2017

Introduction to the Classification Technical Rules

KR

CONTENTS

1. LIST OF CLASSIFICATION TECHNICAL RULES

RULES	GUIDANCE
· Rules for the Classification of Steel Ships - Pt 1 Classification and Surveys (K/E) (2017) - Pt 2 Materials and Welding (K/E) (2017) - Pt 3 Hull Structures (K/E) (2017) - Pt 4 Hull Equipment (K/E) (2017) - Pt 5 Machinery Installations (K/E) (2017) - Pt 6 Electrical Equipment and Control Systems (K/E) (2017) - Pt 7 Ships of Special Service (Ch1-Ch4, Ch7-Ch10) (K/E) (2017) - Pt 7 Ships of Special Service (Ch5, Ch6) (K/E) (2017) - Pt 8 Fire Protection and Fire Extinction (K/E) (2017) - Pt 9 Additional Installations (K/E) (2017) - Pt 10 Hull Structure and Equipment of Small Steel Ships (K/E) (2017) - Pt 11 Common Structural Rules for Bulk Carriers (K/E) (2014) - Pt 12 Common Structural Rules for Double Hull Oil Tankers (K/E) (2014) - Pt 13 Common Structural Rules for Bulk Carriers and Tankers (K/E) (2017)	· Guidance Relating to the Rules for the Classification of Steel Ships - Pt 1 Classification and Surveys (K/E) (2017) - Pt 2 Materials and Welding (K/E) (2017) - Pt 3 Hull Structures (K/E) (2017) - Pt 4 Hull Equipment (K/E) (2017) - Pt 5 Machinery Installations (K/E) (2017) - Pt 6 Electrical Equipment and Control Systems (K/E) (2017) - Pt 7 Ships of Special Service (Ch1-Ch4, Ch7-Ch10) (K/E) (2017) - Pt 7 Ships of Special Service (Ch5, Ch6) (K/E) (2017) - Pt 8 Fire Protection and Fire Extinction (K/E) (2017) - Pt 9 Additional Installations (K/E) (2017) - Pt 10 Hull Structure and Equipment of Small Steel Ships (K/E) (2017) - Pt 13 Common Structural Rules for Bulk Carriers and Tankers (K/E) (2017)
Rules for Offshore Structures - Rules for the Classification of Mobile Offshore Units (K/E) (2017) - Rules for the Classification of Fixed Offshore Structures (K/E) (2014) - Rules for the Classification of Mobile Offshore Drilling Units (K/E) (2017)	Guidance for Offshore Structures - Guidance Relating to the Rules for the Classification of Mobile Offshore Units (K/E) (2017) - Guidance Relating to the Rules for the Classification of Mobile Offshore Drilling Units (K/E) (2017) - Guidance for Floating Offshore Production Units (K/E) (2015) - Guidance for Floating Liquefied Gas Units (K/E) (2017) - Guidance for OSV (K/E) (2015)

RULES	GUIDANCE
Other Rules - Rules for the Classification of Steel Barges (K/E) (2016) - Rules for the Classification of Dredgers (K) (2015) - Rules for the Classification of Underwater Vehicles (K/E) (2015) - Rules for the Classification of FRP Ships (K/E) (2014) - Rules for the Classification of Floating Docks (K/E) (2015) - Rules for the Classification of High Speed and Light Crafts (K/E) (2015) - Rules for the Towing Survey of Barges and Tugboats (K/E) (2014)	Other Guidance - Guidance Relating to the Rules for the Classification of Steel Barges (K/E) (2016) - Guidance Relating to the Rules for the Classification of Underwater Vehicles (K/E) (2015) - Guidance Relating to the Rules for the Classification of FRP Ships (K/E) (2014) - Guidance Relating to the Rules for the Classification of Floating Docks (K/E) (2015) - Guidance Relating to the Rules for the Classification of High Speed and Light Craft (K/E) (2015) - Guidance for Approval of Manufacturing Process and Type Approval, Etc. (K/E) (2017) - Guidance for Floating Structures (K/E) (2010) - Guidance for Freight Containers (K/E) (2014) - Guidance for Single Point Mooring (K/E) (2017) - Guidance for Ships Carrying CNG in Bulk (K/E) (2011) - Guidance for WIG ships (Wing-In-Ground Effect Ships) (K/E) (2016) - Guidance for Recreational Crafts (K/E) (2013) - Guidance for Large Yachts (K/E) (2014) - Guidance for Gas-fuelled Ships (K/E) (2016) - Guidance for Fuel Cell Systems on Board of Ships (K/E) (2015) - Guidance for Ships for Navigation in Ice (K/E) (2017) - Guidance for Approval of Risk-based Ship Design (K/E) (2015) - Guidance for Assessment of Sloshing Load and Structural Strength of Cargo Containment System (K/E) (2015) - Guidance for LNG Fuel Ready Ships (K/E) (2017) - Guidance on Strength Assessment of Containerships Considering the Whipping Effect (K/E) (2017) - Guidance for Structural Strength Assessment of Pump Tower of LNG Carrier (2017) - Guidance for Noise and Vibration (2017)

2. USER'S GUIDE TO CLASSIFICATION TECHNICAL RULES

2.1 General

2.1.1 The purpose of this General has been prepared to introduce kinds, contents and user's guide for Classification Technical Rules published by Korean Register of Shipping (hereinafter called "the Society") to users.

2.1.2 Classification Technical Rules published by the Society are grouped into "Rules", which means all rules for the classification of ships, offshore installations and related equipment, etc., and "Guidance", which means rules prepared with the purpose of providing guidelines for the treatment of detailed contents during surveys carried out in accordance with the requirements in Rules. The list of Classification Technical Rules is given in **1.**

2.1.3 Where the formulated or revised contents of classification rules are not too voluminous, or it is anticipated that the revised contents will become effective early, Circular Letter shall be published for users to know its contents easily, instead of printing complete volumes.

2.2 User's Guide

2.2.1 Enforcement

Rules, in principle, shall come into force after 3 months from the approved date and "Major Changes and Effective Date" is recorded at the beginning of each Rule for ready use.

2.2.2 Format

Rules, in principle, shall come into force after 3 months from the approved date and "Major Changes and Effective Date" is recorded at the beginning of each Rule for ready use.

"Rules for Offshore Structures" is composed of 3 kinds and "Guidance for Offshore Structures" is composed of 4 kinds.

"Other Rules" is composed of 7 kinds and "Other Guidance" is composed of 19 kinds.

2.3 Numbering System

2.3.1 "Rules for the Classification of Steel Ships" and "Guidance Relating to the Rules for the Classification of Steel Ships"

(1) In principle, the text consists of Part, Chapter, Section, Article, Paragraph, Sub-paragraph, (A), (a) and (i).

(2) An article consists of a section number and serial number, and the hundred means section number and the rest means serial number.
(e.g.) For eleventh article in **Section 2 ; 211.**

(3) The number of a figure or a table consists of part, chapter and serial number in each chapter. The figure number is placed in the center under the figure, and the table number is placed in the top left hand corner of the table.
(e.g.) For eighth figure in **Chapter 7** of **Part 3; Fig 3.7.8**
For second table in **Chapter 1** of **Part 5; Table 5.1.2**

2.3.2 Other Rules and Other Guidance

The same as **2.3.1**

2.3.3 Classification Rules other than 2.3.1 and 2.3.2

(1) In principle, the text consists of Chapter, Section, Article, Paragraph, Sub-paragraph, (A), (a) and (i).

(2) The remainder are the same as those specified in **2.3.1.** The number of a figure or of a table consists of chapter and serial number in each chapter.

(e.g.) For ninth figure in **Chapter 3; Fig 3.9**
For tenth table in **Chapter 3; Table 3.10.**

2.4 Cross-Reference to Articles and Paragraphs

2.4.1 "Rules for the Classification of Steel Ships" and "Guidance Relating to the Rules for the Classification of Steel Ships"

(1) Where a paragraph in any chapter is quoted from an other chapter in the same part, the chapter, relevant article and paragraph are written in sequence.

(e.g.) For rules: in **Ch 1, 201. 1** (1), or in **Ch 1, 201. 1** (1) of the Guidance.
For guidances: in **Ch 1, 201. 1** (1) of the Rules, or in **Ch 1, 201. 1** (1) of the Guidance.

(2) Where a paragraph in any part is quoted from an other part, the part, chapter, relevant article and paragraph are written in sequence.

(e.g.) For rules: in **Pt 1, Ch 1, 201. 1** (1), or in **Pt 1, Ch 1, 201. 1** (1) of the Guidance.
For guidances: in **Pt 1, Ch 1, 201. 1** (1) of the Rules, or in **Pt 1, Ch 1, 201. 1** (1) of the Guidance.

2.4.2 Classification Rules other than 2.4.1

Where the contents of any rules are quoted in the rules other than **2.4.1,** the names of the rules, part, chapter, relevant article and paragraph are written.

(e.g.) Where **Pt 1, Ch 2, 202.** of "Rules for the Classification of Steel Ships" is quoted in "Rules for the Classification of Steel Barges"; **Pt 1, Ch 2, 202.** of **Rules for the Classification of Steel Ships**.

2.5 Cross-Reference to Figures and Tables

2.5.1 "Rules for the Classification of Steel Ships" and "Guidance relating to the Rules for the Classification of Steel Ships"

(1) Where a figure or a table in any chapter is quoted from an other chapter in the same part, the number of the figure (or the table) is written.

(e.g.) For rules: in **Fig 2.1.1** (or **Table 2.1.1**), or in **Fig 2.1.1** (or **Table 2.1.1**) of the Guidance.
For guidances: in **Fig 2.1.1** (or **Table 2.1.1**) of the Rules, or in **Fig 2.1.1** (or **Table 2.1.1**) of the Guidance.

(2) Where a figure or a table is quoted from an other part, the part and the number of the figure (or the table) are written.

(e.g.) For rules: in **Pt 2, Fig 2.1.1** (or **Table 2.1.1**), or in **Pt 2, Fig 2.1.1** (or **Table 2.1.1**) of the Guidance.
For guidances: in **Pt 2, Fig 2.1.1** (or **Table 2.1.1**) of the Rules, or in **Pt 2, Fig 2.1.1** (or **Table 2.1.1**) of the Guidance.

2.5.2 Classification Rules other than 2.5.1

Where a figure or a table of any rules is quoted in the rules other than **2.5.1,** the name of the rules, the part and the number of the figure (or the table) are written.

(e.g.) Where **Pt 3, Fig 3.3.1** (or **Table 3.3.1**) of "Rules for the Classification of Steel Ships" is quoted in "Rules for the Classification of Steel Barges": in **Pt 3, Fig 3.3.1** (or **Table 3.3.1**) of **Rules for the Classification of Steel Ships**.

2.6 Units

The SI-units (International System of Units) shown in **4.** are generally used in Classification Rules. However, the MKS-units (Metric System of Units) may be used together with SI-units, at the discretion of the Society. ⚓

3. CONTENTS OF CLASSIFICATION TECHNICAL RULES

3.1 Contents of Rules for the Classification of Steel Ships

PART 1 CLASSIFICATION AND SURVEYS

PART 2 MATERIALS AND WELDING

PART 3 HULL STRUCTURES

PART 7 SHIPS OF SPECIAL SERVICE

3.2 Contents of Guidance Relating to the Rules for the Classification of Steel Ships

PART 1 CLASSIFICATION AND SURVEYS

PART 2 MATERIALS AND WELDING

PART 3 HULL STRUCTURES

PART 5 MACHINERY INSTALLATIONS

PART 6 ELECTRICAL EQUIPMENT AND CONTROL SYSTEMS

PART 9 ADDITIONAL INSTALLATIONS

PART 10 HULL STRUCTURE AND EQUIPMENT OF SMALL STEEL SHIPS

3.3 Contents of Rules for Offshore Structure

RULES FOR THE CLASSIFICATION OF MOBILE OFFSHORE UNITS

RULES FOR THE CLASSIFICATION OF FIXED OFFSHORE STRUCTURES

RULES FOR THE CLASSIFICATION OF MOBILE OFFSHORE DRILLING UNITS

3.4 Contents of Guidance for Offshore Structures

GUIDANCE FOR FLOATING LIQUEFIED GAS UNITS

GUIDANCE FOR OSV

3.5 Contents of Other Rules

RULES FOR THE CLASSIFICATION OF STEEL BARGES

RULES FOR THE CLASSIFICATION OF DREDGERS

RULES FOR THE CLASSIFICATION OF UNDERWATER VEHICLES

PART 1 SUBMERSIBLES

RULES FOR THE CLASSIFICATION OF FRP SHIPS

RULES FOR THE CLASSIFICATION OF FLOATING DOCKS

RULES FOR THE CLASSIFICATION OF TOWING SURVEY OF BARGES AND TUGBOATS

3.6 Contents of Other Guidance

GUIDANCE RELATING TO THE RULES FOR THE CLASSIFICATION OF STEEL BARGES

GUIDANCE RELATING TO THE RULES FOR THE CLASSIFICATION OF UNDERWATER VEHICLES

GUIDANCE RELATING TO THE RULES FOR THE CLASSIFICATION OF FLOATING DOCKS

GUIDANCE RELATING TO THE RULES FOR THE CLASSIFICATION OF HIGH SPEED AND LIGHT CRAFTS

GUIDANCE FOR APPROVAL OF MANUFACTURING PROCESS AND TYPE APPROVAL, ETC.

GUIDANCE FOR FLOATING STRUCTURES

GUIDANCE FOR FREIGHT CONTAINERS

GUIDANCE FOR SINGLE POINT MOORING

GUIDANCE FOR SHIPS CARRYING CNG IN BULK

GUIDANCE FOR RECREATIONAL CRAFTS

GUIDANCE FOR LARGE YACHTS

GUIDANCE FOR FUEL CELL SYSTEMS ON BOARD OF SHIPS

GUIDANCE FOR SHIPS FOR NAVIGATION IN ICE

GUIDANCE FOR APPROVAL OF RISK-BASED SHIP DESIGN

GUIDANCE FOR ASSESSMENT OF SLOSHING LOAD AND STRUCTURAL STRENGTH OF CARGO CONTAINMENT SYSTEM

GUIDANCE FOR LNG FUEL READY SHIPS

GUIDANCE ON STRENGTH ASSESSMENT OF CONTAINERSHIPS CONSIDERING THE WHIPPING EFFECT

4. CONVERSION TABLE OF SI UNITS

Quantity	SI Unit	Other Unit	Remarks
mass	kg	t	1 t = 10^3 kg
density (mass density)	kg/m^3	-	-
moment of inertia	$kg-m^2$	-	-
force	N	kgf	1 kgf = 9.81 N
moment (torque)	N-m	kgf-m	1 kgf-m = 9.81 N-m
stress	Pa or N/m^2	kgf/mm^2	1 kgf/mm^2 = 9.81 N/mm^2 = 9.81 MPa
pressure	Pa	kgf/cm^2 or bar	1 kgf/cm^2 = 0.981 bar = 98.1 kPa
work energy	J	kgf-m	1 kgf-m = 9.81 J
electric potential	J	kW-h	1 kW-h = 3.6 × 10^6 J
power	W	PS	1 PS = 735.5 W
temperature	K or ℃	C	x℃ = (x+273.15)K
quantity of heat	J	cal or kcal	1 kcal = 4.19 kJ
heat flow rate	W	kcal/h	1 kcal/h = 1.16 W
frequency	Hz	-	-
rotational frequency	s^{-1}	min^{-1}(rpm)	rpm = 60 /s
velocity	m/s	knot	1 knot = 1852 m/h
plane angle	rad	°, ', "	1° = $\frac{\pi}{180}$rad

5. LOAD LINE MARKS

(1) Assignment of Load Line
The Society is authorized to assign Load Lines to vessels registered by the Korean Government and other Governments.

(2) Load Line Mark for Ocean Going Vessels without Timber Load Line
The centre of the ring is to be placed on each side of the ship at the middle of the length as defined in the International Convention on Load Lines, 1966. The ring, 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 permanently marked on the sides of the ship as shown in **Fig 1.**

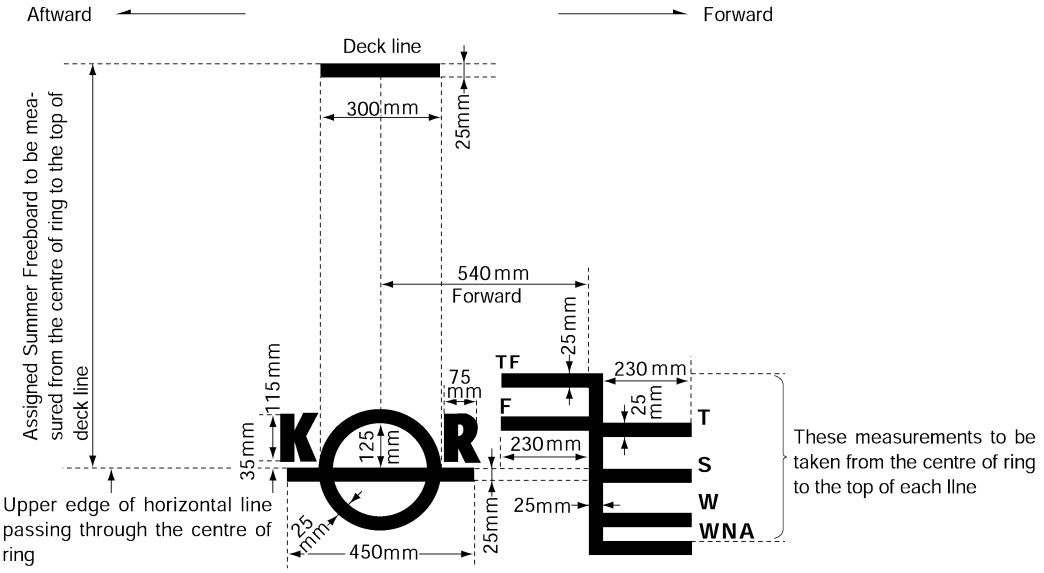

Fig 1

(3) Load Line Mark for Ocean Going Vessels with Timber Load Line
The centre of the ring is to be placed on each side of the ship at the middle of the length as defined in the International Convention on Load Lines, 1966. The ring, 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 permanently marked on the sides of the ship as shown in **Fig 2.**

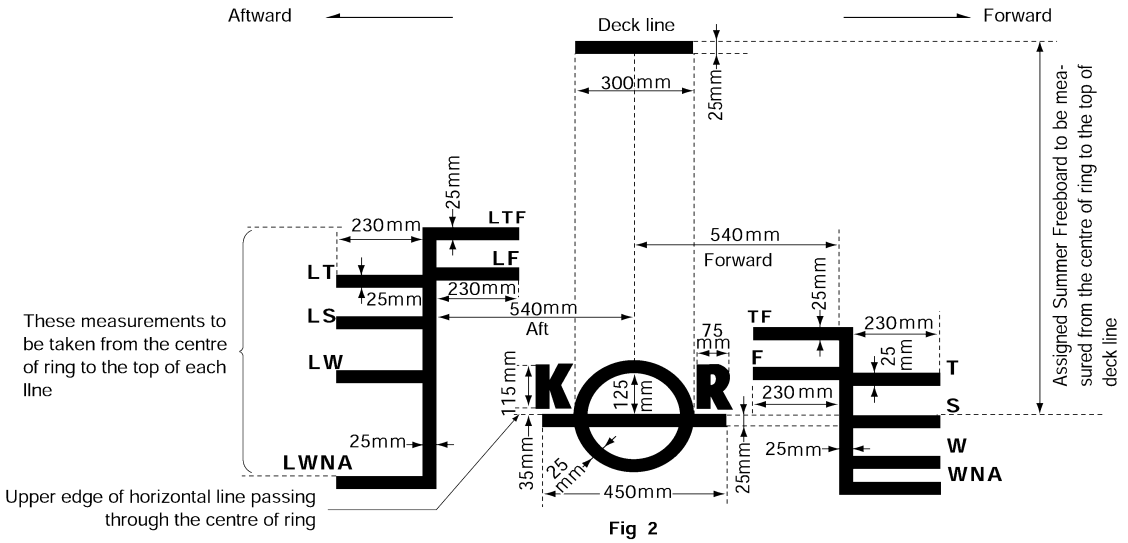

Fig 2

(4) For Korean flagged vessels which are over 12 m and for domestic voyage, the load line mark is to be as shown in **Fig 3** Marking method refers to (2). However, for the vessels navigating solely on lakes and rivers sub-paragraph (5) may be applied.

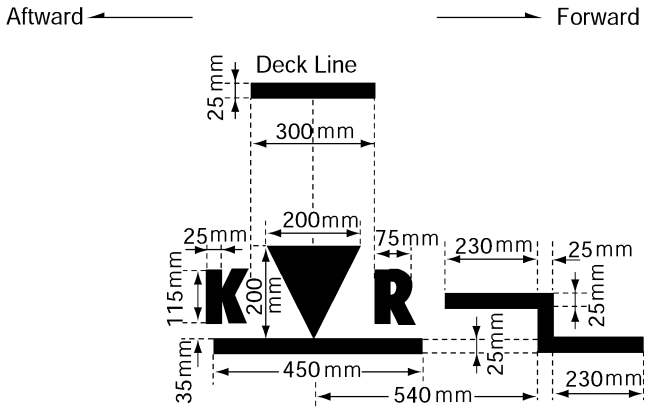

Fig 3

(5) For Korean flagged passenger vessels and dangerous cargo carriers which are less than 12 m in length and for domestic voyage, the load line mark is to be as shown in **Fig 4** Marking method refers to (2).

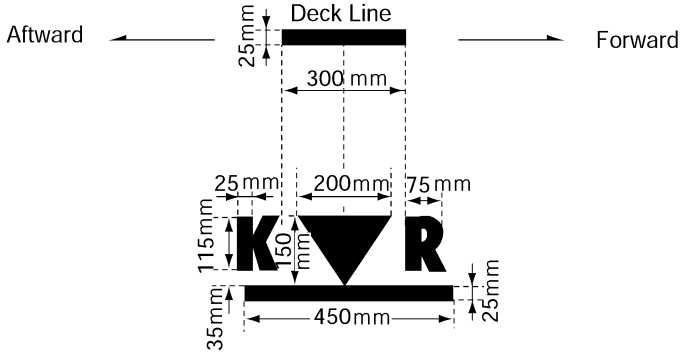

Fig 4

(6) For Korean flagged fishing vessels, the load line mark is to be as shown in **Fig 5** Marking method refers to (2).

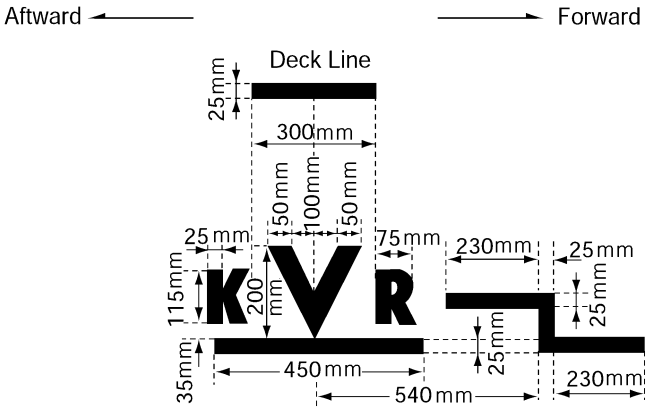

Fig 5

(7) For Korean flagged high speed crafts which are less than 12 m in length and for domestic voyage, the load line mark is to be as shown in **Fig 6** Marking method refers to (2).

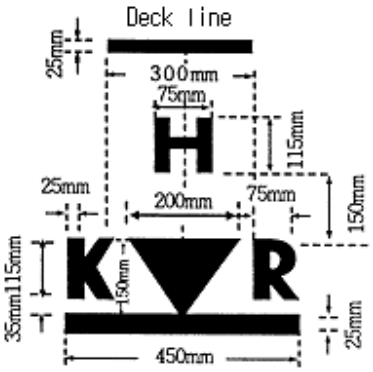

Fig 6

(8) For Korean flagged high speed crafts which are over 12 m in length and for domestic voyage, the load line mark is to be as shown in **Fig 7** Marking method refers to (2).

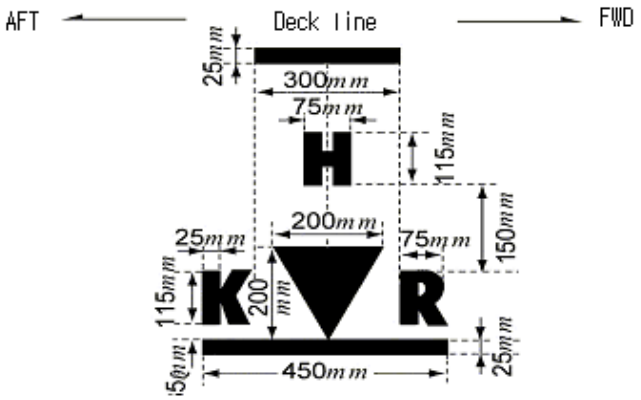

Fig 7

(9) For high speed craft subject to 2000 HSC Code engaged in international voyage, the load line mark is to be as shown in **Fig 8** Marking method refers to (2).

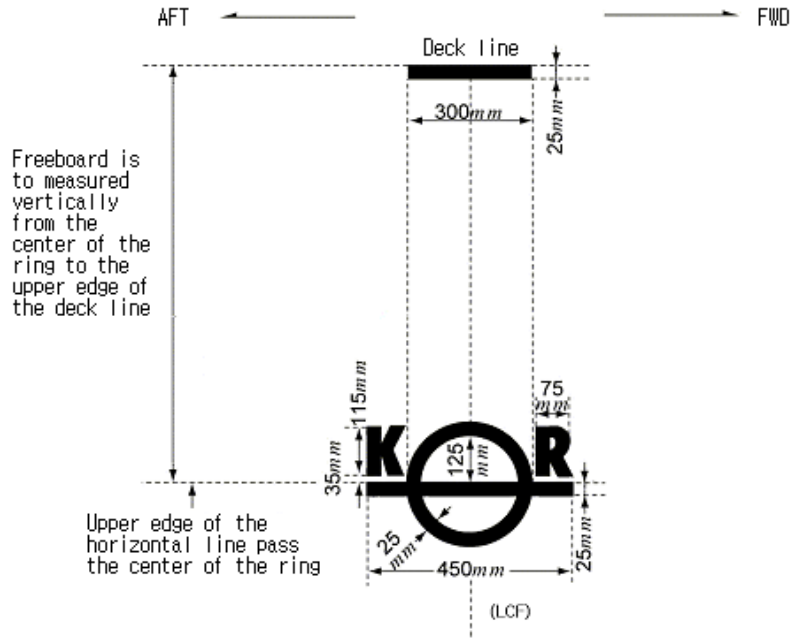

Fig 8

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