

A cost-effective analysis for DP3 cable routing of drillship through an LCA and LCCA

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Abstract

When designing the cable way of ships, the main ways are firstly decided effectively according to the arrangement of equipment in each room. After finishing the main ways, branch cable ways are decided from the main way to final equipments or between equipments directly.

However, there are no standard for connecting cables between equipments, whether cable should be installed using the existing main cable ways or should be installed a new cable ways directly. Generally, it is determined by the designer's experiences and judgments.

Therefore, this project is to optimize the DP3 cable way arrangement of drillship using Life cycle cost analysis(LCCA) and Life cycle assessment (LCA).

Research findings are expected to give us insight to general decision-making in designing the branch way of the cable way between equipment for all ships and all areas.

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