Dutch Ocean Technology Centre

Hexapod

Need for unique experimental facilities

Challenge

 Lack of experimental testing facilities for Ship & Offshore structures under realistic operational conditions;

 Missing validated models for multiaxial fatigue lifetime estimates



How

- Realize the Hexapod facility capable to apply realistic operational loads on structural components and details;
- Perform experiments of structural details subjected to multiaxial loads using the Hexapod
- Develop the model.

Impact

- The Hexapod is operational as a DOTC facility in the laboratory of TU Delft. It can apply realistic complex loading up to 100 tonnes capable of speeding up experimental fatigue life time assessment with a frequency up to 30 Hz;
- More reliable lifetime prediction of Ship & Offshore structural details under complex loads













