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”

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

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<th>Service</th>
<th>Shipyard</th>
<th>Hull number</th>
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<th>Country of installation</th>
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### Typical Applications

- **MARRS FRP handrail and phenolic grating**
- **FRP Platforms and Stairs**
- **Bondstrand GRE piping systems**