A significant aspect of pipework maintenance repair is how to repair leaking defects. Composite repairs cannot be used to live leak seal as the leaking fluid will contaminate the outer surface of the pipework preventing the composite repair from adhering to it. Therefore to enable composite repairs to be used on leaking defects, first the leaks must be mechanically sealed. ICR has developed a range of simple mechanical leak sealing solutions for processes operating under the following conditions.

Class 1 and 2 repairs according to ISO 24187 cover design pressures up to 20 bar and design temperatures up to 40°C the majority of the utility service systems. This class is intended for those systems that do not relate directly to personnel safety or safety-critical systems.

The intention of the leak sealing capability offered by ICR is to provide a temporary (mechanically) leak sealing solution, prior to the application of a compliant Technowrap™ composite repair providing a long term repair solution up to 20 years.

**BENEFITS OF OUR COMPOSITE LEAK DIVERSION PLATE**

- The composite plate can be formed to any geometry (Straight/T’s/Reducers/Flanges)
- Plates can be fabricated onsite where the defect is located
- This system allows the leak to be diverted away from the pipe, allowing the resin system to cure
- Leak repairs are temporary but when overwrapped with an ISO compliant composite repair system can provide a long term solution
- Trained and experienced leak sealing technicians
- Application of the latest leak sealing techniques
- Variety of leak sealing options available

The trial of leak sealing tests - carried out on a 6” pipe with a 10mm diameter through-wall defect - were successful and the seals were able to withstand a pressure of more than 30bar before failure.

Based on successful conclusion of these trials, the Composite Leak Diversion Plate is now available for field application by fully trained ICR Technicians.