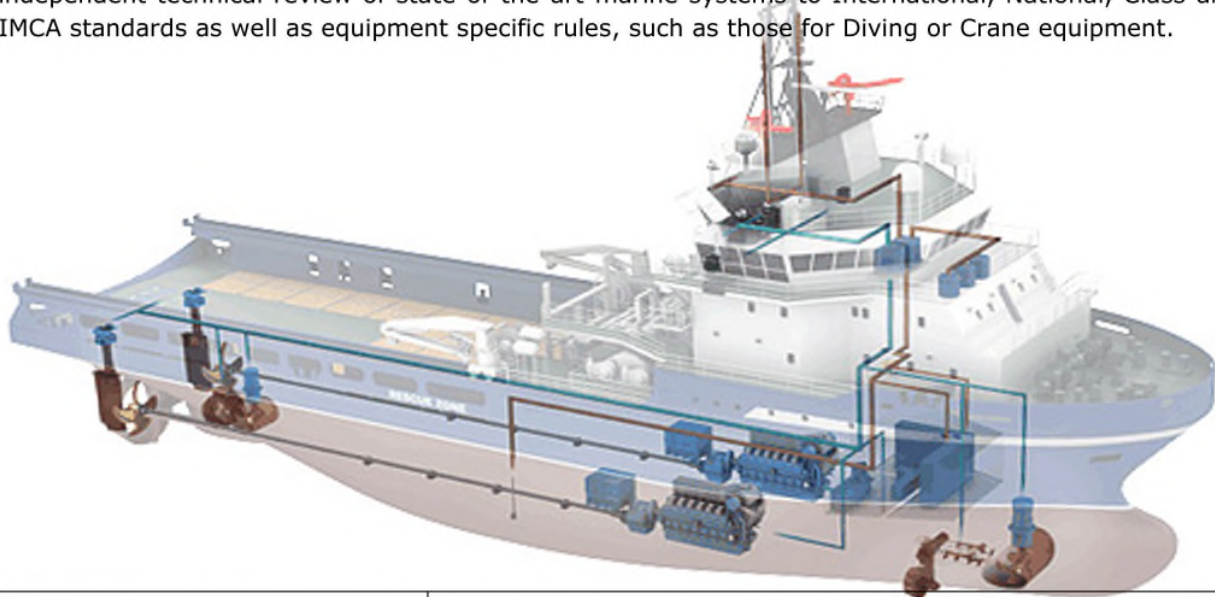


**Marine Consultants & Engineers (MCE)**, is an independent marine and engineering consultancy, with strong focus on **Dynamic Positioning Services** both in assurance and in FMEA and FMECA services. Using a core team of highly qualified individuals working to exacting standards, MCE provides independent technical review of state-of-the-art marine systems to International, National, Class and IMCA standards as well as equipment specific rules, such as those for Diving or Crane equipment.



DP review and audit	Vessel specific study and analysis of risk for individual tasks. Such desktop study may include shuttle tanker bow loading systems, gangway systems, pipelay systems, diving systems, and drilling systems
Equipment analysis	Based on stringent criterion, we identify the safest operational procedure for various specific operations executed by DP vessels.
FMEA/FMECA Failure Modes and Effect Analysis/Criticality Analysis	Verify and ensure that design criterion meet exacting industry standards. Trials are designed and executed to ensure compliance with these benchmarks. Rectification measures for worst case failure of DP systems evaluated.
DP vessel conversion and upgrade studies	Based on client requirements, gap analysis is undertaken to ensure that design criterion meets intended requirements. Components sourced from various vendors analysed to ensure stability and balance under dynamic operating conditions.
Vessel capability plots	Vessel theoretical operability assessments for both damaged and intact load cases based on required environmental load cases. These plots can be developed both to clients' specific needs and to the IMCA 140 rev 1 criteria
DP operation manuals	Vessel specific DP manuals meeting IMCA and client guidelines developed and existing manuals reviewed
DP operator competence assessment and verification	Competency compliance studies based on IMO and IMCA guidelines
DP drift off and drive off studies	Analysis to identify time constraints in loss of position based on operational context (operational watch circles)
Design reviews	Design reviews from high level HAZIDs through to conceptual and detailed engineering

