

第一附屬書

商船ノ滿載吃水線ノ決定ニ關スル規則

第一編 總則

本規則ハ必然的ニ貨物、脚荷等ノ性質及積付ガ船舶ニ對シ十分ナル復原性ヲ確保スルガ如キモノタルコトヲ前提トス

第一規則 定義

汽船 「汽船」ナル用語ハ帆ノミニ依ル航行ノ爲十分ナル帆面積ヲ備フルモノヲ除クノ外機械的推進ノ爲十分ナル裝置ヲ有スル一切ノ船舶ヲ包含ス

機械的推進裝置ヲ備ヘ且帆ノミニ依ル航行ノ爲不十分ナル帆面積ヲ備フル船舶ニハ本規則第三編ニ依リ滿載吃水線ヲ指定スルコトヲ得

舢舨、荷舢舨又ハ獨立ノ推進裝置ヲ有セザル其ノ他ノ船舶ハ曳カレテ航行スルトキハ本規則第三編ニ依リ之ニ滿載吃水線ヲ指定スベシ

ANNEX I. RULES FOR DETERMINING MAXIMUM LOAD LINES OF MERCHANT SHIPS.

PART I.—GENERAL.

The Rules necessarily assume that the nature and stowage of the cargo, ballast, &c., are such as to secure sufficient stability for the ship.

Rule I.—Definitions.

Steamer.—The term “steamer” includes all ships having sufficient means for mechanical propulsion, except where provided with sufficient sail area for navigation under sails alone.

A ship fitted with mechanical means of propulsion and with sail area insufficient for navigation under sails alone may be assigned a load line under Part III of these Rules.

A lighter, barge or other ship without independent means of propulsion, when towed, is to be assigned a load line under Part III of these Rules.

帆船	平甲板船	船樓	乾舷	乾舷甲板
帆船 「帆船」ナル用語ハ機械的推進裝置ヲ備フルト否トヲ問ハズ帆ノミニ依ル航行ノ爲十分ナル帆面積ヲ備フル一切ノ船舶ヲ包含ス	平甲板船 平甲板船ハ乾舷甲板ニ船樓ヲ有セザル船舶トス	船樓 船樓ハ乾舷甲板ニ於ケル甲板ヲ有スル建設物ニシテ舷ヨリ舷ニ互ルモノトス低船尾樓ハ之ヲ船樓ト看做ス	乾舷 指定セラルル乾舷ハ船舶ノ中央ノ舷ニ於テ甲板線ノ上縁ヨリ滿載吃水線ヲ示ス線ノ上縁迄垂直ニ下方ニ測リタル距離トス	乾舷甲板 乾舷甲板ハ乾舷ヲ測ル基準ト爲ル甲板ニシテ甲板ノ露天部ニ於ケル一切ノ開口ヲ第八規則乃至第十六規則ニ從ヒ閉鎖スル常設裝置ヲ有スル最上層ノ全通甲板トス乾舷甲板ハ平甲板船及分立船樓ヲ有スル船舶ニ在リテハ上甲板トス
				閉鎖セラレザル船樓又ハ第一級閉鎖設備ヲ備ヘザル船樓内ニ於テ連續セザル乾舷甲板ヲ有スル船舶ニ在リテハ船樓甲板下ノ甲板ノ最下線ヲ乾舷甲板トス

Sailing Ship.—The term "sailing ship" includes all ships provided with sufficient sail area for navigation under sails alone, whether or not fitted with mechanical means of propulsion.

Flush Deck Ship.—A flush deck ship is one which has no superstructure on the freeboard deck.

Superstructure.—A superstructure is a decked structure on the freeboard deck extending from side to side of the ship. A raised quarter deck is considered a superstructure.

Freeboard.—The freeboard assigned is the distance measured vertically downwards at the side of the ship amidships from the upper edge of the deck line to the upper edge of the load line mark.

Freeboard Deck.—The freeboard deck is the deck from which the freeboard is measured, and is the uppermost complete deck having permanent means of closing all openings in weather portions of the deck in accordance with Rules VIII to XVI. It is the upper deck in flush deck ships and ships with detached superstructures.

In ships having discontinuous freeboard decks within superstructures which are not intact, or which are not fitted with Class 1 closing appliances, the lowest line of the deck below the superstructure deck is taken as the free-

船舶の中央

船舶ノ中央 船舶ノ中央ハ第三十二規則ニ定ムル夏期
満載吃水線ノ長サノ中央トス

甲板線

第二規則 甲板線

甲板線ハ長サ三百ミリメートル幅二十五ミリメートル
ノ水平線トス甲板線ハ各舷ニ於テ船舶ノ中央ニ標示セ
ラルベク且其ノ上縁ハ乾舷甲板ノ上面ノ外方ヘノ延長
ガ外板ノ外面ト交叉スル點ヲ通過スベシ(第一圖参照)
乾舷甲板ガ船舶ノ中央ニ於テ部分的ニ被覆セラルルト
キハ甲板線ノ上縁ハ船舶ノ中央ニ於ケル實際ノ被覆物
ノ上面ノ外方ヘノ延長ガ外板ノ外面ト交叉スル點ヲ通
過スベシ

満載吃水
線円標

第三規則 満載吃水線円標

満載吃水線円標ハ直径三百ミリメートルニシテ上縁ガ
圓標ノ中心ヲ通過スル長サ四百六十ミリメートル幅二
十五ミリメートルノ水平線ニ依リ交叉セラル圓標ハ甲
板線ノ下方ニ於テ船舶ノ中央ニ標示セラルベシ

board deck.

Amidships.—Amidships is the middle of the length of
the summer load water-line, as defined in Rule XXXII.

Rule II.—*Deck Line*.

The deck line is a horizontal line twelve inches in length
and one inch in breadth. It is to be marked amidships on
each side of the ship, and its upper edge is to pass through
the point where the continuation outwards of the upper
surface of the freeboard deck intersects the outer surface
of the shell. (See figure 1.) Where the deck is partly sheath-
ed amidships, the upper edge of the deck line is to pass
through the point where the continuation outwards of the
upper surface of the actual sheathing at amidships intersects
the outer surface of the shell.

Rule III.—*Load Line Disc*.

The load line disc is twelve inches in diameter and is
intersected by a horizontal line eighteen inches in length
and one inch in breadth, the upper edge of which passes
through the centre of the disc. The disc is to be marked
amidships below the deck line.

第四規則 圓標ニ關聯シテ用フベキ線

円標に關聯シテ用フベキ線
各種ノ情況及各種ノ季節(第二附屬書參照)ニ於ケル滿載吃水線ヲ示ス線ハ圓標ノ中心ノ五百四十ミリメートル前方ニ標示シタル垂直線ヨリ之ニ直角ニ引キタル長サ二百五十ミリメートル幅二十五ミリメートルノ水平線タルベシ(第一圖參照)

右ニ用フベキ線ハ左ノ如シ

夏期滿載吃水線 夏期滿載吃水線ハ圓標ノ中心ヲ通過スル線ノ上緣及Sト標示シタル線ノ上緣ニ依リ之ヲ示ス

冬期滿載吃水線 冬期滿載吃水線ハWト標示シタル線ノ上緣ニ依リ之ヲ示ス

冬期北大西洋滿載吃水線 冬期北大西洋滿載吃水線ハWNAト標示シタル線ノ上緣ニ依リ之ヲ示ス

熱帶滿載吃水線 熱帶滿載吃水線ハTト標示シタル線ノ上緣ニ依リ之ヲ示ス

淡水滿載吃水線 夏期淡水滿載吃水線ハFト標示シタル線ノ上緣ニ依リ之ヲ示ス

夏期淡水滿載吃水線ハFト標示シタル線ノ上緣ニ依リ之ヲ示ス夏期淡水滿載吃水線ト夏期滿載吃水線トノ間ノ差ハ他ノ滿載吃水線ニ付淡水ニ於ケル積載ニ對シ許サルベキ餘裕トス熱帶淡水滿載吃水線

Rule IV.—Lines to be used in connection with the Disc.

The lines which indicate the maximum load line in different circumstances and in different seasons (see Annex II) are to be horizontal lines, nine inches in length and one inch in breadth, which extend from, and are at right angles to, a vertical line marked 21 inches forward of the centre of the disc (see figure 1).

The following are the lines to be used:—

Summer Load Line.—The Summer load line is indicated by the upper edge of the line which passes through the centre of the disc and also by a line marked S.

Winter Load Line.—The winter load line is indicated by the upper edge of a line marked W.

Winter North Atlantic Load Line.—The Winter North Atlantic load line is indicated by the upper edge of a line marked WNA.

Tropical Load Line.—The Tropical Load Line is indicated by the upper edge of a line marked T.

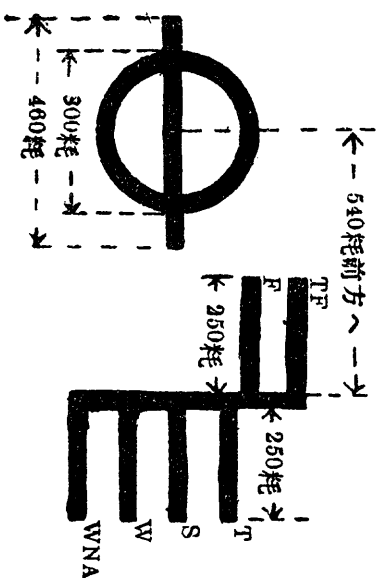
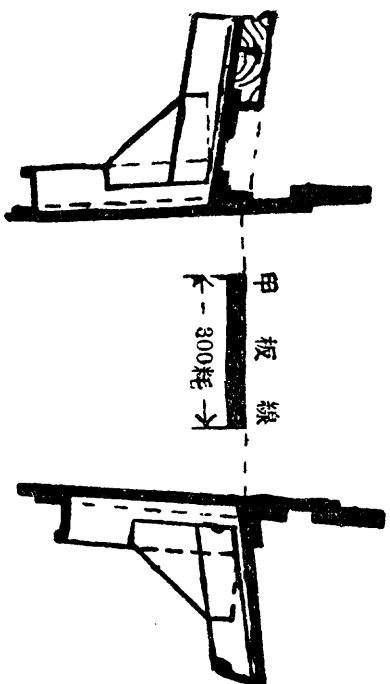
Fresh Water Load Lines.—The Fresh Water load line in Summer is indicated by the upper edge of a line marked F. The difference between the Fresh Water load line in summer and the Summer load line is the allowance to be

線ハTFト標示シタル線ノ上縁ニ依リ之ヲ示ス(註)

(註) 航海汽船ガ河川又ハ内水ヲ航行スルトキハ發航點ト
外海トノ間ニ於ケル消費ニ要スル燃料等ノ重量ニ相當ス
ル餘分ノ積載ヲ許ス

第

圖



made for loading in Fresh Water at the other load lines.
The Tropical Fresh Water load line is indicated by the
upper edge of a line marked T.F.*

* Where sea-going steamers navigate a river or inland
water, deeper loading is permitted corresponding to the
weight of fuel, &c., required for consumption between the
point of departure and the open sea.

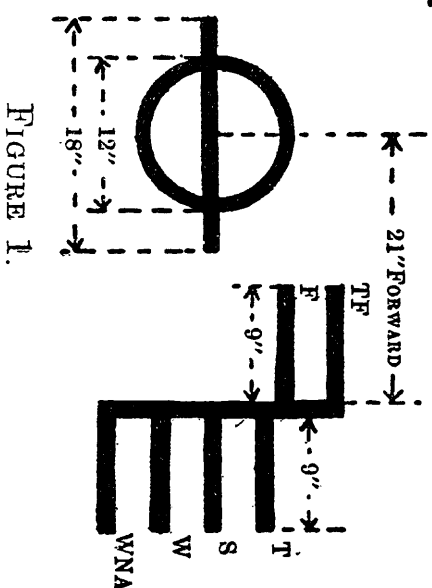
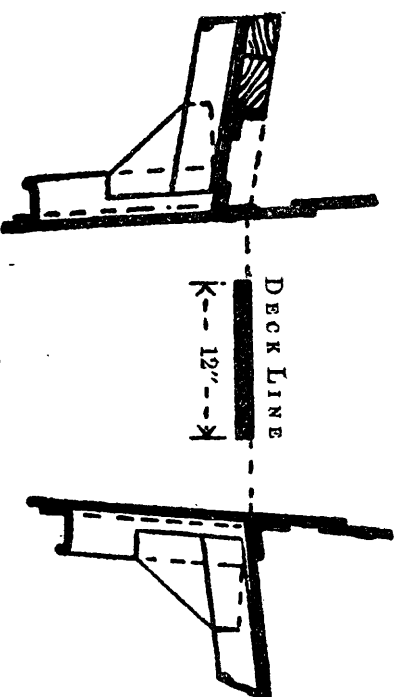


FIGURE 1.

指定機關
の標示

第五規則 指定機關ノ標示

滿載吃水線ヲ指定スル機關ハ圓標ノ側方ニ於テ中心線ノ上方ニ標示シタル高サ約百十五ミリメートル幅七十五ミリメートルノ大サノ文字ヲ以テ之ヲ示スコトヲ得

標示の細
目

第六規則 標示ノ細目

圓標、線及文字ハ暗色ノ地ニハ白色又ハ黃色ニテ又明色ノ地ニハ黑色ニテ之ヲ畫クベシ尙此等ハ鐵鋼船ノ舷ニ入念ニ之ヲ切込ミ又ハ點刻シ又木船ニ在リテハ此等ハ外板ニ少クトモ三ミリメートル之ヲ切込ムベシ標示ハ明ニ認メ得ラルルモノタルベク且必要ノ場合ニ於テハ之ガ爲特別ノ措置ヲ執ルベシ

標示の檢
証

第七規則 標示ノ檢證

國際滿載吃水線證書ハ指定機關ノ検査員（本條約第九條ノ規定ニ依リ行動ス）ニ於テ標示ガ正確ニ且永續的ニ舷ニ示サレアルコトヲ證明スル迄ハ船舶ニ對シ之ヲ交付スベカラズ

Rule V.—*Mark of Assigning Authority.*

The Authority by whom the load lines are assigned may be indicated by letters measuring about 4½ inches by 3 inches marked alongside the disc and above the centre line.

Rule VI.—*Details of Marking.*

The disc, lines and letters are to be painted in white or yellow on a dark ground or in black on a light ground. They are also to be carefully cut in or centre-punched on the sides of iron and steel ships, and on wood ships they are to be cut into the planking for at least one-eighth of an inch. The marks are to be plainly visible, and, if necessary, special arrangements are to be made for this purpose.

Rule VII.—*Verification of Marks.*

The International Load Line Certificate is not to be delivered to the ship until a surveyor of the Assigning Authority (acting under the provisions of Article 9 of this Convention) has certified that the marks are correctly and permanently indicated on the ship's sides.

第二編 満載吃水線ノ指定ノ條件

満載吃水
線の指定
の條件

満載吃水線ノ指定ハ船舶ガ構造上十分ナルコト並ニ船舶及船員ニ對シ實效アル保護ノ設備アルコトヲ條件トス
第八規則乃至第三十一規則ハ最小乾舷ガ指定セラルル船舶ニ之ヲ適用ス最小限ヨリ大ナル乾舷ガ指定セラルル船舶ニ在リテハ右保護ハ之ニ應ジ相對的ニ實效アルコトヲ要ス

乾舷甲板及船樓甲板ニ於ケル開口

第八規則 船樓ニ依リ保護セラレザル貨物艙口及他ノ艙口

乾舷甲板及船樓甲板ノ暴露部ニ於ケル貨物艙口及他ノ艙口ノ構造及裝置ハ第九規則乃至第十六規則ニ規定スル標準ト少クトモ同等ノモノタルベシ

第九規則 艙口縁材

乾舷甲板ニ於ケル艙口縁材ノ高サハ甲板ノ上方少クトモ六十ミリメートルタルベシ船樓甲板ニ於ケル縁材ノ高サハ船首材ヨリ船舶ノ長サノ四分ノ一以内ニ在ル

PART II.—CONDITIONS OF ASSIGNMENT OF LOAD LINES.

The assignment of load lines in conditional upon the ship being structurally efficient and upon the provision of effective protection to ship and crew.

Rules VIII to XXXI apply to ships to which minimum freeboards are assigned. In ships to which greater freeboards than the minimum are assigned, the protection is to be relatively as effective.

Openings in Freeboard and Superstructure Decks.

Rule VIII.—*Cargo and other Hatchways not protected by Superstructures.*

The construction and fitting of cargo and other hatchways in exposed positions on freeboard and superstructure decks are to be at least equivalent to the standards laid down in Rules IX to XVI.

Rule IX.—*Hatchway Coamings.*

The height of hatchway coamings on freeboard decks is to be at least 24 inches above the deck. The height of coamings on superstructure decks is to be at least 24 inches

トキハ甲板ノ上方少クトモ六百十ミリメートル又其ノ以外ニ在ルトキハ少クトモ四百五十七ミリメートルタルベシ

縁材ハ鋼製トスベク、堅牢ニ構造スベク且高サ六百十ミリメートルナルコトヲ要スルトキハ其ノ上縁ノ下方二百五十四ミリメートルヨリ低カラザル個所ニ實效アル横防撓材ヲ取附ケ且三メートル〇五ヲ超エザル間隔ニテ防撓材ヨリ甲板ニ達スル實效アル肘板又ハ支柱ヲ取附クベシ端縁材ガ保護セラルトキハ右ノ要件ハ之ヲ變更スルコトヲ得

第十規則 艙口蓋

艙口蓋
暴露セル艙口ノ蓋ハ實效アルモノタルベク且木製ナルトキハ其ノ仕上ノ厚サハ一メートル五二ヲ超エザル支點間隔ニ對シ少クトモ六十ミリメートルタルベシ此等ノ艙口蓋ニ對スル各支面ノ幅ハ少クトモ六十三ミリメートルタルベシ

第十一規則 艙口梁及縱材

艙口梁及縱材
木製ノ艙口蓋ヲ備フル場合ニ於テ艙口梁及縱材ハ高サ六百十ミリメートルノ縁材ヲ要スルトキハ第一表ニ掲グル寸法及心距ノモノタルベク又高サ四百五十七ミリメートルノ縁材ヲ要スルトキハ第二表ニ掲グル寸法及

above the deck if situated within a quarter of the ship's length from the stem, and at least 18 inches if situated elsewhere.

Coamings are to be of steel, are to be substantially constructed and, where required to be 24 inches high, are to be fitted with an efficient horizontal stiffener placed not lower than 10 inches below the upper edge, and fitted with efficient brackets or stays from the stiffener to the deck, at intervals of not more than 10 feet. Where end coamings are protected, these requirements may be modified.

Rule X.—Hatchway Covers.

Covers to exposed hatchways are to be efficient, and where they are made of wood, the finished thickness is to be at least 2½ inches in association with a span of not more than 5 feet. The width of each bearing surface for these hatchway covers is to be at least 2½ inches.

Rule XI.—Hatchway Beams and Fore-and-Afters.

Where wood hatchway covers are fitted the hatchway beams and fore-and-afters are to be of the scantlings and spacing given in Table 1 where coamings 24 inches high are required, and as given in Table 2 where coamings 18

心距ノモノタルベシ上縁ニ於ケル山形材ハ連續シテ各
梁ノ全長ニ及ブベシ木製縦材ハ一切ノ支面ニ於テ鋼板
ニテ包マルベシ

inches high are required. Angle bar mountings on the
upper edge are to extend continuously for the full length
of each beam. Wood fore-and-afters are to be steel shod
at all bearing surfaces.

第一表

(高サ六百十ミリメートルノ縁材)

長サ六十一メートル以上ノ船舶ニ對スル艀口梁及縦材 (註)

艀口梁

艀口ノ幅	取 附 材	縦 材 ア ル ト キ ノ 梁			縦材ナキトキノ梁	
		心 距			心 距	
		メ ー ト ル	メ ー ト ル	メ ー ト ル	メ ー ト ル	メ ー ト ル
メートル 3.05	ミリメートル 75×75×10A	ミリメートル 280×7.5P	ミリメートル 305×8P	ミリメートル 356×8.5P	ミリメートル 230×11.5BP	ミリメートル 254×12.5BP
3.66	75×75×10A	305×8P	356×8.5P	432×9P	280×12.5BP	305×12.5BP
4.27	75×75×10.5A	356×8.5P	432×9P	508×9.5P	305×12.5BP	305×8P
4.88	90×75×10.5A	406×9P	483×9.5P	559×9.5P	305×8P	356×8.5P
5.49	100×75×11A	457×9P	533×9.5P	635×10P	356×8.5P	406×9P
6.10	100×75×11A	508×9.5P	610×10P	711×10.5P	381×8.5P	457×9P
6.71	115×75×11.5A	559×9.5P	660×10.5P	762×11P	406×9P	483×9P
7.32	130×90×11.5A	584×10P	711×10.5P	813×11P	432×9P	508×9.5P
7.93	140×90×12A	610×10P	736×10.5P	864×11.5P	457×9P	533×9.5P
8.54	150×90×12.5A	635×10P	787×11P	915×12P	483×9.5P	559×9.5P
9.14	150×90×13A	660×10.5P	813×11P	965×12P	508×9.5P	584×10P

TABLE 1.

(Coamings 24 inches in height.)

HATCHWAY Beams and Fore-and-Afters for Ships 200 feet or more in length.*

HATCHWAY BEAMS.

Breadth of Hatchway.	Mounting.	Beams with Fore-and-Afters.			Beams without Fore-and-Afters.		
		Spacing Centre to Centre.			Spacing Centre to Centre.		
		6' 0"	8' 0"	10' 0"	4' 0"	5' 0"	
10' 0"	ins. 3 × ins. 3 × ins. .40A	ins. 11 × ins. .30P	ins. 12 × ins. .32P	ins. 14 × ins. .34P	ins. 9 × ins. .46B P	ins. 10 × ins. .50B P	
12' 0"	3 × 3 × .40A	12 × .32P	14 × .34P	17 × .36P	11 × .50B P	12 × .50B P	
14' 0"	3 × 3 × .42A	14 × .34P	17 × .36P	20 × .38P	12 × .50B P	12 × .32P	
16' 0"	3½ × 3 × .42A	16 × .36P	19 × .38P	22 × .38P	12 × .32P	14 × .34P	
18' 0"	4 × 3 × .44A	18 × .36P	21 × .38P	25 × .40P	14 × .34P	16 × .36P	
20' 0"	4 × 3 × .44A	20 × .38P	24 × .40P	28 × .42P	15 × .34P	18 × .36P	
22' 0"	4½ × 3 × .46A	22 × .38P	26 × .42P	30 × .44P	16 × .36P	19 × .36P	
24' 0"	5 × 3½ × .46A	23 × .40P	28 × .42P	32 × .44P	17 × .36P	20 × .38P	
26' 0"	5½ × 3½ × .48A	24 × .40P	29 × .42P	34 × .46P	18 × .36P	21 × .38P	
28' 0"	6 × 3½ × .50A	25 × .40P	31 × .44P	36 × .48P	19 × .38P	22 × .38P	
30' 0"	6 × 3½ × .52A	26 × .42P	32 × .44P	38 × .48P	20 × .38P	23 × .40P	

縦材

縦材ノ長サ	取 附 材	板 中 央 縦 材				球 側 山 形 材						
		心 距				心 距						
		メー ト ル 0.91	メー ト ル 1.22	メー ト ル 1.52	メー ト ル 0.91	メー ト ル 1.22	メー ト ル 1.52					
1.83	ミリメートル 65×65× 9	ミリメートル 150× 9	ミリメートル 165× 9.5	ミリメートル 180× 9.5	ミリメートル 150×75× 9.5	ミリメートル 165×90× 9.5	ミリメートル 180×90× 9.5					
2.44	65×65× 9.5	180×10.5	200×11	230×11	180×90×10.5	200×75×11	230×90×11					
3.05	65×65×10	200×12.5	240×12.5	280×12.5	200×90×12.5	240×90×12.5	280×90×12.5					
縦材ノ長サ	木 製 中 央 縦 材				木 製 側 縦 材							
	心 距				心 距							
	メー ト ル 0.91	メー ト ル 1.22	メー ト ル 1.52	メー ト ル 0.91	メー ト ル 1.22	メー ト ル 1.52						
	D	B	D	B	D	B	D	B				
	1.83	140	180	150	180	165	180	140	140	150	150	165
2.44	165	180	190	180	200	180	165	165	190	180	200	180
3.05	200	180	215	200	230	230	200	180	215	200	230	230

FORE-AND-AFTERS.

Length of Fore-and-Afters.	Mounting.	Bulb Plate. Centre Fore-and-Afters.					Bulb Angle. Side Fore-and-Afters.				
		Spacing Centre to Centre.					Spacing Centre to Centre.				
		3' 0"	4' 0"	5' 0"	3' 0"	4' 0"	5' 0"				
6' 0"	ins. 2½ × 2½ × .36	ins. 6 × .36	ins. 6½ × .38	ins. 7 × .38	ins. 6 × 3 × .36	ins. 6½ × 3½ × .38	ins. 7 × 3½ × .38				
8' 0"	2½ × 2½ × .38	7 × .42	8 × .44	9 × .44	7 × 3½ × .42	8 × 3 × .44	9 × 3½ × .44				
10' 0"	2½ × 2½ × .40	8 × .50	9½ × .50	11 × .50	8 × 3½ × .50	8½ × 3½ × .50	11 × 3½ × .50				
Wood Centre Fore-and-Afters.								Wood Side Fore-and-Afters.			
Spacing Centre to Centre.								Spacing Centre to Centre.			
3' 0"		4' 0"		5' 0"		3' 0"		4' 0"		5' 0"	
D	B	D	B	D	B	D	B	D	B	D	B
6' 0"	ins. 5½	ins. 7	ins. 6	ins. 7	ins. 6½	ins. 7	ins. 5½	ins. 5½	ins. 6	ins. 6½	ins. 6
8' 0"	6½	7	7½	7	8	7	6½	6½	7½	7	8
10' 0"	8	7	8½	8	9	9	8	7	8½	8	9

A = 通常山形材、B P = 球板、P = 平板、D = 深サ、B = 幅

艀口梁ノ深サハ長サノ中央ニ於ケルモノニシテ上部取附材ヨリ梁ノ下縁迄之ヲ測ル縦材ノ深サハ艀口板ノ下面ヨリ縦材ノ下縁迄之ヲ測ル中間ノ長サ及心距ニ對スル寸法ハ挿間法ニ依リ之ヲ求ム平板ト定メラレタルトキハ取附材ニ關シテ掲グル寸法ノ二個ノ山形材ヲ梁又ハ縦材ノ上部ニ取附クベシ球板ト定メラレタルトキハ取附材ニ關シテ掲グル寸法ノ一個ノ山形材ヲ右形材ノ上部ニ取附クベシ山形材ノ定メラレタル兩邊ガ異レル寸法ノモノナル場合ニ於テハ廣邊ハ水平タルベシ

(註) 長サ三十メートル五〇ヲ超エザル船舶ニ在リテハ平板及山形材ヨリ成ル梁ノ深サハ前記ノ深サノ六十「パーセント」タルコトヲ得、球山形材及球板ヨリ成ル梁及鋼製縦材ノ深サハ前記ノ深サノ八十「パーセント」タルコトヲ得、球山形材及球板ノ厚サハ七ミリメートル五ヲ最小限ノ厚サトシ減少セラレタル深サニ對シ表ニ示ス厚サニ相當スベシ木製縦材ノ深サ及幅ハ側縦材ニ關シ表ニ掲グルモノノ八十「パーセント」タルコトヲ得但シ中央縦材ハ幅百六十五ミリメートル未満タルコトヲ得ズ長サ三十メートル五〇ト六十一メートルトノ中間ノ船舶ニ在リテハ梁及縦材ノ寸法ハ挿間法ニ依リ之ヲ決定スベシ

A = Plain angle. BP = Bulb plate. P = Plate. D = Depth. B = Breadth.

Depths for hatchway beams are at the middle of the length and are measured from the top mounting to the lower edge. Depths for fore-and-afters are measured from the underside of the hatch covers to the lower edge. Sizes for intermediate lengths and spacing are obtained by interpolation. Where plates are specified, two angles of the size given for mountings, are to be fitted at the upper and at the lower part of the beam. Where bulb plates are specified, two angles, of the size given for mountings are to be fitted at the upper part of the beam or fore-and-after. Where bulb angles are specified, one angle, of the size given for mountings, is to be fitted at the upper part of the section. Where the specified flanges of an angle are of different dimensions, the larger flange is to be horizontal.

* In ships not exceeding 100 feet in length, the depths of beams which are formed of plates and angles may be 60 per cent. of the depths given above; the depths of beams and steel fore-and-afters formed of bulb angle or bulb plate section may be 80 per cent. of the depths given above; the thickness of plates, bulb angles and bulb plates should correspond to the thickness tabulated for the reduced depths with a minimum thickness of .30 inch; the depths and breadths of wood fore-and-afters may be 80 per cent. of those given in the tables for side fore-and-afters, but the centre fore-and-afters must be not less than 6½ inches wide. In ships between 100 feet and 200 feet in length, the sizes of the beams and fore-and-afters are to be determined by linear interpolation.

第 二 表

(高サ四百五十七ミリメートルノ縁材)

長サ六十一メートル以上ノ船舶ニ對スル艀口梁及縦材 (註)

艀 口 梁

艀口ノ幅	取 附 材	縦 材 フ ル ト キ ノ 梁			縦材ナキトキノ梁	
		心			心	
		メー ートル	メー ートル	メー ートル	メー ートル	メー ートル
3.05	75×75×10A	241×11.5BP	267×12.5BP	292×13BP	203×10BP	230×11BP
3.66	75×75×10A	280×12.5BP	280×7.5P	330×8.5P	230×11BP	254×12.5BP
4.27	75×75×10.5A	280×7.5P	330×8P	381×8.5P	254×12.5BP	292×12.5BP
4.88	90×75×10.5A	305×8P	381×8.5P	432×9P	280×7.5P	280×7.5P
5.49	100×75×11A	356×8.5P	432×9P	483×9.5P	280×7.5P	305×8P
6.10	100×75×11A	406×9P	483×9.5P	533×9.5P	305×8P	330×8.5P
6.71	115×75×11.5A	432×9P	508×9.5P	584×10P	318×8P	356×8.5P
7.32	130×90×11.5A	457×9P	533×9.5P	635×10P	330×8.5P	368×8.5P
7.93	140×90×12A	483×9.5P	559×9.5P	660×10.5P	344×8.5P	381×8.5P
8.54	150×90×12.5A	508×9.5P	584×10P	686×10.5P	356×8.5P	406×9P
9.14	150×90×13A	533×9.5P	610×10P	711×10.5P	381×8.5P	432×9P

TABLE 2.
(Connings 18 inches in height.)

HATCHWAY Beams and Fore-and-Afters for Ships 200 feet or more in length.*

HATCHWAY BEAMS.

Breadth of Hatchway.	Mounting.	Beams with Fore-and-Afters.			Beams without Fore-and-Afters.	
		Spacing Centre to Centre.			Spacing Centre to Centre.	
		6' 0"	8' 0"	10' 0"	4' 0"	5' 0"
10' 0"	ins. 3 × 3 × ins. .40A	ins. 9½ × ins. .46B P	ins. 10½ × ins. .50B P	ins. 11½ × ins. .52B P	ins. 8 × ins. .40B P	ins. 9 × ins. .44B P
12' 0"	3 × 3 × .40A	11 × .50B P	11 × .30P	13 × .34P	9 × .44B P	10 × .50B P
14' 0"	3 × 3 × .42A	11 × .30P	13 × .32P	15 × .34P	10 × .50B P	11½ × .50B P
16' 0"	3½ × 3 × .42A	12 × .32P	15 × .34P	17 × .36P	11 × .30P	11 × .30P
18' 0"	4 × 3 × .44A	14 × .34P	17 × .36P	19 × .38P	11 × .30P	12 × .32P
20' 0"	4 × 3 × .44A	16 × .36P	19 × .38P	21 × .38P	12 × .32P	13 × .34P
22' 0"	4½ × 3 × .46A	17 × .36P	20 × .38P	23 × .40P	12½ × .32P	14 × .34P
24' 0"	5 × 3½ × .46A	18 × .36P	21 × .38P	25 × .40P	13 × .34P	14½ × .34P
26' 0"	5½ × 3½ × .48A	19 × .38P	22 × .38P	26 × .42P	13½ × .34P	15 × .34P
28' 0"	6 × 3½ × .50A	20 × .38P	23 × .40P	27 × .42P	14 × .34P	16 × .36P
30' 0"	6 × 3½ × .52A	21 × .38P	24 × .40P	28 × .42P	15 × .34P	17 × .36P

材 縱 材

縦材ノ長サ	取 附 材	球 中 央 縦 材			球 側 山 縦 材		
		心 距		材	心 距		材
		メートル 0.91	メートル 1.22		メートル 0.91	メートル 1.22	メートル 1.52
メートル	ミリメートル	ミリメートル	ミリメートル	ミリメートル	ミリメートル	ミリメートル	ミリメートル
1.83	65×65× 9	130× 8.5	140× 8.5	150× 9	130×75× 8.5	140×75× 8.5	150×75× 9
2.44	65×65× 9.5	150× 9.5	180×10	190×10.5	150×75× 9.5	180×75×10	190×90×10.5
3.05	65×65×10	180×11	200×11.5	230×12.5	180×75×11	200×90×11.5	230×90×12.5

縦材ノ長サ	木 製 中 央 縦 材				木 製 側 縦 材			
	心 距			材	心 距			材
	メートル 0.91	メートル 1.22	メートル 1.52		メートル 0.91	メートル 1.22	メートル 1.52	
	D	B	D	B	D	B	D	B
1.83	130	180	140	180	150	180	130	130
2.44	150	180	165	180	180	180	150	150
3.05	180	180	190	180	200	180	180	180

FORE-AND-AFTERS.

Length of Fore-and- Afters.	Mounting.	Bulb Plate. Centre Fore-and-Afters.					Bulb Angle. Side Fore-and-Afters.				
		Spacing Centre to Centre.					Spacing Centre to Centre.				
		3 0'	4 0'	5 0'	3 0'	4 0'	5 0'				
6' 0"	ins. 2½ × ins. 2½ × ins. .36	ins. 5 × ins. .34	ins. 5½ × ins. .34	ins. 6 × ins. .36	ins. 5 × 3 × ins. .34	ins. 5½ × 3 × ins. .34	ins. 6 × 3 × ins. .36				
8' 0"	2½ × 2½ × .38	6 × .38	7 × .40	7½ × .42	6 × 3 × .38	7 × 3 × .40	7½ × 3½ × .42				
10' 0"	2½ × 2½ × .40	7 × .44	8 × .46	9 × .50	7 × 3 × .44	8 × 3½ × .46	9 × 3½ × .50				
Wood Centre Fore-and-Afters.								Wood Side Fore-and-Afters.			
Spacing Centre to Centre.				Spacing Centre to Centre.							
3' 0"		4' 0"		5' 0"		3' 0"		4' 0"		5' 0"	
D	B	D	B	D	B	D	B	D	B	D	B
6' 0"	ins. 5	ins. 7	ins. 5½	ins. 7	ins. 6	ins. 7	ins. 5	ins. 5½	ins. 5	ins. 6	ins. 5
8' 0"	6	7	6½	7	7	7	6	5	6½	6	7
10' 0"	7	7	7½	7	8	7	7	6	7½	7	8