
**Technical product documentation
(TPD) — General principles of
presentation —**

**Part 15:
Presentation of shipbuilding drawings**

iTeh STANDARD PREVIEW
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*Documentation technique de produits (TPD) — Principes généraux de
représentation —
Partie 15: Représentation des dessins de construction navale*

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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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2. www.iso.org/directives

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received. www.iso.org/patents

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

The committee responsible for this document is ISO/TC 10, *Technical product documentation*, Subcommittee SC 6, *Mechanical engineering documentation*.

ISO 128 consists of the following parts, under the general title *Technical drawings — General principles of presentation*:

- *Part 1: Introduction and index* [ISO 128-15:2013](https://standards.iteh.ai/catalog/standards/sist/bcfc267-bbfc-45c0-b743-490752451/iso-128-15-2013)
- *Part 15: Presentation of shipbuilding drawings* <https://standards.iteh.ai/catalog/standards/sist/bcfc267-bbfc-45c0-b743-490752451/iso-128-15-2013>
- *Part 20: Basic conventions for lines*
- *Part 21: Preparation of lines by CAD systems*
- *Part 22: Basic conventions and applications for leader lines and reference lines*
- *Part 23: Lines on construction drawings*
- *Part 24: Lines on mechanical engineering drawings*
- *Part 25: Lines on shipbuilding drawings*
- *Part 30: Basic conventions for views*
- *Part 34: Views on mechanical engineering drawings*
- *Part 40: Basic conventions for cuts and sections*
- *Part 44: Sections on mechanical engineering drawings*
- *Part 50: Basic conventions for representing areas on cuts and sections*
- *Part 71: Simplified representation for mechanical engineering drawings [Technical Specification]*

Technical product documentation (TPD) — General principles of presentation —

Part 15: Presentation of shipbuilding drawings

1 Scope

This part of ISO 128 specifies the presentation of shipbuilding drawings for general use on metal hulls.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 128-25, *Technical drawings — General principles of presentation — Part 25: Lines on shipbuilding drawings*

ISO 3098-2, *Technical product documentation — Lettering — Part 2: Latin alphabet, numerals and marks*

ISO 5455, *Technical drawings — Scales*

ISO 5457, *Technical product documentation — Sizes and layout of drawing sheets*

ISO 6428, *Technical drawings — Requirements for microcopying*

3 General principles

The rules of sizes and layout of drawing sheets given in ISO 5457 apply.

The rules of scales given in ISO 5455 apply.

The basic types of lines, their designations and dimensions as well as general for draughting of line given in ISO 128-25 apply.

The requirements for microcopying given in ISO 6428 apply.

NOTE All figures in this International Standard are in the first angle projection method. The third angle projection method could equally well have been used without prejudice to the principles established.

4 Presentation of drawings

4.1 Basic requirements

4.1.1 The drawings shall be made in orthographic projection.

4.1.2 On the drawings, the stern is to the left and the bow is to the right.

4.1.3 The name of view (identification letter) is indicated at the top of the drawing.

4.1.4 The layout of the drawing shall be presented clearly and concisely. For drawings of the entire vessel, generally, the side view is in the upper position of the drawing and plan view is in middle or lower position. For drawings of the block structure, normally, the side view (longitudinal section in centerplane, outer shell-plate developed view) is in the upper left or middle left and the plan view (platform, deck and bilge drawing) is in the lower left or middle left. The section and detailed drawings are located on the right side or another blank space on the drawings.

4.2 View

4.2.1 Basic view

The basic view is the drawing of hull and structure projected at basic projection planes. The basic views generally comprise of side view, plan view, bow view and stern view.

4.2.2 Directional view

The directional view is the drawing of hull and structure projected at certain direction. The projection direction and view name are expressed with identification letter symbol and capital Latin letter for directional view. See Figures 1 a) and c).

When the directional view is used to show that the structure is not in the same plane, the structure shall be developed to be in the same plane as shown in Figures 1 b) and c).

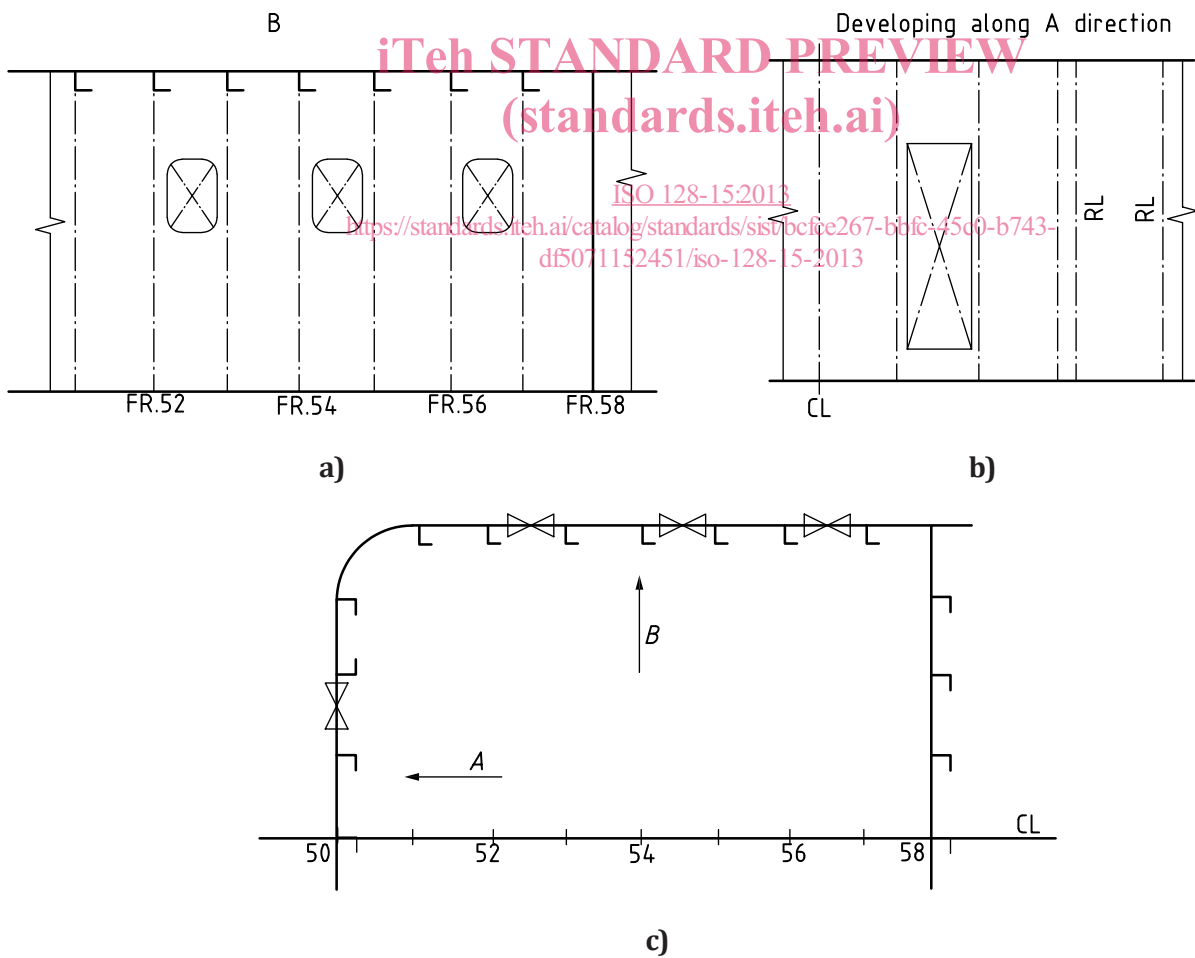


Figure 1

4.3 Sectional view

When the structure has symmetrical planes, it can be divided at the centerline of symmetry with one part shown by a sectional view and the other part by another view, such as a double-bottom plan view.

A partial sectional view can be used to show the part structure.

A breaking line or a wavy continuous line can be used as a dividing line between the sectional view and other views on the plan drawings. See [Figure 2](#).

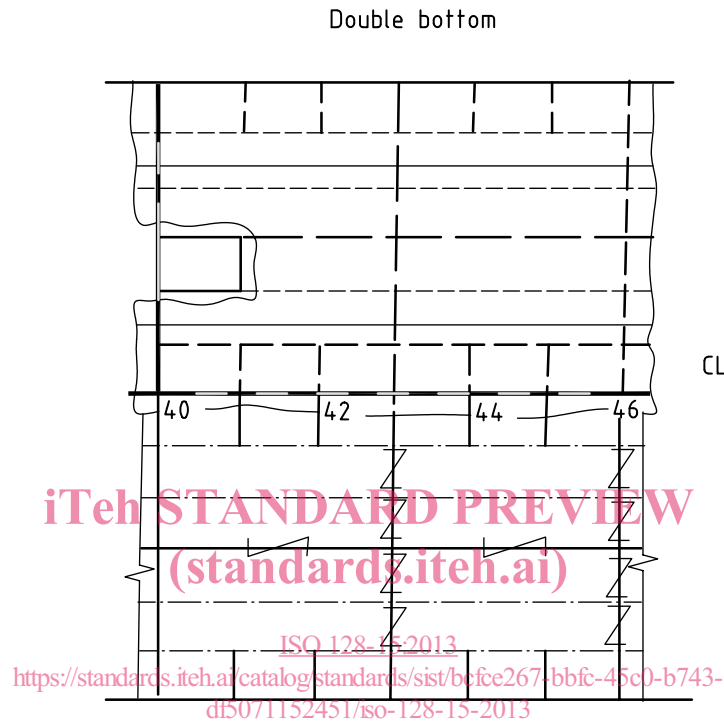


Figure 2

4.4 Section

4.4.1 Frame section

The frame section is the section used to show the structural form at the frame which is indicated by frame number and view symbol to show section position, section name and projection direction.

EXAMPLE $\xrightarrow{FR55}$ (indicating the section at frame no. 55, bow direction), $\xleftarrow{FR60}$ (FR61- FR65 similar) (indicating the section at frame no. 60 stern direction. The frame between no. 61-65 in the stern direction is similar). See [Figure 3 c](#)).

4.4.2 General section

The general section refers to the section at every other position except the frame, which is indicated by section symbol and capital Latin letter to show section position, section name and projection direction. See [Figures 3 a](#)) and b).

The section may also be drawn directly on the extension line (long-dashed dotted narrow line) of the section trace without any other indications. See [Figure 4](#). When necessary, it may be drawn with magnification scale.

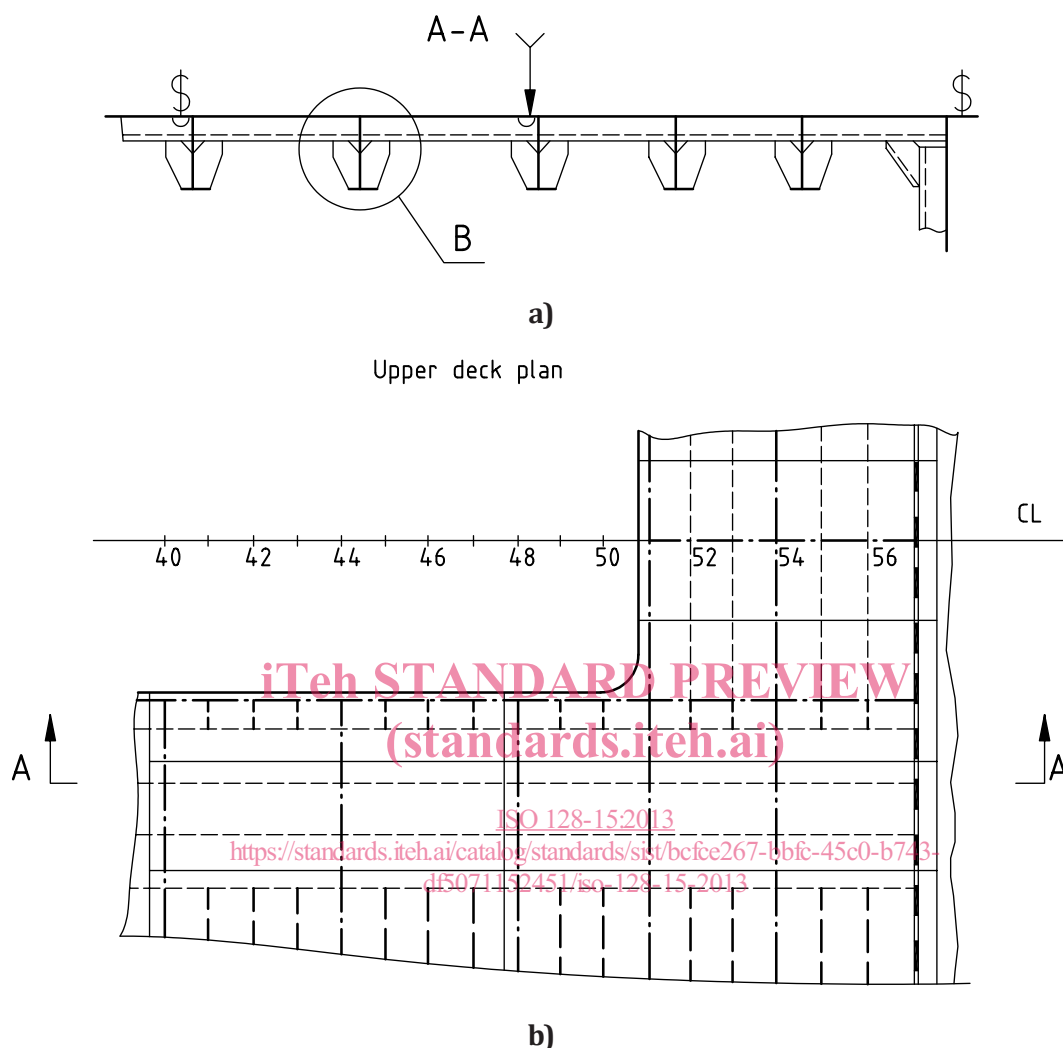
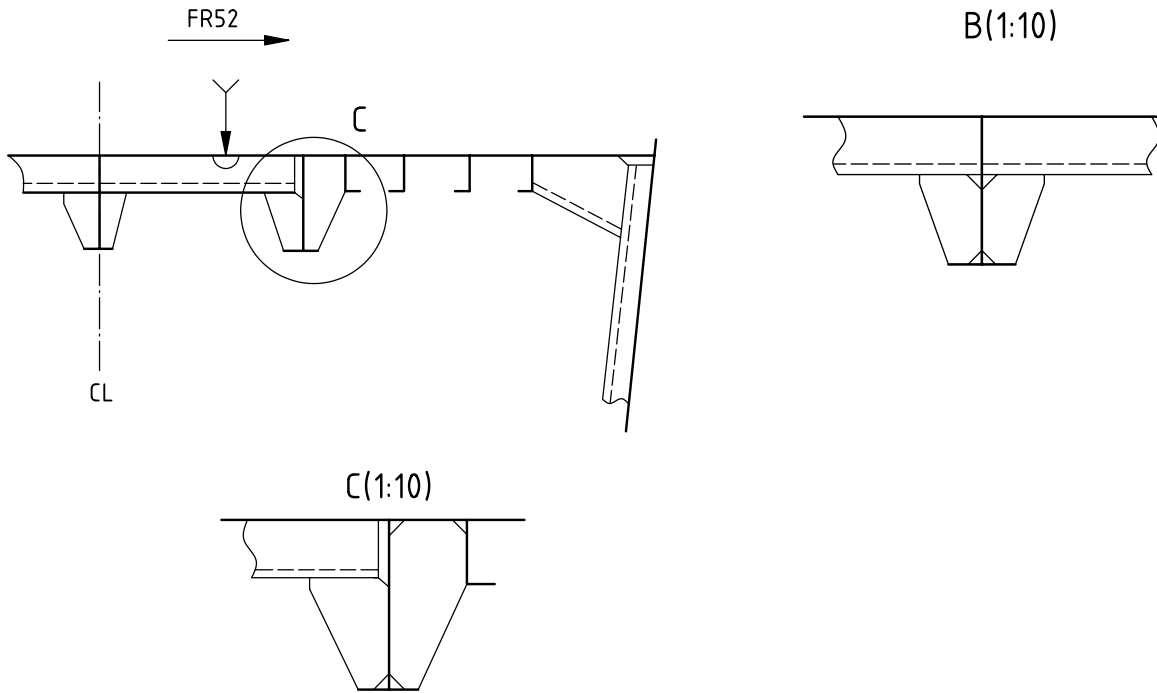


Figure 3 (continued on the next page)



c)

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Figure 3
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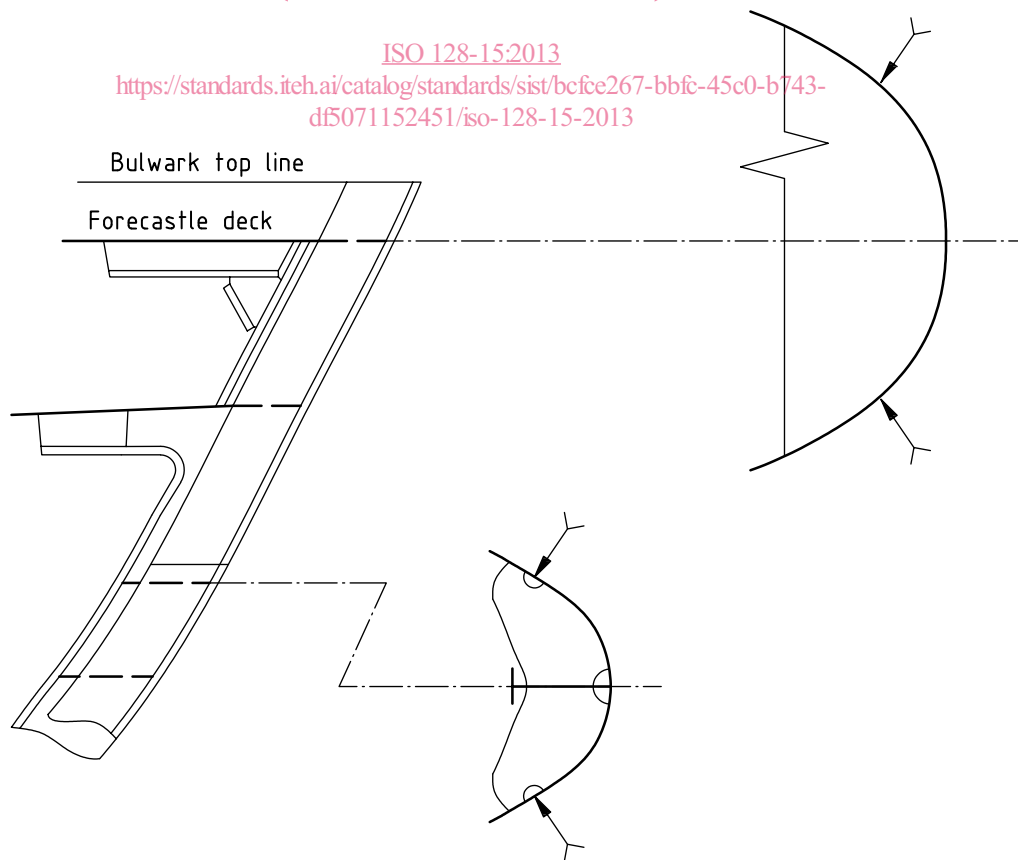


Figure 4