

Oil and Gas industry Case study

Project: BPGIC - Fujairah Oil Industry Zone II

Anti-slip solution for liquid storage facility

BPGIC FOIZ, a subsidiary of Broege Energy, was founded on the premise of operating some of the most technologically advanced bulk liquid storage facilities in the world.

Safety, security, and careful handling of products is BPGIC's core ethos. They want to ensure that while continuing to facilitate the flow of energy, they do so without putting people in harm's way or endangering the ecosystem.

Slips and Trips causing injury

Statistics show slipping and tripping to be the single most common cause of major injury in workplaces and they are often the initiators of accidents attributed to other causes, such as some machinery accidents, scalding and falls from height. This is a fact across all industries.

Almost 2/3 happen on the walking level as a result of slips and trips, while 1/3 occur due to falling from an elevation such as ladders, stairs etc. Slips could occur due to wet and oily surfaces, traction differences and of course human behaviour.

Challenge

BPGIC wants to prevent all types of personal incidents and see the statistics as critical risks.

As a result, they sought an innovative, safe and sustainable solution for installing anti-slip prevention upgrades within their operational facility.

A trusted contractor identified a company with expertise in their field and got in touch with us at Real Safety for a site visit to inspect the facility. After the inspection, we fully understood the challenges, safety concerns, restrictions in Zone 2 areas etc.

Furthermore, the solution requested was to implement a permanent safety solution which could retrofit onto existing structures.





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Solution benefits

Traditionally, paint with sand and tapes are used, but these wear out quickly and must be re-done over and over. The chosen solution is a FRP profile with the following advantages:

- Sharp silicon carbide stones are encapsulated into the surface of the FRP to provide optimum friction
- Corrosion resistant
- Does not heat up like steel – even in warm climates
- Text and safety pictograms can be embedded
- Easy to modify, cut and install without closing off areas and the use of hot works
- Not electrically conductive (spark safe)
- No maintenance

Solution

To secure the area, we introduced our Anti-Slip concept for Stairways and Ladders with colour warnings and text embedded safety messages.

Work began in early November 2022. Real Safety came on site and installed the safety upgrades which are already making a huge difference. On stairways, the top and bottom step covers have been fitted with an integrated message saying “Use Handrail” – in a stand-out colour. This helps to highlight the use of handrails – and over time, this will also enhance behaviour and awareness.

The steel rungs of ladders were also upgraded to give excellent grip when climbing the ladder. Each rung was fitted with Anti-Slip cover in yellow colour. The cover benefits of non-heat absorb thus gripping is less warm!

M. Moataz Antaki, Maintenance Manager at the facility states:

“Following the final instalment of the FRP anti-slip solution on the stairways and ladders, we have been extremely happy with the result. It really is an ideal solution for us. It’s a simple, yet innovative and cost-effective solution that has meant that safety – both for the site itself – but as importantly, also for staff, has been significantly increased. The feedback from our staff, technicians and contractors has been very positive, and comments are made of enhanced awareness. I’m already considering how we can incorporate this safety technology into the next build phases of our facility!”

