Project:

A well conductor in the North Sea had been badly damaged due to fretting against the conductor guide. In order to prevent further damage and water ingress, causing additional corrosion damage to the internal casing, a conductor repair clamp was due to be installed. The clamp was designed to slide down the conductor and fit between the conductor guide and the conductor.

Upon further inspection, due to the type of damage and excessive marine growth, there was a concern the conductor repair clamp may not be able to slide into position easily and would require an additional tool to push it into place.

To ensure operations were well prepared, Unity were asked to design a positioning tool to help push the repair clamp into place.

Solution:

• Unity designed a tool to provide over six tons of push force onto the repair clamp, while at the same time gripping the conductor, resisting the reactions of the push rams. The rams used to push the clamp provided 200mm of travel.

• Unity designed, built, tested and delivered the Conductor Clamp Positioning Tool in five weeks from the initial enquiry.

• The tool was part of a suite of products developed to repair ten wells, enabling their continued safe production with an extended lifespan, generating potentially millions of pounds in hydrocarbon revenue.

• The client saved well in excess of £1 million by not having to carry out the alternative solution of replacing the conductors.

PRODUCT: CONDUCTOR CLAMP POSITIONING TOOL