

Abstract

This thesis aims to answer the following questions: *‘How is a jack-up structure constructed?’* and *‘Which location specific capacities of a jack-up structure are tested prior to a project and how is such an assessment made?’*.

This is done on the basis of an extensive literary study and by conducting interviews. The first research question outlines an explanatory framework that is needed when answering the second research question. The evolution, through which the structure has gone, is cited. The documentation that applies to the structure is also discussed. As an answer to the first research question, it is explained, step by step, how a jack-up structure is constructed. A distinction is made between the different components that a jack-up structure consists of.

The inspections and maintenance of these special maritime structures are also discussed. Followed by the operational risks inherent to projects carried out by jack-up structures.

After answering the first research question, it was investigated which location assessments are carried out prior to a project. During this assessment, it will be checked whether the location-specific capabilities of the jack-up structure are sufficient to carry out the specified project.

This thesis ends in a conclusion.