

Noise Abatement Measures for the Engine Room, Accommodation and Bridge Areas

With the "IMO Code on Noise Level on Board Ships" adopted with Resolution MSC.337(91) on the 30.11.2012 noise pressure level limits in dB(A) for the engine room, accommodation and bridge areas are mandatory under SOLAS. The IMO Code in German language has been published on the 24.01.2014 in the Federal Law Gazette (Verkehrsblatt - Dokument Nr. B 8140).

1. Diesel engines

The noise level in engine rooms is largely determined by the main and auxiliary diesel engines. The limit of 110 dB(A) and the NR curve 105 are not to be exceeded at any test point in the engine room area with measurements being taken in accordance with DIN 80 061 (noise measurement on vessels). It should be noted that the noise level is not the same as that of the individual diesel engine as measured on the test bed.

The noise level is significantly influenced by the shape of the engine room, by installation of a further main engine in the case of two engine power plants and by the mounting of the auxiliary diesel engines. In Dienststelle Schiffssicherheit experience, it can be assumed that the readings in the engine room will increase by at least 3 dB(A) and by 3 dB in the harmonic analysis, and in the case of double engine power plants by at least 5 dB(A) and 5 dB compared to the readings on the test stand, in all cases measured at a distance of 1.00 m.

2. Accommodation area

The crew and shipboard fitters shall be informed that when elastic elements (such as W-elements, bell type units, noise suppressing floor plates) are fitted, care must be taken not to impair their effectiveness. Structure-borne sound bridges, such as fixed supports and incorrectly laid screed, shall be avoided. If such bridges are discovered during noise tests, their elimination will necessitate extensive remedial measures.

The Accident Prevention Division of BG Verkehr/Department See reserves the right to make a final assessment of the new vessel on the basis of noise level measurements, in order to check whether the limits imposed in Section VIII have not been exceeded. A date for carrying out such noise level measurements shall be given to See-Berufsgenossenschaft in good time.

If the Accident Prevention Division of BG Verkehr/Department See does not intend to carry out noise level measurements, it will inform the shipyard in due time; the noise level measurements shall then be carried out by the shipyard or by a specialist firm, and the measurement report sent to BG Verkehr/Ship Safety Division.

In the case of new vessels, details of the noise abatement measures (acoustic insulation measures) are to be submitted to BG Verkehr/Ship Safety Division in accordance with the attached Appendix DE.15