

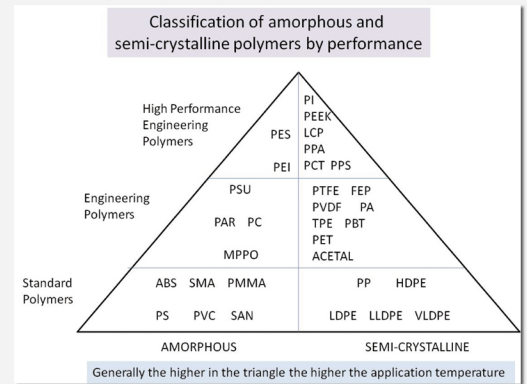


# some of our oil & gas work...

## Introduction

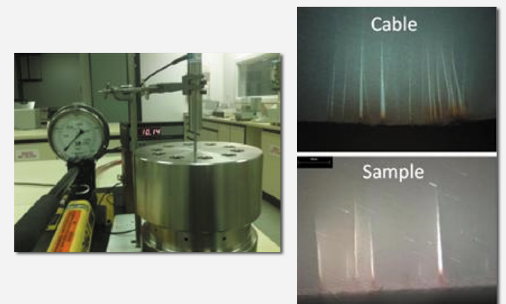
New applications for polymers are continually being found in the demanding oil and gas environment. Roles are continually being found for the broad family of thermoplastic from standard, engineering and high performance engineering polymers.

Impact Solutions knowledge of polymer systems have enabled us to be closely involved in a number areas in the field of oil and gas.



## Simulating ageing performance under pressure

As part of a project to improve service life of a polymer component in a flexible riser, a novel high pressure laboratory rig was developed to simulate damage found in an umbilical cable, as the first step to finding an improved material.



## Assessment of polymer lining

Impact was asked to assess the performance of a polymer liner in a steel tube removed after 13 years of operation in a North Sea oilfield. The work entailed assessing the tensile and environmental stress crack performance of the liner as received, after de-absorption of oil from the liner and comparison with a similar unaged grade. The results showed the liner performance to be good even after its long service life.



## Failure analysis of a buoy

The cracking of the outer coating of a buoy was attributed to slow crack growth and a series of tests undertaken to identify resins with improved crack resistance.

