

TEADIT® 24B - Nitrogen Blower CASE HISTORY

INDUSTRIAL SEGMENT

Original Equipment Manufacturer

APPLICATION

Media: Nitrogen

Equipment

Blower

SCENARIO

A manufacturer of blowers was having difficulty sealing a new nitrogen blower for a large manufacturer of commercial and consumer products. Blowers, such as this one, can be very challenging sealing applications. They often have very complex sealing areas which require a non-standard gasket as standard flat gaskets can be extraordinarily difficult to install, if even possible, and require a lengthy installation process. The flanges are typically very thin which leads to small sized bolting with large spacing, as flange deformation could occur if too much load is applied to the flange. These low bolt load flanges are designed to seal with gasket materials that can provide a reliable seal with very low gasket stress applied. The flanges, as is common in thinner flanges, were found to be very uneven and had large gaps that needed to be overcome by the gasket material. The customer required a material that could provide a reliable seal under all these challenging conditions.

SOLUTION

The customer contacted Teadit's application engineering team to help them find a solution to this application. After a thorough investigation of the application it was determined that a material was needed that could seal at low gasket stresses and was also soft and conformable. It was recommended to utilize Teadit style 24B joint sealant for this application. Teadit style 24B is a mono-axially expanded joint sealant made of 100% PTFE which has exceptional malleability to compensate for uneven surfaces and can be formed to fit any non-standard sized assembly. Teadit engineering provided special installation guidance in which the material was layered in areas with large gaps in order to overcome the uneven flange surface.

CUSTOMER GAINS

Using the Teadit style 24B and the special installation method provided, it was possible to achieve optimal sealing for the complex connections and overcome the uneven sealing surface. Teadit's ability to find a solution for this application was extremely critical for the customer, as they were under time constraints due to being fined for delays to the project and a new blower would have taken too much time. The customer was also able to reduce the amount of material required and installation cost for this specific application by using a form-in-place gasket material, as opposed to a traditional flat gasket style. Teadit was able to demonstrate its superior technical support and problem-solving ability to the customer.

