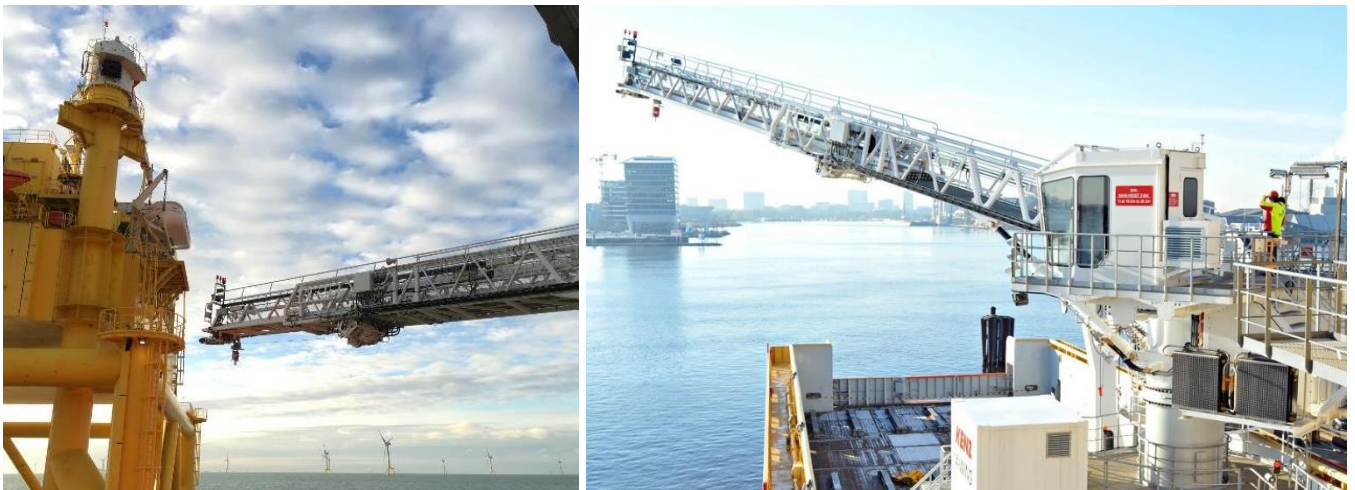


3D ACTIVE MOTION COMPENSATED GANGWAY



TECHNICAL SPECIFICATION

MAIN FEATURES:

- Gangway for safe personnel & cargo transfer
- Certified as a Type 2 gangway according to DNVGL-ST-0358 (December 2015)
- Certified for cargo transfer according to DNVGL-ST-0378 (May 2016)
- 3D Active Motion Compensation (AMC) by means of telescoping, slewing and luffing
- In Personnel Transfer Mode (PTM), connection is maintained by means of an intelligent bumper
- In Crane Hook Mode (CHM), 3D motion compensation offshore cargo transfer up to 1000Kg is achieved
- Redundant power pack located on the gangway
- Gangway can be operated by own crew

TECHNICAL DETAILS	
Reach	16.2m / 26.2m
Working angles	+20deg / -20deg (PTM)
	+50deg / -20deg (CHM)
Operational wave height*	$H_s = 3m$
Weight	49t
	20m/s (in operation)
	36m/s (for deployment)
Wind speed	44m/s (in transit)
	-20°C / +40°C (with relative humidity up to 100%)

*Assuming a reference vessel
($L_{pp} = 85m$, breadth = 20m)
and the gangway midships.

3D ACTIVE MOTION COMPENSATED GANGWAY

WORKING PRINCIPLE

The gangway has **3DOF Active Motion Compensation (AMC)**, the tip of the gangway is kept stationary by compensating vessel-induced motions by means of telescoping, slewing and luffing. Vessel induced motions are measured by an Octans Inertial Navigation System (INS) placed on the vessel. This INS combines data from a Motion Reference Unit (MRU) with data received from the vessels Differential Global Positioning System (DGPS) to get a very accurate measurement of each motion.



The tip of the gangway is kept stationary by compensating the measured motions by means of telescoping, slewing and luffing. This ensures easy docking with the intelligent bumper.

The bumper requires a very low contact force, thus has a minimal impact on e.g. the landing platform and the vessel DP system. Furthermore, the bumper provides an additional feedback signal to improve the 3D motion compensation. This results in a far higher compensation accuracy compared to systems which only rely on a MRU signal.

WORKING RANGE

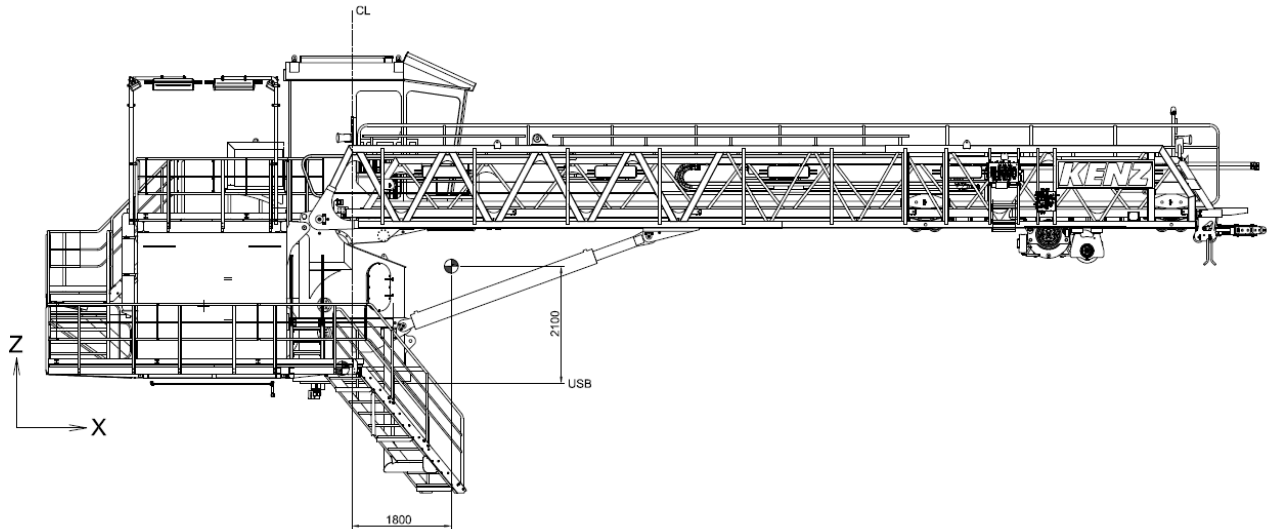
- Minimum gangway outreach: 16.2 [m];
- Maximum gangway outreach: 26.2 [m];
 - Thus the total stroke of telescopic motion is 10 [m];
- Minimum gangway working angle: 20 [deg] downwards;
- Maximum gangway working angle:
 - 20 [deg] upwards (PTM);
 - 50 [deg] upwards (CHM);
- Unlimited slewing due to application of a slip ring.

3D ACTIVE MOTION COMPENSATED GANGWAY

WEIGHT AND COG

The total weight of the gangway, from the slewing bearing and up, is 49.3 [tonne].

The center of gravity (COG) is located at 1.8[m] forward from the gangway center line (CL) and 2.1[m] above the underside of the slewing bearing (USB) as shown in Figure 2.



ADDITIONAL FEATURES

- Designed for a utilization of > 4 million cycles and 100.000 hours (U9/T9 according to ISO 4301-1; Intensive use)
- Redundant power pack (2x 100% power)
- Enclosed air-conditioned cabin (ventilation/heating)
- LED lighting
- Fail safe Siemens PLC with class 3 Safety Integrity Level (SIL)
- Camera system with four cameras: two on tip for docking (forward) and hoisting (downward), one on the bridge and one on the waiting area
- Unlimited slewing by means of a slip ring
- Portable X-wing foundation for maximum deck space

SCOPE OF SUPPLY

- 1 x KenzFige AMC Gangway as in current and good working condition
- 1 x X-wing structure (optionally)
- 1 x MCC container which includes electrical equipment
- Lifting slings
- Available spare parts as currently available (list will be provided)

LOCATION

- Located in South-East Asia

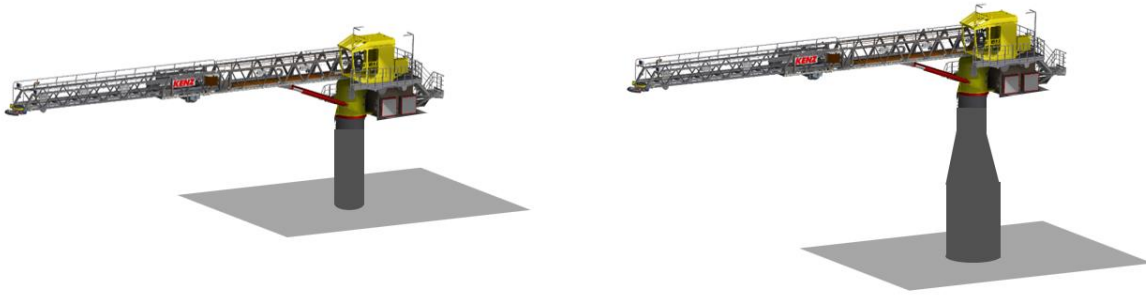
YEAR OF MANUFACTURING

- 2024

3D ACTIVE MOTION COMPENSATED GANGWAY

ADDITIONAL SERVICES, INTEGRATION AND DOCUMENTATION

Additional services for integration to your vessel can be offered. The Gangway is easy to mobilise on existing vessels where we can design & manufacture a suitable pedestal for your vessel/project. We can design different adapter pieces, so you can utilise for different landing heights. We can also add the stairs.



Further technical details of the offered system can be provided at request, such as :

- General Arrangement of gangway
- Technical Description
- Operating Manual
- Utility datasheet
- Weight and CoG
- Track record

PICTURES

Picture of typical equipment currently located in South East Asia



3D ACTIVE MOTION COMPENSATED GANGWAY

Typical Gangway installed on Platform supply vessel



Typical Gangway installed on Platform supply vessel



3D ACTIVE MOTION COMPENSATED GANGWAY

Gangway in Cargo Handling Mode



Typical Gangway installed on large Construction vessel

