

# Metal Jacketed Gaskets

Metal Jacketed Gaskets, as the name suggests, consist of a metallic outer shell with either a metallic or non-metallic compressed fiber filler. The filler material gives the gasket resilience, while the metal jacket protects the filler and resists pressures, temperatures and corrosion.

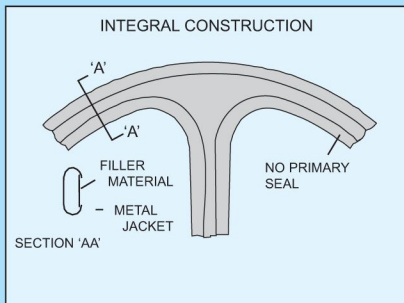
A wide range of materials are available to suit specific temperature and corrosive conditions.

<i>Metallic:</i>	Soft Iron	Nickel	<i>Non-Metallic:</i>	Compressed Fiber Millboard
	Carbon Steel	Aluminum		PTFE
	Stainless Steel	Brass		Flexicarb®
	Inconel®	Copper		Ceramic
	Monel®	(Other materials on request)		

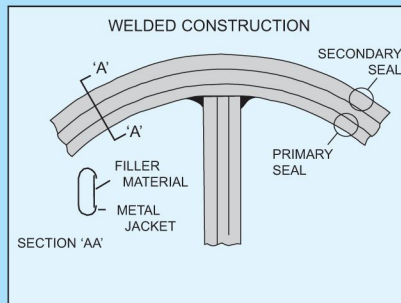
Metal Jacketed Gaskets are available in a wide range of sizes and configurations. They are traditionally used for heat exchanger applications, pumps, and valves, however the resilience and recovery properties of these gaskets are limited. Metal Jacketed Gaskets require smooth flange surface finishes, high bolt loads, and flange flatness in order to seal effectively.

When pass partition bars are required, it is sufficient to use a gasket with a welded pass bar construction, as opposed to an integral pass bar construction. Jacketed gaskets standard tolerances:

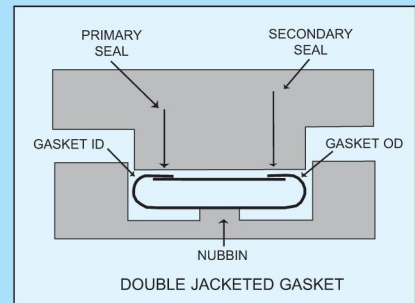
<i>Jacketed Gaskets Standard Tolerances</i>		
<i>Gasket Outer Diameter</i>	<i>I.D.</i>	<i>O.D.</i>
Up to 6"	+1/32" / -0	+0 / -1/32"
6" to 60"	+1/16" / -0	+0 / -1/16"
Above 60"	+1/8" / -0	+0 / -1/8"



If leakage occurs across the pass partition bar, the fluid will flow along the length of the pass bar arrangements, and then flow to the outer diameter of the gasket being retained only by the secondary seal. The intermediate part of the gasket does very little to effect the sealing capabilities of the gasket.



With a welded pass bar arrangement the fluid is retained by the primary seal at the inner diameter of the gasket. Thus the primary seal maintains its function, providing a seal of higher integrity.



Due to the high bolt loads required to seat metal jacketed gaskets, designers often incorporate stress raising nubbins on the flange sealing face, the principle being that the majority of the applied bolt load is acting on a relatively small proportion of the gasket surface area, thus high surface stresses result. It is essential that the gasket is installed with the smooth side toward the nubbin.