling:

Upplösningsbehandlat och släckt.

Antalet prover är baserat på A0-storlek före ev.delning.

De levererade produkterna uppfyller specifikationer och krav i ordern.

Materialet är tillverkat enligt ett kvalitetssystem,
godkänt och certifierat mot ISO 9001.

Intyget är ADB-framställt och giltigt utan underskrift.

PROVNINGSRESULTATEN ÖVERFÖRDA FRÅN CERTIFIKAT NR A090915

**CERTIFICATE**

No. A/09-925509 Rev 00
Date 2009-12-21 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 708137/HOLMGREN 003-00991 ITEMS Customer order 2009-12-17		Sandvik References Order No. Subs No. ABSMT Dispatch note 178435 158587 40766/54 ABSMT No. C.Code 300-13814 46																																																																																												
Material description SEAMLESS STAINLESS COLD FINISHED INSTRUMENTATION TUBING Steel making process Electric furnace		Steel/material Designations Sandvik SS 3R60 2353																																																																																												
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-3R60-12.7-1.24 12.70 X 1.24</td><td>047272</td><td>99949</td><td>25</td><td>54.0</td><td>150.00</td></tr><tr><td colspan="4"></td><td>Total</td><td>25</td><td>54.0 150.00</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>047272</td><td>522466</td><td>99949</td><td>4842946/1-1</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>047272</td><td>0.018</td><td>0.41</td><td>1.75</td><td>0.028</td><td>0.008</td><td>17.27</td><td>13.14</td><td>2.54</td></tr><tr><td></td><td>N</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>047272</td><td>0.037</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></tbody></table> Tensile test at room temperature <table border="1"><thead><tr><th rowspan="3">Lot</th><th colspan="2">Yield strength</th><th>Tensile strength</th><th>Elongation</th></tr><tr><th>MPa</th><th>MPa</th><th>MPa</th><th>%</th></tr><tr><th>Rp0.2</th><th>Rp1.0</th><th>Rm</th><th>A</th></tr></thead><tbody><tr><td rowspan="2">99949</td><td>236</td><td>275</td><td>544</td><td>53</td></tr><tr><td>239</td><td>273</td><td>542</td><td>55</td></tr></tbody></table>				It	Product designation	Heat	Lot	Pieces	Kg	M	01	THT-3R60-12.7-1.24 12.70 X 1.24	047272	99949	25	54.0	150.00					Total	25	54.0 150.00	KEY TO HEAT		KEY TO LOT		Heat Code	Heat No.	Lot Code	Lot No.	047272	522466	99949	4842946/1-1	Heat	C	Si	Mn	P	S	Cr	Ni	Mo	047272	0.018	0.41	1.75	0.028	0.008	17.27	13.14	2.54		N								047272	0.037								Lot	Yield strength		Tensile strength	Elongation	MPa	MPa	MPa	%	Rp0.2	Rp1.0	Rm	A	99949	236	275	544	53	239	273	542	55
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**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 A090915