

**INSPECTION CERTIFICATE**

(A02) EN 10204: 2004 TYPE 3.1

(A03) No. **4-21-02276-rev.01** Pag. 1 / 5

(A06) **Purchaser**  
 Salzgitter Mannesmann Stainless Tubes USA Inc.  
 12050 W. LITTLE YORK  
 77041 HOUSTON  
 Texas  
 USA

(A07) **Customer Order No**  
 HOUSTON STOCK REPLENISHMENT  
 (A08) **SMST-Tubes Order No**  
 0000284622  
**SMST-Item** (A09) **Part No**  
 0000284622-000001 SS-T4-S-035-20D

(B01) (B02) (B04) **Product Description**

Seamless Stainless Steel Cold Finished Tubes Solution Annealed In Bright Condition Plain Ends Square Cut Deburred

**Specifications**

ASME SA 213 19;ASTM A 213 19 a;ASTM A 269 15 >US units;SWAGELOK SCS-00062 REV. B

**Grade**

TP 316;TP 316L;DMV 316L

**Tolerances**

A 213 / A 1016 AW;ASTM A 269

(B03) **Supplementary Requirements**

None

(B06 - D01) **Marking of the Product**

**Technical marking**

MANNESMANN MST-I - ASME SA 213 / ASTM A 213 / ASTM A 269 - DMV 316L - TP 316 / TP 316L - 1/4 " X 0,035 " - 6,35 MM X 0,89 MM - AW - SML - CF - NDE - HEAT \$HEAT\_NBR\$ - \$QUAL\_LOT\_NBR\$ - ITALY - BUNDLE \$BUNDLE\_NBR\$ - NR \$INDIV\_NBR\$

**Country of Origin of the tubes**

Italy

Quantity						Dimensions			
(B07) Heat	Quality Lot	SMST-Item	(B08) Pieces	(B13) Weight	(B16) Length	(B09) OD	(B10) WT	(B11) Ordered Length	
								min	max
352150	QL40071553	000001	850	623.46 kg	5181.600 m	6.35 mm	0.89 mm	6096 mm	6099 mm
				1374.50 lbs	17000.00 ft	0.250 "	0.035 "	20.00 ft	20.01 ft
			<b>850</b>	<b>623.46 kg</b>	<b>5181.600 m</b>				
			<b>850</b>	<b>1374.50 lbs</b>	<b>17000.00 ft</b>				

**Heat Analysis**

(B07) Heat	Heat Origin	Request	C	Si	Mn	P	S	Cr	Ni	Mo	
											Min
											Max
352150	Germany	(C70) Melting Process	%	%	%	%	%	%	%	%	
			EAF + VOD	0.014	0.44	1.49	0.021	0.0080	17.0	11.3	2.1

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**Product Analysis**

**ASTM A 213;ASME SA 213;ASTM A 269;ASTM A 480**

	Request	C	Si	Mn	P	S	Cr	Ni	Mo
	Min	0.00	0.00	0.00	0.00	0.0050	16.0	10.0	2.0
	Max	0.035	1.0	2.0	0.045	0.0150	18.0	14.0	3.0
Quality Lot	(C00) Sample	%	%	%	%	%	%	%	%
QL40071553	49135739	0.015	0.47	1.52	0.020	0.0080	16.9	11.4	2.1

Sampling done on tubes in manufacturing length

**Tensile Test at Room Temperature**

**ASTM A 370;ASTM A 632**

(C02) Direction: LONGITUDINAL

(C10) Description: FULL SIZE TEST SPECIMEN

		(C11)	(C12)	(C13)
		YS 0.2%	U.T.S.	EL
		Rp 0,2%	Rm	2"
Request	Min	30	75	35.0
	Max			
Quality Lot	(C00) Sample	ksi	ksi	%
QL40071553	49135739	62	93	37.8
	49135740	66	95	37.4

Sampling done on tubes in manufacturing length

**(C30) Hardness HRB**

**ASTM E 18**

		(C30) HRB			
		Request			90.0 max
Quality Lot	(C00) Sample	Result	(C31) Min	(C31) Max	(C32) Avg
QL40071553	49135739		88	89	88.5
	49135740		89	90	89.5

Sampling done on tubes in manufacturing length

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**(C51) Flaring Test**

**ASTM A 1016**

Quality Lot	(C00) Sample	Result
QL40071553	49135731	OK
	49135732	OK
	49135733	OK
	49135734	OK
	49136282	OK

Sampling done on tubes in manufacturing length

Test done at both ends of tubes

**(C50) Flattening Test**

**ASTM A 1016**

Quality Lot	(C00) Sample	Result
QL40071553	49135735	OK
	49135736	OK
	49135737	OK
	49135738	OK
	49136283	OK

Sampling done on tubes in manufacturing length

Test done at both ends of tubes

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**Other Tests and Declarations**

QL40071553

Heat Treatment Solution Annealed 1100 °C/2012 °F Holding Time 1 Min / mm WT rapid gas cooling

(D01)	Visual and dimensional inspection (VT) on 100% of tubes according to the order	Satisfactory
(D51)	Antimixing Check (PMI) on 100% of tubes	Satisfactory
(D02)	Eddy Current Testing (ET) on 100% of tubes ASTM A 1016	Satisfactory

"Tubing are capable of passing corrosion test in accordance with EN ISO 3651-2 method A and ASTM A 262 Practice E"  
SMTS USA is an authorized distributor of SMST Italy products

No Weld Repair

(Z01) SMST declares that the product was manufactured, sampled, tested, inspected and packed in accordance with the specifications and any other requirements designated in the purchase order within the extent listed in SMST order acknowledgment, and has been found to meet such requirements

Tubes are free from mercury contamination and from radioactive contamination

The material is conforming to directive 2000/53/EC and 2011/65/EU

Confirmation with reference to Pressure Equipment Directive 2014/68/EU:  
The works operates a quality management system that has undergone a specific assessment for materials for pressure equipment and is certified by a competent body (TUV-Cert. No: 70/2002/MUC)

(Z02) Mill's Inspector **Ruggero Clementi (QC)** Date of Edition **16/12/2021**

This certificate is issued by SALZGITTER MANNESMANN STAINLESS TUBES via a computerized system bearing a traceable unique number. It is valid without signature. An intermediary may only pass on the original certificate without any alterations. Providing a copy of the original is only permitted subject to strict compliance with the prerequisites set out in § 6 of EN 10204:2004 i.e. traceability and availability of the original upon request. Any modification or alteration of the certificate or any copies are strictly prohibited. Any contravention of this notice or § 6 of EN 10204:2004 is illegal and will be prosecuted. Any falsification of a certificate e.g. by introducing false or fraudulent data for the purpose of promoting the sales of goods is a criminal offence under German law (and many other jurisdictions) punishable with fines and imprisonment. If an authentication is needed, please contact [info@mst.mannesmann.com](mailto:info@mst.mannesmann.com)

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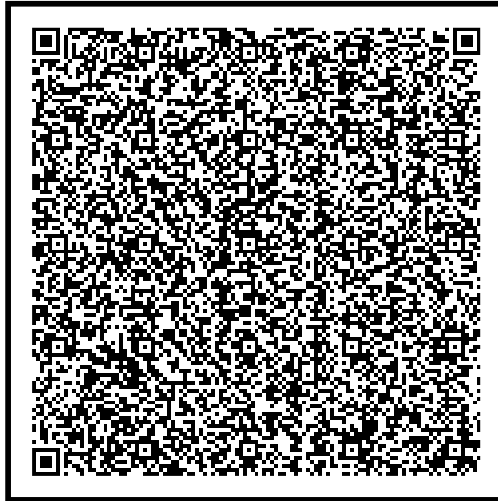
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**Certificate anti counterfeiting check**



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