



## J Tube Extension Ballast Blocks

### Sheringham Shoal Wind Farm Norfolk

**Sector:** Offshore Renewables  
**Client:** Subsea Protection Systems Limited  
**Value:** Undisclosed  
**Completion:** September 2012

The 317MW Sheringham Shoal Offshore Wind Farm is located off the coast of North Norfolk. The scheme comprises 88 wind turbines and generates around 1.1TWh per annum. Underground cables between Weybourne and the offshore substation serving the site is over 21km in length.

The wind farm generates enough clean energy to power over 200,000 homes in the UK and will reduce UK CO2 emissions by over 475,000 tonnes per annum.

Technicus Consulting provided consultancy services to Subsea Protection Systems Limited [SPS], who were contracted to provide precast, reinforced concrete [PRC] ballast blocks.

The PRC units are required to stabilise the infield cable, which is dependent upon the fitting of a cable protection system, comprising external J-tubes, and further successive pipe protection systems.

Technicus designed the reinforcement requirements for transportation and lifting, as well the operational case. The design required liaison with SPS, as manufacturers, regarding the lifting requirements for subsea installation as well as cathodic protection.

Technicus' engineers have designed a wide range of pipe protection units, ballast blocks, pipe support units, subsea bridges, valve covers, log mats, mattress installations and other subsea PRC and steel installations over several decades, both in the Southern North Sea and further afield, including the Arabian Gulf and West Africa.

