Z-Bridge

Bring-to-Work System

“Right sizing Offshore Access”

Safe and efficient Crew Transfer and

Cargo Hoisting in one solution

Z-Bridge
Bring-to-Work system

The Bring-to-Work (B2W) system is developed by Z-Bridge Offshore Access Solutions, with the objective to continue the improvement of safety and operational efficiency in offshore access and cargo transfer. Our mission is to provide our clients with the opportunity to save considerable costs by using smaller vessels while maintaining equal workability.

The B2W system is designed, constructed and tested in compliance with the Bureau Veritas rules for certification of Offshore Access System; this includes a full system FMECA, performed under the supervision of an independent third party. The B2W is the lightest system available in the market that provides direct access to height; able to operate from 10 up to 22 meter above the vessels deck. Weighing only 27.5 mT, the system is suitable to operate from a CTV, mini SOV or an normal SOV / DP2 vessel. The B2W system can also be used as a fully motion compensated crane.

The Bring-to-Work system consists of the following main components:

- Base frame, with tilting compensation and the slewing ring;
- Main boom, with luffing cylinders to the pedestal;
- Telescopic boom, with the landing head for personnel transfer.
- An additional hoisting JIB can be mounted to increase vertical reach during cargo transfer;

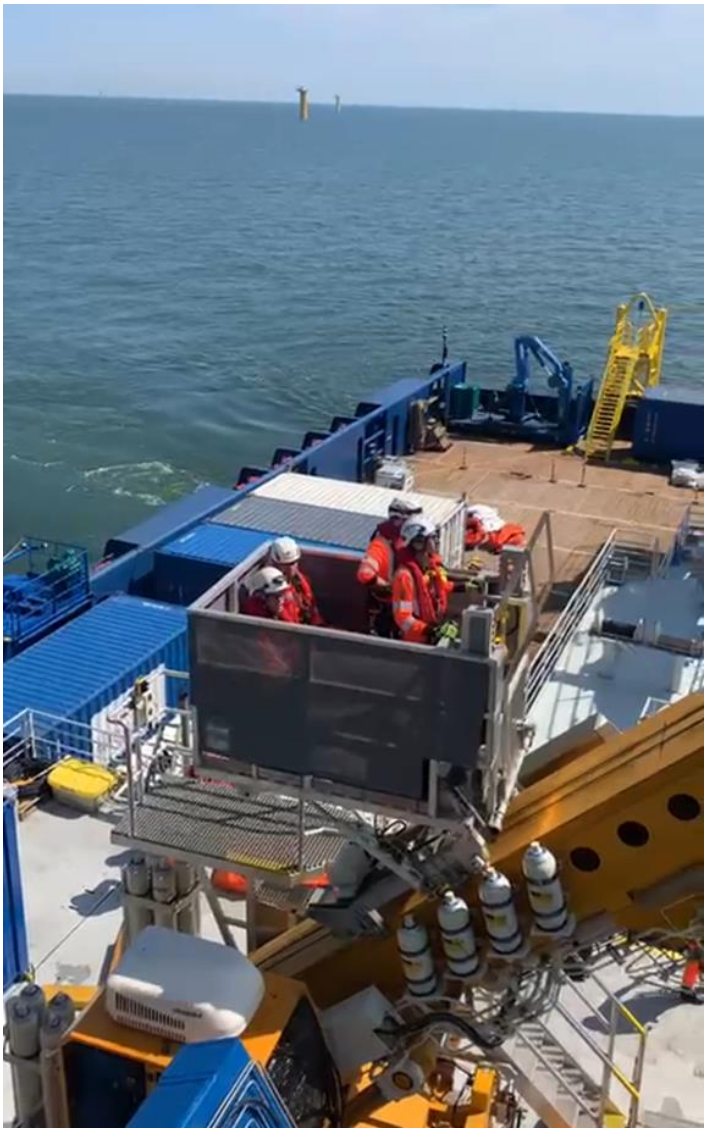
Mobilisation: The B2W system can be mobilized as a modular unit on the deck of any suitable vessel or be mounted on a deck pedestal for a permanent setup. The system can be transported by road transport and hoisted with an 150mT mobile crane.

Being hydraulically driven, the power can be supplied by an integrated unit in the vessel or from a separate HPU, possibly mounted under the boom. This makes the complete footprint of the system on deck only 4.3m x 18m.

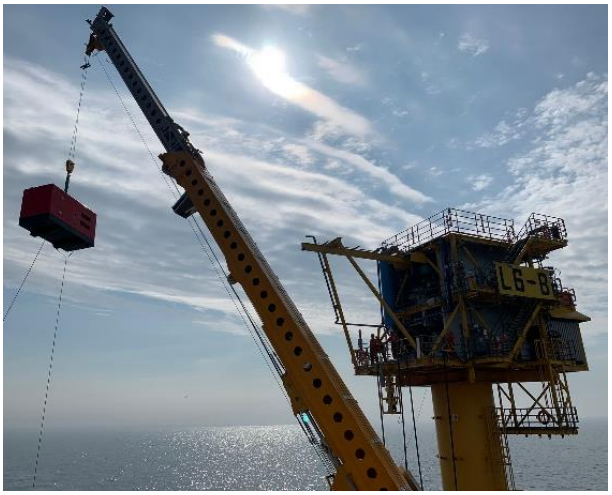
Z-Bridge
Bring-to-Work system

Operation: the vessel is positioned near the offshore structure, in such heading that the roll motion is minimized. Alternatively; a CTV can be pushed-on to the TP.

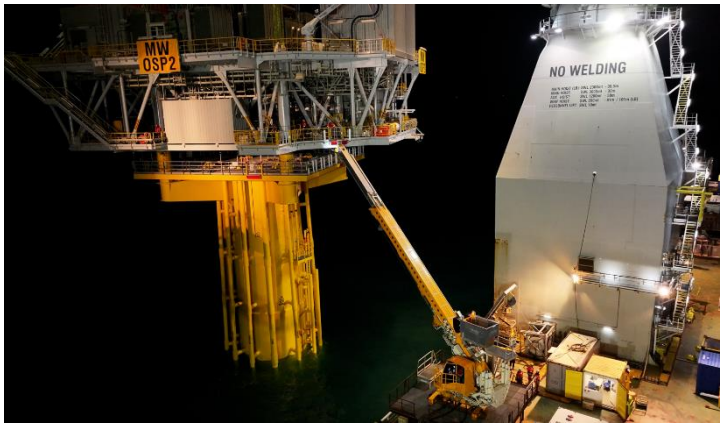
Personnel transfer: The boom is lifted out of the pedestal, slewed towards the offshore structure and the motion compensation is activated- keeping the tip stationary. The tip is pointed towards the landing spot and the telescopic part is extended until a safe connection is made. "Free run" is automatically activated, maintaining a constant push-on force to the landing beam. Next 6 persons enter the trolley, which travels over the boom. When the trolley arrives at the tip the transferees can disembark on to the offshore structure. The Return trip is equal in opposite direction. This process takes around 6 minutes.



Cargo Transfer: The vertical reach of the crane functionality can be extended with an optional JIB. This can be installed within 8 minutes. The boom is lifted out of the pedestal and the telescopic boom half-way extended. The hook is positioned over the load on deck and the load is hooked on. The load is hoisted up and the motion compensation directly engaged – the tip is now stationary, as well as the load. The boom is slewed towards the offshore structure and the load positioned over the lay-down area. The load is laid down and un-hooked. Hoisting back to the vessel is done in opposite operation.



Z-Bridge
Bring-to-Work system



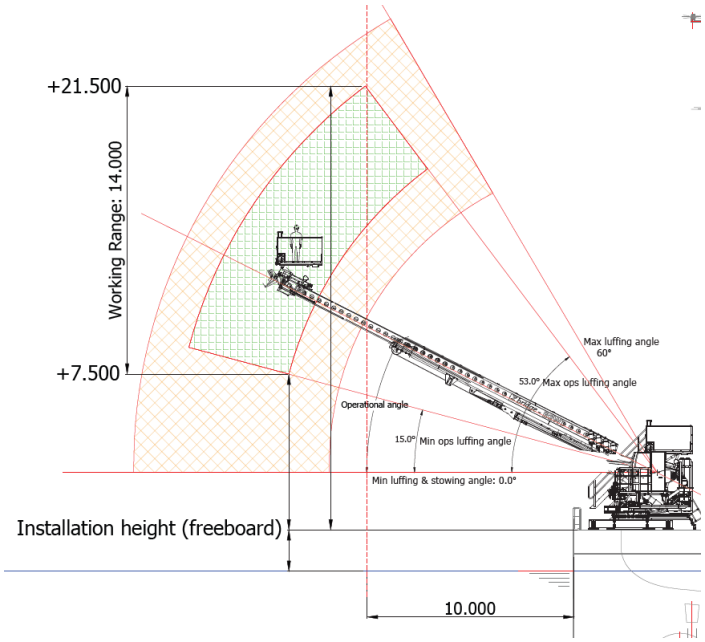
Vessels: The Bring-to-Work system allows it to be installed on smaller vessels. This makes it extremely suitable for the so called mini SOV's and large CTV's. The possibility to right-size the vessel for the project scope will allow our clients to perform any project scope with a fit for purpose project set-up as well as having the highest flexibility on landing heights. The fluent combination of personnel transfer and cargo hoisting makes the Bring-to-Work system a unique asset adding critical value to the entire operation. The benefits of the Bring-to-Work system:

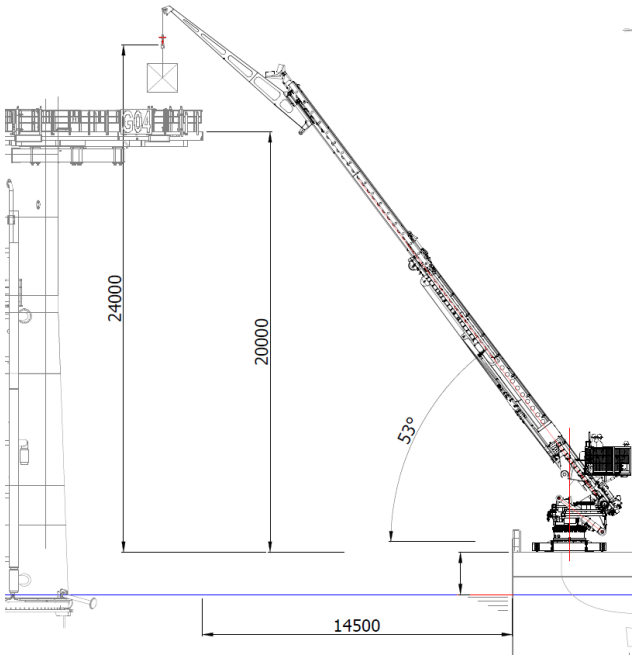
- Small foot print,
- Flexible landing height,
- Able to reach height without Substructures
- Personnel and cargo transfer in the trolley and a hoisting function in one solution.

Are also applicable for larger vessels as CSOV's and Heavy Lift Vessels. Deck space is always a challenge on these vessels. With the B2W system no big substructures are required to reach height and any tidal difference can easily be covered.

Z-Bridge
Bring-to-Work system

Windspeed	operational	20 m/sec
	stowed (sea fastened)	44 m/sec
Temperature	ambient min/max	- 20/+40 Celsius
Wave frequency		6 – 15 sec
Pitch	Operational /Maximum	+/- 6 / 8 degrees
Roll	Operational /Maximum	+/- 6 / 8 degrees
Heave	Operational /Maximum	2,0 m / 2,2 m
Landing height	Max landing height above deck	21,0 m
	Min landing height above deck	10,0 m
Minimum safety distance	vessel to offshore structure	10 m distance
Safety margin telescoping	both sides of telescope stroke	1 m
Transfer capacity	Persons in trolley	Up to 6 Pax
	Cargo in trolley	1000 Kg
	Hoisting single wire*	1,6 ton SWL
	Hoisting double wire*	3,0 ton SWL
*at 50% of operational motions	Hoisting jib (optional)*	1,6 ton SWL





Z-Bridge
Bring-to-Work system

Bring-to-Work Key features :

- Safe and efficient Crew Transfer & Cargo Hoisting in one solution:
- No climbing, Transferring teams of 6 persons per transit
- Shortening visits times
- Direct access from deck +21,5m
- High vertical landing range, no in-project adaptations needed
- Light weight, low COG, Small footprint
- Efficient medivac in trolley
- 3 ton SWL Hoisting capability
- 1,6 ton SWL Hoist with 8 m Jib extension
- Fits on **all vessels** from CTV to HLV and all Mini-SOV's and CSOV in between.

Cost efficient, possibly reducing major cost drivers:

- Crew transfer & Hoisting in one solution
- Right-size operations with smaller vessels
- Reduce fuel consumption and CO2 emission
- Save time by personnel and cargo transfer in 1 operation
- Quick & easy mobilization around the world

SAFETY SYSTEM CERTIFICATION DNV ISO 45001
ENVIRONMENTAL SYSTEM CERTIFICATION DNV ISO 14001
QUALITY SYSTEM CERTIFICATION DNV ISO 9001

Z-Bridge B.V | 2de Havenstraat | 1976 CE IJmuiden | The Netherlands

Tel : +31 (0)255 526286 Email : Info@Zbridge.nl Website : www.Zbridge.nl