K-WALK





FULLY AUTOMATIC INTEGRATED GANGWAY

Through integrated mission planning, automated vessel manoeuvring and autonomous gangway connection, K-Walk introduces an innovative approach to personnel and cargo transfer during Wind Farm construction and maintenance operations.

K-Walk takes a new approach to increasing productivity and efficiency for Walk-to-Work vessels. While providing a completely safe, motion compensated gangway for the fast transfer of personnel and materials, integration enables more efficient approach and settlement at wind turbines and more effective logistics.

The system is activated prior to entering a wind turbine's safety zone, reducing vessel speed and launching the K-Walk connection process during approach. Because of the integration with the DP, the gangway is able to move into position while the vessel is still moving, positioning it safely as the vessel arrives on station.

FEATURES

BENEFITS

OPERABILITY:

- Integrated mission planning and automated vessel manoeuvring
- Integrated with Dynamic Positioning System (K-Pos) for a fully automatic connection using precision reference systems and increasing operability by reduced manning (controlled from DP bridge)

PRODUCTIVITY:

- · Slope-less transfer of personnel and cargo
- · Integrated lift for step-less transfer
- Increased operational weather window due to roll compensation of pedestal

EFFICIENCY:

- Improved efficiency through Hybrid AC design solution
- · Integrated Energy control with advisory tools
- Energy management accounting for DP dynamics

TECHNICAL SPECIFICATIONS

Technical data:

Significant wave height
 Weight
 Live load capacity
 Maximum height of pedestal
 Telescopic gangway
 Hs 3.5m
 y95 tones
 3 x personnel
 1000 kg of cargo
 Max 22 m
 20 +/- 4 meter

1200 mm

Telescopic gangway
Minimum internal with of gangway bridge

Minimum free walk height
Material
Material

Pedestal:

- 330°slewing range
- Tilted Pedestal ± 8°
- Roll Compensation for operations < Hs 3.5m
- · Height Adjustable

Integrated Lift:

- 2000 kg load carrying capacity
- \bullet Internal dimensions 1600 x 2800 x 2200 mm (W x D x H)
- Door dimensions 1200 x 2100 mm (W x H)
- Automatic docking towards heave compensated gangway bridge/king
- Synchronized lift and gangway control systems
- · Direct access to/from storage area, weather deck

Control System:

- Kongsberg K-Walk Control System is specially designed for gangway operations and is fully redundant
- The controller unit contains two powerful control computers and I/O units to provide an interface to motors, instruments, sensors and dual LAN interface for other Kongsberg Systems
- The Gangway Control System is designed for seamless integration with Kongsberg Dynamic Positioning system, K-Pos and Vessel Control system, K-Chief by means of network connections

Integrated Operator Environment and Dedicated Gangway Views:

- Single window operational environment
- · Innovative levers and touch solutions
- Adjustable and retractable screen and seating positions for total viewing
- Gangway view with status, sensor, reference and position information

Certification:

Designed to DNVGL-ST-0358 Certification of offshore gangways for personnel transfer - Edition December 2015

Specifications subject to change without any further notice.

