

INSPECTION CERTIFICATE

(A02) EN 10204: 2004 TYPE 3.1

(A03) No. **5-22-00146-rev.01** Pag. 1 / 5

(A06) **Purchaser**
 GRANDE PRAIRIE FLUID SYSTEM TECHNOLOGIES INC
 118 COMMERCE DRIVE
 R3P 0Z6 WINNIPEG
 Manitoba
 Canada

(A07) **Customer Order No**
 8005275
 (A08) **SMST-Tubes Order No**
 0000288202
SMST-Item (A09) **Part No**
 0000288202-000013 SS-T12-S-109-20

(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. B 03.2020 Solution annealed
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-U A/SA-213 A-269 TP 316/TP 316L .750 X .109AW SML CF ET HT RK703 PHU(XXXX) QL(XXXX) 288202-13 USA

Country of Origin of the tubes

USA

(B07) Heat	Quality Lot	SMST-Item	Quantity			Dimensions			
			(B08) Pieces	(B13) Weight	(B16) Length	(B09) OD	(B10) WT	(B11) Ordered Length min max	
RK703	QL50019411	000013	89	1335.00 lbs	1780.00 ft	0.750 "	0.109 "	20.00 ft	20.01 ft
	QL50019458	000013	78	1170.00 lbs	1560.00 ft	0.750 "	0.109 "	20.00 ft	20.01 ft

167 2505.00 lbs 3340.00 ft

Heat Analysis

(B07) Heat	Request	C	Si	Mn	P	S	Cr	Ni	Mo	
										Min
										Max
RK703	Heat Origin	(C70) Melting Process	%	%	%	%	%	%	%	
	France	E + VOD	0.017	0.32	1.73	0.017	0.0070	16.7	11.0	2.1

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Product Analysis

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

	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	%	%	%	%	%	%	%	%
QL50019411	59027250	0.017	0.32	1.73	0.017	0.0070	16.7	11.0	2.1
QL50019458	59027497	0.017	0.32	1.73	0.017	0.0070	16.7	11.0	2.1

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	%
QL50019411	59027250	49	93	56.8
QL50019458	59027497	41	88	60.8

Sampling done on tubes in manufacturing length

(C30) Hardness HRB

ASTM E 18

		Request	(C30) HRB		
					90.0 max
Quality Lot	(C00) Sample	Result	(C31) Min	(C31) Max	(C32) Avg
QL50019411	59027251		72	77	74.5
	59027252		72	77	74.5
QL50019458	59027498		67	74	70.5
	59027499		67	74	70.5

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(C51) Flaring Test

ASTM A 1016

Quality Lot	(C00) Sample	Result
QL50019411	59027250	OK
QL50019458	59027497	OK

ASTM A 1016

Quality Lot	(C00) Sample	Result
QL50019411	59027250	OK
QL50019458	59027497	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
QL50019411	59027250	OK
QL50019458	59027497	OK

ASTM A 1016

Quality Lot	(C00) Sample	Result
QL50019411	59027250	OK
QL50019458	59027497	OK

Sampling done on tubes in manufacturing length

Test done at both ends of tubes

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Other Tests and Declarations

QL50019411; QL50019458

Heat Treatment Bright Annealed @ 1950 °F rapid gas cooling 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 B 829 Satisfactory

Tubes in compliance with customer specification nr.

- SCS-00062 rev. B

- SQS-00012 rev. Y

- SQS-00020 rev. K

- SGS- 00008

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 (ABS QE Cert. No. 42608)

(Z02) Mill's Inspector **Noel Villatoro** Date of Edition **03/11/2022**

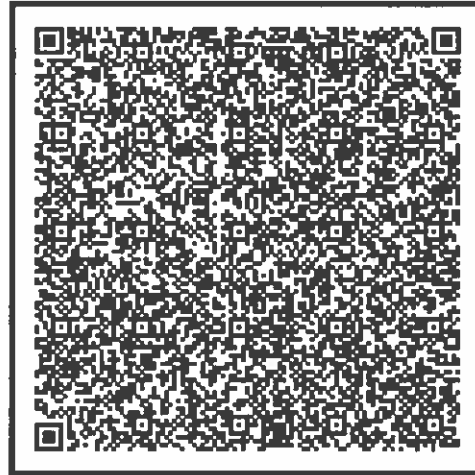
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Certificate anti counterfeiting check



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