

Electrical Installations of Electric Propulsion Ships

Amended Rules and Guidance

Rules for the Survey and Construction of Steel Ships Part H

Guidance for the Survey and Construction of Steel Ships Part H

Reason for Amendment

In recent years, an increase in the number of studies regarding the use of electric motors as the main propulsion devices of ships has led to the introduction of many new design types. Electric propulsion ships offer many advantages such as improved ship control when entering (leaving) harbours, increased efficiency of propulsion plants, expanded cargo capacities due to the compact design of engine rooms, etc.

Therefore, the further technological development and the usage of these systems are expected to become even more widespread from this point on.

In response to this, a study of the effects of this latest technology on the electrical installations of electric propulsion ships was undertaken. As a result, the relevant requirements have been amended to reference IEC standards.

Outline of Amendment

- (1) Requirements related to the THD (Total Harmonic Distortion) of electric propulsion systems are provided.
- (2) Necessary conditions related to the relevant requirements regarding the construction, composition and safety precautions of the electrical installations of electric propulsion ships are provided.
- (3) Requirements related the Semi-conductor Rectifiers for Power of electric propulsion plants not unique to the requirements for electric propulsion ships are reorganized and moved to the chapter on General Requirements.