



# SHIPBUILDING & OFFSHORE BRITAIN CASE STUDY

# Background:

The North Sea, a marginal tract of the Atlantic Ocean located between Great Britain, Scandinavia, Germany, the Netherlands, Belgium and France has long been battered by the elements - and presents some of the harshest operating conditions for marine installations and products.

## **Location:**

North Sea

#### **Industry:**

Shipbuilding & offshore

#### **Challenges:**

- Design, test and manufacture range of fire resistant cable joints in limited time frame
- Quick and easy installation

### **Solutions:**

A wide range of fire resistant LV and MV joints for control, communications and power cables

# **Customer Advantage:**

Specially engineered TE solutions are still in operation more than 40 years after installation

# Challenge:

The average temperature in the North Sea during the summer months is 17°C while in winter, a season of frequent gales and storms, the average the average temperature is 6°C while salinity averages 34-35g of salt per liter of water. The North Sea is also prone to 'storm surges', an offshore rise of water associated with a low pressure weather system caused primarily by high winds pushing on the ocean's surface.

The early days of exploration and recovery of North Sea offshore oil in the 1970s called for exceptionally enduring products that would meet the exacting requirements of the companies operating in this harsh environment. A well-known, British oil and gas company, an early leader in the industry, was looking for high performance LV and MV joints and terminations for their innovatively constructed platforms.

The challenge for TE Connectivity was to design, test and manufacture a large number of fire resistant cable joints in a limited time that could be quickly and easily installed.

# **Britain Case Study**

# Solution:

With many years of expertise and experience in designing and supplying products for demanding environments, TE rose to the challenge. It implemented an accelerated development program to design, test and manufacture a range of rugged, high-performance and long-lasting products.

The program resulted in the development of a wide range of fire resistant LV and MV joints for control, communications and power cables that satisfied the customer's stringent specifications. The resilience and reliability of these specially engineered TE solutions is borne out by the fact that they are in still in operation more than 40 years after they were installed!



Applications on four of North Sea platforms

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