

Bondstrand composite products for Offshore Wind Substations



Offshore substations must demonstrate satisfactory operation under the most severe environmental conditions, including wave loads, wind, seismic, salt/chemical, snow/ice etc. Our corrosion resistant, lightweight class approved products offer value engineered cost-effective solutions with reduced maintenance, proven structural and operational integrity, and significant overall reduction in CO2 footprint.

We design and manufacture a wide range of composite piping systems and structural products that provide the optimum solution and improved safety to the asset. Engineered to endure, our composites provide quality, longevity and efficiency throughout the project life cycle. Machine manufactured from high quality epoxy and phenolic resins, our glass reinforced epoxy (GRE) piping systems and fiber reinforced polymer (FRP) structures provide assurance backed by over 40 years in service.

Our versatile Bondstrand™ composite range includes:

Structural FRP products and services **Piping GRE products and services**

- MARRS™ offshore handrails
- Ladders and gates
- Grating and flooring
- Platforms, stairs and walkways
- Protection panels
- Engineering and design
- Cooling water
- Chilled water
- Drinking water
- Freshwater cooling
- Seawater cooling & drains
- Engineering and design

CapEx Benefits

- Low weight, typically 66% - 75% weight saving
- No additional steel support required
- Durable and field proven (TRL Level 9)
- Faster installation with reduced mechanical handling
- High strength / High pressure
- Meets offshore requirements, with IMO and Type Approvals
- Reduced CO2 footprint

OpEx Benefits

- Excellent corrosion resistance, 20-30 years to first major maintenance
- Non-sparking, no earthing, no cathodic protection, no contamination from rust
- Proven durability
- Enhanced safety
- Energy saving



Dolwin 6 – Offshore Wind Farm Substation

Client: Siemens / Tenne T
Location: German North Sea
Product: Bondstrand 2000M and BS2420 for the sea water system & open drains diameter range was 1” – 18”.
Approx. 1200 m of piping was supplied in total.



Rampion – Offshore Wind Farm Substation

Client: EON UK
Location: English Channel, UK
Product: Duragrid I-5500 Phenolic Grating. 45mm deep.
1307 sq m of grating installed on cable deck and equipment deck.



Dogger Bank – Offshore Wind Farm Substation

Client: SSE / Equinor
Location: Southern North Sea, UK
Product: 500-600 m2 of black conductive. Duragrid phenolic grating to the Doggerbank A substation and will supply the same to Doggerbank B & C next year. Work in progress to include FGS structural products on Doggerbank C next year.



BorWin3 – Offshore Wind Project

Client: TenneT
Location: 130 km off the coast of Germany
Product: Bondstrand Series 2416 & Bondstrand Series 2000M for seawater, sewage, and slope oil

2” – 16” diameter, 16 Barg, 80 deg C, to standard ISO14692 part 1-4 inclusive



Borssele Alpha/Borssele Beta (2 OSS) - Offshore Wind Farm Substations

Client: TenneT
Location: Borssele windpark (Vlissingen)
Product: Bondstrand Series 7000M for fresh water, potable water, sewage, drainage

1” – 8”, < 16 Barg, ambient temperature to standard ISO14692 part 1-4 inclusive. Lloyds Approval.