

CASE STUDY

Gallagher Fluid Seals helps meters and instruments manufacturer via design and fabrication of a custom-molded gasket with an engineered profile.

PROBLEM

Customer's gas volume micro corrector was experiencing water intrusion past their closed-cell foam O-ring gasket due to severe compression set.

SOLUTION

GFS engineers designed a custom-molded gasket, with an engineered profile, which provided optimal sealing performance in the application.

RESULTS/NEXT STEPS

The Gallagher-engineered gasket solution was a success; it eliminated water intrusion and damage to the electronics, reduced warranty claims, and provided a more reliable product.

Gallagher Fluid Seals, Inc.'s (GFS) client is a leading global provider of reliable infrastructure services and products, including a wide array of rotary meters, test equipment, and metering instrumentation for the energy industry.

For nearly 100 years, our client's meters and instruments have been used for billing of commercial and industrial gas loads and are designed to provide accurate readings over widely fluctuating pressure, temperature, and flow conditions.

Our client's micro corrector was experiencing water intrusion past the gasket, caused by improper seal material and configuration.

Gallagher Regional Sales Manager Benjamin Mell worked closely with our client to identify and address the issue and suggested sending a sample of the instrument to GFS headquarters. Our engineering team received the hardware and investigated the root cause of the seal failure.

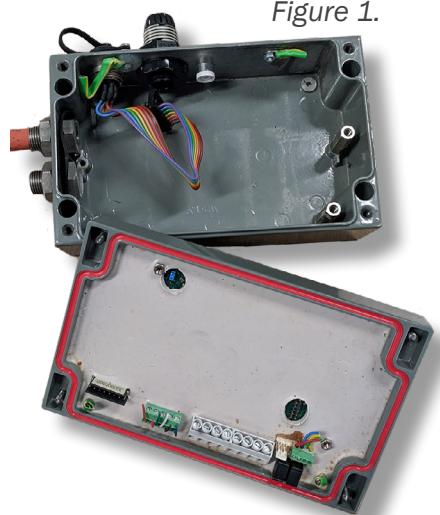
GFS engineers observed that our client's closed-cell foam gasket had taken a severe compression set. This was limiting the life and effectiveness of the foam seal, which in turn allowed water to penetrate the instrument and damage the electronics.

Based on our experience and industry insights, GFS partnered with the client to design and fabricate a highly-engineered, custom-molded gasket to properly mate with the hardware and perform to customer expectations and requirements. (See Figure 1. *red seal*)

Gallagher's team of engineers were able to successfully solve our client's problem, ultimately eliminating water

ingress and creating a more reliable product with a reduction of warranty claims.

Figure 1.



With the success of this project, GFS is partnering with our client for additional custom solutions. Next, we plan to help design and fabricate a window seal on the micro corrector to further decrease the possibility of water intrusion.

Want to learn more? Contact GFS today to see how we can help you with a custom solution!

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