



# KLINGER CASE STUDY

## Offshore Asset



ASSEMBLY



DECK SPACE SAVING



COST SAVING



TIME SAVING

### » OVERVIEW

Based in the Oil and Gas industry, as part of their 2022 Shutdown, the end user required the Hydraulic Supply and Returns pipework bolts to be replaced on several flanges on both 150# and 2500# flanges.

### » CHALLENGES

It is important that the bolts on the hydraulic line would hold until the next shutdown/maintenance, however, this couldn't be guaranteed due to corrosion on the bolts. The bolts were also situated in an area that had extremely tight access.

### » SOLUTION

Using the KLINGER Hot Bolt Clamp, we were able to change out the corroded bolts for new bolts one by one whilst still maintaining the alignment and integrity of the flanged joints, without the requirement to flush/purge or retest the system. We supplied all the equipment and our onsite engineers held all the required flange management/bolting certification tickets. The scope was carried out in a timely manner and due to the success of the scope, our team stayed offshore to perform other hot bolting activities in order to improve the site's overall condition, saving time and money.



IMAGE SHOWING TYPICAL CORROSION ON BOLTS BEFORE REMOVAL ON 150# FLANGES

### » CLIENT FEEDBACK:

*"I find KLINGER onshore support very professional through the yard trials and during the execution phase, the two KLINGER technicians carrying out the work offshore also showed the same professionalism throughout the workscope. I would recommend the use of KLINGER Services and the Hot Bolt Clamping System in the future where Hot Bolting Flanges is required".*

### PRODUCT | SERVICE | SOLUTION

KLINGER is an industry-leading supplier of sealing solutions, from gasket design and manufacturing, through to a full range of self-delivered on-site field engineering services.



IMAGE SHOWING THE REPLACEMENT OF BOLTS FOLLOWING THE UTILISATION OF THE KLINGER FLANGE TOOL