



Svanen Heavy Lift Vessel Central Gripper

The largest multi-functional monopile installation tool available for deep water





Heavy Lift Vessel Svanen

Due to the increasing demand of deep-water wind turbine installation, Van Oord approached us in 2016 to design a monopile gripper for one of its top two duo vessels – floating Heavy Lift Vessel [HLV] Svanen. Through identifying the requirements and the boundary conditions already in the proposal stage, TWD and Van Oord worked out a cost-effective and tailor-made design solution. Despite the challenging time frame of only 7 months, our close cooperation with the fabricators led to a smooth and timely monopile installation.

Central Gripper

The Svanen central gripper is currently the largest monopile installation tool available, capable of handling piles with diameters up to 11m. We designed the gripper to be placed over the moon bay of the Svanen. It carries multiple functions including handling monopiles, storing a hydro-hammer, and deploying a noise mitigation system to reduce the sound of hammering operations while also protecting the environment. The hammer storage facility can allow for hammers up to 1200 tonnes. Both the gripper and hammer platform can skid along the moon bay of Svanen.

Our central gripper design assisted HLV Svanen in carrying out installation projects for Burbo Bank Extension Offshore Wind Farm [OWF], Walney Extension OWF, wind farm Arkona, and Danish Kriegers Flak OWF.



Project highlights

- Handling of monopile diameters up to 11m
- Hydro-hammer storage facility
- Allows for noise mitigation system integration
- Hammer and gripper frame equipped with skidding systems on 2 tracks integrated in the hull of the vessel

TWD
+31 10 294 03 74
www.twd.nl
info@twd.nl

Rotterdam Science Tower
Marconistraat 16
3029 AK Rotterdam
The Netherlands

