

**A02/Z03**

INSPECTION CERTIFICATE acc to EN 10204 3.1  
INSPECTION STAMP QA-TUBE

**A06**

PROCESSKONTROLL ITEMS AB  
STORA HÖGA INDUSTRIOMRÅDE  
VALLENVÄGEN 5  
444 60 STORA HÖGA  
SWEDEN

Customer References		A07
765468	Customer order	
	2024-05-17	
SEPROCESSK 9002757		

Alleima References			A08
Order No.	Subs No.	Dispatch note	
609764	176390	1621034	
Suppl. No			
0010102417			

Material Description		B01/B04
SEAMLESS COLD FINISHED HYDRAULIC TUBING		
Metallurgical process	Origin	C70
Electric Arc Furnace+AOD	SE	

Steel/material designations		B02
Alleima	AISI	
3R60	316/316L	
UNS	EN no	
S31600	1.4435/ 1.4436	

Technical Requirements	B03
ASTM A213-21B AW, ASME SA213-ED-23 AW, ASTM A269-22	
NACE MR0175/ISO 15156-3:-2020, NACE MR0103/ISO 17945-1:-2015	
PED 2014/68/EU EN 10216-5 TC1	
HRB MAX 80	

Extent of delivery							B07-B13		
lt	Product designation	Heat	Lot	Pcs	Kg	m			
1	THT-3R60-42-2 42 x 2	570557	0000102924	2	24,0	12			
				<b>Total</b>	<b>2</b>	<b>24,0</b>			
<b>Test Results</b>									
<b>Chemical composition (weight%)</b>									
Heat	C	Si	Mn	P	S	Cr	Ni	Mo	N
570557	0.020	0.39	1.68	0.029	0.009	17.11	13.08	2.64	0.040
<b>Chemical composition, product(weight%)</b>									
Heat									
Lot	C	Si	Mn	P	S	Cr	Ni	Mo	
	%	%	%	%	%	%	%	%	%
0000102924	0.019	0.40	1.67	0.030	0.006	17.13	13.03	2.65	

Quality assurance - Quality assurance - Helen Jämtemyr / QA-manager	A05/Z02



Lot N  
%  
0000102924 0.04

**Tensile test**

Lot	Rp0.2 MPa	Rp1.0 MPa	Rm MPa	A %
0000102924:1	419	454	623	45
0000102924:2	306	335	574	45

Lot	2" %
0000102924:1	40
0000102924:2	42

**Hardness test**

Lot	Single values		Average
	HRB	HRB	HRB
0000102924:1	67.0	68.0	67.5
0000102924:2	68.0	68.0	68.0

**Flaring test**

Lot	Test	Test X-End
0000102924	OK	OK

**Flaring test**

Lot	Test
0000102924	OK

**Flattening test**

Lot	Test	Test X-End
0000102924	OK	OK

**Corrosion test**

ACC TO: ASTM A-262 E  
Intergranular corrosion test

Lot	Test
0000102924	OK



**Corrosion test**

ACC TO: ISO 3651-2 A  
Intergranular corrosion test

Lot	Test
0000102924	OK

**Positive material ident.**

100% PMI-Test

**Eddy current test**

Leak test: Accc to EN ISO 10893-1, ASME SA1016.

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

Following controls/tests have been satisfactorily performed:

- Visual inspection and dimensional control.

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.

ALLEIMA 3R60 ASTM A213/A269 ASME SA213 COLD EN10216-5 TC1 AW TP316/316L EN 1.4435  
EN 1.4436 CFD SML NDE 42.00 X 2.00 MM HT 570557 SS LOT 102924 MADE IN SWEDEN  
\*QA-TUBE\*

Note! If the lot number in the certificate start with "0000". These "0000" are not printed on the actual tubes due to IT limitations.

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.

