



Alleima USA LLC

Product Area Tube

982 Griffin Pond Rd, Clarks Summit, PA 18411, PA US 18411, Ph: 570-585-7500

MATERIAL CERTIFICATE

Cert#: 2400001369

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Plant Location: 982 Griffin Pond Road, Clarks Summit, PA 18411
 Sold To: 8801 Ship To:
 Alleima Tube AB(0140) ALLEIMA BENELUX B.V.
 SANDVIKEN SE SANDVIKEN SE
 Customer Order No: 32558 Certification Date: 20240313
 Alleima Order No: 393036/5

Work Order/Lot: 312647

 Specification S-08921 v 5.0, ASTM A213-22a, ASME SA-213, ASTM A269-22
 ASME Section II, 2023 Edition, NACE MR0175/ISO 15156
 4th Edition 2022-09-21, (Austenitic), EN 10216-5:2021, TC1
 AD2000-W2 Einbaurohre, EN10305-1 (Tolerances Only)

Cold Finished BRIGHT ANNEALED Seamless Tube
Type 3R60 TP316/TP316L 1.4435

Size: 12.0 MM X 1.5 MM
Heat: 568457

ANALYSIS %

	C	Si	Mn	P	S	Cr	Ni
Heat	.016	.44	1.62	.032	.008	17.25	13.16
Prod	.016	.45	1.63	.032	.007	17.33	13.14
	Fe	Mo	Cu	Al	Pb	N	
Heat		2.62	.30	.006		.037	
Prod		2.63	.30	.004		.044	

Mechanical Tests:

Yield Strength				Tensile Strength		Elongation in %				Reduction Of Area %
0.2%		1.0%		psi	MPa	E2"	E10"	E4d	E5d	%
psi	MPa	psi	MPa	psi	MPa	E2"	E10"	E4d	E5d	%
41100	283.4	45500	313.8	82200	566.9	53	N/A	N/A	N/A	N/A
39800	274.5	44000	303.4	80100	552.4	55				

Hardness Test Results: 77HRBW, 77HRBW

Flare Test per ASTM A450/A1016 and ASME SA450/SA1016,
No. samples: 2 Result: Acceptable

Flattening Test per ASTM A450/A1016 and ASME SA450/SA1016:
Acceptable

Tensile Test sample width (1=Full-Size 2=1/2" Strip): 1

This material complies with DFARS 252.225-7001 (2017)
 This material does not comply with DFARS 252.225-7008 (2013)
 This material complies with DFARS 252.225-7009 (2019)
 This material does not comply with FAR 52.225-1 (2021)
 This material complies with FAR 52.225-5 (2019)

Intergranular corrosion test in accordance with
EN ISO 3651-2, Method A: Acceptable

Country Of Origin: United States

100% Positive Material Identification performed

All material subjected to a final solution annealing heat
treatment with material at a temperature of 1900 deg. F
minimum followed by rapid quenching to below 800 deg. F in
less than three (3) minutes.

The material has not come in contact with Mercury or Mercury

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containing compounds.
No welding has been performed on this material.
Material was 100% eddy current tested in accordance with
ASTM A450, ASTM A1016 and is acceptable.
Material manufactured in compliance with Annex 1, Paragraph
4.3 of the Pressure Equipment Directive (2014/68/EU).
LRQA Certificate number 0343/HOU/PED/PRJ11100408980.
Material has been manufactured/supplied in accordance
with Alleima USA, LLC-Quality Manual- Commercial
Products Revision 5 dated July 6, 2023. Quality system
has been approved to ISO 9001:2015 (Cert# 10544864, 8AUG23)
No unauthorized alterations. The content of this inspection
certificate may not be modified or revised in any way
without the prior written approval of Alleima USA, LLC
Unauthorized alterations to the inspection
certifiante, including introduction of false, fictitious or
fraudulent statements or entries, may be punishable by
fines, imprisonment, or both.
Contravention of this notice will be prosecuted to the
fullest extent of the applicable laws.
Inspection certificate produced in accordance with
EN 10204 3.1 (formerly EN 10204 3.1.B).
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 USA , LLC
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 EN 10204:2004, Section 6. Contravention of this
notice will be prosecuted to the fullest extent of the
applicable law(s).
This is to certify that the contents of this certificate
are correct and accurate as contained in Alleima's records,
and that all above test results and operations performed are
in compliance with the requirements of the purchase order
and the specification(s) listed above.

Electronically Generated Certificate-Valid without signature
John Scherer, Quality Manager
15 (VENLO3R60 R2) (15) CF (JN0491)