

CASE STUDY

MW Polymers works in partnership with a the a Brisith utility firm using a P.E Repair Kit on a leaking fusion socket to immediaty stop the leak





Project Overview

utility company responsible for managing and maintaining pipelines in the East Anglia region of the United Kingdom, encountered a challenging situation. They faced a critical issue with a leaking fusion joint within a polyethylene (P.E) pipeline, and what made the situation even more complex was the need to address this problem while the pipeline remained operational, under live conditions.

The term "fusion joint" typically refers to a method of joining two sections of a pipeline by melting the ends of the pipes and fusing them together to create a seamless and durable connection. When such a joint begins to leak, it poses significant risks, including potential environmental hazards and service disruptions. This made the repair task all the more urgent and essential.



MW Polymers Solution

The P.E Repair kit is a valuable tool designed to provide pipeline operators with a quick and effective solution for addressing leaks without requiring any specialized tools or equipment. This kit is particularly useful when dealing with puncture damage that has occurred on the body of a polyethylene (P.E) pipe, which can be attributed to various factors, such as accidental impacts, often caused by heavy machinery like a digger backhoe bucket tooth.

When puncture damage occurs on a pipeline, it is a matter of significant concern, as it can lead to the unintended release of the pipe's contents, which could range from water and gas to other materials. To ensure the safety of the pipeline, the environment, and the surrounding area, it's essential to address these punctures promptly.

The P.E Repair kit simplifies the repair process by offering a solution that doesn't demand the use of special tools or equipment. This ease of use is crucial, as it allows operators to respond swiftly to the puncture damage without unnecessary delays. Rapid response is particularly important because it minimizes the potential consequences of a leak, such as environmental contamination, service interruptions, and safety hazards

Furthermore, after the puncture damage has been addressed using the P.E Repair kit, an additional protective measure is taken by applying a material called Polyform. This coating or material is specifically designed to enhance the pipe's resistance to future impacts. In essence, it acts as a protective shield, reducing the risk of similar damage occurring in the future.

By employing the P.E Repair kit and applying Polyform™, operators not only stop the leak promptly but also proactively fortify the pipeline to prevent similar issues caused by accidental impacts. This approach ensures the longevity and reliability of the pipeline while maintaining the safety and integrity of the overall system. It represents a well-rounded and efficient solution for managing puncture damage in P.E pipelines and is an important component of pipeline maintenance and repair practices.



Result

The repair was executed with remarkable swiftness, allowing it to be conducted without interrupting the operation of the live main. This rapid response and the ability to carry out the repair on an active primary pipeline showcase the efficiency and expertise of the maintenance team involved. It ensured minimal downtime and reduced the impact on services reliant on the live main, underscoring the importance of quick and seamless solutions in maintaining the continuity of critical infrastructure.

