# FOIL FERRY

## ZERO-EMISSION, HIGH-SPEED MARINE TRANSPORT

Glosten
BIEKER BOATS

The highly efficient Glosten/Bieker Foil Ferry offers operators zero emissions, low noise, and negligible wake at a significantly reduced lifecycle cost when compared to typical passenger catamarans.

- **LENGTH** 27.5m
- **BEAM** 7.6m
- **CRUISE SPEED** 30 kts
- **RANGE** 30 nm
- **BATTERY LIFE** 500,000 nm
- **NON-FOILING DRAFT** 3.7m
- **POWER** 2×500 kW
- **PASSENGERS** 150 + crew

### Ultra-Efficient Transportation

By combining the proven technologies of ultra-efficient hydrofoils and lightweight carbon fiber hull construction, the Foil Ferry requires less than half the installed power of a typical passenger catamaran, resulting in more than a 50% reduction in energy consumption. It is compatible with a variety of propulsion methods, including batteries and hydrogen for longer-range, emissions-free operation—both of which offer significant operational cost savings and produce zero greenhouse gases.

### Environmentally Friendly

If Seattle-Bremerton commuters ride the Foil Ferry instead of the existing diesel fast ferry, the amount of $CO_2$, particulate matter (PM), and NOx emissions produced by the journey will be reduced by 83%, 95%, and 99%, respectively. This assumes that the Foil Ferry will rely on the Bremerton electrical grid, which is continually reducing emissions with a plan for net-zero emissions by 2045.

The vessel's quiet propulsion system and lack of wave generation protects marine mammals from underwater radiated noise and provides a comfortable ride.

With low drag foils and half the installed power, this ferry's wake has practically no impact on sensitive shorelines.

### Safety and Comfort

Safety of passengers and crew is paramount for all vessels. Our design takes proven commercial hydrofoiling ferry technology and incorporates a foil collision energy absorption system designed to dissipate the energy during contact with a submerged object. The system can be quickly reset because our priority is reliability.

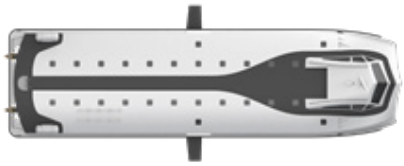
Comfort is enhanced and transit times are expedited as the vessel flies over waves rather than through them.

### Advanced Construction

The vessel's hull is constructed using carbon fiber with foam cores above the waterline, resulting in significant weight savings over the lightest aluminum construction. The struts and foils are constructed of carbon fiber laminates, achieving the same strength and stiffness of high-strength steel at 20% of the weight. These advancements in foil design and manufacturing can be seen in the latest America's Cup foiling yachts.

### Low Maintenance

The aft foil can be manually raised while at the dock for routine inspections and cleaning of the foil and propulsion units. The forward foil assembly can be removed for service without drydocking the boat. Propulsion maintenance is drastically reduced with half the installed power and consistent loading.




GLOSTEN.COM
BIEKERBOATS.COM