

Bondstrand composite products for Offshore Wind Turbine Installation Vessels



Offshore Wind Turbine Installation Vessels must demonstrate satisfactory operation under the most severe environmental conditions, including current, wave loads, wind, 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 hogging and sagging of the vessel and vibrations from jacking operation, our composites provide quality, longevity and efficiency throughout the project life cycle. Manufactured from high quality 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

- MARRS™ offshore handrails
- Ladders and gates
- Grating and flooring
- Platforms, stairs and walkways
- Protection panels
- Engineering and design

Piping GRE products and services

- Cooling water
- Chilled water
- Drinking water
- Freshwater cooling
- Seawater cooling & drains
- Ballast water
- Bilge
- SCR Urea
- 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 and IMO standards
- 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

Sea Installer – Wind Turbine Installation Vessel

Client: A2SEA
 Location: Operating globally
 Product: Bondstrand Series 2432 and Bondstrand Series 2000M.
 Size: 2” – 32”

Installation locations: Cargo Area
 Pump Room
 Machinery Space
 Leg Wall

Applications: Ballast Water System
 Fresh Water Cooling System
 Sea Water Cooling System
 Leg Jetting System (32 barg pressure)

Year	Customer/shipowner	Service	Shipyard	Hull number	Type of installation - Vessel	Country of installation	Product/type of resin - EPOXY
2018	DEME	Water ballast system	COSCO QD	N830	Wind turbine installation vessel	China	Bondstrand 7000M
2017	Deme/Belgium	Water ballast system	COSCO QD	N829	Wind turbine installation vessel	China	Bondstrand 7000M
2013	A2SEA/Denmark	Water ballast system	COSCO NT	N488	Wind turbine installation vessel	China	Bondstrand 7000M
2011	Blue Ocean	Water ballast system	SHI	2021	Wind turbine installation vessel	China	Bondstrand 7000M
2011	A2SEA/Denmark	Water ballast system	COSCO NT	N370	Wind turbine installation vessel	China	Bondstrand 2000M and 2432
2009	A2SEA/Denmark	Water ballast system	COSCO NT	N270	Wind turbine installation vessel	China	Bondstrand 7000M

Typical Applications

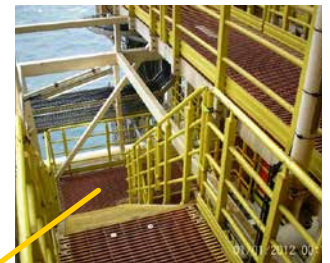
MARRS FRP handrail and phenolic grating



Bondstrand GRE piping systems



FRP Platforms and Stairs



Bondstrand GRE piping systems

