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Shipbuilding — Side scuttles — Positioning

Construction navale — Hublots — Positionnement

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 5780 was prepared by Technical Committee ISO/TC 8, *Shipbuilding and marine structures*, in collaboration with representatives of the International Association of Classification Societies (IACS).

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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Shipbuilding — Side scuttles — Positioning

1 Scope and field of application

This International Standard specifies the allowable positioning of side scuttles to ISO 1751, applicable for passenger and cargo ships intended for international voyages.

Annexes A and B form integral parts of this International Standard. Annex A gives a formula for calculation of design pressure; annex B is based on the calculation method for design pressure, but presents simplified graphs for positioning of side scuttles.

2 References

ISO 1751, *Shipbuilding — Ships' side scuttles*.

International Convention on load lines, 1966 (LL 1966), International Maritime Organization (IMO).

Requirement S3, *Strength of end bulkheads of superstructures and deckhouses*, International Association of Classification Societies (IACS).

3 Conditions for positioning

3.1 General

The positioning of side scuttles shall be determined according to the rules and regulations of international conventions and codes, national authorities and classification societies.

3.2 Positioning

The position of a side scuttle on a ship depends on

- a) the position of the side scuttle relative to the length, L , of the ship and to the height, v , of its sill¹⁾ above the sum-

mer load line, S (see graphs Nos. 1 to 4 in annex B). Where timber load lines are assigned, the height shall be measured from the summer timber load line to the sill of the side scuttle;

- b) the nature and the orientation of the wall in which it is fitted, namely

- the ship's side below the freeboard deck;
- the fronts, sides and aft ends of superstructures and deckhouses.

3.3 Side scuttle position limitations

For positions where side scuttles shall not be installed, see 3.3.1 and 3.3.3, and where they shall be of non-opening type, see 3.3.2.

3.3.1 No side scuttle shall be installed in a position where its sill would be below a line drawn parallel to the freeboard deck on the side having its lowest point 2,5 % of the breadth, B , of the ship above the summer load line, S , (or summer timber load line if assigned), or 500 mm above the same load line whichever is the greater distance.

3.3.2 If the vessel is required to satisfy damage stability requirements, all side scuttles the sills of which are positioned below the final waterline in damaged condition and are fitted outside the spaces considered flooded shall be of the non-opening type.

NOTE — For detailed information, see the relevant requirements of the international conventions and codes given in the bibliography.

3.3.3 No side scuttle shall be fitted between the position as defined in 3.3.1 and 3.3.2 and the lower part of the curve derived from graph No. 1 (see annex B).

1) Sill is defined as the lower end of the glass opening.