2022

Introduction to the Classification Technical Rules

KR

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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" and "Guidances" which mean all rules for the classification of ships, offshore installations and related equipment, etc., and "Guidance Relating to the Rules", which is prepared with the intent of giving details as to the treatment of the various provisions for items required the unified interpretations and items not specified in the Rules. The list of Classification Technical Rules is given in 1.

2.1.3 Amendments to the Classification Technical Rules that need to be implemented prior to publishing the Classification Technical Rules are issued without a printed copy of the entire Rules or the Guidances.

2.2 User's Guide

2.2.1 Enforcement

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

2.2.2 Format

"Rules for Steel Ships" are composed of 15 kinds and "Guidances for Steel Ships" are composed of 12 kinds.

"Rules for Offshore Structures" are composed of 3 kinds and "Guidances for Offshore Structures" are composed of 6 kinds.

"Other Rules" are composed of 8 kinds and "Other Guidances" are composed of 6 kinds.

"Other Guidance" is composed of 33 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

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

3.3 Contents of Rules for Offshore Structure

RULES FOR THE CLASSIFICATION OF MOBILE OFFSHORE UNITS

3.4 Contents of Guidance for Offshore Structures

GUIDANCE RELATING TO THE RULES FOR THE CLASSIFICATION OF MOBILE OFFSHORE DRILLING UNITS

GUIDANCE FOR MOBILE OFFSHORE UNITS

GUIDANCE FOR FLOATING PRODUCTION UNITS

GUIDANCE FOR FLOATING LIQUEFIED GAS PRODUCTION 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

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

RULES FOR THE CLASSIFICATION OF SHIPS USING LOW-FLASHPOINT FUELS

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

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

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 SHIPLIFT AND TRANSFER SYSTEMS

GUIDANCE FOR BATTERY SYSTEMS ON BOARD OF SHIPS

GUIDANCE FOR MARITIME CYBER SECURITY SYSTEM

GUIDANCE FOR INTEGRATED SOFTWARE PROCESS MANAGEMENT

GUIDANCE OF HEAT TRANSFER ANALYSIS FOR SHIPS CARRYING LIQUEFIED GASES IN BULK/SHIPS USING LIQUEFIED GASES AS FULES

GUIDANCE FOR FATIGUE STRENGTH ASSESSMENT INCLUDING SPRINGING

GUIDANCE FOR UNDERWATER RADIATED NOISE

GUIDANCE FOR ROMOTE SURVEY

GUIDANCE FOR ROMOTE INSPECTION TECHNIQUES

GUIDANCE FOR PREVENTION SYSTEM OF POLLUTION FROM SHIPS

GUIDANCE FOR SHIPS DESIGNED TO PREVENT THE SPREAD OF INFECTIOUS DISEASE

4. CONVERSION TABLE OF SI UNITS

Quantity	SI Unit	Other Unit	Remarks
mass	kg	t	1 t = 10^3kg
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.**

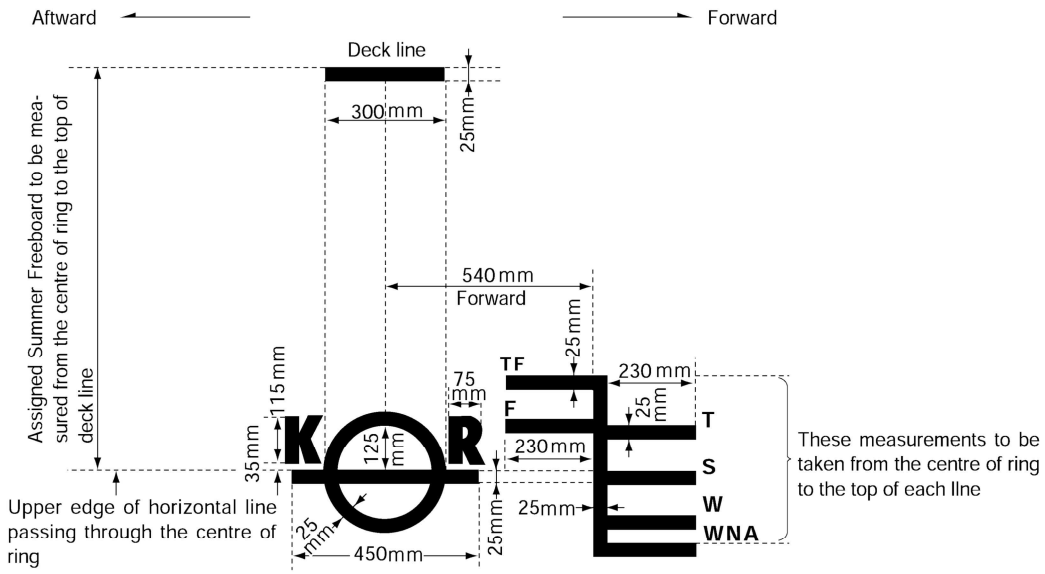

Fig 1

(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.**

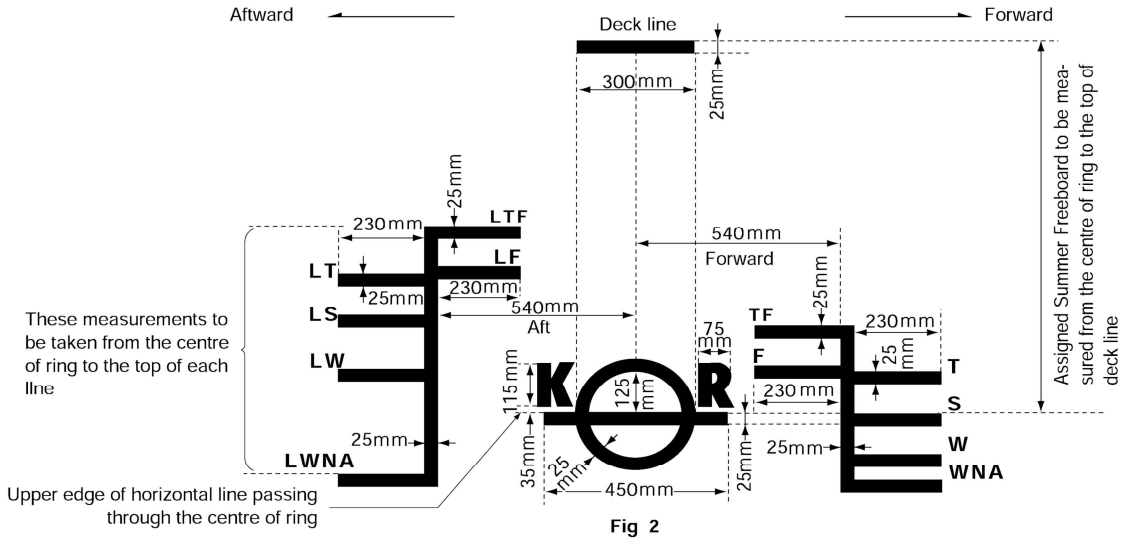

Fig 2

(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.

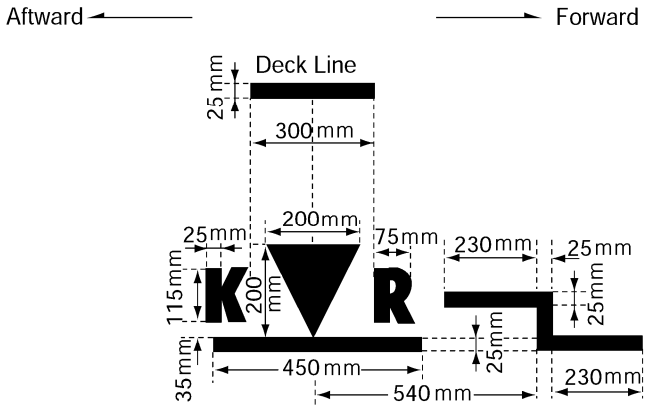

Fig 3

(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).

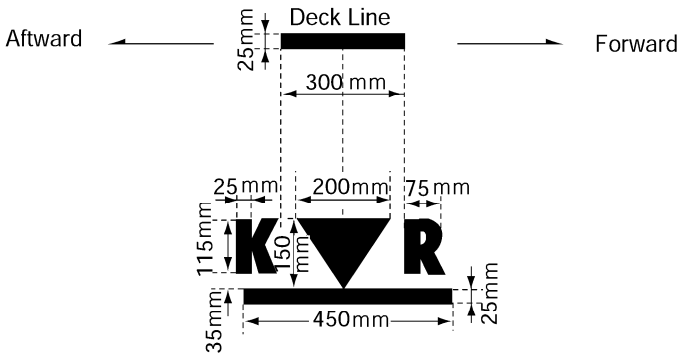

Fig 4

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

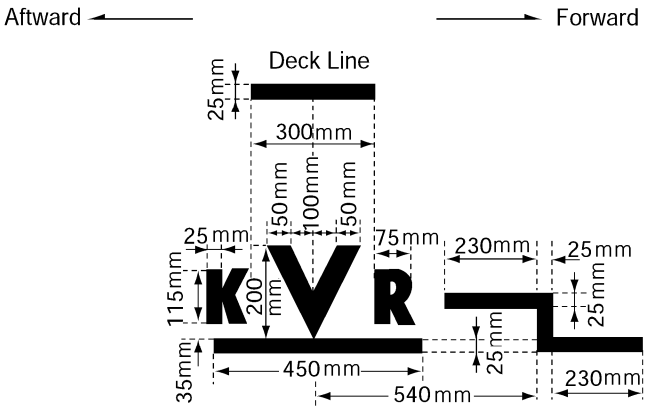

Fig 5

(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).

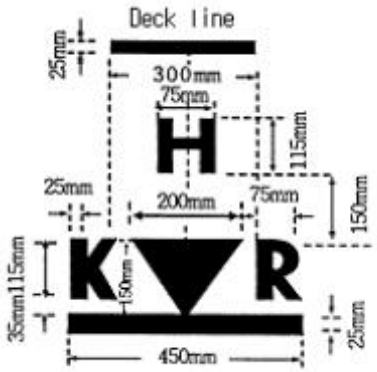

Fig 6

(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).

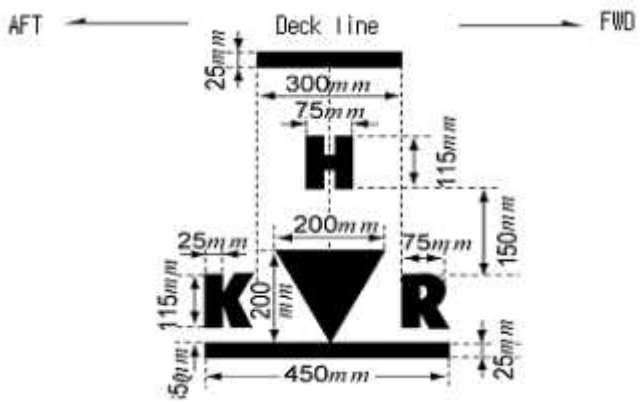

Fig 7

(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).

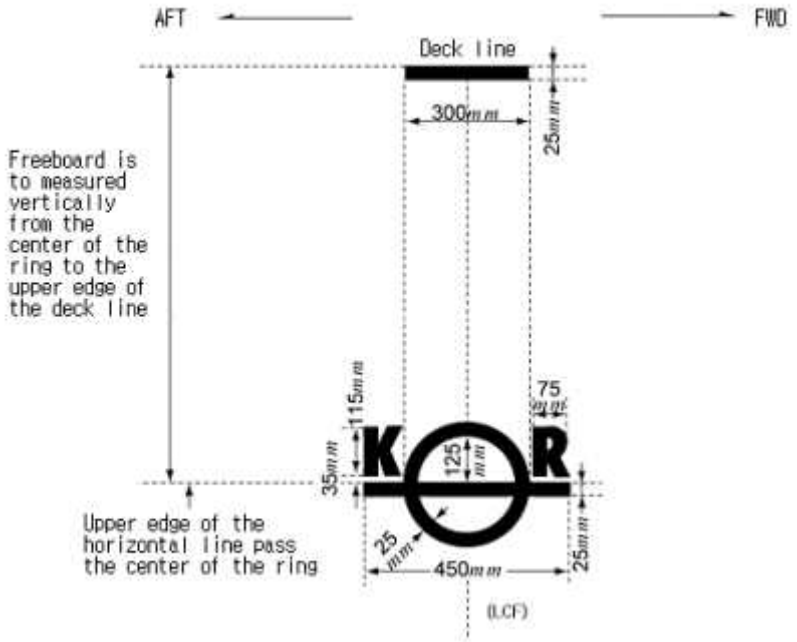

Fig 8

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