

**ASTM TUBE PART NUMBER MATRIX**

<b>TXXX</b>	-	<b>XX</b>	-	<b>XXXXX (XXX)</b>	<b>X4</b>	-	<b>XXX</b>	<b>XX</b>
<u>PROCESS CODE</u>		<u>ALLOY CODE (SEE NOTE 1)</u>		<u>SIZE CODE (SEE NOTE 3)</u>		<u>WALL CODE</u>		<u>SURFACE FINISH &amp; VISUALS</u>
<b>T1A</b> = PER SP-9204 (101)		<b>0S</b> = 316L SEAMLESS		<b>00125</b> .13 = .125" DIA	<b>USED ONLY FOR 4-METER LENGTH TUBES</b>	<b>028</b> = .028" THICK		<b>USED ONLY FOR 401 PROCESS CODE</b>
<b>T2A</b> = PER SP-9206 (201)		<b>0W</b> = 316L WELDED		<b>00250</b> .25 = .25" DIA		<b>035</b> = .035" THICK		<b>A5</b> = 5µIn Ra Max, Superior Visuals
<b>T2I</b> = PER CUSTOM SPEC		<b>2S</b> = 304L SEAMLESS		<b>00375</b> .38 = .375" DIA		<b>039</b> = .039" THICK		<b>A7</b> = 7µIn Ra Max, Superior Visuals
<b>T3A</b> = PER SP-9223 (301)		<b>2W</b> = 304L WELDED		<b>00500</b> .50 = .5" DIA		<b>049</b> = .049" THICK		<b>B0</b> = 10µIn Ra Max, Standard Visuals
<b>T3B</b> = PER SP-9223 BULK PK (301)		<b>3S</b> = 304L SEAMLESS		<b>00750</b> .75 = .75" DIA		<b>058</b> = .058" THICK		<b>C0</b> = 10µIn Ra, Relaxed Visuals
<b>T3O</b> = PER SP-9223 OEM (301)		<b>3W</b> = 304L WELDED		<b>01000</b> 1.0 = 1" DIA		<b>065</b> = .065" THICK		
<b>T3OB</b> = PER SP-9223 OEM BULK PK (301)		<b>AS</b> = 304 SEAMLESS		<b>01500</b> 1.5 = 1.5" DIA		<b>083</b> = .083" THICK		
<b>T4A</b> = PER SP-9220 (401)		<b>AW</b> = 304 WELDED		<b>02000</b> 2.0 = 2" DIA		<b>095</b> = .095" THICK		
<b>T4B</b> = PER SP-9220 BULK PK (401)		<b>BS</b> = 316L SEAMLESS, VOD/VAR		<b>02500</b> 2.5 = 2.5" DIA		<b>109</b> = .109" THICK		
<b>T4I</b> = PER CUSTOM SPEC		<b>FS</b> = V22 ALLOY SEAMLESS		<b>03000</b> 3.0 = 3" DIA				
<b>T4O</b> = PER SP-9220 OEM (401)		<b>HS</b> = HASTELLOY® C-22® SEAMLESS*		<b>04000</b> 4.0 = 4" DIA				
<b>T4R</b> = PER SP-9220 & I.D./O.D. POLISH (401)		<b>KS</b> = 316L SEAMLESS VIM/VAR		<b>06000</b> 6.0 = 6" DIA				
<b>TMC</b> = PER SP-9207 (222)		<b>NS</b> = 316L SEAMLESS (ASTM STD)						
		<b>NW</b> = 316L WELDED (ASTM STD)						
		<b>QS</b> = 316L SEAMLESS						
		<b>QW</b> = 316L WELDED						
		<b>RS</b> = 316L SEAMLESS						
		<b>RW</b> = 316L WELDED						
		<b>VS</b> = 316L SEAMLESS VIM/VAR						

<b>USED FOR 20-FOOT AND 6-METER LENGTH TUBES</b>	<b>USED ONLY FOR 4-METER LENGTH TUBES</b>
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- NOTES:**
- PROCESS CODES ARE NOT AVAILABLE FOR ALL TYPE CODES (MATERIAL) AND SIZES. PLEASE CONTACT VALEX SALES FOR ITEM NUMBER AVAILABILITY.
  - ZEROS MAY BE OMITTED AND REPLACED WITH DECIMAL IN SOME PROCESSES (I.E. T30B).
  - SHADED COLUMNS USED ONLY FOR 4-METER LENGTH TUBES.
  - VISUAL CRITERIA IS TO BE USED IN CONJUNCTION WITH SURFACE ROUGHNESS AS INDICATED.

- NOTES:**
- SEE SHEET 9 FOR BREAKDOWN OF ALLOY CHEMISTRIES AND MELT TYPE.

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 <a href="http://www.valex.com">www.valex.com</a>		
<b>TITLE</b>		
<b>TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME</b>		
<b>SPECIFICATION</b>	<b>SHEET</b>	<b>REV</b>
SP-9200	1/9	BM

**ASTM COAXIAL TUBE PART NUMBER MATRIX**

**CTXX**

**- XX**

**- XX**

**- XXXXX (XXXX)**

**X4**

**- XX**

INNER PROCESS CODE

**CT1A** = PER SP-9204 (101)  
**CT2A** = PER SP-9206 (201)  
**CT3A** = PER SP-9223 (301)  
**CT4A** = PER SP-9220 (401)  
**CT4I** = PER CUSTOM SPEC  
**CTMC** = PER SP-9207 (222)

OUTER ALLOY (SEE NOTE 1)

**S** = 316L 0S SEAMLESS  
**W** = 316L 0W WELDED  
**2S** = 304L SEAMLESS  
**2W** = 304L WELDED  
**AW** = 304 WELDED  
**NS** = 316L SEAMLESS (ASTM STD)  
**RS** = 316L SEAMLESS  
**RW** = 316L WELDED  
**VS** = 316L SEAMLESS VIM/VAR

INNER ALLOY (SEE NOTE 1)

**0S** (or BLANK) = 316L SEAMLESS  
**0W** = 316L WELDED  
**2S** = 304L SEAMLESS  
**2W** = 304L WELDED  
**3S** = 304L SEAMLESS  
**3W** = 304L WELDED  
**BS** = 316L SEAMLESS, VOD/VAR  
**FS** = V22 ALLOY SEAMLESS  
**HS** = HASTELLOY® C-22® (SEAMLESS)\*  
**KS** = 316L SEAMLESS VIM/VAR  
**NS** = 316L SEAMLESS (ASTM STD)  
**NW** = 316L WELDED (ASTM STD)  
**QS** = 316L SEAMLESS  
**QW** = 316L WELDED  
**RS** = 316L SEAMLESS  
**RW** = 316L WELDED  
**VS** = 316L SEAMLESS VIM/VAR

SIZE CODE - INNER (SEE NOTE 3)

<b>.25</b>	<b>.25</b>	= .25" DIA
<b>.25M</b>	<b>.25M</b>	= .25" DIA (1MM WALL)
<b>.375</b>	<b>.38</b>	= .375" DIA
<b>.375M</b>	<b>.38M</b>	= .375" DIA (1MM WALL)
<b>.5</b>	<b>.5</b>	= .5" DIA
<b>.75</b>	<b>.75</b>	= .75" DIA
<b>.75M</b>	<b>.75M</b>	= .75" DIA (.049" WALL)
<b>1</b>	<b>1</b>	= 1" DIA
<b>1.5</b>	<b>1.5</b>	= 1.5" DIA
<b>2</b>	<b>2</b>	= 2" DIA

USED FOR 20-FOOT AND 6-METER LENGTH TUBES	USED ONLY FOR 4-METER LENGTH TUBES
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USED  
ONLY FOR  
4-METER  
LENGTH  
TUBES

SURFACE FINISH & VISUALS

**USED ONLY FOR 401 PROCESS CODE**  
**A5** = 5µIn Ra Max, Superior Visuals  
**A7** = 7µIn Ra Max, Superior Visuals  
**B0** = 10µIn Ra Max, Standard Visuals  
**C0** = 10µIn Ra, Relaxed Visuals

**NOTES:**

1. SEE SHEET 9 FOR BREAKDOWN OF ALLOY CHEMISTRIES AND MELT TYPE.
2. DECIMALS MAY BE OMITTED AND REPLACED WITH ZEROS IN SOME PROCESSES (I.E. CT4A-S-VS-XXXX-XX).
3. SHADED COLUMNS USED ONLY FOR 4-METER LENGTH TUBES.
4. PROCESS CODES ARE NOT AVAILABLE FOR ALL ALLOY AND SIZE CODES. PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.

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TITLE		
<b>TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME</b>		
SPECIFICATION	SHEET	REV
SP-9200	2/9	BM

**SINGLE WALL FITTING PART NUMBER MATRIX - ASTM**

**XX**

PROCESS / ALLOY (SEE NOTE 1)

**B** = SP-9206 (201) 0S/0W/A4 (316L)  
**D** = SP-9206 (201) 2S/2W (304L)  
**E** = SP-9220 (401) 0S/0W/A4 (316L)  
**FV** = SP-9207 (222) V22 ALLOY  
**H** = SP-9207 (222) HS (HASTELLOY® C-22®)\*  
**Q** = SP-9220 (401) VS (316L)  
**RB** = SP-9206 (201) RS/RW (316L)  
**RE** = SP-9220 (401) RS/RW (316L)  
**Y** = SP-9220 (401) KS (316L)  
**YB** = SP-9206 (201) KS (316L)

**XXXX**

CONFIGURATION CODE

**2** = 90° ELBOW  
**2W** = 90° ELBOW, WLD  
**2K** = 45° ELBOW  
**2KW** = 45° ELBOW, WLD  
**7** = EQUAL TEE  
**7W** = EQUAL TEE, WLD  
**7ST** = EQUAL TEE, SHORT TANGENT  
**7STW** = EQUAL TEE, SHORT TANGENT, WLD  
**7R** = REDUCING TEE  
**7RW** = REDUCING TEE, WLD  
**7RWW** = REDUCING TEE, WLD X WLD  
**9** = EQUAL CROSS  
**9R** = REDUCING CROSS  
**16** = END CAP  
**16W** = END CAP, WLD  
**31** = CONCENTRIC REDUCER  
**31(S)** = CONCENTRIC REDUCER, SHORT TYPE  
**31W** = CONCENTRIC REDUCER, WLD X SMLS  
**31WW** = CONCENTRIC REDUCER, WLD X WLD  
**32** = ECCENTRIC REDUCER  
**32W** = ECCENTRIC REDUCER, WLD X SMLS  
**32WW** = ECCENTRIC REDUCER, WLD X WLD  
**38** = WELD NECK FLANGE W/ SMLS TUBE  
**38W** = WELD NECK FLANGE W/ WLD TUBE  
**38SE** = TUBE STUB END, SHORT  
**38LE** = TUBE STUB END, LONG  
**38PF** = TUBE PLATE FLANGE

-

**XXXXXX**

SIZE CODE (SEE NOTE 2)

**.25** = 1/4" O.D. X .035" WALL  
**.25M** = 1/4" O.D. X .039" (1MM) WALL  
**.375** = 3/8" O.D. X .035" WALL  
**.375M** = 3/8" O.D. X .039" (1MM) WALL  
**.5** = 1/2" O.D. X .049" WALL  
**.75** = 3/4" O.D. X .065" WALL  
**.75M** = 3/4" O.D. X .049" WALL  
**1** = 1" O.D. X .065" WALL  
**1.5** = 1-1/2" O.D. X .065" WALL  
**2** = 2" O.D. X .065" WALL  
**2.5** = 2-1/2" O.D. X .065" WALL  
**3** = 3" O.D. X .065" WALL  
**4** = 4" O.D. X .083" WALL  
**6** = 6" O.D. X .109" WALL

**x(XXXXXX)**

USED ONLY FOR  
REDUCING FITTINGS

REFER TO "SIZE"  
CODE IF APPLICABLE

**- XX**

SURFACE FINISH & VISUALS

**USED ONLY FOR 401 PROCESS CODE**

**A5** = 5µIn Ra Max, Superior Visuals  
**A7** = 7µIn Ra Max, Superior Visuals  
**B0** = 10µIn Ra Max, Standard Visuals  
**C0** = 10µIn Ra, Relaxed Visuals

*Single Wall Fitting Example 1:*

**E2-5-B0**

VALEX 401 SPEC, 90° ELBOW, 1/2" O.D. X .049" WALL,  
STANDARD VISUALS, 10 Ra MAX, 0S CHEMISTRY

*Single Wall Fitting Example 2:*

**Y7R-1X.5-A5**

VALEX 401 SPEC, REDUCING TEE, 1"(.065" WALL) X 1/2" (.049" WALL),  
SUPERIOR VISUALS, 5Ra MAX, KS CHEMISTRY

**COAXIAL FITTING PART NUMBER MATRIX - ASTM**

**XX**

INNER PROCESS / ALLOY (SEE NOTE 1)

**C** = SP-9220 (401) 0S/0W (316L)  
**CB** = SP-9206 (201) 0S/0W (316L)  
**HC** = SP-9207 (222) HS (HASTELLOY® C-22®)\*  
**R** = SP-9220 (401) VS (316L)  
**RC** = SP-9220 (401) RS/RW (316L)  
**W** = SP-9220 (401) KS (316L)  
**WB** = SP-9206 (201) KS (316L)

**X**

OUTER ALLOY (SEE NOTE 1)

**BLANK** = 0S/0W (316L)  
**2** = 2S/2W (304L)  
**A** = AW (304)  
**N** = NS (316L)  
**R** = RS/RW (316L)  
**V** = VS (316L)

**XXXX**

CONFIGURATION CODE

**2** = 90° ELBOW  
**2K** = 45° ELBOW  
**7** = EQUAL TEE  
**7R** = REDUCING TEE  
**7P** = COAX PURGE TEE, MALE  
**7PF** = COAX PURGE TEE, FEMALE  
**7PFS** = COAX PURGE TEE W/ FS, MALE  
**12** = COAX SLEEVE  
**12E** = COAX SLEEVE (4=4", 5=5", 6=6")  
**14FS** = COAX FS WELD GLAND, FEMALE  
**15FS** = COAX FS WELD GLAND, MALE  
**16** = COAX TERMINATOR  
**17BH** = COAX BULKHEAD FITTING  
**31** = CONCENTRIC REDUCER

-

**XXXXXX**

SIZE CODE (SEE NOTE 2)

**.25** = 1/4" O.D. X .035" WALL INNER TUBE  
 1/2" O.D. X .049" WALL OUTER TUBE  
**.25M** = 1/4" O.D. X .039" (1MM) WALL INNER TUBE  
 1/2" O.D. X .049" WALL OUTER TUBE  
**.375** = 3/8" O.D. X .035" WALL INNER TUBE  
 5/8" O.D. X .049" WALL OUTER TUBE  
**.375M** = 3/8" O.D. X .039" (1MM) WALL INNER TUBE  
 5/8" O.D. X .049" WALL OUTER TUBE  
**.5** = 1/2" O.D. X .049" WALL INNER TUBE  
 3/4" O.D. X .065" WALL OUTER TUBE  
**.75** = 3/4" O.D. X .065" WALL INNER TUBE  
 1" O.D. X .065" WALL OUTER TUBE  
**.75M** = 3/4" O.D. X .049" WALL INNER TUBE  
 1" O.D. X .065" WALL OUTER TUBE  
 1" O.D. X .065" WALL INNER TUBE  
 1-1/4" O.D. X .065" WALL OUTER TUBE  
**1.5** = 1.5" O.D. X .065" WALL INNER TUBE  
 2" O.D. X .065" WALL OUTER TUBE  
**2** = 2" O.D. X .065" WALL INNER TUBE  
 2-1/2" O.D. X .065" WALL OUTER TUBE

**x(XXXXXX)**

USED ONLY FOR  
REDUCING FITTINGS

REFER TO "SIZE"  
CODE IF APPLICABLE

**- XX**

SURFACE FINISH & VISUALS

**USED ONLY FOR 401 PROCESS CODE**

**A5** = 5µIn Ra Max, Superior Visuals  
**A7** = 7µIn Ra Max, Superior Visuals  
**B0** = 10µIn Ra Max, Standard Visuals  
**C0** = 10µIn Ra, Relaxed Visuals

*Coax Fitting Example:*


**C2-25M-A5**

VALEX 401 SPEC, COAXIAL 90° ELBOW, 1/4" (1MM WALL) INNER,  
1/2" (.049" WALL) OUTER, SUPERIOR VISUALS, 5 Ra MAX, 0S INNER  
CHEMISTRY, 0S OUTER CHEMISTRY

**NOTES:**

- SEE SHEET 9 FOR BREAKDOWN OF ALLOY CHEMISTRIES AND MELT TYPE.
- SHADED COLUMNS USED ONLY FOR REDUCING FITTINGS.
- PROCESS CODES ARE NOT AVAILABLE FOR ALL ALLOY AND SIZE CODES.  
PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.

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 www.valex.com		
TITLE		
TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME		
SPECIFICATION	SHEET	REV
SP-9200	3/9	BM


**JIS PIPE PART NUMBER MATRIX**

<b>PXX</b>	-	<b>XX</b>	-	<b>XXXX (XXX)</b>	<b>X</b>	<b>X4</b>	-	<b>XXX</b>	<b>XX</b>
<u>PROCESS CODE</u>		<u>ALLOY CODE (SEE NOTE 1)</u>		<u>SIZE CODE (SEE NOTE 2)</u>	<u>END TYPE CODE</u>	<b>USED ONLY FOR 4-METER LENGTH PIPES</b>		<u>SCHEDULE CODE</u>	<u>SURFACE FINISH &amp; VISUALS</u>
<b>P1A</b> = PER SP-9204 (101)		<b>1S</b> = 304L SEAMLESS (JIS STD)		<b>0008 008</b> = 8A PIPE	<b>A</b> = SQUARE			<b>6M PIPE</b>	<b>USED ONLY FOR 401 PROCESS CODE</b>
<b>P2A</b> = PER SP-9206 (201)		<b>1W</b> = 304L WELDED (JIS STD)		<b>0010 010</b> = 10A PIPE	<b>B</b> = 32.5° BEVELED			<b>05S</b> = JIS SCH. 5	<b>A5</b> = 5µIn Ra Max, Superior Visuals
<b>P4A</b> = PER SP-9220 (401)		<b>AS</b> = 304 SEAMLESS		<b>0015 015</b> = 15A PIPE	<b>C</b> = SQUARE, +10% / -15% WALL			<b>10S</b> = JIS SCH. 10	<b>A7</b> = 7µIn Ra Max, Superior Visuals
<b>P4O</b> = PER SP-9220 & O.D. POLISH (401)		<b>AW</b> = 304 WELDED		<b>0020 020</b> = 20A PIPE	<b>D</b> = 32.5° BEVELED, +10% / -15% WALL			<b>4M PIPE</b>	<b>B0</b> = 10µIn Ra Max, Standard Visuals
<b>P4R</b> = PER SP-9220 & I.D./O.D. POLISH (401)		<b>BS</b> = 316L SEAMLESS, VOD/VAR		<b>0025 025</b> = 25A PIPE	<b>E</b> = SQUARE, LOW TI			<b>05</b> = JIS SCH. 5	<b>C0</b> = 10µIn Ra, Relaxed Visuals
<b>P2S</b> = PER SP-9206 & I.D./O.D. POLISH (201)		<b>NS</b> = 316L SEAMLESS (JIS STD)		<b>0032 032</b> = 32A PIPE	<b>F</b> = 32.5° BEVELED, LOW TI			<b>10</b> = JIS SCH. 10	
		<b>NW</b> = 316L WELDED (JIS STD)		<b>0040 040</b> = 40A PIPE	<b>G</b> = SQUARE, LOW TI, +10% / -15% WALL				
		<b>RS</b> = 316L SEAMLESS		<b>0050 050</b> = 50A PIPE	<b>H</b> = 32.5° BEVELED, LOW TI, +10% / -15% WALL				
		<b>RW</b> = 316L WELDED		<b>0065 065</b> = 65A PIPE	<b>I</b> = SQUARE, P1A BA				
				<b>0080 080</b> = 80A PIPE	<b>J</b> = SQUARE, +UNSPECIFIED / -20% WALL				
				<b>0090 090</b> = 90A PIPE	<b>K</b> = 32.5° BEVELED, +UNSPECIFIED / -20% WALL				
				<b>0100 100</b> = 100A PIPE					
				<b>0125 125</b> = 125A PIPE					
				<b>0150 150</b> = 150A PIPE					
				<b>0200 200</b> = 200A PIPE					
				<b>0250 250</b> = 250A PIPE					
				<b>0300 300</b> = 300A PIPE					
				<b>0350 350</b> = 350A PIPE					
				<b>0400 400</b> = 400A PIPE					
				<b>0450 450</b> = 450A PIPE					
				<b>0500 500</b> = 500A PIPE					
				<b>0550 550</b> = 550A PIPE					
				<b>0600 600</b> = 600A PIPE					
				<b>0650 650</b> = 650A PIPE					
				<b>0700 700</b> = 700A PIPE					
				<b>0750 750</b> = 750A PIPE					
				<b>0800 800</b> = 800A PIPE					

USED FOR 20-FOOT AND 6-METER LENGTH PIPES	USED ONLY FOR 4-METER LENGTH PIPES
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**NOTES:**

- SEE SHEET 9 FOR BREAKDOWN OF ALLOY CHEMISTRIES AND MELT TYPE.
- SHADED COLUMNS USED ONLY FOR 4-METER LENGTH PIPES.

 www.valex.com		
TITLE		
<b>TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME</b>		
SPECIFICATION	SHEET	REV
SP-9200	4/9	BM

**JIS COAXIAL PIPE PART NUMBER MATRIX**

**CPXX**

- **XX**

INNER PROCESS CODE

**CP1A** = PER SP-9204 (101)  
**CP2A** = PER SP-9206 (201)  
**CP4A** = PER SP-9220 (401)

OUTER ALLOY (SEE NOTE 1)

**AS** = 304 SEAMLESS  
**AW** = 304 WELDED  
**NS** = 316L SEAMLESS (JIS STD)  
**NW** = 316L WELDED (JIS STD)  
**RS** = 316L SEAMLESS  
**RW** = 316L WELDED

- **XX**

INNER ALLOY (SEE NOTE 1)

**1S** = 304L SEAMLESS (JIS STD)  
**1W** = 304L WELDED (JIS STD)  
**NS** = 316L SEAMLESS (JIS STD)  
**NW** = 316L WELDED (JIS STD)  
**RS** = 316L SEAMLESS  
**RW** = 316L WELDED

- **XXX (XX)**

SIZE CODE - INNER (SEE NOTE 2)

<b>008</b>	<b>08</b>	= 8A PIPE, SCH. 5
<b>010</b>	<b>10</b>	= 10A PIPE, SCH. 5
<b>015</b>	<b>15</b>	= 15A PIPE, SCH. 5
<b>020</b>	<b>20</b>	= 20A PIPE, SCH. 5
<b>025</b>	<b>25</b>	= 25A PIPE, SCH. 5
<b>032</b>	<b>32</b>	= 32A PIPE, SCH. 5

USED FOR  
20-FOOT  
AND 6-  
METER  
LENGTH  
PIPES

USED  
ONLY FOR  
4-METER  
LENGTH  
PIPES

**X**

END TYPE CODE

**A** = SQUARE  
**B** = 32.5° BEVELED  
**C** = SQUARE,  
 +10% / -15% WALL  
**D** = 32.5° BEVELED,  
 +10% / -15% WALL  
**J** = SQUARE,  
 +UNSPECIFIED / -20% WALL  
**K** = 32.5° BEVELED,  
 +UNSPECIFIED / -20% WALL

**X4**

USED  
ONLY FOR  
4-METER  
LENGTH  
PIPES

- **XX**

SURFACE FINISH & VISUALS

**USED ONLY FOR 401 PROCESS CODE**  
**A5** = 5µIn Ra Max, Superior Visuals  
**A7** = 7µIn Ra Max, Superior Visuals  
**B0** = 10µIn Ra Max, Standard Visuals  
**C0** = 10µIn Ra, Relaxed Visuals

**NOTES:**

- SEE SHEET 9 FOR BREAKDOWN OF ALLOY CHEMISTRIES AND MELT TYPE.
- SHADED COLUMNS USED ONLY FOR 4-METER LENGTH PIPES.
- PROCESS CODES ARE NOT AVAILABLE FOR ALL ALLOY AND SIZE CODES. PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.



TITLE		
TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME		
SPECIFICATION	SHEET	REV
SP-9200	5/9	BM

**SINGLE WALL FITTING PART NUMBER MATRIX - JIS**

**XX**

**PROCESS / ALLOY (SEE NOTE 1)**  
 JA = SP-9204 (101) AS/AW (304)  
 JB = SP-9206 (201) RS/RW (316L)  
 JD = SP-9206 (201) AS/AW (304)  
 JE = SP-9220 (401) RS/RW (316L)

**XXXXX**

**CONFIGURATION CODE**  
 2(S) = 90° ELBOW, SHORT RADIUS  
 2(L) = 90° ELBOW, LONG RADIUS  
 2W(S) = 90° ELBOW, SHORT RADIUS, WLD  
 2W(L) = 90° ELBOW, LONG RADIUS, WLD  
 2K = 45° ELBOW  
 2KW = 45° ELBOW, WLD  
 2(S) = 90° ELBOW, SHORT, JIS B2312  
 2(L) = 90° ELBOW, LONG, JIS B2312  
 2W(S) = 90° ELBOW, SHORT, JIS B2313, WLD  
 2W(L) = 90° ELBOW, LONG, JIS B2313, WLD  
 2K(L) = 45° ELBOW, LONG, JIS B2312  
 2KW(L) = 45° ELBOW, LONG, JIS B2313, WLD  
 7 = EQUAL TEE  
 7W = EQUAL TEE, WLD  
 7R = REDUCING TEE  
 7RW = REDUCING TEE, WLD  
 7RWW = REDUCING TEE, WLD X WLD  
 7RN = REDUCING TEE, NO RISER  
 7S = EQUAL TEE, JIS B2312 / B2313  
 7RS = REDUCING TEE, JIS B2312 / B2313  
 7RSN = REDUCING TEE, JIS B2312 / B2313, NO RISER  
 16 = END CAP  
 16W = END CAP, WLD  
 31 = CONC REDUCER  
 31W = CONC REDUCER, WLD X SMLS  
 31WW = CONC REDUCER, WLD X WLD  
 31FF = CONC REDUCER, FORMED, NO TANGENT  
 31FS = CONC REDUCER, NO TANGENT LARGE, SMALL TANGENT SMLS  
 31SF = CONC REDUCER, LARGE TANGENT SMLS, NO TANGENT SMALL  
 31FW = CONC REDUCER, NO TANGENT LARGE, SMALL TANGENT WLD  
 31WF = CONC REDUCER, LARGE TANGENT WLD, NO TANGENT SMALL  
 33 = CONC REDUCER, CAP TYPE  
 33FF = CAP REDUCER, FORMED, NO TANGENT  
 33FS = CAP REDUCER, NO TANGENT LARGE, SMALL TANGENT SMLS  
 33SF = CAP REDUCER, LARGE TANGENT SMLS, NO TANGENT SMALL  
 33FW = CAP REDUCER, NO TANGENT LARGE, SMALL TANGENT WLD  
 33WF = CAP REDUCER, LARGE TANGENT WLD, NO TANGENT SMALL  
 38BF = BLANK FLANGE  
 38L = LAP JOINT STUB END, JIS  
 38LJ = LAP JOINT FLANGE  
 38WN = WELD NECK FLANGE

**- XXXX**

**SIZE CODE (SEE NOTE 2)**  
 8 = 8A PIPE  
 10 = 10A PIPE  
 15 = 15A PIPE  
 20 = 20A PIPE  
 25 = 25A PIPE  
 32 = 32A PIPE  
 40 = 40A PIPE  
 50 = 50A PIPE  
 65 = 65A PIPE  
 80 = 80A PIPE  
 90 = 90A PIPE  
 100 = 100A PIPE  
 125 = 125A PIPE  
 150 = 150A PIPE  
 200 = 200A PIPE  
 250 = 250A PIPE  
 300 = 300A PIPE  
 350 = 350A PIPE  
 400 = 400A PIPE  
 450 = 450A PIPE  
 500 = 500A PIPE  
 550 = 550A PIPE  
 600 = 600A PIPE  
 650 = 650A PIPE  
 700 = 700A PIPE  
 750 = 750A PIPE  
 800 = 800A PIPE  
 .25 = 1/4" O.D. X .035" WALL  
 .25M = 1/4" O.D. X .039" (1MM) WALL  
 .38 = 3/8" O.D. X .035" WALL  
 .38M = 3/8" O.D. X .039" (1MM) WALL  
 .5 = 1/2" O.D. X .049" WALL  
 .75 = 3/4" O.D. X .065" WALL  
 .75M = 3/4" O.D. X .049" WALL  
 1 = 1" O.D. X .065" WALL  
 1.5 = 1-1/2" O.D. X .065" WALL  
 2 = 2" O.D. X .065" WALL  
 2.5 = 2-1/2" O.D. X .065" WALL  
 3 = 3" O.D. X .065" WALL  
 4 = 4" O.D. X .083" WALL  
 6 = 6" O.D. X .109" WALL

**X**

**END TYPE CODE**  
 A = SQUARE  
 B = 32.5° BEVELED  
 C = SQUARE,  
 +10% / -15% WALL  
 D = 32.5° BEVELED,  
 +10% / -15% WALL  
 E = SQUARE, LOW TI  
 F = 32.5° BEVELED, LOW TI  
 G = SQUARE, LOW TI,  
 +10% / -15% WALL  
 H = 32.5° BEVELED, LOW TI,  
 +10% / -15% WALL  
 J = SQUARE,  
 +UNSPECIFIED / -20% WALL  
 K = 32.5° BEVELED,  
 +UNSPECIFIED / -20% WALL  
**FLANGE TYPE CODE**  
 S = JIS 5K  
 T = JIS 10K

**X**

**SCHEDULE**  
 BLANK = 5S  
 T = 10S  
**FACE TYPE**  
 (FLANGE ONLY)  
 1 = FULL FACE  
 2 = RAISED FACE  
 3 = GROOVED FACE

**x(XXXX)**  
 USED ONLY FOR REDUCING FITTINGS  
 REFER TO "SIZE", "END TYPE" & "SCHEDULE" CODES IF APPLICABLE

**- XX**

**SURFACE FINISH & VISUALS**  
**USED ONLY FOR 401 PROCESS CODE**  
 A5 = 5µIn Ra Max, Superior Visuals  
 A7 = 7µIn Ra Max, Superior Visuals  
 B0 = 10µIn Ra Max, Standard Visuals  
 C0 = 10µIn Ra, Relaxed Visuals

*Single Wall Fitting Example 1:*  
**JE2S-150AT-B0**  
 VALEX 401 SPEC, 90° ELBOW (SHORT TYPE), 150A PIPE,  
 SCHEDULE 10, SQUARED ENDS, STANDARD VISUALS, 10 Ra MAX  
*Single Wall Fitting Example 2:*  
**JB7R-80AX20A**  
 VALEX 201 SPEC, REDUCING TEE, 80A PIPE X 20A PIPE,  
 SCHEDULE 5, SQUARED ENDS, NO EP.

**COAXIAL FITTING PART NUMBER MATRIX - JIS**

**XX**

**INNER PROCESS / ALLOY (SEE NOTE 1)**  
 JC = SP-9220 (401) RS/RW (316L)

**X**

**OUTER ALLOY (SEE NOTE 1)**  
 1 = 1S/1W (304L)  
 A = AW (304)  
 N = NS (316L)  
 R = RS/RW (316L)

**XXXXX**

**CONFIGURATION CODE**  
 2 = 90° ELBOW  
 2K = 45° ELBOW  
 7 = EQUAL TEE  
 7R = REDUCING TEE  
 7P = COAX PURGE TEE, MALE  
 7PF = COAX PURGE TEE, FEMALE  
 7PFS = COAX PURGE TEE W/ FS, MALE  
 12 = COAX SLEEVE  
 14FS = COAX FS WELD GLAND, FEMALE  
 15FS = COAX FS WELD GLAND, MALE  
 16 = COAX TERMINATOR  
 17BH = COAX BULKHEAD FITTING  
 31 = CONCENTRIC REDUCER

**- XXXX**

**SIZE CODE (SEE NOTE 2)**  
 10 = 10A X SCHEDULE 5 INNER PIPE  
 20A X SCHEDULE 5 OUTER PIPE  
 15 = 15A X SCHEDULE 5 INNER PIPE  
 25A X SCHEDULE 5 OUTER PIPE  
 20 = 20A X SCHEDULE 5 INNER PIPE  
 32A X SCHEDULE 5 OUTER PIPE  
 25 = 25A X SCHEDULE 5 INNER PIPE  
 40A X SCHEDULE 5 OUTER PIPE  
 32 = 32A X SCHEDULE 5 INNER PIPE  
 40A X SCHEDULE 5 OUTER PIPE

**X**

**END TYPE CODE**  
 A = SQUARE  
 B = 32.5° BEVELED  
 C = SQUARE,  
 +10% / -15% WALL  
 D = 32.5° BEVELED,  
 +10% / -15% WALL  
 J = SQUARE,  
 +UNSPECIFIED / -20% WALL  
 K = 32.5° BEVELED,  
 +UNSPECIFIED / -20% WALL


**x(XXX)**  
 USED ONLY FOR REDUCING FITTINGS  
 REFER TO "SIZE", "END TYPE" CODES IF APPLICABLE

**- XX**

**SURFACE FINISH & VISUALS**  
**USED ONLY FOR 401 PROCESS CODE**  
 A5 = 5µIn Ra Max, Superior Visuals  
 A7 = 7µIn Ra Max, Superior Visuals  
 B0 = 10µIn Ra Max, Standard Visuals  
 C0 = 10µIn Ra, Relaxed Visuals

*Coax Fitting Example:*  
**JC2-25A-A5**  
 VALEX 401 SPEC, COAXIAL 90° ELBOW, 25A (SCH 5) INNER,  
 40A (SCH 5) OUTER, SQUARED ENDS, SUPERIOR VISUALS, 5 Ra MAX,  
 RS INNER CHEMISTRY, 0W OUTER CHEMISTRY

**NOTES:**  
 1. SEE SHEET 9 FOR BREAKDOWN OF ALLOY CHEMISTRIES AND MELT TYPE.  
 2. SHADED COLUMNS USED ONLY FOR REDUCING FITTINGS.  
 3. PROCESS CODES ARE NOT AVAILABLE FOR ALL ALLOY AND SIZE CODES.  
 PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.

 www.valex.com		
TITLE TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME		
SPECIFICATION SP-9200	SHEET 6/9	REV BM

**TUBE & PIPE PART NUMBER MATRIX - CFOS AND LDEP PRODUCT LINES**

**XX**

**- XXXXX**

**X**

**X**

**XXXX**

**- XXXX**

**PROCESS / ALLOY (SEE NOTE 1)**

**CS** = 316L SEAMLESS  
**CW** = 316L WELDED  
**DS** = 304L SEAMLESS  
**DW** = 304L WELDED  
**AS** = 304 SEAMLESS  
**AW** = 304 WELDED

**SIZE CODE:**

**ASTM TUBE**

1/4 = .25" DIA  
 3/8 = .375" DIA  
 1/2 = .5" DIA  
 3/4 = .75" DIA  
 1 = 1" DIA  
 1-1/2 = 1.5" DIA  
 2 = 2" DIA  
 2-1/2 = 2.5" DIA  
 3 = 3" DIA  
 4 = 4" DIA  
 6 = 6" DIA

**JIS & NPS PIPE**

25 = DN 25 (JIS 25A)  
 32 = DN 32 (JIS 32A)  
 40 = DN 40 (JIS 40A)  
 50 = DN 50 (NPS 2 / JIS 50A)  
 65 = DN 65 (NPS 2-1/2 / JIS 65A)  
 80 = DN 80 (NPS 3 / JIS 80A)  
 90 = DN 90 (NPS 3-1/2 / JIS 90A)  
 100 = DN 100 (NPS 4 / JIS 100A)  
 125 = DN 125 (NPS 5 / JIS 125A)  
 150 = DN 150 (NPS 6 / JIS 150A)  
 200 = DN 200 (NPS 8 / JIS 200A)  
 250 = DN 250 (NPS 10 / JIS 250A)  
 300 = DN 300 (NPS 12 / JIS 300A)  
 350 = DN 350 (NPS 14 / JIS 350A)  
 400 = DN 400 (NPS 16 / JIS 400A)  
 450 = DN 450 (NPS 18 / JIS 450A)  
 500 = DN 500 (NPS 20 / JIS 500A)  
 550 = DN 550 (NPS 22 / JIS 550A)  
 600 = DN 600 (NPS 24 / JIS 600A)  
 650 = DN 650 (JIS 650A)  
 700 = DN 700 ( JIS 700A)  
 750 = DN 750 (NPS 30 / JIS 750A)  
 800 = DN 800 (JIS 800A)

**END TYPE CODE:**

**ASTM TUBE**

**BLANK** = SQUARE

**JIS PIPE:**

**A** = SQUARE  
**B** = BEVELED  
**J** = SQUARE,  
 -20% WALL  
**K** = BEVELED,  
 -20% WALL

**NPS PIPE:**

**L** = SQUARE  
**M** = BEVELED  
**N** = SQUARE,  
 -20% WALL  
**P** = BEVELED,  
 -20% WALL

**WALL CODE**

**TUBE WALL**

.035 = .035" THICK  
 .039 = .039" THICK  
 .049 = .049" THICK  
 .065 = .065" THICK  
 .083 = .083" THICK  
 .109 = .109" THICK

**PIPE SCHEDULE**

**5S** = SCH. 5  
**10S** = SCH. 10  
**40S** = SCH. 40  
**80S** = SCH. 80

**FINISH CODE**

**AP** = CFOS, O.D.=AP, I.D.=AP  
**ODMP** = CFOS, O.D.=MP, I.D.=AP  
**BA** = CFOS, O.D.=BA, I.D.=BA 200Ra MAX  
**BA40** = CFOS, O.D.=BA, I.D.=40 Ra BA  
**EP** = LDEP, O.D.=BA, I.D.=EP 20 Ra Ave / 25 Ra MAX  
**ID40** = CFOS, O.D.=AP, I.D.=40 Ra BA  
**IDMP** = CFOS, O.D.=AP, I.D.=BA 200Ra MAX

NPS Pipe Example:

**DW-250LX20S-BA40**

VALEX CFOS SPEC PIPE, 304L WELDED, NPS 10 (DN 250) X SCH 20, BA FINISH OPTION WITH 40 Ra, SQUARED ENDS

ASTM Tube Example:

**CS-1/2X.049-BA**

VALEX CFOS SPEC TUBE, 316L SEAMLESS, 1/2" O.D. X .049" WALL, BA FINISH OPTION, SQUARED ENDS

JIS Pipe Example:

**AW-250BX10S-AP**

VALEX CFOS SPEC PIPE, 304 WELDED, JIS SIZE 250A X SCH 10, AP FINISH OPTION, BEVELED ENDS

**NOTES:**

- PER VALEX SPECIFICATION SP-9234 (CFOS) AND SP-9235 (LDEP).
- PROCESS CODES ARE NOT AVAILABLE FOR ALL SIZE AND FINISH CODES. PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.



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TITLE

**TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME**

SPECIFICATION

**SP-9200**

SHEET

**7/9**

REV.

**BM**

**FITTING PART NUMBER MATRIX - CFOS AND LDEP PRODUCT LINES**

**XX**

ALLOY  
**(SEE NOTE 1)**  
 AF = 304  
 CF = 316L  
 DF = 304L

**XXXXX**

**CONFIGURATION CODE**

2S = 90° ELBOW, SHORT RADIUS  
 2L = 90° ELBOW, LONG RADIUS  
 2WS = 90° ELBOW, SHORT RADIUS, WLD  
 2WL = 90° ELBOW, LONG RADIUS, WLD  
 2K = 45° ELBOW  
 2KW = 45° ELBOW, WLD  
 2SS = 90° ELBOW, SHORT, ASME B16.9 / JIS B2312  
 2LS = 90° ELBOW, LONG, ASME B16.9 / JIS B2312  
 2WSS = 90° ELBOW, SHORT, ASME B16.9 / B2313, WLD  
 2WLS = 90° ELBOW, LONG, ASME B16.9 / B2313, WLD  
 2KLS = 45° ELBOW, LONG, ASME B16.9 / JIS B2312  
 2KWLS = 45° ELBOW, LONG, ASME B16.9 / B2313, WLD  
 7 = EQUAL TEE  
 7W = EQUAL TEE, WLD  
 7ST = EQUAL TEE, SHORT TANGENT  
 7STW = EQUAL TEE, SHORT TANGENT, WLD  
 7R = REDUCING TEE  
 7RW = REDUCING TEE, WLD  
 7RWW = REDUCING TEE, WLD X WLD  
 7S = EQUAL TEE, JIS B2312 / B2313  
 7RS = REDUCING TEE, JIS B2312 / B2313  
 9 = EQUAL CROSS  
 9R = REDUCING CROSS  
 16 = END CAP  
 16W = END CAP, WLD  
 31 = CONG REDUCER  
 31T = CONG REDUCER, TRANSITIONAL  
 31W = CONG REDUCER, WLD X SMLS  
 31WW = CONG REDUCER, WLD X WLD  
 31FF = CONG REDUCER, FORMED  
 32 = ECCENTRIC REDUCER  
 33 = CONG REDUCER, CAP TYPE  
 38BF = BLIND / BLANK FLANGE  
 38L = LAP JOINT STUB END, JIS  
 38LA = LAP JOINT STUB END, LONG PATTERN, TYPE "A", ASME B16.9  
 38SA = LAP JOINT STUB END, SHORT PATTERN, TYPE "A", ASME B16.9  
 38LJ = LAP JOINT FLANGE  
 38WN = WELD NECK FLANGE

**- XX**

**SIZE CODE (SEE NOTE 2)**

ASTM TUBE	JIS & NPS PIPE
04 = .25" DIA	70 = DN 15 (NPS 1/2 / JIS 15A)
06 = .375" DIA	71 = DN 20 (NPS 3/4 / JIS 20A)
08 = .5" DIA	72 = DN 25 (NPS 1 / JIS 25A)
12 = .75" DIA	73 = DN 32 (NPS 1-1/4 / JIS 32A)
16 = 1" DIA	74 = DN 40 (NPS 1-1/2 / JIS 40A)
24 = 1.5" DIA	75 = DN 50 (NPS 2 / JIS 50A)
32 = 2" DIA	76 = DN 65 (NPS 2-1/2 / JIS 65A)
40 = 2.5" DIA	77 = DN 80 (NPS 3 / JIS 80A)
48 = 3" DIA	78 = DN 90 (NPS 3-1/2 / JIS 90A)
64 = 4" DIA	79 = DN 100 (NPS 4 / JIS 100A)
96 = 6" DIA	80 = DN 125 (NPS 5 / JIS 125A)
	81 = DN 150 (NPS 6 / JIS 150A)
	82 = DN 200 (NPS 8 / JIS 200A)
	83 = DN 250 (NPS 10 / JIS 250A)
	84 = DN 300 (NPS 12 / JIS 300A)
	85 = DN 350 (NPS 14 / JIS 350A)
	86 = DN 400 (NPS 16 / JIS 400A)
	87 = DN 450 (NPS 18 / JIS 450A)
	88 = DN 500 (NPS 20 / JIS 500A)
	89 = DN 550 (NPS 22 / JIS 550A)
	90 = DN 600 (NPS 24 / JIS 600A)
	91 = DN 650 (JIS 650A)
	92 = DN 700 (JIS 700A)
	93 = DN 750 (JIS 750A)
	94 = DN 800 (JIS 800A)

*Fitting Example 1:*

**AF7RWW-82MT75MT-2**

VALEX CFOS SPEC, REDUCING TEE, NPS 8" X NPS 2" PIPE, SCHEDULE 10, BEVELED ENDS, BA GRADE

*Fitting Example 2:*

**CF2KW-79M-3**

VALEX CFOS SPEC, 45° ELBOW, NPS 4" PIPE, SCHEDULE 5, BA GRADE, 40 Ra

**X**

**TYPE CODE**

**ASTM TUBE:**  
 BLANK = SQUARE  
  
**JIS PIPE:**  
 A = SQUARE  
 B = BEVELED  
 J = SQUARE, -20% WALL  
 K = BEVELED, -20% WALL  
  
**NPS PIPE:**  
 L = SQUARE  
 M = BEVELED  
 N = SQUARE, -20% WALL  
 P = BEVELED, -20% WALL  
  
**FLANGE TYPE:**  
 Q = B16.5, CLASS 150  
 R = B16.5, CLASS 300  
 S = JIS B2220, 5K  
 T = JIS B2220, 10K

**X**

**WALL CODE**

**ASTM TUBE:**  
 B = .035" WALL  
 C = .039" WALL  
 D = .049" WALL  
 F = .065" WALL  
 G = .083" WALL  
 J = .109" WALL  
  
**JIS & NPS PIPE:**  
 BLANK = 5S  
 T = 10S  
 V = 40S  
 W = 80S  
  
**FACE-TYPE (FLANGE ONLY):**  
 1 = FLAT / FULL FACE  
 2 = RAISED FACE  
 3 = GROOVED FACE

**(XXXX)**

USED ONLY FOR REDUCING FITTINGS  
 REFER TO "SIZE", "TYPE" & "WALL" CODES IF APPLICABLE


**- X**

**FINISH CODE**

BLANK = NO FINISH REQUIREMENT  
 1 = CFOS, O.D.=AP, I.D.=AP  
 2 = CFOS, O.D.=BA, I.D.=BA 200 Ra MAX  
 3 = CFOS, O.D.=BA, I.D.=40 Ra BA  
 4 = LDEP, O.D.=BA, I.D.=EP 20 Ra Ave / 25 Ra MAX  
 5 = CFOS, O.D.=AP, I.D.=40 Ra BA  
 6 = CFOS, O.D.=AP, I.D.=BA 200 Ra MAX  
 7 = CFOS, O.D.=MP, I.D.=AP

**NOTES:**

- PER VALEX SPECIFICATION SP-9234 (CFOS) AND SP-9235 (LDEP).
- SHADED COLUMNS USED ONLY FOR REDUCING FITTINGS.
- PROCESS CODES ARE NOT AVAILABLE FOR ALL ALLOY AND SIZE CODES. PLEASE CONTACT VALEX FOR ITEM NUMBER AVAILABILITY.

 www.valex.com		
TITLE <b>TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME</b>		
SPECIFICATION <b>SP-9200</b>	SHEET <b>8/9</b>	REV <b>BM</b>



**CHEMISTRY CODE MATRIX**

Unit : wt%

Tube Identifier	Fitting Identifier	Coax Fitting Identifier (Inner)	Seamless / Welded	Melt Type	Standard	Grade	C	Si	Mn	P	S	Ni	Cr	Mo	Cu	Al	
REFERENCE					ASTM A269	TP 304	0.080 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 11.0	18.0 - 20.0	-	-	-	
					ASTM A269	TP 304L	0.035 max <sup>2</sup>	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 12.0	18.0 - 20.0	-	-	-	
					ASTM A269	TP 316L	0.035 max <sup>2</sup>	1.00 max	2.00 max	0.045 max	0.030 max	10.0 - 15.0	16.0 - 18.0	2.00 - 3.00	-	-	-
					ASTM A312	TP 304	0.080 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 11.0	18.0 - 20.0	-	-	-	
					ASTM A312	TP 304L	0.035 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 13.0	18.0 - 20.0	-	-	-	
					ASTM A312	TP 316L	0.035 max	1.00 max	2.00 max	0.045 max	0.030 max	10.0 - 14.0	16.0 - 18.0	2.00 - 3.00	-	-	
					ASTM A276 / A479	S31603 (316L)	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	10.0 - 14.0	16.0 - 18.0	2.00 - 3.00	-	-	
					ASTM A632	TP 304	0.080 max	0.75 max	2.00 max	0.045 max	0.030 max	8.0 - 11.0	18.0 - 20.0	-	-	-	
					ASTM A632	TP 304L	0.030 max	0.75 max	2.00 max	0.045 max	0.030 max	8.0 - 13.0	18.0 - 20.0	-	-	-	
					ASTM A632	TP 316L	0.030 max	1.00 max <sup>3</sup>	2.00 max	0.045 max	0.030 max	10.0 - 15.0	16.0 - 18.0	2.00 - 3.00	-	-	
					ASTM A774	TP 304L	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 12.0	18.0 - 20.0	-	-	-	
					ASTM A774	TP 316L	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	10.0 - 14.0	16.0 - 18.0	2.00 - 3.00	-	-	
					JIS G3459	SUS304TP	0.080 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 11.0	18.0 - 20.0	-	-	-	
					JIS G3459	SUS304LTP	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	9.0 - 13.0	18.0 - 20.0	-	-	-	
					JIS G3459	SUS316LTP	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	12.0 - 16.0	16.0 - 18.0	2.00 - 3.00	-	-	
					JIS G3468	SUS304	0.080 max	1.00 max	2.00 max	0.045 max	0.030 max	8.0 - 10.5	18.0 - 20.0	-	-	-	
					JIS G3468	SUS304L	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	9.0 - 13.0	18.0 - 20.0	-	-	-	
					JIS G3468	SUS316L	0.030 max	1.00 max	2.00 max	0.045 max	0.030 max	12.0 - 15.0	16.0 - 18.0	2.00 - 3.00	-	-	

*Exceptions to Standard Chemistry*

0S	E, B	C, CB	Seamless	AOD or VOD	A269 <sup>1</sup>	316L	-	-	-	-	0.005 - 0.012	-	-	-	-	-
0W	E, B	C, CB	Welded	AOD or VOD	A269 <sup>1</sup>	316L	-	-	-	-	0.005 - 0.017	-	-	-	-	-
1S	DF <sup>4</sup>	-	Seamless	AOD or VOD	G3459 / G3468 / A312	304L	-	-	-	-	-	-	-	-	-	-
1W	DF <sup>4</sup>	-	Welded	AOD or VOD	G3459 / G3468 / A312	304L	-	-	-	-	-	-	-	-	-	-
2S	D	-	Seamless	AOD or VOD	A269 <sup>1</sup>	304L	-	-	-	-	0.005 - 0.012	-	-	-	-	-
2W	D	-	Welded	AOD or VOD	A269 <sup>1</sup>	304L	-	-	-	-	0.005 - 0.017	-	-	-	-	-
3S	-	-	Seamless	AOD or VOD	A269 <sup>1</sup> / A312	304L	-	-	-	-	0.010 max	-	-	-	-	-
3W	-	-	Welded	AOD or VOD	A269 <sup>1</sup> / A312	304L	-	-	-	-	0.010 max	-	-	-	-	-
A4	E, B	C	N/A	AOD	A276 / A479	316L	-	-	-	-	-	-	-	-	-	-
AS	AF, JD, JA	-	Seamless	AOD or VOD	G3459 / G3468 / A269 <sup>1</sup> / A312	304	-	-	-	-	-	-	-	-	-	-
AW	AF, JD, JA	-	Welded	AOD or VOD	G3459 / G3468 / A269 <sup>1</sup> / A312	304	-	-	-	-	-	-	-	-	-	-
BS	-	-	Seamless	VOD/VAR	G3459	316L	0.02 max	0.30 max	0.40 max	0.040 max	0.003 max	12.0 - 15.0	-	-	-	-
FS	FV	FC	Seamless	AOD	B622	UNS N06022	-	-	-	-	-	-	-	-	-	-
HS	H	HC	Seamless	AOD	B622	* Hastelloy® C-22®	-	-	-	-	-	-	-	-	-	-
KS	Y, YB	W, WB	Seamless	VIM/VAR	G3459 / A269 <sup>1</sup>	316L	0.02 max	0.20 max	0.05 max	0.040 max	0.002 max	14.5 - 16.0	-	2.20 - 3.00	0.15 max	0.010 max
NS	CF <sup>4</sup>	-	Seamless	AOD or VOD	G3459 / A269 <sup>1</sup> / A312	316L	-	-	-	-	-	-	-	-	-	-
NW	CF <sup>4</sup>	-	Welded	AOD or VOD	G3459 / A269 <sup>1</sup> / A312	316L	-	-	-	-	-	-	-	-	-	-
QS	-	-	Seamless	AOD or VOD	A269 <sup>1</sup> / A312	316L	-	-	-	-	0.010 max	-	-	-	-	-
QW	-	-	Welded	AOD or VOD	A269 <sup>1</sup> / A312	316L	-	-	-	-	0.010 max	-	-	-	-	-
RS	RE, RB, JE, JB	JC, RC	Seamless	AOD or VOD	G3459 / G3468	316L	0.025 max	0.60 max	0.80 max	0.040 max	0.005 max	12.0 - 15.0	-	-	-	-
RW	RE, RB, JE, JB	JC, RC	Welded	AOD or VOD	G3459 / G3468	316L	-	-	-	-	0.010 max	-	-	-	-	-
VS	Q	R	Seamless	VIM/VAR	A269 <sup>1</sup>	316L	0.02 max	0.20 max	0.05 max	0.040 max	0.002 max	14.5 - 16.0	-	2.20 - 3.00	0.15 max	0.010 max

**NOTES:**

- 1) For tube sizes 1/2" and greater, the ASTM reference is A269. For tube sizes less than 1/2", the ASTM reference is A632.
- 2) For tube sizes less than 1/2", a carbon maximum of 0.040% is allowed in ASTM A269 grades 304L and 316L.
- 3) For ASTM A632 welded 316L grade tubes, the maximum silicon allowed is 0.75%.
- 4) Special Pipe X Tube Fittings may have chemistry per A774 pipe connections.

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**TITLE:**  
**TUBE, PIPE, AND FITTING ITEM NUMBER SCHEME**

<b>SPECIFICATION</b> SP-9200	<b>SHEET</b> 9/9	<b>REV</b> BM
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