

Gaskets are similar in that using the products at the upper ratings will likely result in shorter service life. Applications Engineering will typically recommend an upgrade when approaching the continuous operating temperature, 50% of the maximum pressure rating and/or 50% of the PxT rating. This only makes good sense when there are products readily available that can meet the higher performance requirements. When asked for a recommendation, it is appropriate to give the best recommendation for the conditions. We do know of situations where customers have successfully evaluated and used products slightly beyond the published ratings. However, we cannot endorse the use of gaskets above the published ratings.

Are there other variable that impact performance?

Absolutely! The single largest factor to gasket performance is INSTALLATION. Several years ago Applications Engineering did a study of “failed gasket” and found that nearly 90% of all failures are due to improper installation, misaligned flanges, incorrect torque levels and/or flanges that were not appropriate for the gasket used. In fact, the customers that are successfully using gaskets near or over the published ratings can typically attribute the success to proper installation.

Media (what’s being sealed) is also a huge factor. As an example, a fiber gasket may have a temperature rating of 400°F (205°C), but that does NOT mean the product is suitable for sulfuric acid at 400°F (205°C).

Gasket thickness also can directly impact overall performance. There is a bulletin on Garlock.com that delves deep into this subject.

As a general rule of thumb, the best approach to selecting a gasket is to:

1. Collect the TAMPS information
 - Temperature
 - Application
 - Media
 - Pressure
 - Size
2. Contact the Garlock Applications Engineering department at 315-597-7350 if you are not absolutely confident that you have selected the correct product.
3. Make sure anyone installing the gaskets has access to and follows correct installation practices, in order to achieve the optimum performance out of the gasket.