

**INSPECTION CERTIFICATE**

(A02) EN 10204: 2004 TYPE 3.1

(A03) No. **4-22-00879-rev.01** Pag. 1 / 5

<p>(A06) <b>Purchaser</b>          Salzgitter Mannesmann Stainless Tubes USA Inc.          12050 W. LITTLE YORK          77041 HOUSTON          Texas          USA</p>	<p>(A07) <b>Customer Order No</b>          5210000468          (A08) <b>SMST-Tubes Order No</b>          0000288361  <b>SMST-Item</b> (A09) <b>Part No</b>          0000288361-000005 SS-T6-S-049-20D</p>
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(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 21;ASTM A 213 21 a;ASTM A 269 15 >US units;SWAGELOK SCS-00062 REV. C

**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 - 3/8 " X 0,049 " - 9,53 MM X 1,24 MM - AW - SML - CF - NDE - HEAT \$HEAT\_NBR\$ - \$QUAL\_LOT\_NBR\$ - ITALY - BUNDLE \$BUNDLE\_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
177974	QL40073616	000005	611	947.98 kg	3724.656 m	9.53 mm	1.24 mm	6096 mm	6099 mm
				2089.94 lbs	12220.00 ft			0.375 "	0.049 "
			<b>611</b>	<b>947.98 kg</b>	<b>3724.656 m</b>				
			<b>611</b>	<b>2089.94 lbs</b>	<b>12220.00 ft</b>				

**Heat Analysis**

(B07) Heat	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
(B07) Heat	Heat Origin	(C70) Melting Process	%	%	%	%	%	%	%									
177974	Italy	EAF + AOD	0.024	0.38	1.25	0.020	0.0080	16.9	11.2	2.1								

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**Product Analysis**

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

	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	%	%	%	%	%	%	%	%
QL40073616	49156177	0.023	0.38	1.24	0.023	0.0100	16.9	11.2	2.0

Sampling done on tubes in manufacturing length

**Tensile Test at Room Temperature**

**ASTM A 370**

(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	%
QL40073616	49156177	44	90	51.2
	49156178	45	90	51.6

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
QL40073616	49156177		81	82	81.5
	49156178		81	82	81.5

Sampling done on tubes in manufacturing length

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**(C51) Flaring Test**

**ASTM A 1016**

Quality Lot	(C00) Sample	Result
QL40073616	49156171	OK
	49156172	OK
	49156173	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
QL40073616	49156174	OK
	49156175	OK
	49156176	OK

Sampling done on tubes in manufacturing length

Test done at both ends of tubes

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**Other Tests and Declarations**

QL40073616

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"

SMST 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)

Materials are in compliance with ANSI/NACE MR 0175/ISO 15156-3 Ed. 2015

(Z02) Mill's Inspector **Ruggero Clementi (QC)** Date of Edition **20/04/2022**

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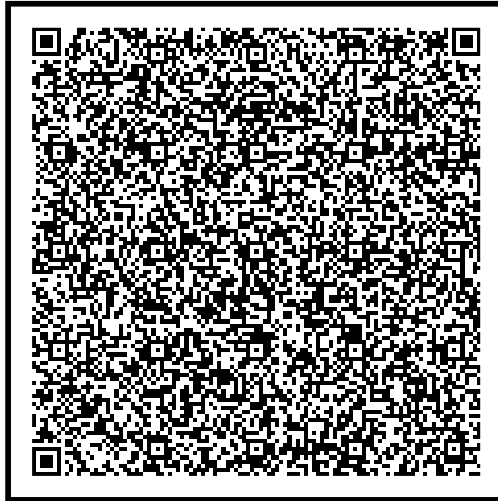
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**Certificate anti counterfeiting check**



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