

Offshore Surveys Track and Analyse Earth Faults to Avoid Costly Downtime

Insulation monitoring devices (IMDs) are a vital part of the critical infrastructure for offshore installations such as static platforms and FPSOs, to ensure compliance with safety regulations and avoid disruption of the production cycle.

Insulation monitoring provides an accurate assessment of the overall 'health' of critical electrical systems such as control, safety, and fire and gas systems. In some cases, Bender UK has found that systems are not used effectively, with additional training for maintenance teams on ungrounded IT systems being required so they can respond to alerts.

Electrical safety specialist Bender UK provides offshore survey capabilities which are carried out by skilled IMD specialists to locate, classify and analyse earth faults on oil and gas platforms or vessels.

Phil Robinson of Bender UK explains: "The survey is comparable to a MoT on the electrical system; it can identify immediate or recurring faults and alert emerging problems or issues. Our training enables maintenance teams to identify, analyse and deal with insulation issues."

Bender surveys are designed to address any earth fault problems faced by operators of offshore oil and gas installations and reduce the cost of non-productive time (NPT) that runs into millions of dollars each year.

Many oil and gas installations operate a wide range of older control equipment and electrical distribution networks in harsh operating conditions where issues can quickly develop. Effective monitoring helps to manage the through-life integrity of electrical power systems.

The effectiveness of modern devices can be impacted by the way they were originally commissioned or by the original system design. Bender UK

will ensure the system is configured correctly for maximum effectiveness and may recommend improvements in the insulation monitoring systems and offer training on installed equipment.

Older installations often have passive monitoring, with a fault indicated by a light, but the maintenance team have little knowledge or information on these types of faults. An alert could, for example, be a legacy issue resulting from the removal of redundant equipment. Or it could be something more serious.

Modern active insulation monitoring devices meet the requirements of the latest British standard BS 7671:2018 (18th edition) as well as the European standard EN 61557-8

Customers can invest in Bender's portable EDS309x ground fault location equipment which automatically locates ground faults in ungrounded AC and DC systems while the system remains online, without the need to open branch breakers or disconnect equipment. Supplied with split core clamps it enables platform technicians to trace and identify ground faults.

Lloyds-approval Bender LIM (Line Insulation Monitoring) devices make it easier to manage the integrity of topside critical power and communications systems, enabling intervention to be planned with minimum disruption to plant operations. These systems safeguard personnel and ensure power and control systems remain in service and experience fewer costly failures that slow or stop production.

This effective technology detects ground faults in ungrounded AC/DC systems, and in systems with variable frequency drives (VFD).

Bender is an approved supplier to Oil, Gas and Subsea companies worldwide with over 70 years of electrical safety experience.

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Offshore Platforms & Vessels Fault Finding & Diagnosis

- ▶ Oil & gas electrical safety engineers
- ▶ Ensure offshore installations are commissioned correctly
- ▶ Locate, classify & analyse earth faults
- ▶ Onboard crew training on IT systems & fault analysis
- ▶ Utilise portable Bender technology for fault detection
- ▶ For regular & emergency maintenance
- ▶ Training & support delivered by certified offshore specialists

OFFSHORE ENGINEERING SERVICES

