

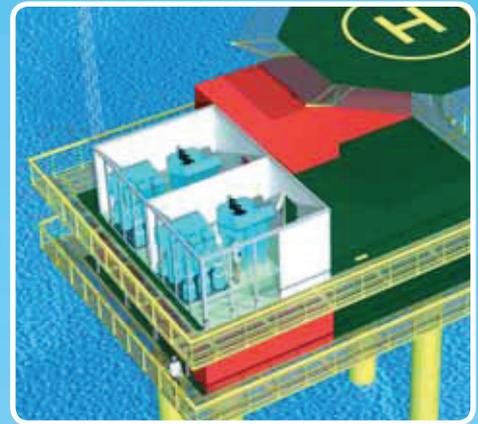
Fire and Blast Protection for Offshore Substations

TECHNICAL INTEGRITY, ZERO MAINTENANCE, LOW LIFE COST

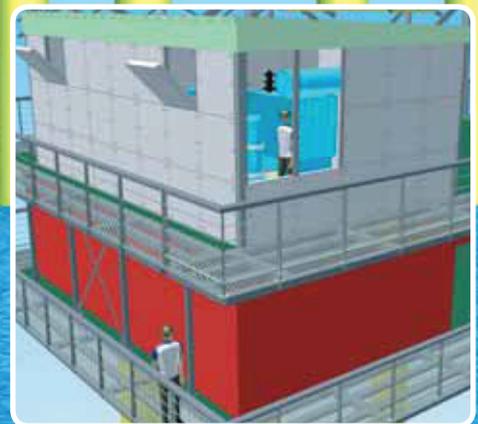
The advent of large scale offshore wind farms is calling on more sophisticated technology for transmission and distribution into the onshore grid. Many of these systems utilise high voltage DC transmission (HVDC), that ultimately will form part of the international Supergrid.

The announcement of the UK Round 3, facilitating 25GW of new offshore wind by 2020, will advance a new era of offshore substation technology, and simultaneously a growing need to keep that energy transmission safe and secure.

Protek™ lightweight composite enclosures for transformers and other critical equipment provide an economic solution for fire and blast protection.



The SCS design team understands the hazardous environment offshore and has learned to design for this harsh environment - inclement weather - wide temperature range - relentless salt spray and corrosion risk throughout the platform's life - typically 30 years. In addition pollution prevention is high on the list of risk mitigation.





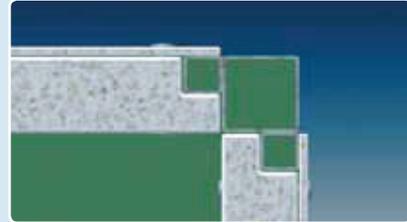
Fire and Blast Protection for Offshore Substations

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The size and complexity of offshore substations demands that the investment is safeguarded and the personnel who maintain them can work safely in a low risk environment. Composite enclosures for transformers and other critical equipment as well as walk-ways and escape-ways provide an economic solution requiring no inspection or routine maintenance and therefore low life cycle cost. Each area is carefully assessed for fire and explosion risk and protection structures are designed accordingly.

The lightweight ProTek™ composite multi-layer structure is virtually inert, thus providing exceptional corrosion and weather resistance over a 30 year life cycle - significantly higher than spray-up and steel systems - and can be easily assembled onshore or offshore. ProTek™ composite panels are mounted on a corrosion resistant steel frame to resist severe blast up to 1.5 barg and environmental wind and snow loads, thus providing an extremely rigid but lightweight structure. Blast relief vents may be included within the design to prevent overpressure build up whilst allowing quick and easy on-site installation.

Capital investment and operating costs have to be carefully managed whilst operational security, reliability and safety have to be maximised. Here SCS experience plays a key role with hundreds of ProTek™ installations already installed offshore in the North Sea.



Our heritage, your reassurance

Solent Composites Systems are leaders in the design and manufacturing of innovative structural composite systems for the offshore oil & gas industry. Today this high performance composite technology and a quality driven heritage enable SCS to deliver high value, risk free solutions to the offshore wind industry.

SCS has a fully integrated management system encompassing ISO 9001, 14001 and OHSAS 18001. In addition SCS has DNV verification for its design methodology for composite fire and blast protection structures.