Offshore Wind Power Project Team

Floating offshore wind power is the trump card for achieving carbon-neutral policies. In addition to further advancing numerical analysis and tank test technologies for single-machine floating offshore wind power generation facilities, we will shift to R & D for solving issues in multiple floating units to contribute to the commercial deployment of wind farms with numerous units. We conduct R & D that contributes to reducing O & M costs in wind farms, R & D on mooring systems using synthetic fiber cables, R & D of digital twin technology, and R & D of mooring cable tension monitoring technology.



Numerical model of floating offshore wind farm mooring system with synthetic fiber cables



Marine immersion tests to evaluate the effects of biofouling on synthetic fiber cables



Enlarged view of FEM model tip



Test in pulsating wind Tunnel with water tank



Installation process of a floating offshore wind farm

FEM model of a floating offshore wind farm for digital twin technology development