



Worldwide Lifting, Drilling and Subsea Solutions



## Wind Turbine Installation Cranes

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Heavy Lift Vessel Rambiz



Jackup Vessel Kraken



Floating Sheerleg Taklift 4



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## Wind Turbine Installation Cranes

Huisman, the world's biggest supplier of heavy lift marine cranes, has designed a range of customised Wind Turbine Installation Cranes for the efficient installation of current and future wind turbines.

### Our Company

Huisman is the worldwide operating specialist in lifting, drilling and subsea solutions. The privately owned company, founded in 1929, has an extensive experience in the design and manufacturing of heavy construction equipment for world's leading on and offshore contractors and shipping companies. With facilities in the Netherlands, Czech Republic and China, Huisman is able to deliver high-quality, custom-designed and innovative equipment. The complete design, engineering, production, commissioning and testing of the equipment can be done in-house on a turnkey basis. Furthermore our Dutch and Chinese facilities are easily accessible for seagoing vessels and both have heavy lift capacity available. This allows for installation, commissioning and load testing of the equipment onboard the designated vessel on a lump sum basis.

The company's in-house developed and manufactured heavy lifting equipment is widely used within the industry for over 30 years and has become a standard in the design and construction of heavy lift cranes. This has resulted in a world market leadership for heavy lift cranes above 600mt capacity.

Cranes currently used for wind turbine installation and delivered by Huisman include the 2x 800mt and 1x 1700mt A-frames onboard Scaldis' Multipurpose Heavy Lift Vessel Rambiz; the 1,600mt sheerleg Taklift 4 owned by Smit, the 300mt cranes onboard Seajacks' Kraken and Leviathan and the 900mt cranes onboard Jumbo Offshore's Javelin and Fairplayer. Two 750mt cranes, planned to be used for a large wind turbine installation project, are currently under construction for Master Marine.

## Wind Turbine Installation Cranes

Currently, the product range of heavy lifting equipment has been expanded with a customised range of Wind Turbine Installation Cranes. Building on the successful operation of the existing Huisman equipment for the installation of wind turbines and the increasing demand for customised equipment by the fast growing market for renewable energy, Huisman has now designed a range of customised cranes.

The new designs for Wind Turbine Installation Cranes are a result of many years of design and operational experience and based on our drive to design and deliver new solutions that add value to the market's existing technologies. In addition to the low construction weight, small footprint and minor tail swing of the existing Huisman cranes, additional value-added features are the extensive lifting height, the small operational minimum radius and the possibility to install the crane around the leg of the jack-up. All these features make these cranes very suitable for installation on jack-up vessels. The cranes can be outfitted with additional features to ensure a safe installation procedure at high elevations. The customised crane range includes Pedestal Mounted and Heavy Lift Ringer Cranes.

## Design

As part of our design philosophy, we have a strong focus to build cranes with low maintenance levels. All major components are installed inside the crane wherever possible. This offers good protection from the harsh marine environment. Huisman prefers to use fully electric driven cranes. These cranes are more reliable and use much less components than hydraulic driven cranes. The advantages being that there is no need to exchange hydraulic hoses after a few years of operation and the noise level of the crane is very low compared to hydraulic cranes. Also the interface with the vessels is very simple; the crane only needs power supplies.

A large design and engineering department is available to optimize the design by using their long term experience and state of the art software. To minimize the weight high tensile steel (yield strength 690 MPa) is used for the crane structure. Our in-house production facilities enable us to deliver this kind of high-level products.

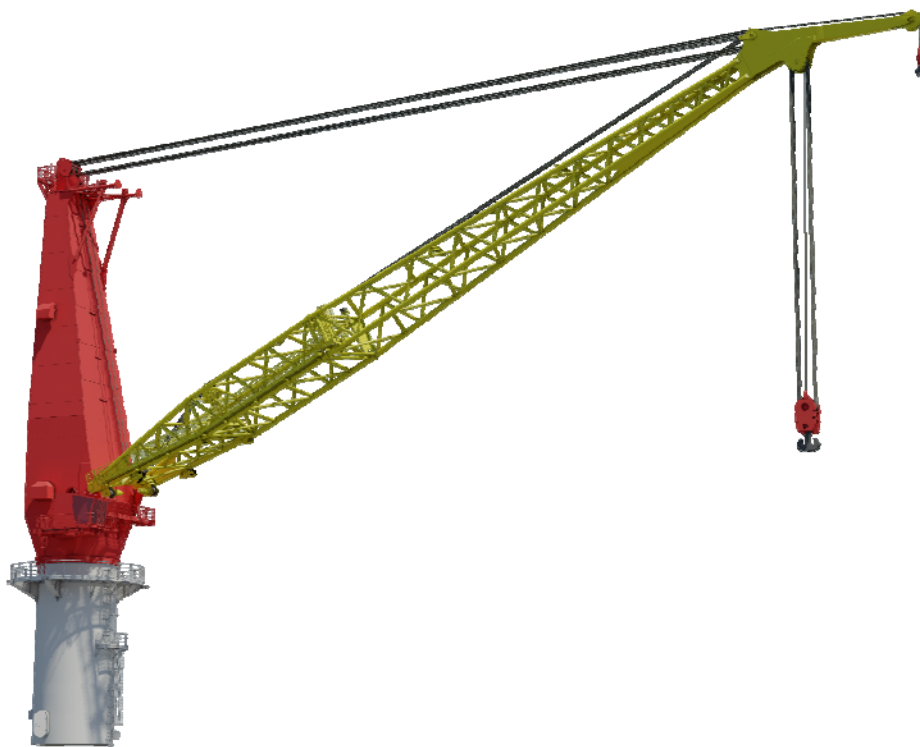
The cranes can be designed and built in accordance with international standards and certified by recognised authorities such as LRS, GL, DNV and ABS.

## Pedestal Mounted Cranes

The range of Pedestal Mounted Cranes includes designs in the capacity range between 500mt and 1200mt. The cranes shall be installed on top of a pedestal which will be designed to meet with the vessel structure. The cranes are outfitted with a roller slew bearing which reduces the required amount of maintenance. The use of a slew bearing makes it possible to build the crane with a small footprint, a small minimum operational radius and a minor tail swing. On a jack-up vessel these features are crucial since available deck space is often limited.

To improve the workability of these cranes Huisman has designed cranes which can be installed around the jack-up leg. This means that the presence of the jack-up legs is no longer an obstacle to transfer loads from the deck to outboard locations.

Lifting heights of the cranes go up to 125m from deck level and more.



### Heavy Lift Ringer Cranes

Heavy Lift Ringer Cranes can be delivered in the capacity range between 1200mt and 1600mt. The cranes will be outfitted with "bogie systems" which run over the pedestal ring. The design of these cranes allows the passage of a jack-up leg up to 12m diameter, so also with this type of crane the legs are no longer an obstacle to transfer loads. This size of lattice-type legs are required for vessels that operate in deeper water and carry more payload.

The design of the crane is based on our Platform Twin Ring Containerized Cranes, which are very successfully operated by Mammoet all around the world, and the A-frames onboard Scaldis' Multipurpose Heavy Lift Vessel, Rambiz

Lifting heights of the cranes go up to 140m from deck level and more.



### *Wind Turbine Installation Cranes*

#### Contact

More details of this type of cranes are available at our sales department. Based on your specific requirements we are able to provide you a customised design which will fully meet your needs.

[www.huismanequipment.com](http://www.huismanequipment.com)