



## CASE STUDY

MW Polymers works with Ecoseal & Polyform™ on a leaking 10" medium pressure bolted flange located next to the motorway

saving thousands of pounds



### Project Overview

The project involves the remediation of a leaking 10-inch medium pressure bolted flange, which has been exposed following excavation. This flange is positioned in close proximity to a heavily trafficked motorway junction, where significant ground movement and vibration are common place. The current issue involves a leakage occurring at a pressure of 27 psi, necessitating urgent attention to prevent further environmental impact and potential operational disruptions.

Previous efforts to address the leak using anaerobic sealing products from another supplier have not achieved the desired results, prompting the need for a thorough reassessment and effective remedial action. Given the critical location and the nature of the leak, a robust solution is imperative to ensure the integrity and reliability of the flange system under operational conditions affected by continuous ground dynamics and vehicular vibrations.



### MW Polymers Solution

After completing the grit blasting procedure, a medium pressure vent tube was carefully inserted into place. This crucial step ensured proper ventilation and pressure management within the system. Subsequently, a layer of Polyform was meticulously applied over the treated surface. This coating serves to provide a durable and protective barrier, enhancing the flange's resistance to corrosion and environmental stressors. Together, these measures contribute to the longevity and reliability of the infrastructure, particularly important in environments prone to mechanical strain and external impacts.



### Result

The result of inserting the medium pressure vent tube and applying Polyform following grit blasting is a strengthened and protected flange system. Here's a breakdown of the outcomes:

- 1. Enhanced Ventilation and Pressure Management:** The installation of the medium pressure vent tube ensures efficient ventilation, preventing pressure build-up within the system. This is crucial for maintaining operational safety and performance.
- 2. Corrosion Protection:** Polyform, applied after grit blasting and vent tube installation, forms a robust protective layer. This coating shields the flange from corrosion caused by environmental factors such as moisture, chemicals, and abrasives.
- 3. Durability and Reliability:** By combining grit blasting to prepare the surface, installing the vent tube for pressure management, and applying Polyform for corrosion protection, the flange system gains enhanced durability. It becomes better equipped to withstand the challenges posed by its operational environment, including ground movement and vibrations near the motorway junction.

Overall, the result is a strengthened flange system that is more resilient to corrosion, better regulated in terms of pressure, and capable of maintaining reliable performance over an extended operational lifespan.

