

**Zbridge**

Founded in 2017

Number of employees: 4 fte

[www.zbridge.nl](http://www.zbridge.nl)

**Offshore Wind**  
**innovators**

## Zbridge makes people walk back and forth safely at height

The transfer from vessel to wind turbine is always a dynamic event. [Zbridge](#) has developed a revolutionary construction amongst all Walk to Work systems (W2W): a twenty-meter-high mast that continuously remains stationary and with an extendable walkway that presses against the wind turbine. This allows continuous access without undocking. The personnel can safely walk up and down with waves up to 4 meters high and wind force 7. In many cases this results in a workability of close to 100 percent.

### FOR WHAT PROBLEM HAVE YOU FOUND A SOLUTION?

“The efficient transfer of people and goods from a ship to an offshore location is a major challenge especially for offshore wind turbines. During the installation and maintenance of an offshore wind farm, installation contractors and park owners want to execute the work as efficiently as possible. Since Ampelmann introduced the motion compensated gangway system, the industry accepts W2W systems as an access solution. Increasing efficiency is the next step. Existing systems are not designed to transfer a constant flow of people and goods. Some systems have to be disconnected in order to put people back on the system, while other systems are partly compensated. The Zbridge remains fully motion compensated while people are transported with a lift to go on or off the turbine via the gangway.”

### WHAT IS THE CORE OF YOUR SOLUTION?

“Zbridge is a modular unit that consists of a telescopic walkway attached to a mast with a cardan axis. This is an axis that rotates in two planes, preventing movements of the boat from being transferred and amplified in the mast. As a result of the cardan axis, the mast remains stationary and the telescopic speed of the gangway remains below the acceptable 1 m/s. During the past project we were able to work with wind force 7 to wave heights up to 4 meters. The walkway can reach a height of 20 meters high. The staff and the goods go up comfortably with a lift at the backside.”



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### WHAT IS SO PIONEERING TO YOUR SOLUTION?

“Keeping the mast steady with the cardan axis is the innovative part. All Roll & Pitch movements are constantly compensated. In other systems, people and goods must first be in place before the gangway compensates for the movements, or all ship movements are compensated at the top of the mast. Thanks to the cardan axis, the ship movements are continuously compensated. This is particularly useful, for example when people or materials have to be transferred several times in succession, or during short interventions on a turbine.”

In addition, the working height is special. Without the use of a subframe, we can operate all common turbines. On average, the work platform of a wind turbine is 15-22 meters above LAT (the lowest water level); the Z-bridge is able to manage this.”

### WHAT ARE THE BENEFITS OF YOUR SYSTEM?

“The operational system in England has achieved a very high workability during the winter season with the worst weather conditions. The Zbridge has not once been the limiting factor during this operation. Our system is modular and fits every vessel. No adjustments are necessary, such as raising the deck. This makes it easier and cheaper for vessel owners, builders or park owners to mobilize our system. Furthermore, our hydraulic system is balanced such that the diesel consumption is the lowest of all systems. We have kept the operating interface of the Zbridge system as user-friendly as possible. After an intensive training, our customer’s operators can operate the Zbridge themselves. This benefits the efficiency. “

### HOW FAR ARE YOU NOW?

“We now have one system that we rent to the Norwegian shipping company Østensjø for the Ørsted Racebank wind farm. Their operators operate it themselves and that goes very well. We have a large network within the industry.



*Not even once the Zbridge has been a limiting factor during the operation in England.*

The interest is great. If we had a second Zbridge, it could start immediately. We have already spoken with park owners, ship owners, wind turbine suppliers. Our current track record certainly contributes to this.”

### WHAT ARE YOUR CHALLENGES?

“We currently face two challenges. The first is how we can grow our business. Finding the right partner for financing is a task. Besides the rental, we also sell our system. It’s logical that if you invest in a W2W vessel, you eventually also want to buy a W2W system. That is our second challenge: continue to

develop the current product. Our design team has come up with a suitable concept for dedicated W2W vessels with integrated systems, this concept will be presented to the market soon. Everything in line with our current compensation system.”

### WHAT ARE YOUR NEXT STEPS?

“In a year’s time, we hope to have two extra systems running. We listen carefully to what the customer asks; whether they want a bigger system, heavier or lighter. And in the meantime we continue to focus to optimize workability, reliability, technology and operation. “

### WHAT IS THE ADDED VALUE OF OFFSHORE WIND INNOVATORS?

“Martin Weissmann of [Offshore Wind Innovators](#) has pointed us to the investment programs of the province. We were not aware of these possibility. Within two weeks we had an appointment to present our company. They are now helping us preparing for a financing process. That is why the [financial services](#) offered by Offshore Wind Innovators also appeal to us.

In addition, it is always good to enlarge your network. We want to talk to all parties involved.”



*In a year’s time, Zbridge hopes to have two extra systems running.*