

# Material Selection Guideline



MATERIAL	STANDARD LEAK RATE	TYPICAL APPLICATIONS	TEMPERATURE	STRENGTHS & WEAKNESSES
<b>AM350</b>	1x10 <sup>-9</sup>	Industrial, High Vacuum and other liquids and gases with low corrosive properties	-100 to 800° F	Highest strength/ cycle life with low leak rate
<b>300 Series SS</b>	1x10 <sup>-9</sup>	Industrial, High Vacuum and other liquids and gases with mild corrosive properties	-420 to 800° F	Lowest cost materials with low leak rate
<b>Inconel 718 625 600</b>	1x10 <sup>-5</sup>	High temperature and corrosive applications such as exhaust, seawater, hydrogen sulfide, and heavy oil	-420 to 1500° F	Good corrosion resistance, yet limited leak rate
<b>Hastelloy 276 C Haynes 242</b>	1x10 <sup>-5</sup>	Highly corrosive media such as petrochemical processing equipment	-420 to 1500° F (Haynes 242 up to 1300° F)	Excellent compatibility; high price point
<b>Titanium Grades 1 through 4 (ASTM-B265)</b>	1x10 <sup>-9</sup>	Light-weight aerospace and invasive medical equipment	-420 to 800° F	Extremely light-weight and capable of being implanted; highest price performance ratio

MW Components offers a wide variety of materials with a range of media compatibilities. Consult factory for additional information.

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