

Case Study 17: Iolair - Emergency Support Vessel - emergency cover for offshore oil & gas production platforms.

By selecting Tungum® tubing, Iolair is able to reduce the risk of tube line failure due to saltwater corrosion.

Built in 1982, Iolair (Gaelic for eagle) is a specialised semi-submersible offshore platform designed for British Petroleum to support and service oil platforms in the North Sea, built by Scott Lithgows in Port Glasgow.



The Iolair is a self-propelled, twin hull, semi-submersible type vessel and operates as a dynamically positioned (DP) construction support vessel. This unique vessel did not start as an ESV, but rather as the concept of a Maintenance and Support Vessel (MSV). It was proposed for the Forties oil field, operated by BP Petroleum Development Company Ltd in the North Sea. As an MSV, the vessel was always conceived to provide accommodation for about 220 persons, saturation diving facilities, a large workshop, craneage, and helicopter landing area with hangar and re-fuelling. All were still featured in the eventual design but had been enhanced with other features and sophistication much of which was to support the emergency role. Then Iolair served as an emergency support vessel (ESV) in the Forties Oil Field. Since 2000 she has been working in the Bay of Campeche, Mexico as an offshore construction and service vessel.

The Tungum Solution

Tungum alloy, possesses a natural protection mechanism whereby, on exposure to salt spray, a very thin oxide coating is generated over the exposed surface, no more than two thousandths of an inch thick, when complete. The tube becomes discoloured, it may even have a verdigris coating, but under the oxide layer the tube material is perfect and will remain so for a very long time.

The Result

Tungum has been installed on the Iolair and been in service for over 25 years.

Tungum is used on safety critical instrumentation and hydraulic systems:

- TSE Loops
- Utility air
- Potable water
- Hydraulic equipment handling systems