Excess Current Capability of Rotating Machines

Amended Rules

Rules for the Survey and Construction of Steel Ships Part H Rules for the Survey and Construction of Inland Waterway Ships

Reason for Amendment

Although the ClassNK Rules specifies requirements related to excess current capability of rotating machines which require the confirmation of an A.C. generator's ability to mechanically and thermally withstand the assumed excess current, these requirements make reference to the IEC standards in place when the requirements were established in 1963.

The IEC standard for rotating machines, however, has been subsequently updated since that time and the most recent version is IEC 60034-1. This version not only stipulates that the time required for an A.C. generator to have excess current capability is 30 seconds, but also stipulates requirements for the excess current capability of A.C. motors.

Accordingly, relevant requirements were amended with reference to IEC 60034-1.

Outline of Amendment

- (1) Amended the time required for A.C. generators to have excess current capability to 30 seconds.
- (2) Specified that A.C. motors are to be capable of withstanding a current equal to 1.5 times their rated current for not less than 2 minutes as the requirement for excess current capability.

Amended Requirements

Rules for the Survey and Construction of Steel Ships

Part H: 2.4.5

Rules for the Survey and Construction of Inland Waterway Ships

Part 8: 2.4.5