

# INTERNATIONAL STANDARD

**ISO**  
**9203-2**

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## Shipbuilding — Topology of ship hull structure elements —

### Part 2 : Description of elements

*Construction navale — Topologie des éléments de structure de coque d'un navire —  
Partie 2 : Description des éléments*



Reference number  
ISO 9203-2 : 1989 (E)

## 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.

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 9203-2 was prepared by Technical Committee ISO/TC 8, *Shipbuilding and marine structures*.

ISO 9203 consists of the following parts, under the general title *Shipbuilding — Topology of ship hull structure elements*:

- *Part 1: Location of elements*
- *Part 2: Description of elements*
- *Part 3: Relations of elements*

# Shipbuilding — Topology of ship hull structure elements —

## Part 2 : Description of elements

### 1 Scope

This three-part International Standard lays down the topology of ship hull structure elements; it enables information on elements and layout to be communicated easily and accurately.

This part of ISO 9203 specifies the description of elements.

### 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 9203. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 9203 are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 7838 : 1984, *Shipbuilding — Shiplines — Formats and data organization*.

ISO 8193 : 1984, *Shipbuilding — Shell plating information*.

ISO 9203-1 : 1989, *Shipbuilding — Topology of ship hull structure elements — Part 1 : Location of elements*.

### 3 Description of ship hull structure elements

#### 3.1 Structure elements

The description of structure elements depends on the locations : these are defined in ISO 9203-1.

#### 3.2 Web internal lines file

The web internal lines file contains numerical representations of the internal contours of webs of the welded beams, stored in the standard ship line data format as defined in ISO 7838.

#### 3.3 Butt-weld lines file

The butt-weld lines file contains numerical representations of butt-welds in the plate elements other than the external shell, stored in the standard ship line data format as defined in ISO 7838.

#### 3.4 External shell

The description of the external shell is defined in ISO 8193.

#### 3.5 Other plate elements

The following information is required to describe a plate element :

- a) element identifier;
- b) number of plates in the element,  $n_p$ ;
- c) number of apertures in the element,  $n_a$ ;
- d) for each of  $n_p$  plates :
  - 1) plate identifier,
  - 2) material code,
  - 3) plate thickness, in millimetres,
  - 4) number of edges of the plate,  $n_m$ ,
  - 5) for each of  $n_m$  edges :
    - identifier of boundary as defined in ISO 9203-1, or
    - butt-weld line identifier;