

CASE STUDY

GEOFLEX®

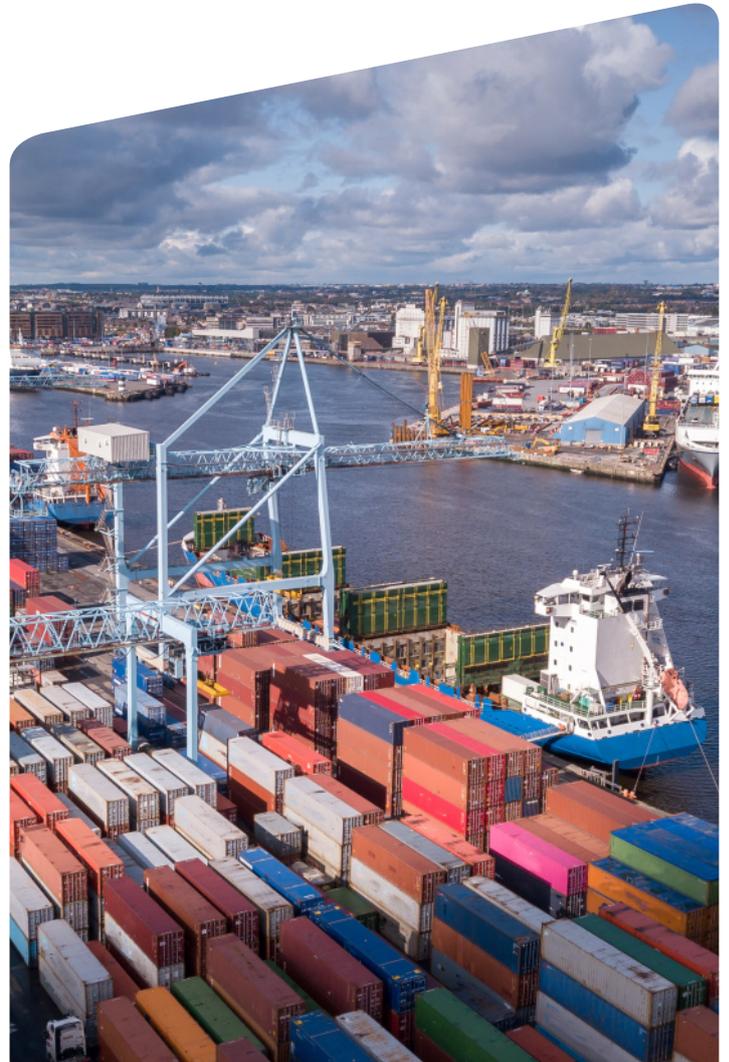
Sliding, flexible and extendible ductile iron fitting solution for applications requiring resistance to subsidence and differential settlement

Creating value through a collaborative approach to innovation.

In collaboration with Arch Henderson Design Consultants.

The issues faced

Arch Henderson Design Consultants were tasked with designing a new water main to supply potable water to docked vessels when moored to a new jetty being built within the Port of Dublin. The water main would pass through docking structures called Dolphins designed to be flexible to allow for the rise and fall of the tide. An immediate solution was hard to find so they asked for the support of the Saint-Gobain PAM UK Technical Team.



Findings

The Dolphin docking structures are connected by a series of walkways with the water main suspended underneath. At one end of the walkway it has a flexible connection that needs to accommodate 2.5 degrees of movement in each direction. At the other, a sliding bearing to allow $\pm 100\text{mm}$ of lateral movement and $\pm 240\text{mm}$ longitudinal movement and $\pm 2.5^\circ$ of rotation

CASE STUDY

The Solution:

GEOFLEX® SLIDING, FLEXIBLE AND EXTENDIBLE DUCTILE IRON FITTING SOLUTION

GEOFLEX® represents a truly innovative approach to product design. It offers a flexible and expandable ductile-iron fitting solution that has been specifically developed to protect pipelines against the risk of displacement and damage caused by ground movement, differential movement between structures or risk of subsidence.

Thanks to its pioneering design and extreme flexibility, the **GEOFLEX®** system simultaneously compensates for expansion, contraction, deflection, rotation and angular deflection stresses.

It is available in a range of diameters DN 100 to DN 1800 range can be used for operating pressures of up to 16 bar.



The Value

The technical advice and support given by the Saint-Gobain UK team was invaluable in enabling Arch Henderson to select a solution to meet with the specific requirements of the project.



Expandable and contractable fittings



Deflection of fittings



Rotational deviation of fittings



GEOFLEX® is just one of several innovative solutions offered by Saint-Gobain PAM UK. For further information and advice on any other products or services offered please contact our team on **0115 930 5000** or visit www.pamline.co.uk