INTERNATIONAL STANDARD



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Shipbuilding – Topology of ship hull structure elements –

Part 2 : Description of elements iTeh STANDARD PREVIEW

Construction havale it ropologie des éléments de structure de coque d'un navire -

Partie 2 : Description des éléments ISO 9203-2:1989 https://standards.iteh.ai/catalog/standards/sist/798923be-ebfd-4034-9b02-

67008daacdd3/iso-9203-2-1989



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 VIEW 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 9203-2:1989

ISO 9203 consists of the following parts, under the general stitle Shipbuilding 3be-ebfd-4034-9b02-Topology of ship hull structure elements: 67008daacdd3/iso-9203-2-1989

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

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Shipbuilding — Topology of ship hull structure elements -

Part 2 : Description of elements

Scope 1

3.3 Butt-weld lines file

This three-part International Standard lays down the topology The butt-weld lines file contains numerical representations of of ship hull structure elements; it enables information on butt-welds in the plate elements other than the external shell, elements and layout to be communicated easily and accurately. stored in the standard ship line data format as defined in

ISO 7838. This part of ISO 9203 specifies the description of elements.

Normative references 2

3.4 External shell ISO 9203-

The following standards contain provisions which, damodgineo-9203-2-1989 the description of the external shell is defined in ISO 8193.

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.

Description of ship hull structure elements 3

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.

3.5 Other plate elements

The following information is required to describe a plate element :

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

- e) for each of n_a apertures :
 - 1) aperture identifier,
 - 2) symmetry code (T = symmetrical about the centreline and exists on both sides, S = starboard only, P = port only, C = located on the centreline),

3) catalogue symbol of the aperture with parameters (shape, dimensions, position).

3.6 Rolled section beams and stiffeners

The following information is required to describe a rolled section element :

- element identifier; a)
- section code; b)
- material code; C)
- number of apertures in the element, n_a ; d)
- for each of n_a apertures : e)
 - 1) aperture identifier,
 - symmetry code [with the same code as in 3.5 e) 2)], assumed that a flange butt-weld is normal to the web 2)
 - internal line); 3) catalogue symbol of the aperture with parameters [as in 3.5 e) 3)]: **Standard Ski trumber of apertures in the web**, n_a ;
- f) number of butt-welds in the element, $n_{\rm b}$;

I) for each of n_a apertures :

67008daacdd3/iso-9202)2-1989 symmetry code [with the same code as in 3.5 e) 2)],

3)

- for each of nb butt-welds : https://standards.iteh.ai/catalog/standards/sist1998apertureudentifier.9b02g)
 - 1) butt-weld identifier,
 - symmetry code [with the same code as in 3.5 e) 2)], 2)

3) coordinate of a point on the adherence line of the element (it is assumed that a butt-weld is normal to the adherence line);

h) for each of two ends of the element, the catalogue symbol of the ending, with parameters defining the type of connection.

3.7 Welded beams

The following information is required to describe a welded beam:

- element identifier; a)
- web internal line identifier; b)

3) catalogue symbol of the aperture, with parameters [as in 3.5 e) 3)];

m) for each of two ends of the welded beam, the catalogue symbol of the ending, with parameters defining the type of connection.

Apertures in elements

4.1 Apertures include manholes, holes to reduce mass, holes to allow the passage of pipes and cables, etc., as well as edge cut-outs and scallops. An aperture is associated with an element.

4.2 Catalogues of apertures and endings lie outside the scope of this International Standard and should be agreed where necessary between the organizations involved.

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Price based on 2 pages

- c) web material code:
- d) web thickness, in millimetres;
- e) number of butt-welds in the web, $n_{\rm b}$;
- f) for each of $n_{\rm b}$ butt-welds :
 - 1) butt-weld identifier,
 - 2) symmetry code [with the same code as in 3.5 e) 2)],

coordinate of a point on the adherence line of the 3) element (it is assumed that a web butt-weld is normal to the adherence line);

- flange material code; a)
- flange thickness, in millimetres; h)
- number of butt-welds in the flange, $n_{\rm b}$; i)
- for each of $n_{\rm b}$ butt-welds : j)
 - butt-weld identifier, 1)
 - 2) symmetry code [with the same code as in 3.5 e) 2)],

coordinate of a point on the web internal line (it is