

A02/Z03

INSPECTION CERTIFICATE acc to
EN 10204 3.1

A06

PROCESSKONTROLL ITEMS AB
BOX 2088
444 02 STORA HÖGA
SWEDEN

INSPECTION STAMP

QA-TUBE

Customer References A07 763064/Holmgren Customer order 2022-09-22 003-00991 ITEMS -W	Alleima References A08 Order No. Subs No. Dispatch note 590413 714279 24116/54 Suppl. No C.Code 300-47073 15																																																																			
Material description B01/B04 SEAMLESS STAINLESS COLD FINISHED HYDRAULIC TUBING Metallurgical process C70 Electric furnace	Steel/material Designations B02 Alleima AISI 3R60 TP316/TP316L EN no 1.4435																																																																			
Technical requirements B03 ASTM A-213-19 AW, ASME SA-213-ED-19 AW, ASTM A-269-15A NACE MR0175/ISO 15156-3:-2015, NACE MR0103/ISO 17945-1:-2015 PED 2014/68/EU EN 10216-5 TC1 HRB MAX 80																																																																				
<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="7" style="text-align: left; border-bottom: 1px solid black;">EXTENT OF DELIVERY</th> <th style="text-align: right;">B07-B13</th> </tr> <tr> <th style="text-align: left;">It</th> <th style="text-align: left;">Product designation</th> <th style="text-align: left;">Heat</th> <th style="text-align: left;">Lot</th> <th style="text-align: left;">Pieces</th> <th style="text-align: left;">Kg</th> <th style="text-align: left;">M</th> </tr> </thead> <tbody> <tr> <td>02</td> <td>THT-3R60-16-2 16.00 X 2.00</td> <td>043904</td> <td>96265</td> <td>84</td> <td>356.0</td> <td>504.00</td> </tr> <tr> <td colspan="4"></td> <td style="text-align: right;">Total</td> <td>84</td> <td>356.0 504.00</td> </tr> </tbody> </table> <table style="width: 100%;"> <tr> <td style="width: 50%;"> KEY TO HEAT Heat Code Heat No. 043904 564733 </td> <td style="width: 50%;"> KEY TO LOT Lot Code Lot No. 96265 2073910-11 </td> </tr> </table> TEST RESULTS Chemical composition (weight%) <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Heat</th> <th style="text-align: left;">C</th> <th style="text-align: left;">Si</th> <th style="text-align: left;">Mn</th> <th style="text-align: left;">P</th> <th style="text-align: left;">S</th> <th style="text-align: left;">Cr</th> <th style="text-align: left;">Ni</th> <th style="text-align: left;">Mo</th> </tr> </thead> <tbody> <tr> <td>043904</td> <td>0.017</td> <td>0.40</td> <td>1.63</td> <td>0.031</td> <td>0.007</td> <td>17.36</td> <td>13.18</td> <td>2.62</td> </tr> <tr> <td colspan="2"></td> <td colspan="7" style="text-align: center;">N</td> </tr> <tr> <td>043904</td> <td>0.043</td> <td colspan="7"></td> </tr> </tbody> </table>		EXTENT OF DELIVERY							B07-B13	It	Product designation	Heat	Lot	Pieces	Kg	M	02	THT-3R60-16-2 16.00 X 2.00	043904	96265	84	356.0	504.00					Total	84	356.0 504.00	KEY TO HEAT Heat Code Heat No. 043904 564733	KEY TO LOT Lot Code Lot No. 96265 2073910-11	Heat	C	Si	Mn	P	S	Cr	Ni	Mo	043904	0.017	0.40	1.63	0.031	0.007	17.36	13.18	2.62			N							043904	0.043							
EXTENT OF DELIVERY							B07-B13																																																													
It	Product designation	Heat	Lot	Pieces	Kg	M																																																														
02	THT-3R60-16-2 16.00 X 2.00	043904	96265	84	356.0	504.00																																																														
				Total	84	356.0 504.00																																																														
KEY TO HEAT Heat Code Heat No. 043904 564733	KEY TO LOT Lot Code Lot No. 96265 2073910-11																																																																			
Heat	C	Si	Mn	P	S	Cr	Ni	Mo																																																												
043904	0.017	0.40	1.63	0.031	0.007	17.36	13.18	2.62																																																												
		N																																																																		
043904	0.043																																																																			
Quality assurance - Sofia Åkesson / Q-Manager A05/Z02 MTC Service / Certificates																																																																				



Chemical composition, product (weight%)

Heat	C	Si	Mn	P	S	Cr	Ni	Mo
043904	0.017	0.40	1.62	0.030	0.009	17.34	13.14	2.60
	N							
043904	0.044							

Tensile test at room temperature

Lot	Yield strength		Tensile strength	Elongation	
	MPa	MPa	MPa	%	%
	Rp0.2	Rp1.0	Rm	A	2"
96265	273	305	590	52	53
	280	311	598	51	53

Hardness test

Lot	Min	Max
	HRB	HRB
96265	75	76

Following controls/tests have been satisfactorily performed:

- Flattening test.
- Flaring test
- 100% PMI-test.
- Intergranular corrosion test acc to ASTM A-262 PR.E and EN ISO 3651-2A
- Leak test: Eddy current test acc to EN ISO 10893-1, ASME SA-1016.
- Visual inspection and dimensional control.

Heat Treatment:

Solution annealed at a temperature of Min 1040° C and quenched.

Marking:

3R60 ASTM/ASME A/SA213 A269 COLD EN 10216-5 TC1 AW TP 316/TP 316L EN 1.4435 CF A SML NDE 16.00 X 2.00 MM . HT 564733 SZ LOT 2073910-11 MADE BY ALLEIMA IN CZE CHIA *QA-TUBE*

The raw material is free from radioactive contamination.

Material free from mercury contamination.

No welding or weld repair.

Approved acc. AD 2000-Merkblatt W0 and certified acc. to Pressure Equipment Directive (2014/68/EU, Annex 1 para 4.3) by TUEV NORD; notified body, reg.no. 0045.

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 9001:2015.



No unauthorized alterations. The contents of this Inspection Certificate may not be modified or revised in any way without the prior written approval of Alleima.

Unauthorized alterations to the Inspection Certificate, including introduction of false, fictitious or fraudulent statements or entries, may be punishable by fines, imprisonment, or both. This Inspection Certificate may be copied only in the manner and for the purposes specified in Section 6 of EN 10204:2004. Contravention of this notice will be prosecuted to the fullest extent of applicable law.

The certificate is produced with EDP and valid without signature.

Alleima, formerly Sandvik Materials Technology. During a brand transition period, both Sandvik and Alleima marking on products may exist.

TEST RESULTS TRANSFERRED FROM CERTIFICATE NO C-6044/30

