



VOLTURNUS +

DAMPED CRUCIFORM BARGE



THE NEXT GENERATION OF
FLOATING OFFSHORE WIND.

FLOATING OFFSHORE WIND INNOVATION

INNOVATION

- Novel motion mitigation technology keeps turbine within acceleration and inclination limits
- Compared to semi-submersible:
 - 20-30% smaller and lighter
 - Simpler geometry, less parts, fewer connections
 - Easier to deploy
- Utilizes local supply chain

TECHNOLOGY

- Large-scale 15MW wind turbine generator (WTG)
- Motion mitigation technology
- Concrete hull built using industrialized production methods
- Significant cost saving by enabling smaller and easier to construct floating foundations

DEVELOPMENT

- Achieved TRL 4 in 2022 following a 15MW FEED effort and 1:70 scale model test
- Set to achieve TRL 7 with a 1:4 offshore deployment
- ABS Approval in Principle received

KEY FEATURES

NOVEL FOUNDATION DESIGN:
Utilizes slip-formable concrete-cruciform-barge design with single structural connection, reducing costs and simplifying construction.

EFFICIENT:
Less than 7m draft enables quay-side commissioning, enhancing deployment efficiency.

OSW SOLUTIONS:
Simplified design overcomes complexities of semi-submersibles, TLPs, and spars, reducing laydown area, production time, and costs.

MOTION MITIGATION
Low-cost system minimizes wave-induced motion, allowing for barge design while maintaining operational limits and reducing hull costs.

REDUCED FOOTPRINT:
Achieves 20-30% smaller hull footprint compared to traditional semi-submersibles, enhancing cost-effectiveness.

TECHNOLOGY READINESS:
Reached TRL 4 in 2022, and now advancing towards TRL 7 by 2024 through deployment of an offshore demonstrator.

