

Dynamic Positioning Systems (DPS)

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Parts B, and P
Guidance for the Survey and Construction of Steel Ships Part P

Reason for Amendment

At the 63rd session of the IMO Maritime Safety Committee (MSC 63) held in May 1994, guidelines specifying international standards (including equipment requirements and functional requirements) for dynamic positioning systems were approved as MSC/Circ.645, and some of the requirements of the guidelines were subsequently incorporated into the NK Rules.

The aforementioned guidelines remained unchanged up until 2017 when they were revised by the IMO so as to reflect the advances made in dynamic positioning system related technologies in the years since their adoption. The updated guidelines were approved as MSC.1/Circ.1580 at the 98th session of the IMO Maritime Safety Committee (MSC 98) in June 2017.

Accordingly, relevant requirements were amended based upon MSC.1/Circ.1580.

Outline of Amendment

- (1) Amended category names for of dynamic positioning systems from Class A, Class B and Class C to Class 1, Class 2 and Class 3 respectively.
- (2) For the Failure Modes and Effects Analysis (FMEA) required for Class 2 DPS or Class 3 DPS, clarified requirements related to the following.
 - plans and documents to be submitted
 - the various work stages at which surveyor presence is required
 - documents to be maintained on board
 - survey details
- (3) Amended the definition of “worst failure condition” for each category of dynamic positioning system.
- (4) Amended requirements regarding the components (e.g. power systems, thruster systems, dynamic positioning control systems, computer systems, position reference systems, vessel sensors, cable and piping systems, independent joystick systems) comprising dynamic positioning systems.
- (5) Clarified items to be specified in the operating manuals of dynamic positioning systems.
- (6) Specified requirements regarding the training and practical experience of personnel engaged in the operation dynamic positioning systems.

Amended Requirements

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Part B: 12.2.2, 12.2.3, 12.2.5, 12.3.2, 12.3.3, 12.5.2, 12.5.3, 12.6.2, 15.2.2, 15.2.3, 15.2.5, 15.3.2, 15.3.3, 15.5.2, 15.6.1

Part P: 10.1.2, 10.2.3, 10.7, 18.2.16

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Part P: P1.1.6, P10.1.2, P10.2.3, P10.3.1, P10.7.1, P10.7.5, P10.7.6, P18.2.2, P18.2.16