



*Photo with the courtesy of Vattenfall*

## Suction Piles for WTG Substructures

**SPT Offshore**



# Suction Piles for WTG substructures

- ✓ Lower cost
- ✓ No noise
- ✓ No vibrations
- ✓ No shock-waves
- ✓ Ultrashort offshore installation time
- ✓ Removal without leaving a single trace behind

## Product characteristics

- Three legged jacket with suction pile foundation.
- Applicable for all available wind turbine sizes
- Water depths up to 60m
- Suited for wide range of soils

## Benefits of suction piles for WTG substructure foundations

- Innovative combination of **proven** technology results in low risks and high predictability
- **Economical** fabrication
- **Fabrication costs** are **reduced significantly**, since no pile sleeves, -catchers, -centralizers, mud mats and leveling padeyes are required
- Very swift offshore **installation** - within 6 hours
- **Environmental friendly, noise-free** and vibration-free installation
- Removal and decommissioning by reverse installation - Fast and **without a trace**
- **Integrated scour protection system**, hence no seabed preparations or rock dumping

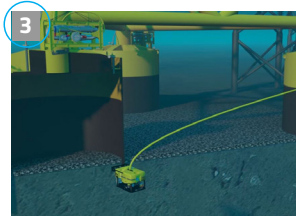
## Transport and installation



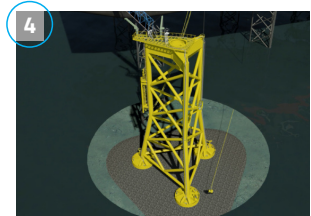
Transport WTG substructure to field



Position and lower to seabed



Install suction piles



Remove pump skids and disconnect rigging

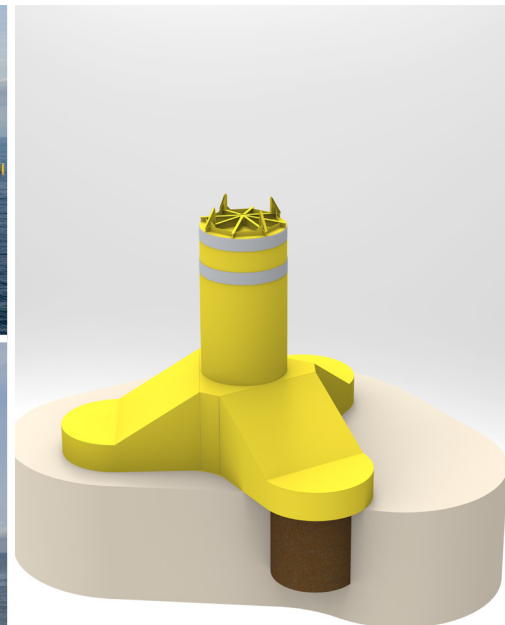
## SPT Offshore track record for WTG substructure foundations



Vattenfall Aberdeen Offshore Wind Farm



Borkum Riffgrund 1 Wind Turbine  
Dudgeon Offshore Wind Substation



Tri-Suction Pile Caisson (TSPC)