

Offshore Locations & Marine Construction

Working in marine conditions brings a myriad of extra challenges to complicate and add additional hazards to the entire process.

The first challenge is that significantly more work has to go into securing the base to a stable foundation.

This usually involves 1 of 5 jacket types to fix the tower into place:

- Monopile • Gravity-based • Tripod • Jacket • Tripile



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Part No: SU3900 - 9992540

Load Monitoring Systems specifically for Wind Power Turbine Construction Projects



straightpoint.com

Straightpoint supply load monitoring solutions for the wind turbine construction and transportation industries

Straightpoint (SP), trusted manufacturers of force measurement, load monitoring and suspended weighing load cell equipment, provide all that you need to ensure safety and successful wind farm construction projects and also for maintenance and repairs.

SP products have been put through rigorous testing regimes and meet the high standards of many globally recognised industry bodies such as ASME, DNV-GL type approval and with a range of intrinsically safe wireless products for zones 0, 1 & 2.

They have also developed them to be used with a wide range of industry standard lifting shackles and equipment, in stock up to 500t and can supply over 1000t with Bluetooth option available.

Today, windfarms have now become a great renewable energy option to producing electricity with the benefits of zero carbon emissions and high energy outputs.

SP supports the drive to produce energy in an environmentally friendly way with the same passion as it puts into producing innovative and industry leading load monitoring products.

Providing the tools to improve safety levels that lead to a successful development completion with no injuries and loss of life occurring.

In turn, when projects are not hindered by disruption, investors can see operational costs tumble down and profitability rising.



Monitor Transportation Loads



Wireless Load Cells



Measure Centre of Gravity



Lifting Safely

Making the wind turbine construction and management industry a safer place

The lifting and rigging industry, as well as the specialists working within it, have been integral to helping the wind power industry to expand and flourish.

To keep up with this rising demand in wind farms the number of people and equipment involved has also jumped up to match the expansion's pace. Straightpoint (SP) products can be best utilised:

- Calculate Centre of Gravity of a monopile or offshore jackets
- Loler Test the hoist tower
- High capacity cranes for lifting the main components such as the nacelle, blades, tower sections, etc.
- Lorry mounted loader cranes transporting the parts to site
- Manual chain hoists for scenarios where heavy lifting equipment cannot be used.

SP can supply load monitoring solutions up to a 1000t for each of those, such is the diversity of our solutions on offer to cover many parts to the construction process. The range of wireless load cells are ideal for measuring the load for transportation.

Also utilised by LOLER inspection specialist to test the hoist in the tower before any actual payload lifting takes place.

SP Compression Load Cells with wireless centre of gravity (WCOGS) software can be used to weigh and correctly calculate COG of the monopile or offshore jackets that support the turbine. Using the latest in IEEE 802.15.4 (2.4GHz) wireless technology or a Bluetooth option; monitor the lift in safety from up to 700m /2300ft away, with its high integrity, error free transmission, wireless connectivity capability. With accessories on offer you will be able to set overload and underload alarms so that you are instantly aware when the lifting equipment is exceeding its safety limits.

Both sea currents and weather play out as major factors that fight against the process to establish the wind turbine's platform/base. So having accurate load force data to monitor before and during the lift is essential.