

<b>Material Type:</b>	316L Stainless steel	
<b>Dimensions:</b>	<b>ASTM Tube Sizes</b> Tubing: • 1/8" to 6" Fittings: • 1/4" to 6"	<b>JIS Pipe Sizes</b> Piping & Fittings: • 8A to 300A (13.8mm to 318.5mm)
<b>Reference Documents:</b>	<b>ASTM:</b> A 269, A 270, A 632, A 276, A 479 <b>ASME:</b> B31.3 <sup>1</sup> <b>JIS:</b> G 3459 & G 3468	
<b>Tube &amp; Pipe Lengths:</b>	<b>Nominal Lengths:</b> 20-foot, 4-meter, 6-meter	
<b>Hardness:</b>	60 to 90 Rb max.	
<b>Valex Material Types:</b>	<b>ASTM:</b> Single-melt, Double-melt (seamless or welded, depends on size) VOD/VAR, VIM/VAR, VAR	<b>JIS:</b> Single melt (seamless or welded, depends on size)
<b>Tolerances:</b>	In accordance with ASTM: A 269 & A 632, JIS: G 3459 & G 3468	
<b>Interior Surface Electropolished:</b>	<b>I.D. Surface Roughness Options:</b> • A5: 5 micro-inches Ra max.                      • B0: 10 micro-inches Ra max. • A7: 7 micro-inches Ra max.                      • C0: 10 micro-inches Ra	
<b>O.D. Surface:</b>	Standard outside diameter finish (may exhibit minor surface imperfections) or superior outside diameter finish as directed by customer's purchase order.	
<b>Weld Ends:</b>	<b>Tube:</b> Square ends suitable for orbital welding <b>Pipe:</b> Square or bevel end options	
<b>Testing &amp; Inspection:</b>	<ul style="list-style-type: none"> <li>• Visual inspection</li> <li>• Surface roughness measurement</li> <li>• Helium-leak testing</li> <li>• Scanning Electron Microscopy (SEM)</li> <li>• Auger Electron Microscopy (AES)</li> </ul>	<ul style="list-style-type: none"> <li>• Electron Spectroscopy for Chemical Analysis (ESCA or XPS)</li> <li>• Particle testing</li> <li>• Moisture testing</li> </ul>
<b>Marking &amp; Traceability:</b>	Each component is traceable to its producing mill and heat by an identification number etched within 24" (610mm) of one end.	
<b>Labeling:</b>	Each component's bag is affixed with a label identifying the component's part number, date and Valox lot number.	
<b>Documentation:</b>	A Quality Inspection Certificate is furnished with each shipment. The report contains the following information: <ol style="list-style-type: none"> <li>a. Material composition &amp; applicable specification designation</li> <li>b. Nominal outside diameter size</li> <li>c. Chemical composition</li> <li>d. Statement of quality assurance testing</li> <li>e. Inspection Certificate type 3.1 per EN 10204:2004</li> <li>f. Lot &amp; heat identification for traceability</li> </ol>	
<b>Packaging:</b>	All components are purged with UHP Nitrogen gas, capped, double-bagged and packaged for shipment in a cleanroom.	

<sup>1</sup> For detailed specifics regarding compliance, please consult factory.