

# 2021

# Notation Guide

### CONTENTS

CHAPTER 1 GENERAL ······	
CHAPTER 2	
2-1 SHIP TYPE - SPECIAL FEATURE NOTATIONS	5
1. Oil Tanker ······	
2-1. Liquefied Gas Carrier	
2-2. Compressed Natural Gas Carrier	
3-1. Chemical Tanker	
3-2. NLS Tanker	
4. Oil/Chemical Tanker	
5. Bulk Carrier	
6. Cargo Ship	
7. Ore Carrier	
8-1. Ore/Oil Carrier	
8-2. Ore/Chemical Carrier	
9. Oil/Bulk/Ore Carrier	
10. RoRo Ship ·····	
11. Container Ship	
12. Fishing Vessel	
13. Fish Carrier	
14. Passenger Ship	
15-1. Tug Boat	
15–2. Pusher	
16. Work Vessel	
17. Special Purpose Ship	
18. Barge	
19. Dredger	
20. Special Purpose Submersible	
21. Fixed Offshore Structure	
22. Mobile Offshore Unit	
23. Mobile Offshore Drilling Unit	
24-1. Floating Production, Storage and Offloading Unit	
24-2. Floating Production and Offloading Unit	
24-3. Floating Storage and Offloading Unit	
25-1. Floating LNG Storage and Regasification Unit	
25-2. Floating LNG Production, Storage and Offloading Unit	
26. Offshore Support Vessel	
27-1. Floating Dock	
27-2. Dock Gate	
27-3. Launching Skid Barge	
28. Refrigerated Cargo Carrier	
29. Single Point Mooring	

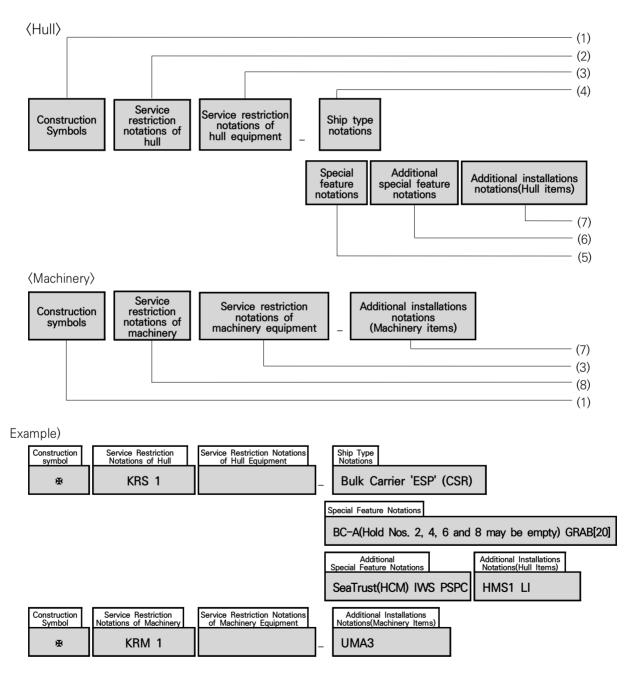
31. Shipli 32. WIG	ng Structure ft and Transfer System Craft ng LNG Bunkering Terminal	
2-2 Remar	ks of SHIP TYPE - SPECIAL FEATURE NOTATIONS	191
	ADDITIONAL SPECIAL FEATURE NOTATIONS	
Annex 1	Written Examples of Class Notations	

### CHAPTER 1 GENERAL

1. Ships built and surveyed for the classification in accordance with the Rules of the Society or in accordance with requirements deemed to be equivalent to the Rules by the Society will be assigned a class and registered in the Register of Ships.

#### 2. Class Notation Configuration

The class will be distinguished by the class notations and the typical arrangement of class notations will consist of the following structure.



The Construction Symbols assigned to the ships according to the distinction of Classification Survey are to be in accordance with the followings:

- **₩**
- For ships built under the supervision of the Society.
- No symbol : For ships considered to be fit as the result of surveys by the Surveyor after construction with the exception of the above mentioned construction symbols
- (2) Service Restriction Notations of Hull

The following Service Restriction Notations will be assigned for ships with hull construction and strength found to be in compliance with the Rules: (refer to the **Guidance Pt 1 Ch 1 201. 4** for the reduced requirements according to the restricted service area)

KRS 1 : For ships unrestricted in service area KRS 0 : For ships restricted in service area

(3) Service Restriction Notation of Hull Equipment or Machinery Equipment The following Service Restriction Notations will be assigned for ships with hull equipment or machinery equipment found to be in compliance with the Rules: (refer to the Guidance Pt 1 Ch 1 201. 4 for the reduced requirements according to the restricted service area)

- No symbol : For ships unrestricted in service area
  - : For ships approved with the condition of coastal service
    - : For ships approved with the condition of smooth water service
- (4) Ship Type Notations

C S

The Ship Type Notations such as Oil Tanker 'ESP'(FBC), Bulk Carrier 'ESP', Cargo Ship, Passenger Ship, Tug Boat, Barge, etc. will be assigned to indicate the type of the ship. (refer Ch 2)

(5) Special Feature Notations

The Special Feature Notations may be located under the character of the Ship Type Notations. These Special Feature Notations could consist of the hull structure and the cargo tank type fitted for the kind and nature of cargoes, ice strengthening, in-water survey, cargo loading condition, design temperature, design pressure, the apparent specific gravity of cargoes. Also, the restriction of navigation area and condition may be remarked additionally. (refer Ch 2)

(6) Additional Special Feature Notations

When considered necessary by the Society, the Additional Special Feature Notations may be located side by appended to the character of Special Feature Notations. These special feature notations could consist of the direct strength assessment, direct fatigue assessment, hull construction monitoring, and/or longitudinal strength of hull girder in flooded condition for bulk carriers, etc. (refer **Ch 3**)

(7) Additional Installations Notations

When the additional installations are complying with the relevant requirements, the Additional Installations Notations may be appended. The hull items such as HMS, HMS1, LG, PA, LI, EQ-SPM, PKS, SUR, BOU, SAT will be appended at the end of hull side notations and the machinery items such as UMA, UMA1, UMA2, UMA3, CMA, PMS, DPS(0), DPS(1), DPS(2), DPS(3), NBS, NBS1, NBS2, HVSC, HVSC-Partial, IGS, COW, RMC, ns-NH3, GCU, Reliquefaction, DFDE, Drilling System will be appended at the end of machinery side notations. (refer Ch 4)

(8) Service Restriction Notations of Machinery The following Service Restriction Notations will be assigned for ships, which have main propulsion machinery, with machinery and electrical installations found to be in compliance with the Rules: (refer to the Guidance Pt 1 Ch 1 201. 4 for the reduced requirements according to the

 $KRM \ 1$  : For ships unrestricted in service area.  $KRM \ 0$  : For ships restricted in service area.

restricted service area)

3. The class notations of large yachts classed with the Society are to be in accordance with the requirements specified in Pt 1, Ch 1, 103. of the Guidance for Large Yachts and the class notations of recreational crafts classed with the Society are to be in accordance with the requirements specified in Ch 1, 103. of the Guidance for Recreational Crafts.

Ψ

<sup>(</sup>NOTES) 1. Unless otherwise specified elsewhere, the "Rules" means the Society's "Rules for the Classification of Steel Ships" and the "Guidance" means the Society's "Guidance Relating to the Rules for the Classification of Steel Ships".

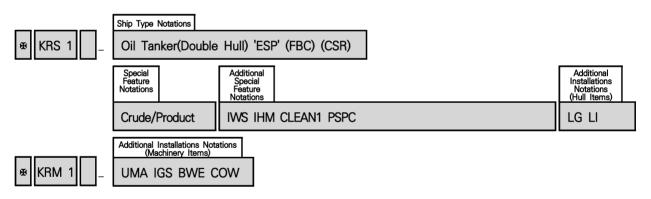
<sup>2.</sup> This Notation Guide is made based on the KR Classification Technical Rules which are effective on or after 1 July 2021 if there is no remarks.

### CHAPTER 2 2–1 SHIP TYPE – SPECIAL FEATURE NOTATIONS

## 1. Oil Tanker

Ship Type Notations	Special Feature Notations
Oil Tanker 'ESP' (Double Hull) (Double Hull)(EXP) (FAC) (FAO) (FBC) (CSR)	Crude Product Crude/Product Product/Asphalt Asphalt

< Typical Example >



#### NOTATIONS (Ship Type Notations)

Oil Tanker

Oil Tanker(Double Hull)

Oil Tanker(Double Hull)(EXP)

Oil Tanker 'ESP'

Oil Tanker(Double Hull) 'ESP'

Oil Tanker(Double Hull)(EXP) 'ESP'

#### DESCRIPTIONS

Oil Tanker : to be assigned to ships which are constructed primarily for the carriage of oil in bulk.

- (Double Hull) : to be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks protected by a double hull complied with the Reg. 19.3 of Annex I of MARPOL73/78 which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces.
- (Double Hull)(EXP) : Any ships not applicable to above (Double Hull), the notation "(Double Hull)(EXP)" shall be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks protected by a double hull complied with the Reg. 19.6 of Annex I of MARPOL73/78 which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces. (Expanded)
- 'ESP': to be assigned to ships which are constructed generally with integral tanks and intended primarily to carry oil in bulk. This type notation shall be assigned to tankers of both single and double hull construction, as well as tankers with alternative structural arrangements, e.g. mid-deck designs. (Enhanced Survey Programme)

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Oil Tanker	Pt 7 Ch 1	Pt 1 Ch 2
Oil Tanker(Double Hull)	Pt 7 Ch 10	Pt 1 Ch 2
Oil Tanker(Double Hull)(EXP)	Pt 7 Ch 10	Pt 1 Ch 2
Oil Tanker 'ESP'	Pt 7 Ch 1	Pt 1 Ch 2, Pt 1 Ch 3 Sec 3
Oil Tanker(Double Hull) 'ESP'	Pt 7 Ch 10	Pt 1 Ch 2, Pt 1 Ch 3 Sec 5
Oil Tanker(Double Hull)(EXP) 'ESP'	Pt 7 Ch 10	Pt 1 Ch 2, Pt 1 Ch 3 Sec 5

<pre></pre>
★ KRM 1 ★ KRS 1 - Oil Tanker 'ESP' (FBC) Product CLEAN1 LG LI ★ KRM 1 - UMA IGS COW
Product CLEAN1 LG LI ⊯KRM 1 – UMA IGS COW
<pre></pre>
$\mathbf{\mathbf{x}}$ (VPS 1 – <b>Oil Tankar(Daubla Hull)</b> 'ESD' (EDC) (CSD)
Crude/Product IWS IHM CLEAN1 PSPC LG LI
≪KRM 1 - UMA3 BWE VEC2 IGS COW
≪KRS 1 - <b>Oil Tanker(Double Hull)(EXP)</b> 'ESP' (FBC) Product CLEAN1 IHM PSPC LI
≪KRM 1 - BWT VEC1

## 1. Oil Tanker

#### NOTATIONS (Ship Type Notations - Flash Point/Tank Vent)

(FAC)			
(FAO)			
(FBC)			

#### DESCRIPTIONS

- (FAC) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Controlled tank vent
- (FAO) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Open tank vents
- (FBC) : to be assigned to ships which are carrying cargoes of Flash point of 60°C and Below with Controlled tank vents

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(FAC)	Pt 7 Ch 1 Sec 10	-
(FAO)	Pt 7 Ch 1 Sec 10	-
(FBC)	Pt 7 Ch 1 Sec 10	-

∞KRS 1 - Oil Tanker <b>(FAO)</b> Asphalt IWS CLEAN1 LG LI ∞KRM 1
≪KRS 1 - Oil Tanker 'ESP' <b>(FBC)</b> Product CLEAN1 LG LI ≪KRM 1 - UMA IGS COW
★KRS 1 - Oil Tanker(Double Hull) 'ESP' (FBC) (CSR) Crude/Product IWS IHM CLEAN1 PSPC LG LI ★KRM 1 - UMA3 BWE VEC2 IGS COW
★KRS 1 - Oil Tanker(Double Hull)(EXP) 'ESP' (FBC) Product CLEAN1 IHM PSPC LI ★KRM 1 - BWT VEC1

### 1. Oil Tanker

#### NOTATIONS (Ship Type Notations - Common Structural Rules)

#### (CSR)

#### DESCRIPTIONS

(CSR) : to be assigned to ships comply with the requirements of IACS's Common Structural Rules for Double Hull Oil Tankers(Pt 12) or IACS's Common Structural Rules for Bulk Carriers and Oil Tankers(Pt 13).

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(CSR)	Pt 12 or Pt 13	Pt 1 Ch 2, Pt 1 Ch 3, Pt 12 or Pt 13

#### EXAMPLES

In Content of the second s

## 1. Oil Tanker

#### NOTATIONS (Special Feature Notations)

Crude	
Product	
Crude/Product	
Product/Asphalt	
Asphalt	

#### DESCRIPTIONS

Crude : to be assigned to ships carrying crude oil in bulk primarily.

Product : to be assigned to ships carrying product oil in bulk primarily.

Crude/Product : to be assigned to ships carrying crude oil and product oil in bulk primarily.

Product/Asphalt : to be assigned to ships carrying product oil and asphalt in bulk primarily.

Asphalt : to be assigned to ships carrying asphalt in bulk primarily.

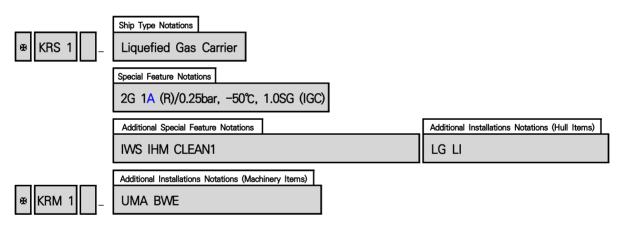
#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Crude	Pt 7 Ch 1	-
Product	Pt 7 Ch 1	-
Crude/Product	Pt 7 Ch 1	-
Product/Asphalt	Pt 7 Ch 1	-
Asphalt	Pt 7 Ch 1	-

<ul> <li>★KRS 1 - Oil Tanker (FAO)</li> <li>Asphalt IWS CLEAN1 LG LI</li> <li>★KRM 1</li> <li>(Remarks : For all cargo tanks are independent type, the 'ESP' notation is not to be assigned)</li> </ul>
★KRS 1 - Oil Tanker 'ESP' (FBC) Product CLEAN1 LG LI ★KRM 1 - UMA IGS COW
★ KRS 1 – Oil Tanker(Double Hull) 'ESP' (FBC) (CSR) Crude/Product IWS IHM CLEAN1 PSPC LG LI ★ KRM 1 – UMA3 BWE VEC2 IGS COW

	Special Feature Notations				
Ship Type Notations	Type of Ship	Type of Tank	Transportation Mode	Design Aspect or Exclusive Cargo	IMO Code
Liquefied Gas Carrier	1G 2G 2PG 3G	21 3M 3S 1A 1B 1C	(R) (P) (RP)	Design Pressure, Minimum Temperature and Specific Gravity(SG) Name of Liquefied Gas when exclusively carried	(NIGC) (IGC) (GC) (GCX)
	LPG				

< Typical Example >



### NOTATIONS (Ship Type Notations)

#### Liquefied Gas Carrier

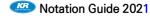
#### DESCRIPTIONS

Liquefied Gas Carrier : to be assigned to ships carrying liquefied gas in bulk.

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Liquefied Gas Carrier	Pt 7 Ch 5	Pt 1 Ch 2

∞KRS 1 - <b>Liquefied Gas Carrier</b> 2G 1A (R)/0.25bar, -50℃, ∞KRM 1	1.0SG (IGC)
≪KRS 1 - <b>Liquefied Gas Carrier</b> LPG ≪KRM 1	



1G		
2G		
2PG		
3G		

#### DESCRIPTIONS

This notations will be assigned according to the ship's type which are to be determined by Pt 7, Ch 5, Sec 2, 203. (damage assumption), 204. (location of cargo tanks), 206. (standard of damage) and 207. (survival requirements) as followings.

- 1G : to be assigned to ships intended to transport products which require maximum preventive measures to preclude the escape of such cargo. (Refer to Pt 7 Ch 5 Sec 2 and Sec 19 Summary of Minimum Requirements)
- 2G : to be assigned to ships intended to transport products which require significant preventive measures to preclude the escape of such cargo. (Refer to Pt 7 Ch 5 Sec 2 and Sec 19 Summary of Minimum Requirements)
- 2PG : to be assigned to ships of 150 m in length or less intended to transport products which require significant preventive measures to preclude the escape of such cargo, and where the products are carried in independent type C tanks designed for a MARVS(Maximum Allowable Relief Valve Setting) of at least 7 bar gauge and a cargo containment system of design temperature of -55°C or above. However, a ship of this description, but over 150 m in length is to be considered a type 2G ship. (Refer to Pt 7 Ch 5 Sec 2 and Sec 19 Summary of Minimum Requirements)
- 3G : to be assigned to ships intended to transport products which require moderate preventive measures to preclude the escape of such cargo. (Refer to Pt 7 Ch 5 Sec 2 and Sec 19 Summary of Minimum Requirements)

Notations	Design	Survey
1G	Pt 7 Ch 5 Sec 2	-
2G	Pt 7 Ch 5 Sec 2	-
2PG	Pt 7 Ch 5 Sec 2	-
3G	Pt 7 Ch 5 Sec 2	-

#### **REQUIREMENTS / RULE REFERENCES**

```
★KRS 1 - Liquefied Gas Carrier
2G 1A (R)/0.25bar, -50℃, 1.0SG (IGC)
```

```
⊛KRM 1
```

#### NOTATIONS (Special Feature Notations - Type of Tank)

21	
3M	
3S	
1A	
1B	
1C	

#### DESCRIPTIONS

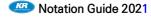
#### 2I : Integral Tank

- to be assigned to ships having tanks to form a structural part of the ship's hull(primary barrier for containment of cargo). (Po ≤ 0.25 bar(Max. 0.7 bar), To ≥-10 °C) (Refer to Pt 7 Ch 5 Sec 4)
- 3M : Membrane Tank
  - to be assigned to ships having non-self supporting tanks which consist of a thin layer(membrane) supported through insulation by the adjacent hull structure(primary barrier for containment of cargo). ( $Po \le 0.25 \text{ bar}(Max. 0.7 \text{ bar})$ , Thickness  $\le 10 \text{ mm}$ ) (Refer to Pt 7 Ch 5 Sec 4)
- 3S : Semi-membrane Tank

- to be assigned to ships having non-self supporting tanks in the loaded condition, which consist of a layer, part of which is supported through insulation by the adjacent hull structure(primary barrier for containment of cargo). ( $Po \le 0.25 \text{ bar}(Max. 0.7 \text{ bar})$ ) (Refer to Pt 7 Ch 5 Sec 4)

#### 1A : Independent Tank Type A

- to be assigned to ships having gravity tanks. (Tanks designed using the requirements of Pt 3, Ch 15,  $Po \le 0.7 \text{ bar}(\text{for plane surfaces}))$  (Refer to Pt 7 Ch 5 Sec 4)
- 1B : Independent Tank Type B
  - to be assigned to ships having gravity tanks or pressure vessels. (Tanks designed using model tests, refined analytical tools and analysis methods,  $Po \le 0.7 \text{ bar}$ (for gravity tanks)) (Refer to Pt 7 Ch 5 Sec 4)
- 1C : Independent tank Type C
  - to be assigned to ships having pressure vessels. (Tanks designed using the requirements of Pt 5, Ch 5, Design vapour pressure to be specially considered) (Refer to Pt 7 Ch 5 Sec 4)
- (Remarks) 1 : Independent, 2 : Integral, 3 : Membrane Po : Design Vapour Pressure, To : Boiling Point of the Cargo



### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
21	Pt 7 Ch 5 Ch 4	-
3M 3S	Pt 7 Ch 5 Ch 4	-
3S	Pt 7 Ch 5 Ch 4	-
1A	Pt 7 Ch 5 Ch 4	-
1B	Pt 7 Ch 5 Ch 4	-
1C	Pt 7 Ch 5 Ch 4	-

\_\_\_\_\_

#### **EXAMPLES**

∞KRS 1 - Liquefied Gas Carrier 2G **1A** (R)/0.25bar, -50℃, 1.0SG (IGC) ∞KRM 1 \_\_\_\_\_

#### NOTATIONS (Special Feature Notations - Transportation Mode)

(R)			
(P)			
(RP)			

#### DESCRIPTIONS

(R) : to be assigned to ships having fully Refrigerated transportation mode.

(P) : to be assigned to ships having fully Pressurized transportation mode.

(RP) : to be assigned to ships having Refrigerated and Pressurized transportation mode.

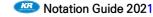
### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(R)	Pt 7 Ch 5	-
(P)	Pt 7 Ch 5	-
(RP)	Pt 7 Ch 5	-

#### **EXAMPLES**

★KRS 1 - Liquefied Gas Carrier 2G 1A (R)/0.25bar, -50°C, 1.0SG (IGC)

⊛KRM 1



NOTATIONS (Special Feature Notations – Design Pressure, Minimum Temperature and Specific Gravity(SG) or Name of Liquefied Gas when exclusively carried)

Design Pressure, Minimum Temperature and Specific Gravity(SG) or Name of Liquefied Gas when exclusively carried

#### DESCRIPTIONS

Design Pressure, Minimum Temperature and Specific Gravity(SG) or Name of Liquefied Gas when exclusively carried : Design pressure, minimum temperature and specific gravity(SG) or mame of liquefied gas when exclusively carried shall be assigned.

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Design Pressure, Minimum		
Temperature and Specific Gravity(SG)	Pt 7 Ch 5	-
Name of Liquefied Gas when exclusively carried	Pt 7 Ch 5	-

#### EXAMPLES

★KRS 1 - Liquefied Gas Carrier 2G 1A (R)/0.25bar, -50℃, 1.0SG (IGC) ★KRM 1

#### NOTATIONS (Special Feature Notations - IMO Code)

(NIGC)		
(IGC)		
(GC)		
(GCX)		

#### DESCRIPTIONS

- (NIGC) : to be assigned to ships built in compliance with the requirements given in Pt 7, Ch 5 of the Rules and constructed on or after 1 July 2016.
- (IGC) : to be assigned to ships built in compliance with the requirements given in Pt 7, Ch 5 of the Rules and constructed on or after 1 July 1986.
- (GC) : to be assigned to ships built in compliance with the IMO Res.A.328(IX).
- (GCX) : to be assigned to ships built in compliance with IMO Res.A.329(IX).

For the ships except the above, additional notation is not assigned.

### **REQUIREMENTS / RULE REFERENCES**

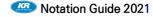
Notations	Design	Survey
(NIGC)	Pt 7 Ch 5	_
(IGC)	Pt 7 Ch 5	-
(GC)	IMO Res.A.328(IX)	-
(GCX)	IMO Res.A.329(IX)	-

#### **EXAMPLES**

★KRS 1 - Liquefied Gas Carrier 2G 1A (R)/0.25bar, -50℃, 1.0SG (IGC)

⊛KRM 1

∞KRS 1 -	Liquefied Gas Carrier 1C (P)/Propane <b>(GCX)</b>
⊛KRM 1	



#### NOTATIONS (Special Feature Notations - LPG)

#### LPG

#### DESCRIPTIONS

LPG : to be assigned to liquefied gas carriers carrying only propane and butane. However, the names of the following cargoes, instead of propane and butane, may be given for ships carrying cargoes other than propane and butane under the approval of the Society. (Example) Ammonia, Butadiene, Propylene, VCM, Ethylene Oxide, Ethylene, etc.

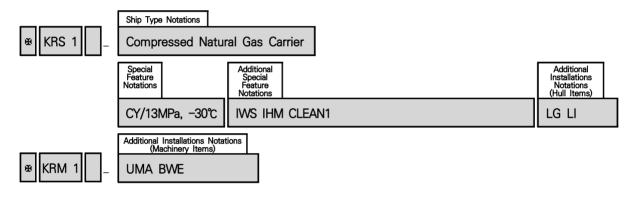
#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
LPG	Pt 7 Ch 5	-

	Gas Carrier	
≪KRS 1 - Liquefied VCM ≪KRM 1	Gas Carrier	

Ship Tung Natations	Special Feature Notations			
Ship Type Notations	Type of Cargo Tank	Design Aspect		
Compressed Natural Gas Carrier	CO CY	Design Pressure, Minimum Temperature		

< Typical Example >



Ch 2

#### NOTATIONS (Ship Type Notations)

#### Compressed Natural Gas Carrier

#### DESCRIPTIONS

Compressed Natural Gas Carrier : to ships complied with Guidance for Ships Carrying CNG in Bulk.

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey		
Compressed Natural Gas Carrier	Guidance for Ships Carrying CNG in Bulk	Guidance for Ships Carrying CNG in Bulk		

#### **EXAMPLES**

★KRS 1 - Compressed Natural Gas Carrier CY/13MPa, -30℃ ★KRM 1

NOTATIONS (Special Feature Notations - Type of Cargo Tank)

CO CY

#### DESCRIPTIONS

- CO: to be assigned to ships having COiled cargo tanks which are complied with Ch 3, 402. 1 (2) (A) of the Guidance for Ships Carrying CNG in Bulk.
- CY : to be assigned to ships having CY linderical cargo tanks which are complied with Ch 3, 402. 1 (2) (B) of the Guidance for Ships Carrying CNG in Bulk.

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
СО	Guidance for Ships Carrying CNG in Bulk	-
CY	Guidance for Ships Carrying CNG in Bulk	-

#### **EXAMPLES**

**₩KRS 1 - Compressed Natural Gas Carrier** CY/13MPa, -30°C ⊛KRM 1

NOTATIONS (Special Feature Notations – Design Pressure, Minimum Temperature)

Design Pressure, Minimum Temperature

#### DESCRIPTIONS

Design Pressure, Minimum Temperature : Design Pressure, Minimum Temperature is to be assigned.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Design Pressure, Minimum Temperature	Guidance for Ships Carrying CNG in Bulk	-

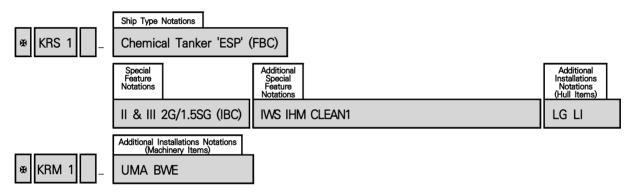
#### EXAMPLES

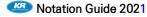
∞KRS 1 - Compressed Natural Gas Carrier CY/**13MPa, -30℃** ∞KRM 1

## 3.1 Chemical Tanker

Ship Type Nota	tions	Special Feature Notations			
Chemical Tanker 'ESP' (FAC) (FAO) (FBC)	'ESP'	Type of Ship	Type of Tank	Design Aspect or Exclusive Cargo	IMO Code
		          &	1G 2G 1P	Apparent Specific Gravity (SG) Name of Chemical when exclusively carried	(IBC) (BCH) - (BCX)

#### $\langle$ Typical Example $\rangle$





#### NOTATIONS (Ship Type Notations)

Chemical Tanker Chemical Tanker 'ESP'

#### DESCRIPTIONS

- Chemical Tanker : to be assigned to ships which are constructed primarily for the carriage of chemicals(liquid cargoes specified in(Pt 7, Ch 6, Sec 17 of the Rules) in bulk.
- 'ESP': to be assigned to ships which are constructed generally with integral tanks and intended primarily to carry chemicals(liquid cargoes specified in Pt 7, Ch 6, Sec 17 of the Rules) in bulk. This type notation shall be assigned to chemical tankers of both single or double hull construction, as well as chemical tankers with alternative structural arrangements. (Enhanced Survey Programme)

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Chemical Tanker	Pt 7 Ch 6	Pt 1 Ch 2
Chemical Tanker 'ESP'	Pt 7 Ch 6	Pt 1 Ch 2, Pt 1 Ch 3 Sec 4

∞KRS 1 - <b>Chemical Tanker</b> (FAO) III 1G/Sulphur Molten (IBC) IWS CLEAN1 LG LI ∞KRM 1 - BWE	
★KRS 1 - Chemical Tanker 'ESP' (FBC) II & III 2G/1.5SG (IBC) IWS CLEAN1 LG LI ★KRM 1 - UMA BWE	

NOTATIONS	(Ship	Type	Notations	-	Flash	Point/Tank V	/ent)
-----------	-------	------	-----------	---	-------	--------------	-------

(FAC)			
(FAO)			
(FBC)			

#### DESCRIPTIONS

- (FAC) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Controlled tank vents
- (FAO) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Open tank vents
- (FBC) : to be assigned to ships which are carrying cargoes of Flash point of 60°C and Below with Controlled tank vents

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(FAC)	Pt 7 Ch 1 Sec 10	-
(FAO)	Pt 7 Ch 1 Sec 10	-
(FBC)	Pt 7 Ch 1 Sec 10	-

#### **EXAMPLES**

★KRS 1 - Chemical Tanker (FAO) III 1G/Sulphur Molten (IBC) IWS CLEAN1 LG LI
★KRM 1 - BWE
★KRS 1 - Chemical Tanker 'ESP' (FBC) II & III 2G/1.5SG (IBC) IWS CLEAN1 LG LI
★KRM 1 - UMA BWE

#### NOTATIONS (Special Feature Notations - Type of Ship)

T		
II		
III		
&		

#### DESCRIPTIONS

This notations will be assigned according to the ship's type which are to be determined by Pt 7, Ch 6, Sec 2, 205. (damage assumption), 206. (location of cargo tanks), 208. (standard of damage) and 209. (survival requirements) as followings.

- I : to be assigned to ships intended to transport products with very severe environmental and safety hazards which require maximum preventive measures to preclude an escape of such cargo. (Refer to Pt 7 Ch 6 Sec 17 Summary of Minimum Requirements, column E)
- II : to be assigned to ships intended to transport products with appreciably severe environmental and safety hazards which require significant preventive measures to preclude an escape of such cargo. (Refer to Pt 7 Ch 6 Sec 17 Summary of Minimum Requirements, column E)
- III : to be assigned to ships intended to transport products with sufficiently severe environmental and safety hazards which require a moderate degree of containment to increase survival capability in a damaged condition. (Refer to Pt 7 Ch 6 Sec 17 Summary of Minimum Requirements, column E)

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
1	Pt 7 Ch 6 Sec 2	-
11	Pt 7 Ch 6 Sec 2	-
	Pt 7 Ch 6 Sec 2	-
&	Pt 7 Ch 6 Sec 2	-

≪KRS 1 - Chemical Tanker (FAO) III 1G/Sulphur Molten (IBC) IWS CLEAN1 LG LI ≪KRM 1 - BWE	

#### NOTATIONS (Special Feature Notations - Type of Tank)

1G			
2G			
1P			

#### DESCRIPTIONS

- 1 : Independent Tank
  - to be assigned to ships having independent gravity tanks or pressure vessels as a cargo containment envelope which is not contiguous with or part of the hull structure.
     (Tanks designed using the requirements of Pt 3, Ch 15 and Pt 5, Ch 5 of the Rules)
- 2 : Integral Tank

- to be assigned to ships having self-supporting hull construction tanks. ( $Po \le 0.25 \text{ bar}(Max. 0.7 \text{ bar}), To \ge -10 ^{\circ}C$ )

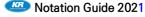
- G: Gravity Tank
  - to be assigned to ships having independent or integral tanks. ( $Po \le 0.7 \text{ bar}$ )
- P: Pressure Tank
  - to be assigned to ships having independent pressure tanks. (Tanks designed using the requirements of Pt 5, Ch 5 of the Rules, Po > 0.7 bar)

(Remarks) Po : Design Pressure, To : Boiling Point of the Cargo

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
1G	Pt 7 Ch 6 Sec 4	-
2G	Pt 7 Ch 6 Sec 4	-
1P	Pt 7 Ch 6 Sec 4	-

≪KRS 1 - Chemical Tanker 'ESP' (FBC) II & III <b>2G</b> /1.5SG (IBC) IWS CLEAN1 LG LI ≪KRM 1 - UMA BWE	



NOTATIONS (Special Feature Notations - Apparent Specific Gravity(SG) or Name of Chemical when exclusively carried)

Apparent Specific Gravity(SG) or Name of Chemical when exclusively carried

#### DESCRIPTIONS

Apparent Specific Gravity(SG) or Name of Chemical when exclusively carried

: Apparent specific gravity(SG) or mame of Chemical when exclusively carried shall be assigned.

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Apparent Specific Gravity(SG)	Pt 7 Ch 6	-
Name of Chemical when exclusively carried	Pt 7 Ch 6	-

#### **EXAMPLES**

#### NOTATIONS (Special Feature Notations - IMO Code)

(IBC)			
(BCH)			
(BCX)			

#### DESCRIPTIONS

- (IBC) : to be assigned to ships built in compliance with the requirements given in Pt 7, Ch 6 of the Rules and constructed on or after 1 July 1986.
- (BCH) : to be assigned to ships built in compliance with the requirements given in Pt 7, Ch 6 of the Rules and constructed before 30 June 1986 and on or after 12 April 1972.
- (BCX) : to be assigned to ships built in compliance with Par 1.7.3 of BCH Code and constructed before 11 April 1972.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(IBC)	Pt 7 Ch 6	-
(BCH)	Pt 7 Ch 6	-
(BCX)	BCH Code 1.7.3	-

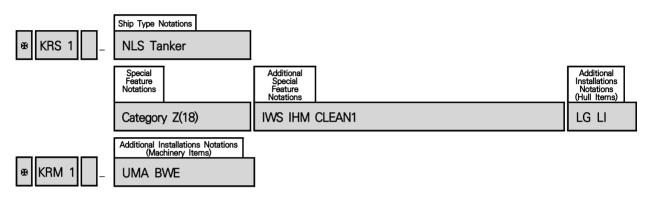
#### **EXAMPLES**

★ KRS 1 - Chemical Tanker (FAO) III 1G/Sulphur Molten (IBC) IWS CLEAN1 LG LI
★ KRM 1- BWE
★ KRS 1 - Chemical Tanker 'ESP' (FBC) II & III 2G/1.5SG (IBC) IWS CLEAN1 LG LI
★ KRM 1 - UMA BWE

## 3.2 NLS Tanker

Ship Type Notations	Special Feature Notations
NLS Tanker	Category Z(18)

 $\langle$  Typical Example  $\rangle$ 



#### NOTATIONS (Ship Type Notations)

#### NLS Tanker

#### DESCRIPTIONS

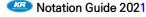
NLS Tanker : to be assigned to ships carrying only cargoes in bulk, except chemical(liquid cargoes specified in Pt 7, Ch 6, Sec 17 of the Rules), classified as pollution category Z, or category Z and OS, which are not subject to IBC Code and specified in Pt 7, Ch 6, Sec 18 of the Rules. (Noxious Liquid Substance)

#### **REQUIREMENTS / RULE REFERENCES**

Notations		Design	Survey	
NLS Tanker		Pt 7 Ch 6 Sec 18	Pt 1 Ch 2	

#### EXAMPLES

≪KRS 1 - **NLS Tanker** Category Z(18) ≪KRM 1



#### NOTATIONS (Special Feature Notations)

Category Z(18)

#### DESCRIPTIONS

Category Z(18) : to be assigned to ships carrying only cargoes in bulk, except chemical(liquid cargoes specified in Pt 7, Ch 6, Sec 17 of the Rules), classified as pollution category Z, or category Z and OS, which are not subject to IBC Code and specified in Pt 7, Ch 6, Sec 18 of the Rules.

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Category Z(18)	Pt 7 Ch 6 Sec 18	-

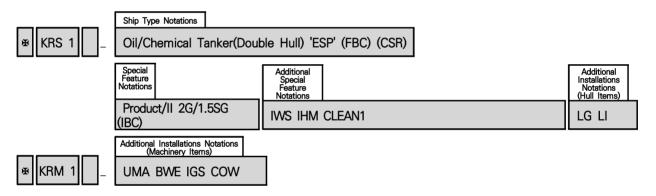
#### **EXAMPLES**

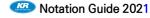
⊯KRS 1 - NLS Tanker **Category Z(18)** ⊛KRM 1

## 4. Oil/Chemical Tanker

Chia Tana Natatiana	Special Feature Notations				
Ship Type Notations	Oil Tanker	Chemical Tanker			
Oil/Chemical Tanker (Double Hull) (Double Hull)(EXP)	Type of Cargo	Type of Ship	Type of Tank	Design Aspect or Exclusive Cargo	IMO Code
(ESP' (FAC) (FAO) (FBC) (CSR)	Crude Product Crude/Product Product/Asphalt Asphalt	          &	1G 2G 1P	Apparent Specific Gravity (SG) Name of Chemical when exclusively carried	(IBC) (BCH) (BCX)

#### < Typical Example >





### NOTATIONS (Ship Type Notations)

Oil/Chemical Tanker Oil/Chemical Tanker(Double Hull) Oil/Chemical Tanker(Double Hull)(EXP) Oil/Chemical Tanker 'ESP' Oil/Chemical Tanker(Double Hull) 'ESP' Oil/Chemical Tanker(Double Hull)(EXP) 'ESP'

### DESCRIPTIONS

- Oil/Chemical Tanker : to be assigned to ships which are constructed primarily for the carriage of oil or chemicals(liquid cargoes specified in(Pt 7, Ch 6, Sec 17 of the Rules) in bulk.
- (Double Hull) : to be assigned to ships which have the cargo tanks for the carriage of oil in bulk protected by a double hull complied with the Reg. 19.3 of Annex I of MARPOL 73/78 which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces.
- (Double Hull)(EXP) : Any ships not applicable to above (Double Hull), the notation "(Double Hull)(EXP)" shall be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks protected by a double hull complied with the Reg. 19.6 of Annex I of MARPOL 73/78 which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces. (Expanded)
- 'ESP': to be assigned to ships which are constructed generally with integral tanks and intended primarily to carry oil or chemicals(liquid cargoes specified in Pt 7, Ch 6, Sec 17 of the Rules) in bulk. This type notation shall be assigned to ships of both single or double hull construction, as well as ships with alternative structural arrangements. (Enhanced Survey Programme)



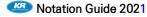
# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey	
Oil/Chemical Tanker	Pt 7 Ch 1, Pt 7 Ch 6	Pt 1 Ch 2	
Oil/Chemical Tanker(Double Hull)	Pt 7 Ch 10, Pt 7 Ch 6	Pt 1 Ch 2	
Oil/Chemical Tanker 'ESP'	Pt 7 Ch 1, Pt 7 Ch 6	Pt 1 Ch 2, Pt 1 Ch 3 Sec 3 & 4	
Oil/Chemical Tanker(Double Hull) 'ESP'	Pt 7 Ch 10, Pt 7 Ch 6	Pt 1 Ch 2, Pt 1 Ch 3 Sec 4 & 5	

\_\_\_\_\_

★KRS 1 - Oil/Chemical Tanker 'ESP' (FBC) Product/III 2G/1.2SG (IBC) IWS CLEAN1 LG LI ★KRM 1 - UMA BWE IGS COW	
★KRS 1 - Oil/Chemical Tanker(Double Hull) 'ESP' (FBC) (CSR) Product/II 2G/1.5SG (IBC) IWS CLEAN1 LG LI ★KRM 1 - UMA BWE IGS COW	
★KRS 1 - Oil/Chemical Tanker(Double Hull)(EXP) 'ESP' (FBC) (CSR) Product/II 2G/1.5SG (IBC) IWS CLEAN1 LG LI ★KRM 1 - UMA BWE IGS COW	





# NOTATIONS (Ship Type Notations - Flash Point/Tank Vent)

(FAC)			
(FAO)			
(FBC)			

### DESCRIPTIONS

- (FAC) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Controlled tank vents
- (FAO) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Open tank vents
- (FBC) : to be assigned to ships which are carrying cargoes of Flash point of 60°C and Below with Controlled tank vents

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(FAC)	Pt 7 Ch 1 Sec 10	-
(FAO)	Pt 7 Ch 1 Sec 10	-
(FBC)	Pt 7 Ch 1 Sec 10	_

★KRS 1 - Oil/Chemical Tanker 'ESP' (FBC) Product/III 2G/1.2SG (IBC) IWS CLEAN1 LG LI ★KRM 1 - UMA BWE IGS COW	
★KRS 1 - Oil/Chemical Tanker(Double Hull) 'ESP' (FBC) (CSR) Product/II 2G/1.5SG (IBC) IWS CLEAN1 LG LI ★KRM 1 - UMA BWE IGS COW	
★KRS 1 - Oil/Chemical Tanker(Double Hull)(EXP) 'ESP' (FBC) (CSR) Product/II 2G/1.5SG (IBC) IWS CLEAN1 LG LI ★KRM 1 - UMA BWE IGS COW	

# NOTATIONS (Ship Type Notations - Common Structural Rules)

### (CSR)

## DESCRIPTIONS

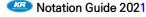
(CSR) : to be assigned to ships comply with the requirements of IACS's Common Structural Rules for Double Hull Oil Tankers(Pt 12) or IACS's Common Structural Rules for Bulk Carriers and Oil Tankers(Pt 13).

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(CSR)	Pt 12 or Pt 13	Pt 1 Ch 2, Pt 1 Ch 3, Pt 12 or Pt 13

# EXAMPLES

∗KRS 1 - Oil/Chemical Tanker(Double Hull) 'ESP' (FBC) **(CSR)** Product/II 2G/1.5SG (IBC) IWS CLEAN1 LG LI ∗KRM 1 - UMA BWE IGS COW



## NOTATIONS (Special Feature Notations)

Crude	
Product	
Crude/Product	
Product/Asphalt	
Asphalt	

### DESCRIPTIONS

Crude : to be assigned to ships carrying crude oil in bulk primarily.

Product : to be assigned to ships carrying product oil in bulk primarily.

Crude/Product : to be assigned to ships carrying crude oil and product oil in bulk primarily.

Product/Asphalt : to be assigned to ships carrying product oil and asphalt in bulk primarily.

Asphalt : to be assigned to ships carrying asphalt in bulk primarily.

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Crude	Pt 7 Ch 1	-
Product	Pt 7 Ch 1	-
Crude/Product	Pt 7 Ch 1	-
Product/Asphalt	Pt 7 Ch 1	-
Asphalt	Pt 7 Ch 1	-

	★KRS 1 - Oil/Chemical Tanker(Double Hull) 'ESP' (FBC) (CSR) Product/III 2G/1.2SG (IBC) IWS CLEAN1 LG LI ★KRM 1 - UMA BWE IGS COW	_
--	--	---

## NOTATIONS (Special Feature Notations - Type of Ship)

1			
Ш			
Ш			
&			

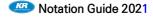
## DESCRIPTIONS

This notations will be assigned according to the ship's type which are to be determined by Pt 7, Ch 6, Sec 2, 205. (damage assumption), 206. (location of cargo tanks), 208. (standard of damage) and 209. (survival requirements) as followings.

- I : to be assigned to ships intended to transport products with very severe environmental and safety hazards which require maximum preventive measures to preclude an escape of such cargo. (Refer to Pt 7 Ch 6 Sec 17 Summary of Minimum Requirements, column E)
- II : to be assigned to ships intended to transport products with appreciably severe environmental and safety hazards which require significant preventive measures to preclude an escape of such cargo. (Refer to Pt 7 Ch 6 Sec 17 Summary of Minimum Requirements, column E)
- III : to be assigned to ships intended to transport products with sufficiently severe environmental and safety hazards which require a moderate degree of containment to increase survival capability in a damaged condition. (Refer to Pt 7 Ch 6 Sec 17 Summary of Minimum Requirements, column E)

Notations	Design	Survey
1	Pt 7 Ch 6 Sec 2	-
	Pt 7 Ch 6 Sec 2	-
	Pt 7 Ch 6 Sec 2	-
&	Pt 7 Ch 6 Sec 2	-

# **REQUIREMENTS / RULE REFERENCES**



## NOTATIONS (Special Feature Notations - Type of Tank)

1G		
2G		
1P		

### DESCRIPTIONS

- 1 : Independent Tank
  - to be assigned to ships having independent gravity tanks or pressure vessels as a cargo containment envelope which is not contiguous with or part of the hull structure.
     (Tanks designed using the requirements of Pt 3, Ch 15 and Pt 5, Ch 5 of the Rules)
- 2 : Integral Tank
  - to be assigned to ships having self-supporting hull construction tanks. ( $Po \le 0.25 \text{ bar}(Max. 0.7 \text{ bar}), To \ge -10 ^{\circ}C$ )
- G : Gravity Tank
  - to be assigned to ships having independent or integral tanks. ( $Po \le 0.7 \text{ bar}$ )
- P: Pressure Tank
  - to be assigned to ships having independent pressure tanks. (Tanks designed using the requirements of Pt 5, Ch 5 of the Rules, Po > 0.7 bar)
- (Remarks) Po : Design Pressure, To : Boiling Point of the Cargo

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
1G	Pt 7 Ch 6 Sec 4	-
2G	Pt 7 Ch 6 Sec 4	-
1P	Pt 7 Ch 6 Sec 4	-

NOTATIONS (Special Feature Notations - Apparent Specific Gravity(SG) or Name of Chemical when exclusively carried)

Apparent Specific Gravity(SG) or

Name of Chemical when exclusively carried

## DESCRIPTIONS

#### Apparent Specific Gravity(SG) or Name of Chemical when exclusively carried

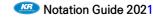
: Apparent specific gravity(SG) or mame of Chemical when exclusively carried shall be assigned.

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Apparent Specific Gravity(SG)	Pt 7 Ch 6	-
Name of Chemical when exclusively carried	Pt 7 Ch 6	-

## **EXAMPLES**

 ★ KRS 1 - Oil/Chemical Tanker 'ESP' (FBC) Product/III 2G/1.2SG (IBC) IWS CLEAN1 LG LI
 ★ KRM 1 - UMA BWE IGS COW
 ★ KRS 1 - Oil/Chemical Tanker(Double Hull) 'ESP' (FBC) (CSR) Product/II 2G/1.5SG (IBC) IWS CLEAN1 LG LI
 ★ KRM 1 - UMA BWE IGS COW



# NOTATIONS (Special Feature Notations - IMO Code)

(IBC)			
(BCH)			
(BCX)			

### DESCRIPTIONS

- (IBC) : to be assigned to ships built in compliance with the requirements given in Pt 7, Ch 6 of the Rules and constructed on or after 1 July 1986.
- (BCH) : to be assigned to ships built in compliance with the requirements given in Pt 7, Ch 6 of the Rules and constructed before 30 June 1986 and on or after 12 April 1972.
- (BCX) : to be assigned to ships built in compliance with Par 1.7.3 of BCH Code and constructed before 11 April 1972.

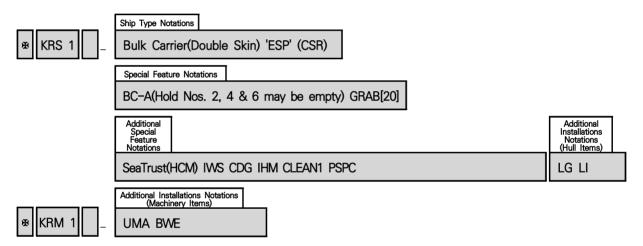
# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(IBC)	Pt 7 Ch 6	-
(BCH)	Pt 7 Ch 6	-
(BCX)	BCH Code 1.7.3	-

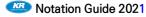
★KRS 1 - Oil/Chemical Tanker 'ESP' (FBC) Product/III 2G/1.2SG (IBC) IWS CLEAN1 LG LI ★KRM 1 - UMA BWE IGS COW	
★KRS 1 - Oil/Chemical Tanker(Double Hull) 'ESP' (FBC) (CSR) Product/II 2G/1.5SG (IBC) IWS CLEAN1 LG LI ★KRM 1 - UMA BWE IGS COW	

Ship Type Notations	Special Feat	Special Feature Notations		
Bulk Carrier	-	GRAB[X]		
(Double Skin)	НС			
'ESP'	HC/E			
'ESP'(EXP)	BC-A			
(CSR)	BC-B			
	BC-C			
Self-Unloading Bulk Carrier	(no MP)			
(Double Skin)	(max cargo density t/m³)			
'ESP'	(Hold Nos may be empty)			
	(Block loading)			

#### $\langle$ Typical Example $\rangle$







# 5. Bulk Carrier

NOTATIONS (Ship Type Notations)

Bulk Carrier Bulk Carrier(Double Skin) Bulk Carrier 'ESP' Bulk Carrier(Double Skin) 'ESP' Bulk Carrier 'ESP'(EXP) Bulk Carrier(Double Skin) 'ESP'(EXP) Self-Unloading Bulk Carrier 'ESP' Self-Unloading Bulk Carrier(Double Skin) 'ESP'

### DESCRIPTIONS

- Bulk Carrier : Where ships constructed before 1 July 2010 with other structural configurations than stated for Bulk Carrier 'ESP' below comply with the applicable requirements specified in Pt 7, Ch 3 of the Rules, the notation Bulk Carrier upon the request of the Owners, may be assigned to the concerned ships to the satisfaction of the Society. In such cases, the additional requirements for Bulk Carrier 'ESP' and Bulk Carrier(Double Skin) 'ESP' specified in Pt 1 of the Rules shall not be applied.
- Bulk Carrier 'ESP' : to be assigned to ships which are constructed generally with single deck, double bottom, hopper side tanks and topside tanks and with single or double side skin construction in cargo length area and intended primarily to carry dry cargoes in bulk. (Enhanced Survey Programme)
- Self-Unloading Bulk Carrier 'ESP' : to be assigned to ships which are constructed generally with single deck, double bottom, hopper side tanks and topside tanks and with single or double side skin construction in cargo length area and intended to carry and self-unload dry cargoes in bulk.
- 'ESP'(EXP): to be assigned to ships which are constructed generally with single deck, double bottom, hopper side tanks and topside tanks and with single or double side skin construction in cargo length area and intended primarily to carry dry cargoes in bulk. For ships constructed on or after 1 July 2010, however, the notation 'ESP' shall be assigned even if they lack some or all of the specified constructional feature above and (EXP) notation shall be followed.
- (Double Skin) : to be assigned in the following cases. (Note: The relevant requirements specified in Pt 1, Ch 3, Sec 6 of the rules, Double Skin Bulk Carriers are to be applied if applicable even if the ship has no (Double Skin) notation.
  - (1) the ships, constructed before 1 July 1999, have double side skin construction
  - (2) the ships, constructed before 1 January 2000, have double side skin construction of not less than 760 mm breadth at any location within the hold length, measured perpendicular to the side shell
  - (3) the ships, constructed on or after 1 January 2000, have double side skin construction of not less than 1000mm breadth at any location within the hold length, measured perpendicular to the side shell

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Bulk Carrier	Pt 7 Ch 3	Pt 1 Ch 2
Bulk Carrier(Double Skin)	Pt 7 Ch 3	Pt 1 Ch 2
Bulk Carrier 'ESP'	Pt 7 Ch 3	Pt 1 Ch 2, Pt 1 Ch 3 Sec 2
Bulk Carrier(Double Skin) 'ESP'	Pt 7 Ch 3	Pt 1 Ch 2, Pt 1 Ch 3 Sec 6
Bulk Carrier 'ESP'(EXP)	Pt 7 Ch 3	Pt 1 Ch 2, Pt 1 Ch 3 Sec 2
Bulk Carrier(Double Skin) 'ESP'(EXP)	Pt 7 Ch 3	Pt 1 Ch 2, Pt 1 Ch 3 Sec 6
Self-Unloading Bulk Carrier 'ESP'	Pt 7 Ch 3	Pt 1 Ch 2, Pt 1 Ch 3 Sec 2
Self-Unloading Bulk Carrier(Double Skin) 'ESP'	Pt 7 Ch 3	Pt 1 Ch 2, Pt 1 Ch 3 Sec 6

×KRM 1 − UMA
★ KRS 1 - Bulk Carrier(Double Skin)
HC/E(Hold Nos. 2 & 4 may be empty) ∞KRM 1 - UMA
KRM 1 - UMA
★ KRS 1 - Bulk Carrier(Double Skin) 'ESP' (CSR) PC A(Used Nee, 2, 4, % 6 may be emety) CDAD[20]
BC-A(Hold Nos. 2, 4 & 6 may be empty) GRAB[20] ∞KRM 1 - UMA
★ KRS 1 - Bulk Carrier 'ESP'(EXP)
HC/E(Hold Nos. 2, 4 & 6 may be empty) ∞KRM 1 - UMA
HC/E(Hold Nos. 2, 4 & 6 may be empty) ∞KRM 1 - UMA
w KRS 1 − Self-Unloading Bulk Carrier 'ESP'
HC/E(Hold Nos. 2, 4 & 6 may be empty) ⊛KRM 1 - UMA
w KRS 1 − Self-Unloading Bulk Carrier(Double Skin) 'ESP'
HC/E(Hold Nos. 2, 4 & 6 may be empty) ⊛KRM 1 - UMA

# 5. Bulk Carrier

# NOTATIONS (Ship Type Notations - Common Structural Rules)

### (CSR)

## DESCRIPTIONS

(CSR) : to be assigned to ships comply with the requirements of IACS's Common Structural Rules for Bulk Carriers(Pt 11) or IACS's Common Structural Rules for Bulk Carriers and Oil Tankers(Pt 13).

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(CSR)	Pt 11 or Pt 13	Pt 1 Ch 2, Pt 1 Ch 3, Pt 11 or Pt 13

≪KRS 1 - Bulk Carrier(Double Skin) 'ESP' <b>(CSR)</b>	-
BC-A(Hold Nos. 2, 4 & 6 may be empty) GRAB[20]	
∞KRM 1 - UMA	

# 5. Bulk Carrier

#### NOTATIONS (Special Feature Notations)

HC
HC/E
BC-A
BC-B
BC-C
GRAB[X]
(no MP)
(max cargo density t/m³)
(Hold Nos may be empty)
(Block loading)

### DESCRIPTIONS

- HC : to be assigned to ships with the double bottom structure specially strengthened for the carriage of Heavy Cargoes having mass density, γ, specified in Pt 3, Ch 7, 101. 6 of the Rules, not less than 1.25 t/m<sup>3</sup>.
- HC/E : to be assigned to ships intended for the alternate loading, in addition to the requirements for HC above.
- BC-A : to be assigned to Bulk Carriers designed to carry dry bulk cargoes of cargo density of 1.0 t/m<sup>3</sup> and above with specified holds empty at maximum draught in addition to BC-B conditions as Pt 7, Ch 3, Sec 2 or Pt 11, Ch 1, Sec 1 or Pt 13, Sub-part 1, Ch 1, Sec 1 of the Rules.
- BC-B : to be assigned to Bulk Carriers designed to carry dry bulk cargoes of cargo density of 1.0 t/m<sup>3</sup> and above with all cargo holds loaded in addition to BC-C conditions as Pt 7, Ch 3, Sec 2 or Pt 11, Ch 1, Sec 1 or Pt 13, Sub-part 1, Ch 1, Sec 1 of the Rules.
- BC-C : to be assigned to Bulk Carriers designed to carry dry bulk cargoes of cargo density of less than 1.0 t/m<sup>3</sup> as Pt 7, Ch 3, Sec 2 or Pt 11, Ch 1, Sec 1 or Pt 13, Sub-part 1, Ch 1, Sec 1 of the Rules.
- GRAB[X]: to be assigned to ships with holds designed for loading/unloading by grabs having a maximum specific weight up to [X] tons in compliance with the requirements of Pt 11, Ch 12, Sec 1 or Pt 13, Sub-part 2, Ch 1, Sec 6 of the Rules, the GRAB[X] notation is mandatory for ships having one of BC-A or BC-B, according to Pt 11, Ch 1, Sec 1 or Pt 13, Sub-part 1, Ch 1, Sec 1 of the Rules and these ships are to be complied with for an unladen grab weight X equal to or greater than 20 tons. See (Note) of Additional Special Feature Notations.
- (no MP) : to be assigned to ships have not been designed for loading and unloading in multiple ports in accordance with the conditions specified in Pt 7, Ch 3, 201. 5 (3) or Pt 11, Ch 4, Sec 7, [3.3] or Pt 13, Sub-part 1, Ch 4, Sec 8 [4.2.2] of the Rules. (no Multi Port)

(max cargo density --- t/m<sup>3</sup>) : to be assigned for BC-A or BC-B ships if the maximum cargo density is less than 3.0 t/m<sup>3</sup>.



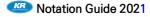
(Hold Nos. --- may be empty) : to be assigned for ships designed to carry cargoes with specified holds empty.

(Block loading) : to be assigned for ships intended to operate in alternate block loading condition according to Pt 13, Sub-part 1, Ch 1, Sec 1 [3.2.1] of the Rules.

Notations	Design	Survey
HC	Pt 3 Ch 7 <sup>1)</sup>	-
HC/E	Pt 3 Ch 7 <sup>1)</sup>	-
BC-A	Pt 7 Ch 3, Pt 11 Ch 1, Pt 13 Sub-part 1 Ch 1	-
BC-B	Pt 7 Ch 3, Pt 11 Ch 1, Pt 13 Sub-part 1 Ch 1	-
BC-C	Pt 7 Ch 3, Pt 11 Ch 1, Pt 13 Sub-part 1 Ch 1	-
GRAB[X]	Pt 11 Ch 12 Sec 1, Pt 13 Sub-part 2 Ch 1 Sec 6	-
(no MP)	Pt 7 Ch 3, Pt 11 Ch 4 Sec 7, Pt 13 Sub-part 1 Ch 4 Sec 8	-
(max cargo density t/m <sup>3</sup> )	Pt 7 Ch 3, Pt 11 Ch 4 Sec 7, Pt 13 Sub-part 1 Ch 4 Sec 8	-
(Hold Nos may be empty)	Pt 7 Ch 3, Pt 11 Ch 4 Sec 7, Pt 13 Sub-part 1 Ch 4 Sec 8	-
(Block loading)	Pt 13 Sub-part 1 Ch 4 Sec 8	-
(Notes)		
1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.		

\_\_\_\_\_

<ul> <li>(1) For ships with double bottom structures specially strengthened for the carriage of heavy cargoes:</li> <li></li></ul>
<ul> <li>(2) For ships with double bottom structures specially strengthened for the carriage of heavy cargoes as alternate loading:</li> <li></li></ul>
(3) For BC-B ships:
<ul> <li>(4) For BC-B ships of which the maximum cargo density is less than 3.0t/m<sup>3</sup>:</li> <li>         ★ KRS 1 - Bulk Carrier 'ESP'         BC-B(max cargo density t/m<sup>3</sup>)     </li> <li>         ★ KRM 1 - UMA     </li> </ul>
<ul> <li>(5) For BC-A ships:</li> <li> <sup>⊕</sup> KRS 1 - Bulk Carrier 'ESP'         BC-A(Hold Nos. 2, 4, 6 &amp; 8 may be empty)     </li> <li> <sup>⊕</sup> KRM 1 - UMA     </li> </ul>
<ul> <li>(6) For BC-A ships of which the maximum cargo density is less than 3.0t/m<sup>3</sup>:</li> <li>         ★ KRS 1 - Bulk Carrier 'ESP'     </li> <li>BC-A(Hold Nos. 2, 4, 6 &amp; 8 may be empty, with max cargo density t/m<sup>3</sup>)</li> <li>         ★ KRM 1 - UMA     </li> </ul>



\_\_\_\_\_

(7) For BC-A ships of which the maximum cargo density is less than 3.0t/m<sup>3</sup> and intended to operate in alternate block load condition according to Pt 13, Sub-part 1, Ch 1, Sec 1 [3.2.1] of the Rules: BC-A(Hold Nos. 2, 4, 6 & 8 may be empty, with max cargo density --- t/m<sup>3</sup>) (Block loading) (8) For ships which have not been designed for loading and unloading in multiple ports in accordance with the conditions specified in Pt 7, Ch 3, 201. 5 or Pt 11, Ch 4, Sec 7, [3.3] or Pt 13, Sub-part 1, Ch 4, Sec 8 [4.2.2] of the Rules. BC-A(or BC-B, BC-C) (no MP) \_\_\_\_\_ (9) For ships with holds designed for loading/unloading by grabs having a maximum specific weight up to [20] tons in compliance with the requirements of Pt 11, Ch 12, Sec 1 or Pt 13, Sub-part 2, Ch 1, Sec 6 of the Rules: 

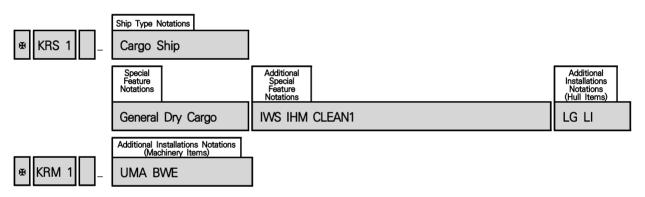
BC-A(or BC-B) GRAB[20]

∗KRM 1 - UMA

# 6. Cargo Ship

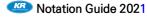
Ship Type Notations	Special Feature Notations	
Cargo Ship	- General Dry Cargo Wood Chip Carrier Cement Carrier Livestock Carrier Deck Cargo Ship General Dry Cargo(Double Skin) Liquid Cargo(Category OS only) Container	HC

#### < Typical Example >





Ch 2



# 6. Cargo Ship

# NOTATIONS (Ship Type Notations)

### Cargo Ship

### DESCRIPTIONS

Cargo Ship : to be assigned to general cargo ships carrying general cargoes, except ships which are distinguished by specific Ship Type Notations such as Oil Tanker, Chemical Tanker, Bulk Carrier, Ore Carrier, Container Ship, RoRo Ship, Passenger Ship, Refrigerated Cargo Carrier, etc.

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey	
Cargo Ship	Pt 3 <sup>1)</sup>	Pt 1 Ch 2	
(Notes)			
1) For small steel ships of which	length is less than 90m, Pt 10 is t	to be applied.	

⊯KRS 1 - <b>Cargo Ship</b> General Dry Cargo HC IWS IHM CLEAN1 LG LI ⊯KRM 1 - UMA BWE
★KRS 1 - Cargo Ship Wood Chip Carrier IWS IHM CLEAN1 LG LI ★KRM 1 - UMA BWE
≪KRS 1 - <b>Cargo Ship</b> General Dry Cargo(Double Skin) IWS IHM CLEAN1 LG LI ≪KRM 1 - UMA BWE
≪KRS 1 - <b>Cargo Ship</b> HC IWS IHM CLEAN1 LG LI ≪KRM 1 - UMA BWE

# 6. Cargo Ship

### NOTATIONS (Special Feature Notations)

General Dry Cargo Wood Chip Carrier Cement Carrier Livestock Carrier Deck Cargo Ship General Dry Cargo(Double Skin) Liquid Cargo(Category OS only) Container HC

# DESCRIPTIONS

#### General Dry Cargo

- : to be assigned to all self-propelled general dry cargo ships of 500GT and above carrying solid cargoes and the additional requirements for General Dry Cargo Ship specified in Pt 1, Ch 2, Sec 14 of the Rules are to be applied. However the following ships are to be omitted.
- bulk carriers and double skin bulk carriers subject to the enhanced survey programme(ESP)
- dedicated container carriers
- ro-ro cargo ships
- refrigerated cargo ships
- dedicated wood chip carriers
- dedicated cement carriers
- livestock carriers
- deck cargo ships(A ships that is designed to carry cargo exclusively above deck without any access for cargo below deck)
- general dry cargo ships of double side-skin construction, with double side-skin extending for the entire length of the cargo area, and for the entire height of the cargo hold to the upper deck

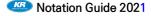
Wood Chip Carrier : to be assigned to ships that is specially designed to carry wood chip.

Cement Carrier : to be assigned to ships that is scpecially designed to carry cement.

Livestock Carrier : to be assigned to ships that is specially desinge to carry livestock.

#### Deck Cargo Ship

: to be assigned to ships that is designed to carry cargo exculsively above deck without any access for cargo below deck.



#### General Dry Cargo(Double Skin)

: to be assigned to general dry cargo ships of double side-skin construction, with double side-skin extending for the entire length of the cargo area, and for the entire height of the cargo hold to the upper deck.

#### Liquid Cargo(Category OS only)

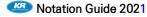
- : to be assigned to ships carrying only liquid cargoes in bulk classified as pollution category OS, which are not subject to IBC Code, specified in Pt 7, Ch 6, Sec 18 of the Rules.
- Container : Even though cell guides are not installed on ships, but shall be assigned to the ships carrying containers generally by means of approved container securing fittings and stowage method in accordance with Annex 7-2, Pt 7 of the Guidance. (ex, Multi-Purpose Ship)
- HC : to be assigned to ships with the double bottom structure specially strengthened for the carriage of Heavy Cargoes having mass density, γ, specified in Pt 3, Ch 7, 101. 6 of the Rules, not less than 1.25 t/m<sup>3</sup>.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
General Dry Cargo	Pt 3 <sup>1)</sup>	Pt 1 Ch 2 Sec 14
Wood Chip Carrier	Pt 3 <sup>1)</sup>	Pt 1 Ch 2
Cement Carrier	Pt 3 <sup>1)</sup>	Pt 1 Ch 2
Livestock Carrier	Pt 3 <sup>1)</sup>	Pt 1 Ch 2
Deck Cargo Ship	Pt 3 <sup>1)</sup>	Pt 1 Ch 2
General Dry Cargo(Double Skin)	Pt 3 <sup>1)</sup>	Pt 1 Ch 2
Liquid Cargo(Category OS only)	Pt 3 <sup>1)</sup>	Pt 1 Ch 2
Container	Pt 3 <sup>1)</sup>	Pt 1 Ch 2
HC	Pt 3 Ch 7 <sup>1)</sup>	-
(Notes)		
1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.		

≪KRS 1 - Cargo Ship <b>General Dry Cargo</b> HC IWS IHM CLEAN1 LG LI ≪KRM 1 - UMA BWE
≪KRS 1 - Cargo Ship <b>Wood Chip Carrier</b> IWS CLEAN1 LG LI ≪KRM 1 - UMA BWE
≪KRS 1 - Cargo Ship Cenent Carrier IWS CLEAN1 LG LI ≪KRM 1 - UMA BWE
≪KRS 1 - Cargo Ship Livestock Carrier IWS IHM CLEAN1 LG LI ≪KRM 1 - UMA BWE
★KRS 1 - Cargo Ship Deck Cargo Ship IWS IHM CLEAN1 LG LI ★KRM 1 - UMA BWE

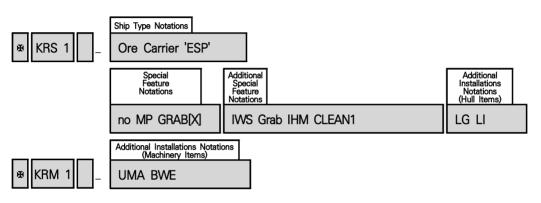
	LEAN1 LG LI
	EAN1 LG LI
≪KRS 1 - Cargo Ship HC IWS IHM CLEAN1 LG LI ≪KRM 1 - UMA BWE	



# 7. Ore Carrier

Ship Type Notations	Special Feature Notations	
Ore Carrier 'ESP'	no MP	GRAB[X]

< Typical Example >



# 7. Ore Carrier

## NOTATIONS (Ship Type Notations)

Ore Carrier

Ore Carrier 'ESP'

### DESCRIPTIONS

Ore Carrier : to be assigned to ships intended primarily to carry ore cargoes in bulk.

'ESP': to be assigned to ships which are constructed generally with single deck, two longitudinal bulkheads and a double bottom throughout the cargo length area and intended primarily to carry ore cargoes in the centre holds only. (Enhanced Survey Programme)

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Ore Carrier	Pt 7 Ch 2	Pt 1 Ch 2
Ore Carrier 'ESP'	Pt 7 Ch 2	Pt 1 Ch 2, Pt 1 Ch 3 Sec 6

### **EXAMPLES**

- ★KRS 1 Ore Carrier 'ESP' no MP GRAB[20] IWS Grab IHM CLEAN1 LG LI
- ₩KRM 1 UMA BWE



\_\_\_\_\_

# 7. Ore Carrier

## NOTATIONS (Special Feature Notations)

no MP GRAB[X]

## DESCRIPTIONS

- no MP : to be assigned to ships has not been designed for loading and unloading in multiple ports as Pt 7 Annex 7-10 of the Guidance.
- GRAB[X]: to be assigned to ships with holds designed for loading/unloading by grabs having a maximum specific weight up to [X] tons in compliance with the requirements of Pt 7, Ch 2, 101. 2 of the Guidance.

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
no MP	Guidance Pt 7 Annex 7-10	-
GRAB[X]	Guidance Pt 7 Ch 2 101. 2	-

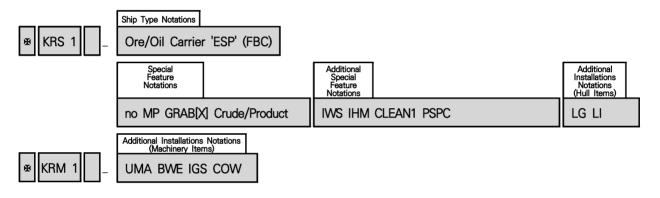
# **EXAMPLES**

★KRS 1 - Ore Carrier 'ESP' no MP GRAB[20] IWS Grab IHM CLEAN1 LG LI ★KRM 1 - UMA BWE

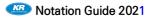


Chin Turne Notations	Special Feature Notations			
Ship Type Notations	Ore Carrier		Oil Tanker	
Ore/Oil Carrier	no MP	GRAB[X]	Crude	
'ESP'			Product	
(FAC)			Crude/Product	
(FAO)			Product/Asphalt	
(FBC)			Asphalt	

< Typical Example >







# 8.1 Ore/Oil Carrier

## NOTATIONS (Ship Type Notations)

Ore/Oil Carrier

Ore/Oil Carrier 'ESP'

### DESCRIPTIONS

Ore/Oil Carrier : to be assigned to ships which are constructed primarily for the carriage of ore or oil in bulk.

'ESP': to be assigned to ships which are constructed generally with single deck, two longitudinal bulkheads and a double bottom throughout the cargo length area and intended primarily to carry ore cargoes in the centre holds or of oil cargoes in center holds and wing tanks. However, these cargoes are not carried simultaneously. (Enhanced Survey Programme)

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Ore/Oil Carrier	Pt 7 Ch 2, Pt 7 Ch 1	Pt 1 Ch 2
Ore/Oil Carrier 'ESP'	Pt 7 Ch 2, Pt 7 Ch 10	Pt 1 Ch 2, Pt 1 Ch 3

## EXAMPLES

# 8.1 Ore/Oil Carrier

NOTATIONS	(Ship	Type	Notations	-	Flash	Point/Tank Ve	ent)
-----------	-------	------	-----------	---	-------	---------------	------

(FAC)		
(FAO)		
(FBC)		

### DESCRIPTIONS

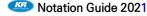
- (FAC) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Controlled tank vents
- (FAO) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Open tank vents
- (FBC) : to be assigned to ships which are carrying cargoes of Flash point of 60°C and Below with Controlled tank vents

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(FAC)	Pt 7 Ch 1 Sec 10	-
(FAO)	Pt 7 Ch 1 Sec 10	-
(FBC)	Pt 7 Ch 1 Sec 10	-

## EXAMPLES

★KRS 1 - Ore/Oil Carrier 'ESP' (FBC) no MP GRAB[20] Product CLEAN1 LG LI ★KRM 1 - UMA IGS COW



Ch 2

# 8.1 Ore/Oil Carrier

### NOTATIONS (Special Feature Notations)

no MP GRAB[X]

## DESCRIPTIONS

- no MP: to be assigned to ships has not been designed for loading and unloading in multiple ports as Pt 7 Annex 7-10 of the Guidance.
- GRAB[X]: to be assigned to ships with holds designed for loading/unloading by grabs having a maximum specific weight up to [X] tons in compliance with the requirements of Pt 7, Ch 2, 101. 2 of the Guidance.

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
no MP	Guidance Pt 7 Annex 7-10	-
GRAB[X]	Guidance Pt 7 Ch 2 101. 2	-

## EXAMPLES

≪KRS 1 - Ore/Oil Carrier 'ESP' (FBC) no MP **GRAB[20]** Product CLEAN1 LG LI ≪KRM 1 - UMA IGS COW

## NOTATIONS (Special Feature Notations)

Crude	
Product	
Crude/Product	
Product/Asphalt	
Asphalt	

### DESCRIPTIONS

Crude : to be assigned to ships carrying crude oil in bulk primarily.

Product : to be assigned to ships carrying product oil in bulk primarily.

Crude/Product : to be assigned to ships carrying crude oil and product oil in bulk primarily.

Product/Asphalt : to be assigned to ships carrying product oil and asphalt in bulk primarily.

Asphalt : to be assigned to ships carrying asphalt in bulk primarily.

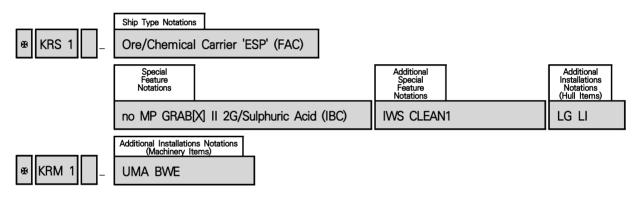
# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Crude	Pt 7 Ch 1	-
Product	Pt 7 Ch 1	-
Crude/Product	Pt 7 Ch 1	-
Product/Asphalt	Pt 7 Ch 1	-
Asphalt	Pt 7 Ch 1	-

## **EXAMPLES**

Chin Turne Netetione		Special Feature Notations					
Ship Type Notations	Ore	Ore Carrier			Chemical Tanker		
Ore/Chemical Carrier 'ESP' (FAC)	no MP	GRAB[X]	Type of Ship	Type of Tank	Design Aspect or Exclusive Cargo	IMO Code	
(FAC) (FAC)			          &	1G 2G 1P	Apparent Specific Gravity (SG) Name of Chemical when exclusively carried	(IBC) (BCH) (BCX)	

< Typical Example >



## NOTATIONS (Ship Type Notations)

### Ore/Chemical Carrier Ore/Chemical Carrier 'ESP'

### DESCRIPTIONS

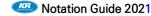
- Ore/Chemical Carrier : to be assigned to ships which are constructed primarily for the carriage of ore or chemicals(liquid cargoes specified in(Pt 7, Ch 6, Sec 17 of the Rules) in bulk.
- 'ESP': to be assigned to ships which are constructed generally with single deck, two longitudinal bulkheads and a double bottom throughout the cargo length area and intended primarily to carry ore cargoes in the centre holds or of chemical cargoes(liquid cargoes specified in(Pt 7, Ch 6, Sec 17 of the Rules) in center holds and wing tanks. However, these cargoes are not carried simultaneously. (Enhanced Survey Programme)

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Ore/Chemical Carrier	Pt 7 Ch 2, Pt 7 Ch 6	Pt 1 Ch 2
Ore/Chemical Carrier 'ESP'	Pt 7 Ch 2, Pt 7 Ch 6	Pt 1 Ch 2, Pt 1 Ch 3 Sec 6 & 4

## **EXAMPLES**

★KRS 1 - Ore/Chemical Carrier 'ESP' (FAC) no MP GRAB[20] II 2G/Sulphuric Acid (IBC) IWS IHM CLEAN1 PSPC LG LI ★KRM 1 - UMA BWE



## NOTATIONS (Ship Type Notations - Flash Point/Tank Vent)

(FAC)			
(FAO)			
(FBC)			

### DESCRIPTIONS

- (FAC) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Controlled tank vents
- (FAO) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Open tank vents
- (FBC) : to be assigned to ships which are carrying cargoes of Flash point of 60°C and Below with Controlled tank vents

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(FAC)	Pt 7 Ch 1 Sec 10	-
(FAO)	Pt 7 Ch 1 Sec 10	-
(FBC)	Pt 7 Ch 1 Sec 10	_

# EXAMPLES

★KRS 1 - Ore/Chemical Carrier 'ESP' (FAC) no MP GRAB[20] II 2G/Sulphuric Acid (IBC) IWS IHM CLEAN1 PSPC LG LI ★KRM 1 - UMA BWE

## NOTATIONS (Special Feature Notations)

no MP GRAB[X]

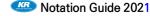
### DESCRIPTIONS

- no MP: to be assigned to ships has not been designed for loading and unloading in multiple ports as Pt 7 Annex 7-10 of the Guidance.
- GRAB[X]: to be assigned to ships with holds designed for loading/unloading by grabs having a maximum specific weight up to [X] tons in compliance with the requirements of Pt 7, Ch 2, 101. 2 of the Guidance.

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
no MP	Guidance Pt 7 Annex 7-10	-
GRAB[X]	Guidance Pt 7 Ch 2 101. 2	-

### EXAMPLES



NOTATIONS (Special Feature Notations - Type of Ship)

I			
П			
III			
&			

### DESCRIPTIONS

This notations will be assigned according to the ship's type which are to be determined by Pt 7, Ch 6, Sec 2, 205. (damage assumption), 206. (location of cargo tanks), 208. (standard of damage) and 209. (survival requirements) as followings.

- I : to be assigned to ships intended to transport products with very severe environmental and safety hazards which require maximum preventive measures to preclude an escape of such cargo. (Refer to Pt 7 Ch 6 Sec 17 Summary of Minimum Requirements, column E)
- II : to be assigned to ships intended to transport products with appreciably severe environmental and safety hazards which require significant preventive measures to preclude an escape of such cargo. (Refer to Pt 7 Ch 6 Sec 17 Summary of Minimum Requirements, column E)
- III : to be assigned to ships intended to transport products with sufficiently severe environmental and safety hazards which require a moderate degree of containment to increase survival capability in a damaged condition. (Refer to Pt 7 Ch 6 Sec 17 Summary of Minimum Requirements, column E)

# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
1	Pt 7 Ch 6 Sec 2	-
П	Pt 7 Ch 6 Sec 2	-
	Pt 7 Ch 6 Sec 2	-
&	Pt 7 Ch 6 Sec 2	-

# EXAMPLES

★KRS 1 - Ore/Chemical Carrier 'ESP' (FAC) no MP GRAB[20] II 2G/Sulphuric Acid (IBC) IWS IHM CLEAN1 PSPC LG LI ★KRM 1 - UMA BWE

## NOTATIONS (Special Feature Notations - Type of Tank)

1G			
2G			
1P			

### DESCRIPTIONS

- 1 : Independent Tank
  - to be assigned to ships having independent gravity tanks or pressure vessels as a cargo containment envelope which is not contiguous with or part of the hull structure.
     (Tanks designed using the requirements of Pt 3, Ch 15 and Pt 5, Ch 5 of the Rules)
- 2 : Integral Tank

- to be assigned to ships having self-supporting hull construction tanks. ( $Po \le 0.25 \text{ bar}(Max. 0.7 \text{ bar}), To \ge -10 ^{\circ}C$ )

- G: Gravity Tank
  - to be assigned to ships having independent or integral tanks. ( $Po \le 0.7 \text{ bar}$ )
- P: Pressure Tank
  - to be assigned to ships having independent pressure tanks. (Tanks designed using the requirements of Pt 5, Ch 5 of the Rules, Po > 0.7 bar)

(Remarks) Po : Design Pressure, To : Boiling Point of the Cargo

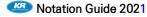
# **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
1G	Pt 7 Ch 6 Sec 4	-
2G	Pt 7 Ch 6 Sec 4	-
1P	Pt 7 Ch 6 Sec 4	-

### EXAMPLES

➡KRS 1 - Ore/Chemical Carrier 'ESP' (FAC)

no MP GRAB[20] II **2G**/Sulphuric Acid (IBC) IWS IHM CLEAN1 PSPC LG LI &KRM 1 - UMA BWE



# 8.2 Ore/Chemical Carrier

NOTATIONS (Special Feature Notations – Apparent Specific Gravity(SG) or Name of Chemical when exclusively carried)

Apparent Specific Gravity(SG) or Name of Chemical when exclusively carried

#### DESCRIPTIONS

Apparent Specific Gravity(SG) or Name of Chemical when exclusively carried

: Apparent specific gravity(SG) or mame of Chemical when exclusively carried shall be assigned.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Apparent Specific Gravity(SG)	Pt 7 Ch 6	-
Name of Chemical when exclusively carried	Pt 7 Ch 6	-

#### **EXAMPLES**

## 8.2 Ore/Chemical Carrier

### NOTATIONS (Special Feature Notations - IMO Code)

(IBC)			
(BCH)			
(BCX)			

#### DESCRIPTIONS

- (IBC) : to be assigned to ships built in compliance with the requirements given in Pt 7, Ch 6 of the Rules and constructed on or after 1 July 1986.
- (BCH) : to be assigned to ships built in compliance with the requirements given in Pt 7, Ch 6 of the Rules and constructed before 30 June 1986 and on or after 12 April 1972.
- (BCX) : to be assigned to ships built in compliance with Par 1.7.3 of BCH Code and constructed before 11 April 1972.

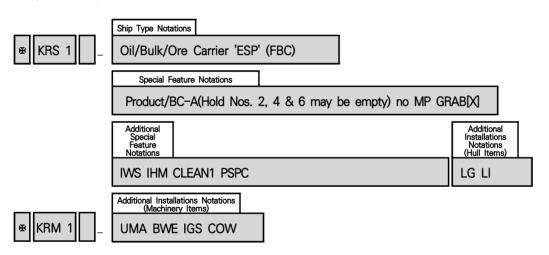
## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(IBC)	Pt 7 Ch 6	-
(BCH)	Pt 7 Ch 6	-
(BCX)	BCH Code 1.7.3	-

#### **EXAMPLES**

Ohin Turne Netetiane	Special Feature Notations		
Ship Type Notations	Oil Tanker	Bulk Carrier	Ore Carrier
Oil/Bulk/Ore Carrier	Crude	-	no MP
'ESP'	Product	НС	GRAB[X]
'ESP'(EXP)	Crude/Product	HC/E	
(FAC)	Product/Asphalt	BC-A	
(FAO)	Asphalt	BC-B	
(FBC)		BC-C	
		(no MP)	
		(max cargo density t/m <sup>3</sup> )	
		(Hold Nos may be empty)	

< Typical Example >



#### NOTATIONS (Ship Type Notations)

Oil/Bulk/Ore Carrier Oil/Bulk/Ore Carrier 'ESP' Oil/Bulk/Ore Carrier 'ESP'(EXP)

#### DESCRIPTIONS

- Oil/Bulk/Ore Carrier : to be assigned to ships which are constructed primarily for the carriage of oil, bulk or ore in bulk.
- 'ESP': to be assigned to ships which are constructed generally with single deck, double bottom, hopper side tanks and topside tanks and with single or double side skin construction in the cargo length area and intended primarily to carry oil or dry cargoes including ore, in bulk. However, these cargoes are not carried simultaneously. (Enhanced Survey Programme)
- 'ESP'(EXP): to be assigned to ships which are constructed generally with single deck, double bottom, hopper side tanks and topside tanks and with single or double side skin construction in the cargo length area and intended primarily to carry oil or dry cargoes including ore, in bulk. However, these cargoes are not carried simultaneously. For ships constructed on or after 1 July 2010, the notation 'ESP' shall be assigned even if they lack some or all of the specified constructional feature above and (EXP) notation shall be followed.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Oil/Bulk/Ore Carrier	Pt 7 Ch 1, 2 & 3	Pt 1 Ch 2
Oil/Bulk/Ore Carrier 'ESP'	Pt 7 Ch 1, 2 & 3	Pt 1 Ch 2, Pt 1 Ch 3
Oil/Bulk/Ore Carrier 'ESP'(EXP)	Pt 7 Ch 1, 2 & 3	Pt 1 Ch 2, Pt 1 Ch 3

#### **EXAMPLES**



### NOTATIONS (Ship Type Notations - Flash Point/Tank Vent)

(FAC)			
(FAO)			
(FBC)			

#### DESCRIPTIONS

- (FAC) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Controlled tank vents
- (FAO) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Open tank vents
- (FBC) : to be assigned to ships which are carrying cargoes of Flash point of 60°C and Below with Controlled tank vents

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(FAC)	Pt 7 Ch 1 Sec 10	-
(FAO)	Pt 7 Ch 1 Sec 10	-
(FBC)	Pt 7 Ch 1 Sec 10	_

∗KRS 1 – Oil/Bulk/Ore Carrier 'ESP' <b>(FBC)</b>
Product/BC-A(Hold Nos. 2, 4 & 6 may be empty) no MP GRAB[20]
IWS IHM CLEAN1 PSPC LG LI
∗KRM 1 - UMA BWE IGS COW

#### NOTATIONS (Special Feature Notations)

Product Crude/Product Product/Asphalt
Product/Asphalt
Asphalt

#### DESCRIPTIONS

Crude : to be assigned to ships carrying crude oil in bulk primarily.

Product : to be assigned to ships carrying product oil in bulk primarily.

Crude/Product : to be assigned to ships carrying crude oil and product oil in bulk primarily.

Product/Asphalt : to be assigned to ships carrying product oil and asphalt in bulk primarily.

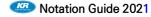
Asphalt : to be assigned to ships carrying asphalt in bulk primarily.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Crude	Pt 7 Ch 1	-
Product	Pt 7 Ch 1	-
Crude/Product	Pt 7 Ch 1	-
Product/Asphalt	Pt 7 Ch 1	-
Asphalt	Pt 7 Ch 1	-

#### **EXAMPLES**

★KRS 1 - Oil/Bulk/Ore Carrier 'ESP' (FBC) Product/BC-A(Hold Nos. 2, 4 & 6 may be empty) no MP GRAB[20] IWS IHM CLEAN1 PSPC LG LI ★KRM 1 - UMA BWE IGS COW



#### NOTATIONS (Special Feature Notations)

HC HC/E BC-A BC-B BC-C (no MP) (max cargo density --- t/m<sup>3</sup>) (Hold Nos. --- may be empty)

#### DESCRIPTIONS

- HC : to be assigned to ships with the double bottom structure specially strengthened for the carriage of heavy cargoes having mass density, γ, specified in Pt 3, Ch 7, 101. 6 of the Rules, not less than 1.25 t/m<sup>3</sup>. (Heavy Cargo)
- HC/E : to be assigned to ships intended for the alternate loading, in addition to the requirements for HC above.
- BC-A : to be assigned to Bulk Carriers designed to carry dry bulk cargoes of cargo density of 1.0 t/m<sup>3</sup> and above with specified holds empty at maximum draught in addition to BC-B conditions as Pt 7, Ch 3, Sec 2 of the Rules.
- BC-B : to be assigned to Bulk Carriers designed to carry dry bulk cargoes of cargo density of 1.0 t/m<sup>3</sup> and above with all cargo holds loaded in addition to BC-C conditions as Pt 7, Ch 3, Sec 2 of the Rules.
- BC-C : to be assigned to Bulk Carriers designed to carry dry bulk cargoes of cargo density of less than 1.0 t/m<sup>3</sup> as Pt 7, Ch 3, Sec 2 of the Rules.
- (no MP) : to be assigned to ships have not been designed for loading and unloading in multiple ports in accordance with the conditions specified in Pt 7, Ch 3, 201. 5. (no Multi Port)

(max cargo density --- t/m<sup>3</sup>) : to be assigned for BC-A or BC-C ships if the maximum cargo density is less than 3.0 t/m<sup>3</sup>.

(Hold Nos. --- may be empty) : to be assigned for ships designed to carry cargoes with specified holds empty.

## **REQUIREMENTS / RULE REFERENCES**

Notations Design		Survey	
HC	Pt 3 Ch 7 <sup>1)</sup>	-	
HC/E	Pt 3 Ch 7 <sup>1)</sup>	-	
BC-A	Pt 7 Ch 3, Pt 11 Ch 1	-	
BC-B	Pt 7 Ch 3, Pt 11 Ch 1	-	
BC-C	Pt 7 Ch 3, Pt 11 Ch 1	-	
(no MP)	Pt 7 Ch 3, Pt 11 Ch 1	-	
(max cargo density t/m <sup>3</sup> )	Pt 7 Ch 3, Pt 11 Ch 1	-	
(Hold Nos may be empty)	Pt 7 Ch 3, Pt 11 Ch 1	-	
(Notes)			
1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.			

\_\_\_\_

<ul> <li>(1) For ships with double bottom structures specially strengthened for the carriage of heavy cargoes:</li> <li></li></ul>
<ul> <li>(2) For ships with double bottom structures specially strengthened for the carriage of heavy cargoes as an alternate loading:</li> <li>         ★ KRS 1 - Oil/Bulk/Ore Carrier 'ESP' Product/HC/E(Hold Nos. 2 &amp; 4 may be empty)     </li> <li>         ★ KRM 1 - UMA     </li> </ul>
(3) For BC-B ships:
(4) For BC-B ships of which the maximum cargo density is less than 3.0t/m <sup>3</sup> :
(5) For BC-A ships:
<ul> <li>(6) For BC-A ships of which the maximum cargo density is less than 3.0t/m<sup>3</sup>:</li> <li>         ★ KRS 1 - Oil/Bulk/Ore Carrier 'ESP' Product/BC-A(Hold Nos. 2, 4 &amp; 6 may be empty, with max cargo density t/m<sup>3</sup>) ★ KRM 1 - UMA     </li> </ul>
(7) For ships which have not been designed for loading and unloading in multiple ports in accordance with the conditions specified in <b>Pt 7, Ch 3, 201. 5</b> . ★KRS 1 - Oil/Bulk/Ore Carrier 'ESP' Product/BC-A(또는 BC-B, BC-C) <b>(no MP)</b> ★KRM 1 - UMA

### NOTATIONS (Special Feature Notations)

### no MP GRAB[X]

### DESCRIPTIONS

- no MP: to be assigned to ships has not been designed for loading and unloading in multiple ports as Pt 7 Annex 7-10 of the Guidance.
- GRAB[X]: to be assigned to ships with holds designed for loading/unloading by grabs having a maximum specific weight up to [X] tons in compliance with the requirements of Pt 7, Ch 2, 101. 2 of the Guidance.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
no MP	Guidance Pt 7 Annex 7-10	-
GRAB[X]	Guidance Pt 7 Ch 2 101. 2	-

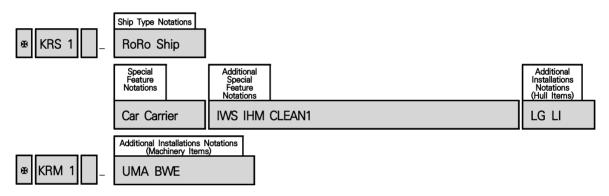
### EXAMPLES

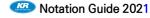
★KRS 1 - Oil/Bulk/Ore Carrier 'ESP' (FBC) Product/BC-A(Hold Nos. 2, 4 & 6 may be empty) no MP GRAB[20] IWS IHM CLEAN1 PSPC LG LI ★KRM 1 - UMA BWE IGS COW

# 10. RoRo Ship

Ship Type Notations	Special Feature Notations	
RoRo Ship	-	
	Car Carrier	
	Car Carrier PCC	
	Car/Cargo	
	Car/Container	
	Car/Bulk	
	Cassette	
	Car Ferry	
	Car Ferry(open space)	

#### $\langle$ Typical Example $\rangle$





Ch 2

## 10. RoRo Ship

### NOTATIONS (Ship Type Notations)

**RoRo Ship** 

### DESCRIPTIONS

RoRo Ship : to be assigned to ships which are specially designed and constructed for the carriage of vehicles, and cargo in pallet form or in container, and loaded and unloaded by wheeled vehicles.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
RoRo Ship	Pt 7 Ch 7	Pt 1 Ch 2

	_
⊛KRS 1 - <b>RoRo Ship</b> Car Carrier(PCC) IWS IHM CLEAN1 LG LI ⊛KRM 1 - UMA BWE	
⊛KRS 1 - <b>RoRo Ship</b> Car/Cargo IWS IHM CLEAN1 LG LI ⊛KRM 1 - UMA BWE	_
≪KRS 1 - <b>RoRo Ship</b> Car/Container IWS CDG IHM CLEAN1 LG LI ≪KRM 1 - UMA BWE	-
≪KRS 1 - <b>RoRo Ship</b> Cassette IWS IHM CLEAN1 LG LI ≪KRM 1 - UMA BWE	_
∞KRS 1 - <b>RoRo Ship</b> Car Ferry IWS LG LI ∞KRM 1 - UMA BWE	_

## 10. RoRo Ship

NOTATIONS	(Special	Feature	Notations)
-----------	----------	---------	------------

-
Car Carrier
Car Carrier PCC
Car/Cargo
Car/Container
Car/Bulk
Cassette
Car Ferry
Car Ferry(open space)

### DESCRIPTIONS

- : Additional notation is not required for ships not intended to carry vehicles.
- Car Carrier : to be assigned to ships, other than car ferry ships engaged in national voyages and subject to Pt 7, Annex 7-3 of the Guidance, which are intended primarily to carry vehicles on vehicle decks in roll-on/roll-off system. For pure car carriers or pure car/truck carriers intended primarily to carry vehicles on several vehicle decks in superstructure running the entire length and breadth of the hull, fully enclosed as well as on vehicle decks under the freeboard deck in roll-on/roll-off system, "PCC" notation shall be assigned additionally after "Car Carrier" notation. (Pure Car Carrier)

#### Car/Cargo, Car/Container, Car/Bulk

- : to ships intended to carry not only vehicles in roll-on/roll-off system but also the relevant cargoes in loading/unloading system other than roll-on/roll-off system such as general cargo ships, container ships or bulk carriers. If these ships are car ferry ships engaged in national voyages which are subject to Pt 7, Annex 7-3 of the Guidance, the notation "Car Ferry/Cargo", "Car Ferry/Container" or "Car Ferry/Bulk" shall be assigned instead of these notations applicable and the notation "(open space)" shall be assigned additionally to car ferry ships, engaged in national voyages, having Open Vehicle Space only.
- Cassette : to ships intended to carry cargoes in roll-on/roll-off system using cassettes primarily.
- Car Ferry : to be assigned to car ferry ships which are engaged in national voyages and subject to Pt 7, Annex 7-3 of the Guidance and the notation "(open space)" shall be assigned additionally to car ferry ships having Open Vehicle Space Only.

Notations	Design	Survey
-	Pt 7 Ch 7	-
Car Carrier	Pt 7 Ch 7	_
Car Carrier PCC	Pt 7 Ch 7	-
Car/Cargo	Pt 7 Ch 7	_
Car/Container	Pt 7 Ch 7	-
Car/Bulk	Pt 7 Ch 7	_
Cassette	Pt 7 Ch 7	-
Car Ferry	Pt 7 Ch 7	-
Car Ferry(open space)	Pt 7 Ch 7	-

#### **REQUIREMENTS / RULE REFERENCES**

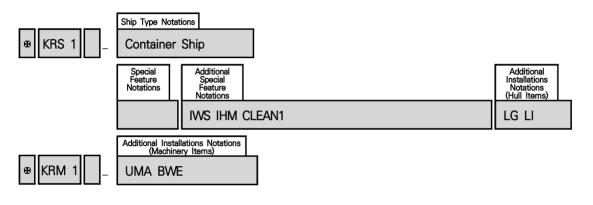


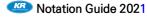
≪KRS 1 - RoRo Ship <b>Car Carrier PCC</b> IWS IHM CLEAN1 LG LI ≪KRM 1 - UMA BWE
∞KRS 1 - RoRo Ship <b>Car/Cargo</b> IWS IHM CLEAN1 LG LI ∞KRM 1 - UMA BWE
≪KRS 1 - RoRo Ship <b>Car/Container</b> IWS CDG IHM CLEAN1 LG LI ≪KRM 1 - UMA BWE
≪KRS 1 - RoRo Ship Cassette IWS IHM CLEAN1 LG LI ≪KRM 1 - UMA BWE
⊛KRS 1 - RoRo Ship <b>Car Ferry</b> IWS LG LI ∞KRM 1 - UMA

# 11. Container Ship

Ship Type Notations	Special Feature Notations	
Container Ship	LS LS(CL) LS(CL, RS) LS(CL, RS+)	

< Typical Example >





## 11. Container Ship

### NOTATIONS (Ship Type Notations)

#### Container Ship

#### DESCRIPTIONS

Container Ship : to be assigned to ships designed and constructed to carry containers exclusively.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Container Ship	Pt 7 Ch 4	Pt 1 Ch 2

#### **EXAMPLES**

≉KRS 1 – **Container Ship** IWS CDG IHM CLEAN1 LG LI ≉KRM 1 – UMA BWE

## 11. Container Ship

#### NOTATIONS (Special Feature Notations)

LS	
LS(CL)	
LS(CL, RS)	
LS(CL, RS+)	

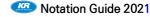
#### DESCRIPTIONS

- LS : to be assigned to ships where container securing arrangements are fitted, and design and construction of the system are in accordance with Pt 7, Annex 7–2 of the Guidance. (Lashing & Stowage)
- LS(CL) : to be assigned to ships where the program for lashing calculations is approved by the Society and installed and maintained onboard in accordance with Pt 7, Annex 7-2 of the Guidance in addition to LS above. (Calculation for Lashing)
- LS(CL, RS) : to be assigned to ships where the contents related to the application of the specific route reduction factors provided by the Society are included in Cargo Securing Manual and the specific route reduction factors are applicable to onboard lashing program in accordance with Pt 7, Annex 7-2 of the Guidance in addition to LS(CL) above. (Route Specific Reduction Factor)
- LS(CL, RS+) : to be assigned to ships where the contents related to the application of the user-specified route reduction factors provided by the Society are included in Cargo Securing Manual and ships equipped with a program that can calculate the route reduction factors for an arbitrary route in accordance with Pt 7, Annex 7-2 of the Guidance in addition to LS(CL) above. (Route Specific Reduction Factor+)

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
LS	Pt 7 Annex 7-2	-
LS(CL)	Pt 7 Annex 7-2	-
LS(CL, RS)	Pt 7 Annex 7-2	-
LS(CL, RS) LS(CL, RS+)	Pt 7 Annex 7-2	-

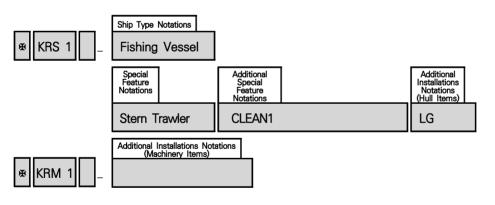
#### **EXAMPLES**



# 12. Fishing Vessel

Ship Type Notations	Special Feature Notations
Fishing Vessel	Long Liner
	Stern Trawler
	Side Trawler
	Whaler
	Purse Seiner
	Gill Net
	Angling
	Stick-held Dip Net
	Bottom Long Liner
	Тгар
	Stow Net
	Lift Net
	Dredge Net
	Seiner
	Stab Net
	Lighting
	Pole and Line

< Typical Example >



## 12. Fishing Vessel

### NOTATIONS (Ship Type Notations)

#### **Fishing Vessel**

### DESCRIPTIONS

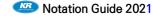
Fishing Vessel : to be assigned to ships used for catching fish, whales, seals, walrus or other living resources of the sea.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Fishing Vessel	Pt 3 <sup>1), 2)</sup>	Pt 1 Ch 2
(Notes)		
1) For small steel ships of which	length is less than 90m, Pt 10 is t	to be applied.
2) For ships of fibre reinforced	plastics, the Rules for the Class	ification of FRP Ships are to be
applied.		

#### **EXAMPLES**

 ≉KRS 1	<ul> <li>Fishing Vessel</li> <li>Stern Trawler CLEAN1 LG</li> </ul>
⊮KRM 1	
	<ul> <li>Fishing Vessel</li> <li>Long Liner and Angling CLEAN1 LG</li> </ul>
⊛KRM 1	



Ch 2

## 12. Fishing Vessel

#### NOTATIONS (Special Feature Notations)

Long Liner Stern Trawler Side Trawler Whaler **Purse Seiner** Gill Net Angling Stick-held Dip Net Bottom Long Liner Trap Stow Net Lift Net Dredge Net Seiner Stab Net Lighting Pole and Line

#### DESCRIPTIONS

Long Liner : to be assigned to long liner fishing vessels.
Stern Trawler : to be assigned to stern trawler fishing vessels.
Side Trawler : to be assigned to side trawler fishing vessels.
Whaler : to be assigned to whaler fishing vessels.
Purse Seiner : to be assigned to purse seiner fishing vessels.
Gill Net : to be assigned to gill net fishing vessels.
Angling : to be assigned to angling fishing vessels.
Stick-held Dip Net : to be assigned to stick-held dip net fishing vessels.

Bottom Long Liner : to be assigned to bottom long liner fishing vessels.

Trap : to be assigned to trap fishing vessels.

Stow Net : to be assigned to stow net fishing vessels.

Lift Net : to be assigned to lift net fishing vessels.

Dredge Net : to be assigned to dredge net fishing vessels.

Seiner : to be assigned to seiner fishing vessels.

Stab Net : to be assigned to stab net fishing vessels.

Lighting : to be assigned to lighting fishing vessels.

Pole and Line : to be assigned for pole-and-line fishing.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Long Liner	Pt 3 <sup>1), 2)</sup>	-
Stern Trawler	Pt 3 <sup>1), 2)</sup>	-
Side Trawler	Pt 3 <sup>1), 2)</sup>	-
Whaler	Pt 3 <sup>1), 2)</sup>	-
Purse Seiner	Pt 3 <sup>1), 2)</sup>	-
Gill Net	Pt 3 <sup>1), 2)</sup>	-
Angling	Pt 3 <sup>1), 2)</sup>	-
Stick-held Dip Net	Pt 3 <sup>1), 2)</sup>	-
Bottom Long Liner	Pt 3 <sup>1), 2)</sup>	-
Тгар	Pt 3 <sup>1), 2)</sup>	-
Stow Net	Pt 3 <sup>1), 2)</sup>	-
Lift Net	Pt 3 <sup>1), 2)</sup>	-
Dredge Net	Pt 3 <sup>1), 2)</sup>	-
Seiner	Pt 3 <sup>1), 2)</sup>	-
Stab Net	Pt 3 <sup>1), 2)</sup>	-
Lighting	Pt 3 <sup>1), 2)</sup>	-
Pole and Line	Pt 3 <sup>1), 2)</sup>	-
(Notes)		

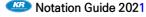
1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.

2) For ships of fibre reinforced plastics, the Rules for the Classification of FRP Ships are to be applied.

#### **EXAMPLES**

★KRS 1 - Fishing Vessel Stern Trawler CLEAN1 LG ★KRM 1
★KRS 1 - Fishing Vessel Long Liner and Angling CLEAN1 LG ★KRM 1

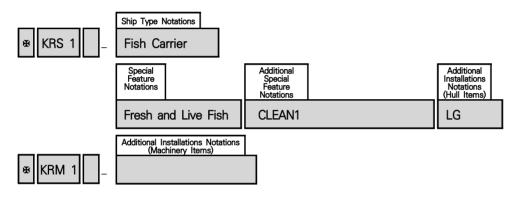




## 13. Fish Carrier

Ship Type Notations	Special Feature Notations
Fish Carrier	Fresh and Live Fish Fresh Fish Live Fish Fish Factory

< Typical Example >



## 13. Fish Carrier

### NOTATIONS (Ship Type Notations)

#### Fish Carrier

#### DESCRIPTIONS

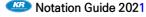
Fish Carrier : to be assigned to ship primarily carrying fishery.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Fish Carrier	Pt 3 <sup>1), 2)</sup>	Pt 1 Ch 2
(Notes)		
1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.		
2) For ships of fibre reinforced pla	astics, the Rules for the Classificatio	n of FRP Ships are to be applied.

### **EXAMPLES**

 ∗KRS 1 - <b>Fish Carrier</b> Fresh and Live Fish CLEAN1 LG ∗KRM 1
 ₩KRS 1 - <b>Fish Carrier</b> Fish Factory CLEAN1 LG ₩KRM 1



Ch 2

## 13. Fish Carrier

### NOTATIONS (Special Feature Notations)

Fresh and Live Fish Fresh Fish Live Fish Fish Factory

#### DESCRIPTIONS

Fresh and Live Fish : to be assigned to ships carrying fresh and live fishes.

Fresh Fish : to be assigned to ships carrying fresh fishes.

Live Fish : to be assigned to ships carrying live fishes.

Fish Factory : to be assigned to fish factory ships.

## **REQUIREMENTS / RULE REFERENCES**

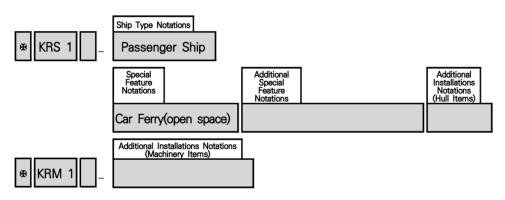
Notations	Design	Survey
Fresh and Live Fish	Pt 3 <sup>1), 2)</sup>	-
Fresh Fish	Pt 3 <sup>1), 2)</sup>	-
Live Fish	Pt 3 <sup>1), 2)</sup>	-
Fish Factory	Pt 3 <sup>1), 2)</sup>	-
(Notes)		
1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.		

2) For ships of fibre reinforced plastics, the Rules for the Classification of FRP Ships are to be applied.

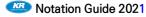
	 - Fish Carrier <b>Fresh and Live Fish</b> CLEAN1 LG
∞KRM 1	Hesh and Live Hish CLLANT LO
	- Fish Carrier
⊯KRM 1	Fish Factory CLEAN1 LG

Special Feature Notations		
Туре	Additional Purpose	Design Aspect
-	-	Max. submerging
Hydrofoil	Cargo	depth and time for
Side Wall Air Cushion Vehicle	Container	submersible
Hover Craft	Leisure	
Catamaran	Car Ferry	
Submersible	Car Ferry(open space)	
	Car Ferry(SCS)	
	RoRo	
	Type - Hydrofoil Side Wall Air Cushion Vehicle Hover Craft Catamaran	TypeAdditional PurposeHydrofoilCargoSide Wall Air Cushion VehicleContainerHover CraftLeisureCatamaranCar FerrySubmersibleCar Ferry(open space)Car Ferry(SCS)

#### $\langle$ Typical Example $\rangle$







# 14. Passenger Ship

### NOTATIONS (Ship Type Notations)

#### Passenger Ship

#### DESCRIPTIONS

Passenger Ship : to be assigned to ships which carries more than 12 passengers.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Passenger Ship	Pt 3 <sup>1), 2), 3)</sup>	Pt 1 Ch 2
(Notes)		
1) For small steel ships of which	length is less than 90m, Pt 10 is t	o be applied.
2) For ships of fibre reinforced pla	astics, the Rules for the Classificatio	n of FRP Ships are to be applied.
3) For high speed and/or light c	rafts, the Rules for the Classification	on of High Speed and Light Craft
are to be applied.		_

	- <b>Passenger Ship</b> Cargo/RoRo CLEAN1
∞KRS 1 - ∞KRM 1	- <b>Passenger Ship</b> Hydrofoil (HSLC-SA3) (HSC-A) CLEAN1
	- <b>Passenger Ship</b> Side Wall Air Cushion Vehicle CLEAN1
∞KRS 1 - ∞KRM 1	- <b>Passenger Ship</b> Catamaran/Car Ferry (HSLC-SA2)
	- <b>Passenger Ship</b> Car Ferry(SCS) CLEAN1 CDG
₩ KRS 1 -	Passenger Ship
₩KRM 1	Submersible/Leisure Max. 40M, 8Hrs

NOTATIONS (	(Special	Feature	Notations	– Type)
-------------	----------	---------	-----------	---------

Hydrofoil	
Side Wall Air Cushion Vehicle	
Hover Craft	
Catamaran	
Submersible	

#### DESCRIPTIONS

Hydrofoil : to be assigned to hydrofoil passenger ships.
Side Wall Air Cushion Vehicle : to be assigned to passenger ships of side wall air cushion vehicle type.
Hover Craft : to be assigned to passenger ships of hover craft type.
Submersible : to be assigned to submersible passenger ships.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Hydrofoil	Pt 3 <sup>1), 2), 3)</sup>	-
Side Wall Air Cushion Vehicle	Pt 3 <sup>1), 2), 3)</sup>	-
Hover Craft	Pt 3 <sup>1), 2), 3)</sup>	-
Catamaran	Pt 3 <sup>1), 2), 3)</sup>	-
	Pt 3 <sup>1), 2), 3)</sup> , Rules for the	Pt 1 Ch 2, Rules for the
Submersible	Classification of Underwater	Classification of Underwater
	Vehicles	Vehicles
(Nieteo)		

(Notes)

1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.

2) For ships of fiber reinforced plastics, the Rules for the Classification of FRP Ships are to be applied.

3) For high speed and/or light crafts, the Rules for the Classification of High Speed and Light Craft are to be applied.

∞KRS 1 -	 - Passenger Ship Hydrofoil (HSLC-SA3) (HSC-A) CLEAN1
₩KRM 1	
∞KRS 1 -	- Passenger Ship Side Wall Air Cushion Vehicle CLEAN1
	 - Passenger Ship <b>Catamaran</b> /Car Ferry (HSLC-SA2)

★KRS 1 - Passenger Ship Car Ferry(SCS) CLEAN1	CDG
& KRM 1	
≪KRS 1 - Passenger Ship Submersible/Leisure Ma	их. 40М, 8Hrs
₩KRM 1	· · · · · · · · · · · · · · · · · · ·

## 14. Passenger Ship

NOTATIONS (Special Feature Notations - Additional Purpose)

-
Cargo
Container
Leisure
Car Ferry
Car Ferry(open space)
Car Ferry(SCS)
RoRo

#### DESCRIPTIONS

- : Additional notation is not required for passenger ship built to carry passenger exclusively.

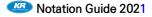
- **Cargo**: to be assigned to passenger ships carrying general cargoes.
- Container : to be assigned to passenger ships carrying containers.
- Leisure : to be assigned to leisure passenger ships.
- Car Ferry : to be assigned to passenger ships with Vehicle Areas specified in Pt 7, Annex 7-3 of the Guidance or passenger ships with spaces intended for the carriage of vehicle except Special Category Spaces or RoRo Spaces specified in SOLAS Ch.II-2 and the notation "(open space)" shall be assigned additionally to car ferry ships, engaged having Open Vehicle Space only.
- Car Ferry(SCS) : to be assigned to passenger ships with Special Category Spaces specified in SOLAS Ch. II-2 or IMO HSC Code(International Code of Safety for High-speed Craft. (Special Category Spaces)
- RoRo: to be assigned to passenger ships with RoRo Spaces specified in SOLAS Ch.II-2 or IMO HSC Code (International Code of Safety for High-speed Craft)

## **REOUIREMENTS / RULE REFERENCES**

Notations	Design	Survey	
-	Pt 3 <sup>1), 2), 3)</sup>	-	
Cargo	Pt 3 <sup>1), 2), 3)</sup>	-	
Container	Pt 3 <sup>1), 2), 3)</sup>	-	
Leisure	Pt 3 <sup>1), 2), 3)</sup>	-	
Car Ferry	Pt 3 <sup>1), 2), 3)</sup> , Pt 7 Ch 7	-	
Car Ferry(open space)	Pt 3 <sup>1), 2), 3)</sup> , Pt 7 Ch 7	=	
Car Ferry(SCS)	Pt 3 <sup>1), 2), 3)</sup> , Pt 7 Ch 7	-	
RoRo	Pt 3 <sup>1), 2), 3)</sup>	-	
(Notes)			
1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.			

2) For ships of fiber reinforced plastics, the Rules for the Classification of FRP Ships are to be applied.

3) For high speed and/or light crafts, the Rules for the Classification of High Speed and Light Craft are to be applied.



w KRS 1 w KRM	- Passenger Ship Cargo/RoRo CLEAN1 1
w KRS 1 w KRM	– Passenger Ship Catamaran/ <b>Car Ferry</b> (HSLC–SA2) 1
w KRS 1 w KRM	- Passenger Ship Submersible/ <b>Leisure</b> Max. 40M, 8Hrs 1

## 14. Passenger Ship

### NOTATIONS (Special Feature Notations - Submersible)

#### Max. submerging depth and time for Submersible

#### DESCRIPTIONS

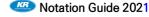
Max. ----M, ----Hrs : Max. submerging depth and time are to be assigned for submersible passenger ships.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey	
MaxM,Hrs	Pt 3 <sup>1), 2), 3)</sup>	-	
(Notes)			
1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.			
2) For ships of fibre reinforced plastics, the Rules for the Classification of FRP Ships are to be applied.			
3) For high speed and/or light crafts, the Rules for the Classification of High Speed and Light Craft			
are to be applied.			

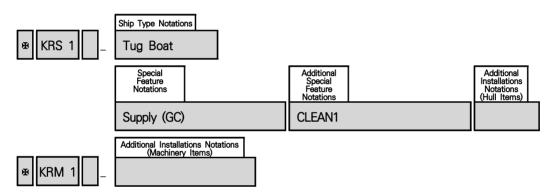
#### EXAMPLES

∞KRS 1 - Passenger Ship Submersible/Leisure **Max. 40M, 8Hrs** ∞KRM 1



Special Feature Notations	
A*	
(Purpose)	
-	
Salvage	
Supply	
Anchor	
Fire-Fighting(GA or GC)	
Fire-Fighting(GA or GC) Oil Recovery(GA, GB or GC)	

< Typical Example >



Remark : In relation to Special Feature Notation, A\*(Purpose), Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8 of Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel.

## NOTATIONS (Ship Type Notations)

#### Tug Boat

#### DESCRIPTIONS

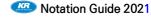
Tug Boat : to be assigned to ships designed primarily for towing service.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Tug Boat	Pt 7 Ch 9 <sup>1)</sup>	Pt 1 Ch 2
(Notes)		
1) For small steel ships of which	length is less than 90m, Pt 10 is t	to be applied.

## EXAMPLES

∞KRS 1 − <b>Tug Boat</b> ∞KRM 1	
∞KRS 1 - <b>Tug Boat</b> Anchor CLEAN1 ∞KRM 1	
∞KRS 1 - <b>Tug Boat</b> Supply(GC) CLEAN1 ∞KRM 1	
≪KRS 1 - <b>Tug Boat</b> Fire-Fighting(GC) CLEAN1 ≪KRM 1	
⊛KRS 1 - <b>Tug Boat</b> Oil Recovery(GC) CLEAN1 ⊛KRM 1	
⊛KRS 1 - <b>Tug Boat</b> Oil Recovery(GC) FF1 CLEAN1 ⊛KRM 1	



Ch 2

## 15-1. Tug Boat

NOTATIONS (Special Feature Notations - Purpose)

Salvage Supply Anchor Fire-Fighting(GA or GC) Oil Recovery(GA, GB or GC)

#### DESCRIPTIONS

Salvage : to be assigned to tug boat designed for towing and salvage service.

Supply : to be assigned to tug boat designed for towing and supply service.

Anchor : to be assigned to tug boat designed for towing and anchor service.

Fire-Fighting(GA or GC) : When it complies with the "Enforcement Regulations of Ship Arrival and Departure, Annex 2, Standards for Fire Extinguishing Facilities," etc., the "Fire-Fighting" specialty feature notations shall be granted. GA or GC are shown in the following:

- GA : Regarding the fire fighting equipment for other vessels, this notation shall be assigned to ships complied with the requirements for explosion-protected electrical equipment in dangerous zone.
- **GC** : Regarding the fire fighting equipment for other vessels, this notation shall be assigned to ships not applied to the requirements for explosion-protected electrical equipment in dangerous zone.

Oil Recovery(GA, GB or GC) : to be assigned to tug boat designed for towing and oil recovery service.

Where,

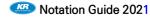
- GA: to be assigned to ships equipped for recovery and storage of spilled oil, and complied with the requirements for explosion-protected electrical equipment in dangerous zone.
- **GB**: to be assigned to ships equipped for recovery and storage of spilled oil, and complied with the requirements for explosion-protected electrical equipment at work and storage spaces.
- GC: to be assigned to ships equipped for recovery and storage of spilled oil, and not applied to the requirements for explosion-protected electrical equipment.
- Remark : In relation to Special Feature Notation Purpose, Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8 of Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel.

## REQUIREMENTS / RULE REFERENCES

Notations	Design	Survey
Salvage	Pt 7 Ch 9 <sup>1)</sup>	-
Supply	Pt 7 Ch 9 <sup>1)</sup>	-
Anchor	Pt 7 Ch 9 <sup>1)</sup>	-
Fire-Fighting(GA or GC)	Pt 7 Ch 9 <sup>1)</sup>	-
Oil Recovery(GA, GB or GC)	Pt 7 Ch 9 <sup>1)</sup>	-
(Notes)		
1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.		

∞KRS 1 - Tug Boat ∞KRM 1	
≪KRS 1 - Tug Boat Anchor CLEAN1 ≪KRM 1	
≪KRS 1 - Tug Boat Supply(GC) CLEAN1 ≪KRM 1	

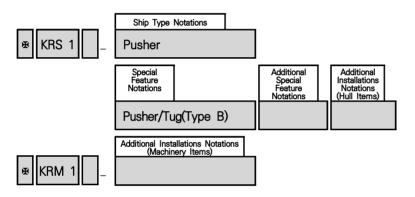




# 15-2. Pusher

Ship Type Notations	Special Feature Notations
Pusher	- (Туре А) (Туре В)
	Pusher/Tug (Type A) (Type B)

< Typical Example >



# 15-2. Pusher

## NOTATIONS (Ship Type Notations)

Pusher Pusher

DESCRIPTIONS

Pusher : to be assigned to ships designed primarily for service of pushing other ship or barge, etc.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey	
Pusher	Pt 7 Ch 9 <sup>1)</sup>	Pt 1 Ch 2	
(Notes)			
1) For small steel ships of which	length is less than 90m, Pt 10 is t	o be applied.	

≪KRS 1 - <b>Pusher</b> (Type B) ≪KRM 1	
∞KRS 1 - <b>Pusher</b> Pusher/Tug(Type B) ∞KRM 1	

## 15-2. Pusher

#### NOTATIONS (Special Feature Notations)

-	
(Type A)	
(Type A)	
Pusher/Tug	
(Туре А)	
(Туре В)	

### DESCRIPTIONS

Pusher/Tug : to be assigned to pushers designed primarily for towing service and service of pushing other ship or barge, etc.

(Type A) : to be assigned to pusher with permanent connection type.

(Type B) : to be assigned to pusher with removable connection type.

## **REQUIREMENTS / RULE REFERENCES**

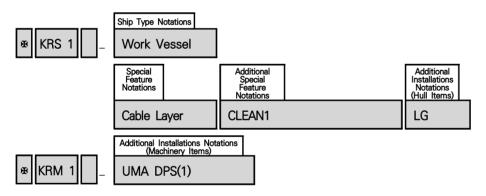
Notations	Design	Survey
Pusher/Tug	Pt 7 Ch 9 <sup>1)</sup>	-
(Notes)		
1) For small steel ships of which le	ngth is less than 90m, Pt 10 is to	be applied.

∞KRS 1 − Pusher <b>(Type A)</b> ∞KRM 1	
∞KRS 1 - Pusher <b>Pusher/Tug(Type B)</b> ∞KRM 1	

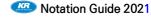
# 16. Work Vessel

Ship Type Notations	Special Feature Notations
Work Vessel	A*
	(Purpose)
	-
	Launch
	Cable Layer
	Crane
	Anchor
	Ice Breaker
	Supply
	Oil Recovery(GA, GB or GC)
	Salvage
	Repair Work
	Tender
	Dredging

< Typical Example >



Remark : In relation to Special Feature Notation, A\*(Purpose), Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8 of Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel.



## 16. Work Vessel

### NOTATIONS (Ship Type Notations)

#### Work Vessel

### DESCRIPTIONS

Work Vessel : to be assigned to ships designed for primarily carrying out intended work.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Work Vessel	Pt 3 <sup>1), 2)</sup>	Pt 1 Ch 2
(Notes)		
1) For small steel ships of which	length is less than 90m, Pt 10 is t	o be applied.
2) For high speed and/or light of	rafts, the Rules for the Classification	on of High Speed and Light Craft
are to be applied.		

∞KRS 1 − <b>Work Vessel</b> ∞KRM 1	
∞KRS 1 - <b>Work Vessel</b> Cable Layer CLEAN1 LG ∞KRM 1 - UMA DPS(1)	
≪KRS 1 - <b>Work Vessel</b> Oil Recovery(GC) CLEAN1 ≪KRM 1	

## 16. Work Vessel

NOTATIONS (Special Feature Notations - Purpose)

Launch Cable Layer Crane Anchor Ice Breaker Supply Oil Recovery(GA, GB or GC) Salvage Repair Work Tender Dredging

#### DESCRIPTIONS

-: Additional notation is not required for work vessel built only for the purpose of work purpose.

Launch : to be assigned to ships carrying out launch works.

Cable Layer : to be assigned to ships carrying out cable lay works.

Crane : to be assigned to ships carrying out crane works.

Anchor : to be assigned to ships carrying out anchor works.

Ice Breaker : to be assigned to ships carrying out ice break works.

Supply : to be assigned to ships carrying out supply works.

Oil Recovery(GA, GB or GC) : to be assigned to ships carrying out oil recovery works.

Where,

- GA: to be assigned to ships equipped for recovery and storage of spilled oil, and complied with the requirements for explosion-protected electrical equipment in dangerous zone.
- **GB**: to be assigned to ships equipped for recovery and storage of spilled oil, and complied with the requirements for explosion-protected electrical equipment at work and storage spaces.
- GC : to be assigned to ships equipped for recovery and storage of spilled oil, and not applied to the requirements for explosion-protected electrical equipment.

Salvage : to be assigned to ships carrying out salvage works.

Repair Work : to be assigned to ships carrying out repair works.

Tender : to be assigned to ships carrying out tender works.

Dredging : to be assigned to ship carrying out dreding.

Remark : In relation to Special Feature Notation – Purpose, Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8 of Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Launch	Pt 3 <sup>1), 2)</sup>	-
Crane	Pt 3 <sup>1), 2)</sup>	-
Crane	Pt 3 <sup>1), 2)</sup>	-
Anchor	Pt 3 <sup>1), 2)</sup>	-
Ice Breaker	Pt 3 <sup>1), 2)</sup>	-
Supply	Pt 3 <sup>1), 2)</sup>	-
Oil Recovery(GA, GB or GC)	Pt 3 <sup>1), 2)</sup>	-
Salvage	Pt 3 <sup>1), 2)</sup>	-
Repair Work	Pt 3 <sup>1), 2)</sup>	-
Tender	Pt 3 <sup>1), 2)</sup>	-
Dredging	Pt 3 <sup>1), 2)</sup>	-
(Nieteo)		

(Notes)

1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.

2) For high speed and/or light crafts, the Rules for the Classification of High Speed and Light Craft are to be applied.

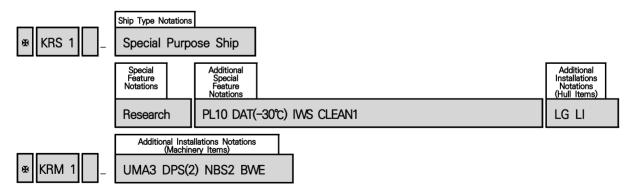
∞KRS 1 - Work Vessel ∞KRM 1	
★KRS 1 - Work Vessel          Cable Layer       CLEAN1 LG         ★KRM 1 - UMA DPS(1)	
★KRS 1 - Work Vessel     Oil Recovery(GC)   CLEAN1     ★KRM 1	
★KRS 1 - Work Vessel Oil Recovery(GC) and Dredging CLEAN1 ★KRM 1	



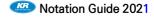
# 17. Special Purpose Ship

Ship Type Notations	Special Feature Notations
Special Purpose Ship	A*
	(Purpose)
	-
	Soil
	Geological
	Survey Boat
	Submersible Support
	Diving Support
	Hopper/Waste
	Waste
	Hospital
	Hydro Survey
	Seismic Survey
	Fire-Fighting(GA or GC)
	Buoy Laying
	Fishery Training
	Fishery Patrol
	Fishery Research
	Patrol
	Pilot
	Training
	Research

 $\langle$  Typical Example  $\rangle$ 



Remark : In relation to Special Feature Notation, A\*(Purpose), Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8 of Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel.



Ch 2

# 17. Special Purpose Ship

## NOTATIONS (Ship Type Notations)

#### Special Purpose Ship

### DESCRIPTIONS

Special Purpose Ship : to be assigned to ships designed for carrying out intended special purposes.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Special Purpose Ship	Pt 3 <sup>1), 2)</sup>	Pt 1 Ch 2
(Notes)		
1) For small steel ships of which	length is less than 90m, Pt 10 is t	to be applied.
2) For high speed and/or light o	rafts, the Rules for the Classificati	on of High Speed and Light Craft
are to be applied.		

∗KRS 1 - <b>Special</b> Fishery	Purpose Ship Patrol CLEAN1 LG
₩KRM 1	
∞KRS 1 - <b>Special</b> Fishery	Purpose Ship Training CLEAN1 LG
₩KRM 1	Ŭ
⊛KRS 1 - <b>Special</b> Hospita	
⊯KRM 1	
	DPS(2) NBS2 BWE
	Purpose Ship CLEAN1 LG LI
₩KRM 1	

## 17. Special Purpose Ship

NOTATIONS (Special Feature Notations - Purpose)

-
Soil
Geological
Survey Boat
Submersible Support
Diving Support
Hopper/Waste
Waste
Hospital
Hydro Survey
Seismic Survey
Fire-Fighting(GA or GC)
Buoy Laying
Fishery Training
Fishery Patrol
Fishery Research
Patrol
Pilot
Observation
Training
Research

### DESCRIPTIONS

- : Additional notation is not required for Special Purpose ship built only for the purpose of special purpose.

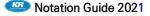
Soil : to be assigned to ships carrying out special purpose related soil matters.

Geological : to be assigned to ships carrying out special purpose related geological matters.

Survey Boat : to be assigned to ships carrying out special purpose related survey matters.

Submersible Support : to be assigned to ships carrying out special purpose related submersible support matters.

Diving Support : to be assigned to ships carrying out special purpose related diving support matters.



Hopper/Waste : to be assigned to ships carrying out special purpose related waste matter with hopper.

Waste : to be assigned to waste ships.

Hospital : to be assigned to hospital ships.

Hydro Survey : to be assigned to hydro survey ships.

Seismic Survey : to be assigned to seismic survey ships.

Fire-Fighting(GA or GC) : to be assigned to fire-fighting ships.

Where,

- GA : to be assigned to ships complied with the requirements for explosion-protected electrical equipment in dangerous zone.
- GC : to be assigned to ships not applied to the requirements for explosion-protected electrical equipment in dangerous zone.

Buoy Laying : to be assigned to buoy laying ships.

Fishery Training : to be assigned to fishery training ships.

Fishery Patrol: to be assigned to fishery patrol ships.

Fishery Research : to be assigned to fishery research ships.

Patrol: to be assigned to patrol fire-fighting ships.

Pilot : to be assigned to pilot ships.

Observation : to be assigned to observation ships.

Training : to be assigned to training ships.

Research : to be assigned to research ships.

Remark : In relation to Special Feature Notation – Purpose, Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8 of Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel.



## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Soil	Pt 3 <sup>1), 2)</sup>	-
Geological	Pt 3 <sup>1), 2)</sup>	-
Survey Boat	Pt 3 <sup>1), 2)</sup>	-
Submersible Support	Pt 3 <sup>1), 2)</sup>	-
Diving Support	Pt 3 <sup>1), 2)</sup>	-
Hopper/Waste	Pt 3 <sup>1), 2)</sup>	-
Waste	Pt 3 <sup>1), 2)</sup>	-
Hospital	Pt 3 <sup>1), 2)</sup>	-
Hydro Survey	Pt 3 <sup>1), 2)</sup>	-
Seismic Survey	Pt 3 <sup>1), 2)</sup>	-
Fire-Fighting(GA or GC)	Pt 3 <sup>1), 2)</sup>	-
Buoy Laying	Pt 3 <sup>1), 2)</sup>	-
Fishery Training	Pt 3 <sup>1), 2)</sup>	-
Fishery Patrol	Pt 3 <sup>1), 2)</sup>	-
Fishery Research	Pt 3 <sup>1), 2)</sup>	-
Patrol	Pt 3 <sup>1), 2)</sup>	-
Pilot	Pt 3 <sup>1), 2)</sup>	-
Observation	Pt 3 <sup>1), 2)</sup>	-
Training	Pt 3 <sup>1), 2)</sup>	-
Research	Pt 3 <sup>1), 2)</sup>	-
(Nister)		

(Notes)

1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.

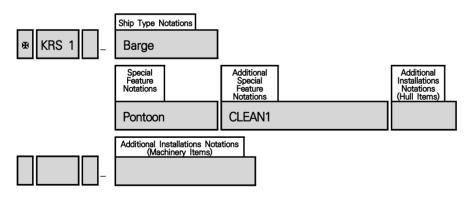
2) For high speed and/or light crafts, the Rules for the Classification of High Speed and Light Craft are to be applied.

★KRS 1 - Special Purpose Ship Fisher: Petrol CLEAN1 + C
 Fishery Patrol CLEAN1 LG ★KRM 1
⊛KRS 1 - Special Purpose Ship Fishery Training CLEAN1 LG
⊛KRS 1 – Special Purpose Ship Hospital
 ₩KRM 1
⊛KRS 1 - Special Purpose Ship <b>Research</b> PL10 DT(-30℃) CLEAN1 HMS1 LG LI
⊛KRS 1 - Special Purpose Ship Waste CLEAN1 LG LI



	Special	Special Feature Notations			
Ship Type Notations	Туре	Loaded Cargo Name or Additional Purpose			
Barge	-	Chemical			
(FAC)	Pontoon	Oil			
(FAO)	Integrated Pusher Barge	Container			
(FBC)	(Туре А)	Sand			
	(Туре В)	Crane			
	Hopper(or Dump)	Pipe-Laying			
		Piling			
		Cable-Laying			
		Salvage			
		Submersible			
		Accommodation			
		Waste			
		Log			
		Heavy Cargo			
		Oil Recovery(GA, GB or GC)			
		Power Plant			
		Wind Turbine Transportation			

#### < Typical Example >



### NOTATIONS (Ship Type Notations)

#### Barge

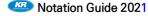
### DESCRIPTIONS

Barge : to be assigned to non self-propelled ships generally pulled or pushed by tug boat.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design			Survey					
Barge	Rules	for	the	Classification	of			Classification	of
	Steel Barges Steel Barges								

 ⊮KRS 1 -	- <b>Barge</b> (FAO) Oil CLEAN1
	BWE
 	- Barge Pontoon CLEAN1
₩KRS 1	- <b>Barge</b> Pontoon/Crane LG
	- <b>Barge</b> Integrated Pusher Barge(Туре В)



### NOTATIONS (Ship Type Notations - Flash Point/Tank Vent)

(FAC)			
(FAO)			
(FBC)			

#### DESCRIPTIONS

- (FAC) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Controlled tank vents
- (FAO) : to be assigned to ships which are carrying cargoes of Flash point Above 60°C with Open tank vents
- (FBC) : to be assigned to ships which are carrying cargoes of Flash point of 60°C and Below with Controlled tank vents

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(FAC)	Pt 7 Ch 1 Sec 10	-
(FAO)	Pt 7 Ch 1 Sec 10	-
(FBC)	Pt 7 Ch 1 Sec 10	-

### **EXAMPLES**

★KRS 1 - Barge (FAO) Oil CLEAN1

BWE

### NOTATIONS (Special Feature Notations - Type)

Pontoon Integrated Pusher Barge(Type A) Integrated Pusher Barge(Type B) Hopper (or Dump)

### DESCRIPTIONS

Pontoon : to be assigned to box shape barges carrying cargoes on the freeboard deck only.

Integrated Pusher Barge(Type A)	to be assigned to barges, within pusher-barge combination, which are connected in permanent connection type to pushers that are operated by the pushing of pusher.
Integrated Pusher Barge(Type B)	to be assigned to barges, within pusher-barge combination, which are connected in removable connection type to pushers that are operated by the pushing of pusher.

Hopper (or Dump) : to be assigned to barges which are constructed so as to open the cargo hold bottom.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Pontoon	Rules for the Classification of Steel Barges, Ch 21	-
Integrated Pusher Barge(Type A)	Rules for the Classification of Steel Barges	-
Integrated Pusher Barge(Type B)	Rules for the Classification of Steel Barges	-
Hopper (or Dump)	Rules for the Classification of Steel Barges	-

∞KRS 1 -	Barge Pontoon CLEAN1
	BWE
	· Barge Pontoon/Crane LG
₩ KRS 1 -	Barge Integrated Pusher Barge(Type B)

NOTATIONS (Special Feature Notations - Loaded Cargo Name or Additional Purpose)

Chemical
Oil
Container
Sand
Crane
Pipe-Laying
Piling
Cable-Laying
Salvage
Submersible
Accommodation
Waste
Log
Heavy Cargo
Oil Recovery(GA, GB or GC)
Power Plant
Wind Turbine Transportation

#### DESCRIPTIONS

- Chemical : to be assigned to barges which are constructed primarily for the carriage of chemicals(liquid cargoes specified in(Pt 7, Ch 6, Sec 17 of the Rules) in bulk. (Remarks: Additional Special Feature Notations are to be assigned in the same manner for those of Chemical Tankers.)
- Oil : to be assigned to barges which are constructed primarily for the carriage of oil in bulk.
- Container : to be assigned to barges which are constructed primarily for the carriage of containers.
- Sand : to be assigned to barges which are constructed primarily for the carriage of sand.(including barges which are not intended to be used for dredging, if they are equipped with equipment for direct sand extraction (sand only))
- Crane : to be assigned to barges carrying out crane works.
- Pipe-Laying : to be assigned to barges carrying out pipe lay works.
- Piling : to be assigned to barges carrying out piling works.

Cable-Laying : to be assigned to barges carrying out cable lay works.

Salvage : to be assigned to barges carrying out salvage works.

Submersible : to be assigned to submersible barges

Accommodation : to be assigned to barges which are constructed to be used as an accommodation.

Waste : to be assigned to barges which are constructed primarily for the carriage of waste.

Log: to be assigned to barges which are constructed primarily for the carriage of logs.

Heavy Cargo : to be assigned to barges which are constructed for the carriage of heavy cargoes.

Oil Recovery(GA, GB or GC): to be assigned to barges carrying out oil recovery works.

Where,

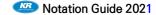
- GA: to be assigned to barges equipped for recovery and storage of spilled oil, and complied with the requirements for explosion-protected electrical equipment in dangerous zone.
- **GB**: to be assigned to barges equipped for recovery and storage of spilled oil, and complied with the requirements for explosion-protected electrical equipment at work and storage spaces.
- GC : to be assigned to barges equipped for recovery and storage of spilled oil, and not applied to the requirements for explosion-protected electrical equipment.

Power Plant : to be assigned to barges which are constructed to be used as a power plant.

Wind Turbine Transportation : to be assigned to barges which are constructed for the transportation of wind turbines.

Notations	Design	Survey
Chemical	Rules for the Classification of Steel Barges	-
Oil	Rules for the Classification of Steel Barges, Ch 22	-
Container	Rules for the Classification of Steel Barges	-
Sand	Rules for the Classification of Steel Barges	-
Crane	Rules for the Classification of Steel Barges	-
Pipe-Laying	Rules for the Classification of Steel Barges	-
Piling	Rules for the Classification of Steel Barges	-
Cable-Laying	Rules for the Classification of Steel Barges	-
Salvage	Rules for the Classification of Steel Barges	-
Submersible	Rules for the Classification of Steel Barges	-
Accommodation	Rules for the Classification of Steel Barges	-
Waste	Rules for the Classification of Steel Barges	-
Log	Rules for the Classification of Steel Barges	-
Heavy Cargo	Rules for the Classification of Steel Barges	-
Oil Recovery(GA, GB or GC)	Rules for the Classification of Steel Barges	-
Power Plant	Rules for the Classification of Steel Barges	-
Wind Turbine Transportation	Rules for the Classification of Steel Barges	-

#### **REQUIREMENTS / RULE REFERENCES**

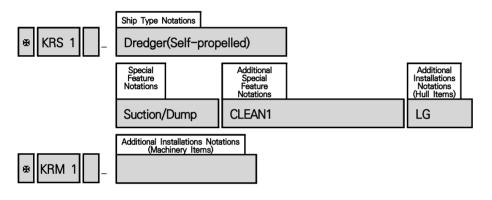


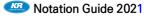
	- Barge (FAO)
∞KRS 1 -	Oil CLEAN1
	BWE
	- Barge
⊮KRS 1 -	Pontoon/ <b>Crane</b> LG

# 19. Dredger

Ship Type Notations	Special Feature Notations
Dredger	Trailing Suction
Dredger(Self-propelled)	Cutter Suction
	Grab
	Bucket
	Dipper
	Suction/Dump
	Reduced Freeboard

< Typical Example >





Ch 2

# 19. Dredger

### NOTATIONS (Ship Type Notations)

## Dredger

#### Dredger(Self-propelled)

### DESCRIPTIONS

Dredger : to be assigned to ships equipped with the dredging equipment for soils, sands, peddles and stones at the bottom of river, harbor and sea lanes.

Dredger(Self-propelled) : to be assigned self-propelled dredger with propulsion machinery.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey			
Dredger	Rules for the Classification of	Rules for the Classification of			
Dredger	Dredgers	Dredgers			
Dredger(Self-propelled)	Rules for the Classification of	Rules for the Classification of			
Dredger(Seir-propened)	Dredgers, Pt 31)	Dredgers			
(Notes)					
1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.					

### **EXAMPLES**

★ KRS 1 - Dredger Cutter Suction CLEAN1 ★ KRM 1
★ KRS 1 - Dredger(Self-propelled) Suction/Dump CLEAN1 LG
★ KRM 1

## 19. Dredger

### NOTATIONS (Special Feature Notations)

Trailing Suction Cutter Suction Grab Bucket Dipper Suction/Dump Reduced Freeboard

### DESCRIPTIONS

Trailing Suction : to be assigned to ships carrying out dredging works in trailing suction type.
Cutter Suction : to be assigned to ships carrying out dredging works in cutter suction type.
Grab : to be assigned to ships carrying out dredging works in grab type.
Bucket : to be assigned to ships carrying out dredging works in bucket type.
Dipper : to be assigned to ships carrying out dredging works in dipper type.
Suction/Dump : to be assigned to ships carrying out dredging works in suction/dump type.
Reduced Freeboard : to be assigned to ships being designed reduced freeboard

Ch 2

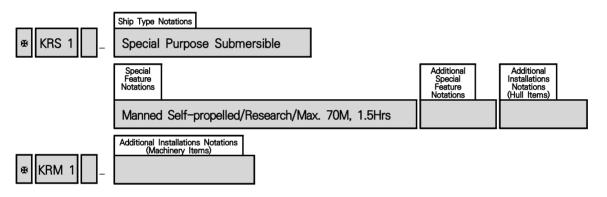
## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Trailing Suction	Rules for the Classification of Dredgers, Pt 3 <sup>1)</sup>	-
Cutter Suction	Rules for the Classification of Dredgers, Pt 3 <sup>1)</sup>	-
Grab	Rules for the Classification of Dredgers, Pt 3 <sup>1)</sup>	-
Bucket	Rules for the Classification of Dredgers, Pt 3 <sup>1)</sup>	-
Dipper	Rules for the Classification of Dredgers, Pt 3 <sup>1)</sup>	-
Suction/Dump	Rules for the Classification of Dredgers, Pt 3 <sup>1)</sup>	-
Reduced Freeboard	Rules for the Classification of Dredgers, Pt 3 <sup>1)</sup>	
(Notes)		
1) For small steel ships of which le	ngth is less than 90m, Pt 10 is to be applied.	

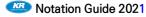
 edger tter Suction CLEAN1
edger(Self-propelled) ction/Dump CLEAN1 LG

Ship Type Notations		Special Feature Notations				
Special Purpose Submersible	Туре	Type Type of Propulsion Purpose Design Aspect				
	Manned Unmanned	Self-propelled Non-propelled	Research Rescue Leisure Special Work	Max. submerging depth and time		

 $\langle$  Typical Example  $\rangle$ 







### NOTATIONS (Ship Type Notations)

#### Special Purpose Submersible

#### DESCRIPTIONS

Special Purpose Submersible : to be assigned to submersible ships designed for carrying out intended special purposes.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design			Survey						
Special Purpose Submersible				Classification	of				Classification	of
	Underwater Vehicles				Under	water	<sup>-</sup> Veh	icles		

★ KRS 1 - Special Purpose Submersible Manned Self-propelled/Research/Max. 70M, 1.5Hrs	
₩KRM 1	

### NOTATIONS (Special Feature Notations - Manned, Unmanned)

Manned

Unmanned

#### DESCRIPTIONS

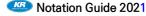
Manned : to be assigned to manned submersible ships.

Unmanned : to be assigned to unmanned submersible ships.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Survey	
Manned	Rules for the Classification of	
	Underwater Vehicles	
Linnenned	Rules for the Classification of	
Unmanned	Underwater Vehicles	_

### **EXAMPLES**



Ch 2

## NOTATIONS (Special Feature Notations - Self-propelled, Non-propelled)

Self-propelled

Non-propelled

#### DESCRIPTIONS

Self-propelled : to be assigned to self-propelled submersible ships.

Non-propelled : to be assigned to non-propelled submersible ships.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Self-propelled	Rules for the Classification of	_
Sell-propelled	Underwater Vehicles	
Ner prepulled	Rules for the Classification of	
Non-propelled	Underwater Vehicles	_

✓KRS 1 – Special Purpose Submersible Manned Self-propelled/Research/Max. 70M, 1.5Hrs
∗KRM 1

### NOTATIONS (Special Feature Notations - Purpose)

Research
Rescue
Leisure
Special Work

#### DESCRIPTIONS

Research : to be assigned to submersible ships carrying out special purpose related research.

- Rescue : to be assigned to submersible ships carrying out special purpose related rescue.
- Leisure : to be assigned to submersible ships used for leisure.(However, to be assigned to ships accompanying personnel not exceeding 13.)

Special Work : to be assigned to submersible ships using for special work.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Research	Rules for the Classification of Underwater Vehicles	-
Rescue	Rules for the Classification of Underwater Vehicles	-
Leisure	Rules for the Classification of Underwater Vehicles	-
Special Work	Rules for the Classification of Underwater Vehicles	-

### EXAMPLES

∞KRS 1 - Special Purpose Submersible Manned Self-propelled/**Research**/Max. 70M, 1.5Hrs ∞KRM 1

#### NOTATIONS (Special Feature Notations - Max. submerging depth and time)

#### Max. submerging depth and time

### DESCRIPTIONS

Max. ---M, ---Hrs : Max. submersing depth and time are to be assigned.

### **REQUIREMENTS / RULE REFERENCES**

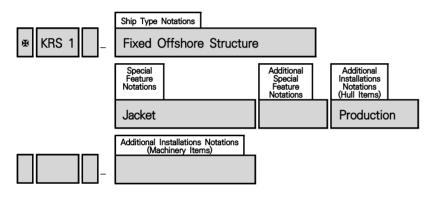
Notations	Design	Survey
MaxM,Hrs	Rules for the Classification of Underwater Vehicles	-

#### **EXAMPLES**

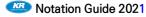
★KRS 1 – Special Purpose Submersible Manned Self-propelled/Research/Max. 70M, 1.5Hrs ★KRM 1

Ship Type Notations	Special Feat	ure Notations
Ship Type Notations	Туре	Purpose
Fixed Offshore Structure	Jacket GBS Compliant Tower Articulated Tower	Drilling Production

< Typical Example >







## NOTATIONS (Ship Type Notations)

#### **Fixed Offshore Structure**

#### DESCRIPTIONS

Fixed Offshore Structure : to be assigned to offshore structures which are buoyant or non-buoyant structures, supported by or attached to the sea floor of specific site of the installation.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design					Survey				
Fixed Offshore Structure	Rules	for	the	Classification	of	Rules	for	the	Classification	of
	Fixed Offshore Structures					Fixed	Offsł	nore S	Structures	

★KRS 1 - Fixed Offshore Structure Jacket Production	
≪KRS 1 - <b>Fixed Offshore Structure</b> GBS Production	

### NOTATIONS (Special Feature Notations - Type)

Jacket		
GBS		
Compliant Tower		
Articulated Tower		

#### DESCRIPTIONS

- Jacket : to be assigned to fixed offshore structures characterized by slender foundation elements, or piles, driven into the sea floor.
- GBS : to be assigned to fixed offshore structures which rest directly on the sea floor. (Gravity Base Structure)
- **Compliant Tower**: to be assigned to fixed offshore structures which are designed to have longer frequency of structure than frequency of wave so that the resonance between structure and wave can be avoided.
- Articulated Tower: to be assigned to fixed offshore structures which depend on buoyancy acting near the water surface to provide the necessary righting stability.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Jacket	Rules for the Classification of Fixed Offshore Structures	-
GBS	Rules for the Classification of Fixed Offshore Structures	-
Compliant Tower	Rules for the Classification of Fixed Offshore Structures	-
Articulated Tower	Rules for the Classification of Fixed Offshore Structures	-

≪KRS 1 - Fixed Offshore Structure <b>Jacket</b> Production	

## NOTATIONS (Special Feature Notations - Purpose)

Drilling

Production

#### DESCRIPTIONS

Drilling : to be assigned to fixed offshore structures carrying out drilling works.

**Production**: to be assigned to fixed offshore structures carrying production works such as processing crude oil, gas, etc. drawn up from the seabed.

## **REQUIREMENTS / RULE REFERENCES**

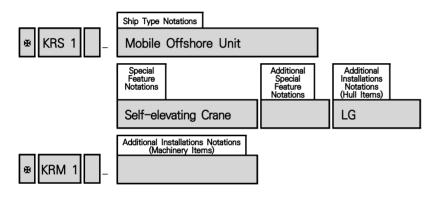
Notations		Design							
Drilling	Rules	for	the	Classification	of	Fixed	Offshore	_	
Drilling	Structu	_							
Draduation	Rules	for	the	Classification	of	Fixed	Offshore	_	
Production	Structu	Structures							

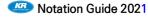
≪KRS 1 - Fixed Offshore Structure Jacket <b>Production</b>	
≪KRS 1 - Fixed Offshore Structure     GBS <b>Production</b>	

# 22. Mobile Offshore Unit

Shin Tuno Notations	Special Feature Notations						
Ship Type Notations	Туре	Purpose					
Mobile Offshore Unit	Self-elevating Column-stabilized Ship Type Barge Type	Crane Accommodation Floating Pier					

< Typical Example >





## 22. Mobile Offshore Unit

## NOTATIONS (Ship Type Notations)

Mobile Offshore Unit

### DESCRIPTIONS

Mobile Offshore Unit : to be assigned to mobile offshore units which are capable of moving for the intended offshore operation primarily without restrictions of service area rather than carrying cargoes. However, for the restricted service units, special consideration may be given by the Society.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design					Survey				
Mobile Offshore Unit	Rules Mobile	Rules for the Classification of Mobile Offshore Units				Rules Mobile			Classification Units	of

∞KRS 1	- Mobile Offshore Unit
∞KRM 1	Self-elevating Crane LG
₩ KRS 1	- Mobile Offshore Unit Barge Type Floating Pier LG

## 22. Mobile Offshore Unit

NOTATIONS (Special Feature Notations – Type)

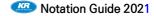
Self-elevating Column-stabilized Ship Type Barge Type

### DESCRIPTIONS

- Self-elevating : Self-elevating unit is a unit having hulls with sufficient buoyancy to safely transport the unit to the desired location, after which the hull is raised to a predetermined elevation above the sea surface on its legs, which are supported by the sea bed. Equipment and supplies may be transported on the unit, or may be added to the unit in its elevated position. The legs of such units may penetrate the sea bed, may be fitted with enlarged sections or footings to reduce penetration, or may be attached to bottom pads or mat.
- **Column-stabilized** : Column-stabilized unit is a unit which depends upon the buoyancy of widely spaced columns for flotation and stability for all afloat modes of operation or in the raising or lowering of the unit, as may be applicable. The columns are connected at their top to an upper structure supporting the equipment. Lower hulls or footings may be provided at the bottom of the columns for additional buoyancy or to provide sufficient area to support the unit on the sea bed. Bracing members of tubular or structural sections may be used to connect the columns, lower hulls or footings and to support the upper structure. Operations may be carried out in the floating condition, in which condition the unit is described as a semi-submersible, or when supported by the sea bed, in which condition the unit is described as submersible. A semi-submersible unit may be designed to operate either floating or supported by the sea bed, provided each type of operation has been found to be satisfactory.
- Ship Type : Ship type unit is a seagoing ship-shaped unit having a displacement type hull or hulls, of the single, catamaran or trimaran type, which have been designed or converted for operations in the floating condition. The unit of this type has propelling machinery.
- Barge Type : Barge type unit is a seagoing unit having a displacement type hull or hulls, which have been designed or converted for operations in the floating condition. The unit of this type has no propelling machinery.

Notations	Design	Survey
Self-elevating	Rules for the Classification of Mobile Offshore Units	-
Column-stabilized	Rules for the Classification of Mobile Offshore Units	-
Ship Type	Rules for the Classification of Mobile Offshore Units	-
Barge Type	Rules for the Classification of Mobile Offshore Units	-

## **REQUIREMENTS / RULE REFERENCES**



∞KRS 1 - Mobile Offshore Unit <b>Self-elevating</b> Crane LG	
<pre>#KRM 1</pre>	
⊛KRS 1 - Mobile Offshore Unit Barge Type Floating Pier LG	

## 22. Mobile Offshore Unit

### NOTATIONS (Special Feature Notations - Purpose)

Crane		
Accommodation		
Floating Pier		

#### DESCRIPTIONS

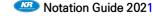
Crane : to be assigned to mobile offshore units carrying out crane works.

- Accommodation : to be assigned to mobile offshore units with no propelling machinery which have accommodation for passengers or particular personnel. This units are to be stationed at smooth water areas or sea areas equivalent to smooth water areas.
- Floating Pier : to be assigned to mobile offshore units which have mooring equipment, loading apparatus, etc. for loading or unloading and have bridges for access from the shore. This units are to be stationed at smooth water areas or sea areas equivalent to smooth water areas.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Crane	Rules for the Classification of Mobile Offshore Units	-
Accommodation	Rules for the Classification of Mobile Offshore Units	-
Floating Pier	Rules for the Classification of Mobile Offshore Units	-

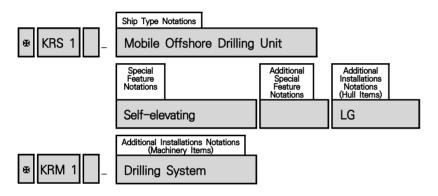
★KRS 1 - Mobile Offshore Unit Self-elevating Crane LG ★KRM 1	
★KRS 1 - Mobile Offshore Unit Barge Type Floating Pier LG	



# 23. Mobile Offshore Drilling Unit

Chin Tune Natations	Special Feature Notations
Ship Type Notations	Туре
Mobile Offshore Drilling Unit	Self-elevating Column-stabilized Ship Type Barge Type

< Typical Example >





# 23. Mobile Offshore Drilling Unit

### NOTATIONS (Ship Type Notations)

#### Mobile Offshore Drilling Unit

#### DESCRIPTIONS

#### Mobile Offshore Drilling Unit

: to be assigned to mobile offshore drilling units or vessels which are capable of engaging in drilling operations for the exploration for or exploitation of resources beneath the seabed such as liquid or gaseous hydrocarbons, sulphur or salt.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey	
Mobile Offshore Drilling Unit	Rules for Mobile Offshore Drilling Units	Rules for Mobile Offshore Drilling Units	

#### **EXAMPLES**

 ★KRS 1 - Mobile Offshore Drilling Unit Self-elevating LG ★KRM 1 - Drilling System
 ⊛KRS 1 - <b>Mobile Offshore Drilling Unit</b> Ship Type LG PKS ⊛KRM 1 - Drilling System

144

## 23. Mobile Offshore Drilling Unit

NOTATIONS (Special Feature Notations - Type)

Self-elevating Column-stabilized Ship Type Barge Type

#### DESCRIPTIONS

- Self-elevating : Self-elevating unit is a unit having hulls with sufficient buoyancy to safely transport the unit to the desired location, after which the hull is raised to a predetermined elevation above the sea surface on its legs, which are supported by the sea bed. Equipment and supplies may be transported on the unit, or may be added to the unit in its elevated position. The legs of such units may penetrate the sea bed, may be fitted with enlarged sections or footings to reduce penetration, or may be attached to bottom pads or mat.
- **Column-stabilized** : Column-stabilized unit is a unit which depends upon the buoyancy of widely spaced columns for flotation and stability for all afloat modes of operation or in the raising or lowering of the unit, as may be applicable. The columns are connected at their top to an upper structure supporting the equipment. Lower hulls or footings may be provided at the bottom of the columns for additional buoyancy or to provide sufficient area to support the unit on the sea bed. Bracing members of tubular or structural sections may be used to connect the columns, lower hulls or footings and to support the upper structure. Operations may be carried out in the floating condition, in which condition the unit is described as a semi-submersible, or when supported by the sea bed, in which condition the unit is described as submersible. A semi-submersible unit may be designed to operate either floating or supported by the sea bed, provided each type of operation has been found to be satisfactory.
- Ship Type : Ship type unit is a seagoing ship-shaped unit having a displacement type hull or hulls, of the single, catamaran or trimaran type, which have been designed or converted for operations in the floating condition. The unit of this type has propelling machinery.
- Barge Type : Barge type unit is a seagoing unit having a displacement type hull or hulls, which have been designed or converted for operations in the floating condition. The unit of this type has no propelling machinery.

#### **REQUIREMENTS / RULE REFERENCES**

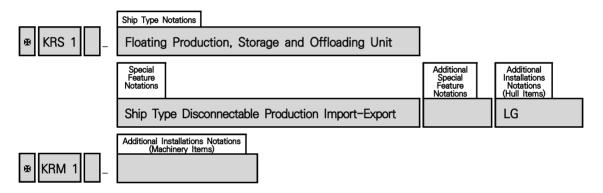
Notations	Design	Survey
Self-elevating	Rules for Mobile Offshore Drilling Units	-
Column-stabilized	Rules for Mobile Offshore Drilling Units	-
Ship Type	Rules for Mobile Offshore Drilling Units	-
Barge Type	Rules for Mobile Offshore Drilling Units	-

≪KRS 1 - Mobile Offshore Drilling Unit <b>Ship Type</b> LG PKS ≪KRM 1 - Drilling System	

# 24. Floating Production, Storage and Offloading Unit

Chin Turne Notations	Special Feature Notations		
Ship Type Notations	Туре	Design Aspect	Classed System
Floating Production, Storage and Offloading Unit	Ship Type	(C)	Production
Floating Production and Offloading Unit	Barge Type	Disconnectable	Import
Floating Storage and Offloading Unit	Column-stabilized		Export
	Spar		Import-Export
	TLP		

#### < Typical Example >



# 24. Floating Production, Storage and Offloading Unit

#### NOTATIONS (Ship Type Notations)

Floating Production, Storage and Offloading Unit Floating Production and Offloading Unit Floating Storage and Offloading Unit

#### DESCRIPTIONS

#### Floating Production, Storage and Offloading Unit (FPSO)

: to be assigned to floating production units which are not intended for the transport of cargo, which are positioned at a specific site of the installation permanently or for long periods and fitted with systems for the processing, storage and offloading of produced crude oil and petroleum gases.

#### Floating Production and Offloading Unit (FPO)

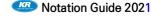
: to be assigned to floating production units which are not intended for the transport of cargo, which are positioned at a specific site of the installation permanently or for long periods and fitted with systems for the processing and offloading of produced crude oil and petroleum gases.

#### Floating Storage and Offloading Unit (FSO)

: to be assigned to floating production units which are not intended for the transport of cargo, which are positioned at a specific site of the installation permanently or for long periods and fitted with systems for the storage and offloading of produced crude oil and petroleum gases.

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Floating Production, Storage and Offloading Unit	Guidance for Floating	Guidance for Floating
Floating Froduction, Storage and Officiality Unit	Production Units	Production Units
Electing Production and Offloading Unit	Guidance for Floating	Guidance for Floating
Floating Production and Offloading Unit	Production Units	Production Units
Floating Storage and Offloading Lipit	Guidance for Floating	Guidance for Floating
Floating Storage and Offloading Unit	Production Units	Production Units



 ∞KRS 1 -	Floating Production, Storage and Offloading Unit Ship Type (C) Disconnectable Production Import-Export LG
⊛KRM 1	
 ∞KRS 1 -	Floating Production and Offloading Unit Spar Production Import-Export LG
∞KRS 1 -	Floating Storage and Offloading Unit Barge Type Import-Export LG

## 24. Floating Production, Storage and Offloading Unit

NOTATIONS (Special Feature Notations - Type)

Ship Type		
Barge Type		
Column-stabilized		
Spar		
TLP		

#### DESCRIPTIONS

Ship Type : Ship type is the unit in the shape of an ordinary tanker or cargo ship having displacement hull.

Barge Type : Barge type is the unit in the shape of an ordinary barge.

- **Column-stabilized**: Column-stabilized type is a unit consisting of deck with top-side installations, surface piercing columns, submerged lower hulls, bracings, etc., which are semi-submerged to a predetermined draft during operation.
- Spar : Spar is a unit which is deep draft, vertical floating structures, usually of cylindrical shape, supporting a topside deck and moored to the seafloor. The hull can be divided into upper hull, mid-section and lower hull.
- TLP : TLP is a unit which fully buoyant and is restrained below its natural flotation line by mooring elements which are attached in tension to gravity anchors or piles at the sea floor. (Tension Leg Platform)

Notations	Design	Survey
Ship Type	Guidance for Floating Production Units	-
Barge Type	Guidance for Floating Production Units	-
Column-stabilized	Guidance for Floating Production Units	-
Spar	Guidance for Floating Production Units	-
TLP	Guidance for Floating Production Units	-

## **REQUIREMENTS / RULE REFERENCES**

150

 ★KRS 1 - Floating Production, Storage and Offloading Unit Ship Type (C) Disconnectable Production Import-Export LG &KRM 1
 ≪KRS 1 - Floating Production and Offloading Unit Spar Production Import-Export LG
 ★KRS 1 - Floating Storage and Offloading Unit Barge Type Import-Export LG

# 24. Floating Production, Storage and Offloading Unit

NOTATIONS (Special Feature Notations - (C), Disconnectable)

(C)

Disconnectable

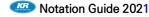
#### DESCRIPTIONS

- (C) : shall be assigned when an existing vessel is converted to a floating production unit and is classed with the Society.
- **Disconnectable** : shall be assigned for the floating production unit that has a propulsion system and a means of disengaging the unit from its mooring and riser systems.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(C)	Guidance for Floating Production Units	-
Disconnectable	Guidance for Floating Production Units	-

∞KRS 1 -	- Floating Production, Storage and Offloading Unit
∞KRM 1	Ship Type <b>(C) Disconnectable</b> Production Import-Export LG
₩KRS 1 -	- Floating Storage and Offloading Unit Barge Type <b>(C)</b> Import-Export LG



## 24. Floating Production, Storage and Offloading Unit

NOTATIONS (Special Feature Notations – Production, Import, Export, Import–Export)

Production		
Import		
Export		
Import-Export		

#### DESCRIPTIONS

- Production : For floating production units fitted with the production systems, where the whole production systems are in compliance with Guidance for Floating Production Units Ch 11, the notation Production may be assigned additionally.
- Import : Where the import systems are in compliance with Guidance for Floating Production Units Ch 12, the notation Import may be assigned additionally.
- Export : Where the export systems are in compliance with Guidance for Floating Production Units Ch 12, the notation Export may be assigned additionally.
- Import-Export : Where the import and export systems are in compliance with Guidance for Floating Production Units Ch 12, the notation Import-Export may be assigned additionally.

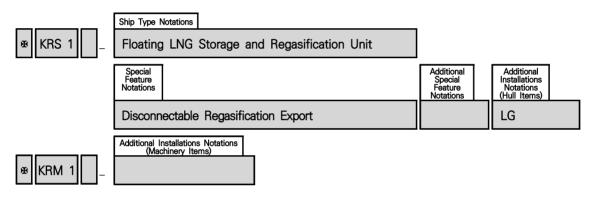
#### **REQUIREMENTS / RULE REFERENCES**

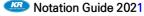
Notations	Design	Survey
Production	Guidance for Floating Production Units Ch 11	-
Import	Guidance for Floating Production Units Ch 12	-
Export	Guidance for Floating Production Units Ch 12	-
Import-Export	Guidance for Floating Production Units Ch 12	-

★KRS 1 - Floating Production, Storage and Offloading Unit Ship Type (C) Disconnectable Production Import-Export LG ★KRM 1
 ★KRS 1 - Floating Production and Offloading Unit Spar Production Import-Export LG
 ★KRS 1 - Floating Storage and Offloading Unit Barge Type Import-Export LG

	Special Feature Notations	
Ship Type Notations	Design Aspect	Classed System
Floating LNG Storage and Regasification Unit	(C)	Regasification
	Disconnectable	Export
Floating LNG Storage Unit	(C)	Export
	Disconnectable	
Floating LNG Regasification Unit	(C)	Regasification
	Disconnectable	Export

#### $\langle$ Typical Example $\rangle$





Ch 2

#### NOTATIONS (Ship Type Notations)

#### Floating LNG Storage and Regasification Unit

#### DESCRIPTIONS

#### Floating LNG Storage and Regasification Unit (FSRU)

: to be assigned to units or vessels which are not intended for the transport of cargo, which are positioned at a specific site of the installation permanently or for long periods and fitted with systems for the storage, regasification and offloading of liquified gas carried by LNG carriers.

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
	Guidance for Floating	Guidance for Floating
Floating LNG Storage and Regasification Unit	Liquefied Gas Storage	Liquefied Gas Storage
	and Regasification Units	and Regasification Units
	Guidance for Floating	Guidance for Floating
Floating LNG Storage Unit	Liquefied Gas Storage	Liquefied Gas Storage
	and Regasification Units	and Regasification Units
	Guidance for Floating	Guidance for Floating
Floating LNG Regasification Unit	Liquefied Gas Storage	Liquefied Gas Storage
	and Regasification Units	and Regasification Units

#### EXAMPLES

155

NOTATIONS (Special Feature Notations - (C), Disconnectable)

(C)

Disconnectable

#### DESCRIPTIONS

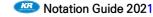
- (C) : shall be assigned when an existing vessel is converted to a floating liquefied gas unit and is classed with the Society.
- **Disconnectable** : shall be assigned for the floating liquefied gas unit that has a propulsion system and a means of disengaging the unit from its mooring and riser systems.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design		
(C)	Guidance for Floating Liquefied Gas Storage and Regasification Units	-	
Disconnectable	Guidance for Floating Liquefied Gas Storage and Regasification Units	-	

#### **EXAMPLES**

 ∞KRS 1 ∞KRM 1	<ul> <li>Floating LNG Storage and Regasification</li> <li>(C) Disconnectable Regasification Export</li> </ul>	
 ∞KRS 1 ∞KRM 1	<ul> <li>Floating LNG Storage and Regasification</li> <li>Disconnectable Regasification Export LG</li> </ul>	Unit
 ₩ KRIVI I		



Ch 2

NOTATIONS (Special Feature Notations - Regasification, Export)

## Regasification

Export

#### DESCRIPTIONS

- Regasification : For floating liquefied gas units fitted with the regasification systems, where the whole regasification systems are in compliance with Guidance for Floating Liquefied Gas Units Ch 12, the notation Regasification may be assigned additionally.
- Export : Where the export systems are in compliance with Guidance for Floating Liquefied Gas Units Ch 15, the notation Export may be assigned additionally.

#### **REQUIREMENTS / RULE REFERENCES**

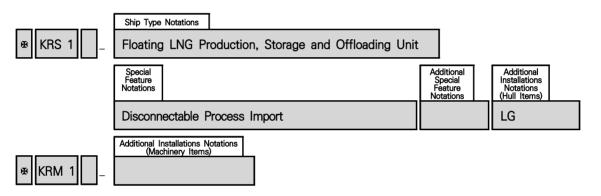
Notations	Design	Survey
Regasification	Guidance for Floating Liquefied Gas Storage and Regasification Units Ch 12	-
Export	Guidance for Floating Liquefied Gas Storage and Regasification Units Ch 15	-

∞KRS 1 -	Floating LNG Storage and Regasification Unit
	(C) Disconnectable Regasification Export LG
⊛KRM 1	

# 25-2. Floating LNG Production, Storage and Offloading Unit

Chin Turne Natatione	Special Feature Notations	
Ship Type Notations	Design Aspect	Classed System
Floating LNG Porduction, Storage and Offloading Unit	(C) Disconnectable	Process Import

< Typical Example >





# 25-2. Floating LNG Production, Storage and Offloading Unit

#### NOTATIONS (Ship Type Notations)

#### Floating LNG Production, Storage and Offloading Unit

#### DESCRIPTIONS

#### Floating LNG Production, Storage and Offloading Unit

: to be assigned to units or vessels which are not intended for the transport of cargo, which are positioned at a specific site of the installation permanently or for long periods and fitted with systems for the processing, storage and offloading of produced liquified gas.

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Floating LNG Production, Storage and Offloading Unit	<u> </u>	Guidance for Floating Liquefied Gas Production Units

👁 KRS 1 - Floating LNG Production, Storage and Offloading Unit	
Disconnectable Process Import LG	
₩KRM 1	

# 25–2. Floating LNG Production, Storage and Offloading Unit

NOTATIONS (Special Feature Notations - (C), Disconnectable)

## (C)

Disconnectable

#### DESCRIPTIONS

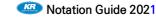
- (C) : shall be assigned when an existing vessel is converted to a floating liquefied gas unit and is classed with the Society.
- **Disconnectable** : shall be assigned for the floating liquefied gas unit that has a propulsion system and a means of disengaging the unit from its mooring and riser systems.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(C)	Guidance for Floating Liquefied Gas Production Units	-
Disconnectable	Guidance for Floating Liquefied Gas Production Units	-

#### **EXAMPLES**

 - Floating LNG Production, Storage and Offloading Unit <b>(C) Disconnectable</b> Process Import LG
 - Floating LNG Production, Storage and Offloading Unit Disconnectable Process Import LG



Ch 2

# 25-2. Floating LNG Production, Storage and Offloading Unit

NOTATIONS (Special Feature Notations - Process, Import)

#### Process Import

#### DESCRIPTIONS

- Process : For floating liquefied gas units fitted with the process systems, where the whole process systems are in compliance with Guidance for Floating Liquefied Gas Units Ch 11, the notation Process may be assigned additionally.
- Import : Where the import systems are in compliance with Guidance for Floating Liquefied Gas Units Ch 15, the notation Import may be assigned additionally.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	
Process	Guidance for Floating Liquefied Gas Production Units Ch 12	-
Import	Guidance for Floating Liquefied Gas Production Units Ch 14	-

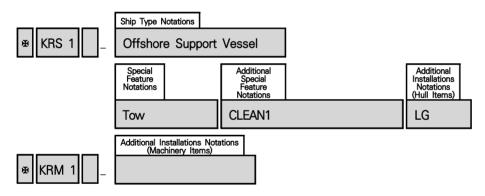
#### EXAMPLES

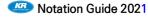
★ KRS 1 - Floating LNG Production, Storage and Offloading Unit
 (C) Disconnectable Process Import LG
 ★ KRM 1

# 26. Offshore Support Vessel

Ship Type Notations	Special Feature Notations	
Offshore Support Vessel	Purpose	Design Aspect
	Supply	HDC(P, Locations)
	АН	HLC(ρ, Tanks)
	Tow	
	HL	
	WTIMR	
	FFS1	
	FFS2	
	FFS3	
	FF	
	Oil Spill Recovery	

 $\langle$  Typical Example  $\rangle$ 





## 26. Offshore Support Vessel

#### NOTATIONS (Ship Type Notations)

Offshore Support Vessel

#### DESCRIPTIONS

Offshore Support Vessel : to be assigned to self-propelled offshore support vessels whose regular trade is to provide services in support of exploration, exploitation, or production of offshore energy or alternative energy resources. These services may include but are not limited to transportation of supplies and equipment, towing and anchoring of offshore structures, fire fighting, handling heavy surface and subsea loads, oil spill recovery and wind turbine installation.

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Offshore Support Vessel	Guidance for OSV(Offshore Support Vessels)	Guidance for OSV(Offshore Support Vessels)

∞KRS 1 - ∞KRM 1	Offshore Support Vessel Tow CLEAN1 LG	
≖KRS 1 -	Offshore Support Vessel Tow AH FF CLEAN1 LG	

NOTATIONS (Special Feature Notations - Purpose)

Supply	
AH	
Tow	
HL	
WTIMR	
FFS1	
FFS2	
FFS3	
FF	
Oil Spill Recovery	

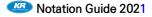
#### DESCRIPTIONS

Supply : to be assigned to offshore support vessels for Supply service.

AH : to be assigned to offshore support vessels for Anchor Handling service.

- Tow : to be assigned to offshore support vessels for Towing service.
- HL : to be assigned to offshore support vessels for Heavy Lift service.
- WTIMR : to be assigned to offshore support vessels for Wind Turbine Installation, Maintenance and Repair service.
- FFS1, FFS2, FFS3 : to be assigned to offshore support vessels for fire fighting service. FFS1, FFS2 or FFS3 shall be assigned according to the minimum requirements of Table 8.1 of the Guidance for OSV(Offshore Support Vessels). Where a ship, which is comply with the requirements for FFS1, is comply with the requirements for FFS2 or FFS3 also, the class notation, Offshore Support Vessel FFS1 FFS2 or Offshore Support Vessel FFS1 FFS3 may be assigned. (Fire Fighting Service)
- FF : to be assigned to offshore support vessels not in full compliance with Ch 8 of the Guidance for OSV(Offshore Support Vessels) or not specifically built for the service intended to be covered by Ch 8 of the Guidance for OSV(Offshore Support Vessels) but equipped with some fire fighting capability in accordance with Ch 8 of the Guidance for OSV(Offshore Support Vessels). (Fire Fighting service)

Oil Spill Recovery : to be assigned to offshore support vessels for oil spill recovery service.



## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	
Supply	Guidance for OSV(Offshore Support Vessels) Ch 4	-
AH	Guidance for OSV(Offshore Support Vessels) Ch 5	-
Tow	Guidance for OSV(Offshore Support Vessels) Ch 5	-
HL	Guidance for OSV(Offshore Support Vessels) Ch 6	-
WTIMR	Guidance for OSV(Offshore Support Vessels) Ch 7	-
FFS1, FFS2, FFS3	Guidance for OSV(Offshore Support Vessels) Ch 8	-
FF	Guidance for OSV(Offshore Support Vessels) Ch 2	-
Oil Spill Recovery	Guidance for OSV(Offshore Support Vessels) Ch 9	

∞KRS 1 -	Offshore Support Vessel <b>Tow</b> CLEAN1 LG	
∞KRM 1		
₩KRS 1 -	Offshore Support Vessel Tow AH FF CLEAN1 LG	 
⊯KRM 1		

## 26. Offshore Support Vessel

#### NOTATIONS (Special Feature Notations - Design Aspect)

HDC(P, Locations)

HLC( $\rho$ , Tanks)

#### DESCRIPTIONS

#### HDC(P, Locations), HLC(p, Tanks)

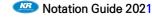
: offshore support vessels built with strengthened for carrying heavy cargoes specified in accordance with Ch 3, 202. of the Guidance for OSV(Offshore Support Vessels) may be assigned the relevant Special Feature Notation HDC(P, Locations) or HLC( $\rho$ , Tanks) additionaly. For example, an Offshore Support Vessel for supply service, anchor handling service and towing service, strengthened for heavy deck cargo of  $30 \ kN/m^2$  at main deck may be assigned the class notation Offshore Support Vessel – Supply AH Tow HDC( $30 \ kN/m^2$ , main deck). For example, an Offshore Support Vessel for supply service, anchor handling service, strengthened for heavy liquid cargo of specific gravity 2.5 in number 3 and 5 cargo tanks may be assigned the class notation Offshore Support Vessel – Supply AH Tow HLC(2.5SG, Tank Nos. 3 and 5) (HDC : Heavy Deck Cargo, HLC : Heavy Liquid Cargo)

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
HDC(P, Locations)	Guidance for OSV(Offshore Support Vessels) Ch 3 202.	-
HLC(ρ, Tanks)	Guidance for OSV(Offshore Support Vessels) Ch 3 202.	-

#### EXAMPLES

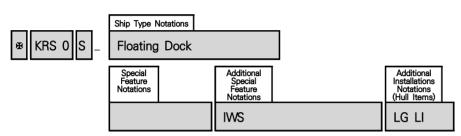
 ★ KRS 1 - Offshore Support Vessel Supply AH Tow HDC(30 kN/m<sup>2</sup>, main deck) CLEAN1 LG
 ★ KRM 1
 ★ KRS 1 - Offshore Support Vessel Supply AH Tow HLC(2.5SG, Tank Nos. 3 and 5) CLEAN1 LG
 ★ KRM 1



# 27-1. Floating Dock

Ship Type Notations	Special Feature Notations
Floating Dock	

< Typical Example >



## 27-1. Floating Dock

#### NOTATIONS (Ship Type Notations)

#### Floating Dock

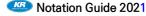
#### DESCRIPTIONS

Floating Dock : to be assigned to movable docks of which both ends are opened and which are able to control it's draft in large range so that it can be used for the ship's repair, etc. by drawing in a ship into the dock at it's large draft and rising up the ship outside of the water at it's small draft.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Floating Dock	Rules for the Classification of Floating Docks	Rules for the Classification of Floating Docks

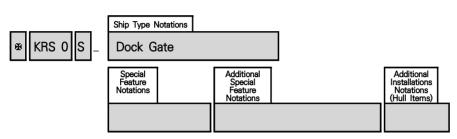
⊛KRS 0S - Floating Dock	
IWS LG LI	



# 27-2. Dock Gate

Ship Type Notations	Special Feature Notations
Dock Gate	

 $\langle$  Typical Example  $\rangle$ 



# 27-2. Dock Gate

## NOTATIONS (Ship Type Notations)

#### Dock Gate

#### DESCRIPTIONS

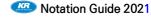
Dock Gate : to be assigned to flood gates which close the dock.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey	
Dock Gate	Guidance Relating to the Rules for the Classification of Floating Docks, Annex(Guidance for Dock Gate)	Guidance Relating to the Rules for the Classification of Floating Docks, Annex(Guidance for Dock Gate)	

#### **EXAMPLES**

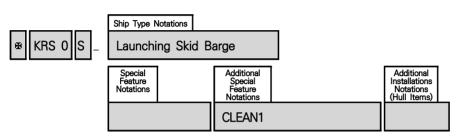
⊛KRS 0S - Dock Gate



# 27-3. Launching Skid Barge

Ship Type Notations	Special Feature Notations
Launching Skid Barge	

 $\langle$  Typical Example  $\rangle$ 



## NOTATIONS (Ship Type Notations)

#### Launching Skid Barge

#### DESCRIPTIONS

Launching Skid Barge : to be assigned to floating docks equipped with skid (launching) arrangements (See, Floating Dock).

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Launching Skid Barge	Rules for the Classification of Floating Docks	Rules for the Classification of Floating Docks

#### **EXAMPLES**

\* KRS OS - Launching Skid Barge

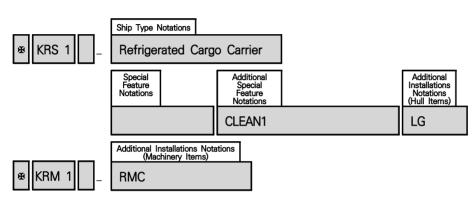
CLEAN1



# 28. Refrigerated Cargo Carrier

Ship Type Notations	Special Feature Notations
Refrigerated Cargo Carrier	

 $\langle$  Typical Example  $\rangle$ 



# 28. Refrigerated Cargo Carrier

## NOTATIONS (Ship Type Notations)

Refrigerated Cargo Carrier

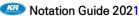
#### DESCRIPTIONS

Refrigerated Cargo Carrier : to be assigned to ships equipped with the refrigerating installations at the cargo holds for the carriage of frozen cargoes.

#### **REQUIREMENTS / RULE REFERENCES**

Notations Design		Survey		
Refrigerated Cargo Carrier	Pt 3 <sup>1)</sup> , Pt 9 <sup>2)</sup>	Pt 1 Ch 2, Pt 9 <sup>2)</sup>		
(Notes)				
1) For small steel ships of which length is less than 90m, Pt 10 is to be applied.				
2) For refrigerating installations, Pt 9 Ch 1 is to be applied.				

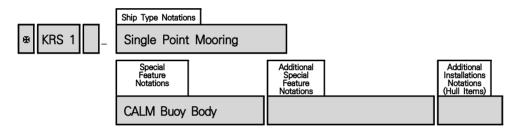
#### **EXAMPLES**



Ch 2

Ship Type Notations	Specia	Special Feature Notations		
Single Point Mooring	A (Type)	B (Equipment)		
	CALM	Buoy Body		
	SALM	Sub-sea Pipeline		
	VALM	Anchor Leg		
	SPMT	PLEM		
		Floating Hose		

< Typical Example >



## NOTATIONS (Ship Type Notations)

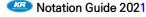
#### Single Point Mooring

#### DESCRIPTIONS

## **REQUIREMENTS / RULE REFERENCES**

Notations		Design	Survey
Single Point Moori	ng	Guidances for Single Point Mooring	Guidances for Single Point Mooring

CALM Buoy Body	



Single Point Mooring : to be assigned to the SPM which permits a vessel to weathervane while the vessel is moored to a fixed or floating structure anchored to the seabed by a rigid or articulated structural system or by catenary spread mooring.

#### NOTATIONS (Special Feature Notations - Type)

SALM VALM SPMT	CALM			
	SALM			
SPMT	VALM			
	SPMT			

#### DESCRIPTIONS

#### CALM (Catenary Anchor Leg Mooring)

: consists of a large buoy connected to mooring points at the seabed by catenary mooring lines. The unit is moored to the buoy by mooring lines or a rigid yoke structure.

#### SALM (Single Anchor Leg Mooring)

: consists of the mooring structure with buoyancy which is positioned at or near the water surface, and is connected to the seabed. The unit is moored to the buoy by mooring lines or a rigid yoke structure.

#### VALM (Vertical Anchor Leg Mooring)

: consist of a buoy with 3 or more vertical pre-tensioned chains anchored on seabed.

#### SPMT (Single Point Mooring Tower)

: consist of a rigid structure erected on seabed and extended upto above water surface with a mounted turret on a swivel.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
CALM	Guidances for Single Point Mooring	-
SALM	Guidances for Single Point Mooring	-
VALM	Guidances for Single Point Mooring	-
SPMT	Guidances for Single Point Mooring	-

≪KRS 1 - Single Point Mooring CALM Buoy Body	

#### NOTATIONS (Special Feature Notations - Equipment)

Buoy Body Sun-sea Pipeline Anchor Leg PLEM Floating Hose

#### DESCRIPTIONS

Buoy Body : entire hull of buoy

Sub-sea Pipeline : Piping installed on the seabed to transport the production fluid

Anchor Leg : Mooring element connecting the single point mooring structure to the point and is essential for station keeping of the system

PLEM (PipeLine End Manifolds): Assemblage of pipe, valves and component connecting to the production facility and the subsea pipeline

#### **REQUIREMENTS / RULE REFERENCES**

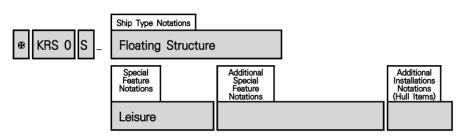
Notations	Design	Survey
Buoy Body	Guidances for Single Point Mooring	-
Sub-sea Pipeline	Guidances for Single Point Mooring	-
Anchor Leg	Guidances for Single Point Mooring	-
PLEM	Guidances for Single Point Mooring	-
Floating Hose	Guidances for Single Point Mooring	-

	e Point Mooring // Buoy Body
•	e Point Mooring T <b>Buoy Body Floating Hose</b>

Floating Hose : Hose or hose string located between the SPM structure and the moored vessel for the purpose of conveying fluid. When not connected to a moored vessel it remains connected to the SPM structure and floats on the sea water surface.

# 30. Floating Structure

Ship Type Notations	Special Feature Notations
Floating Structure	Hotel Restaurant Leisure



## 30. Floating Structure

### NOTATIONS (Ship Type Notations)

#### Floating Structure

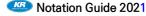
### DESCRIPTIONS

Floating Structure : to be assigned to the floating structures(except those permanently fixed on the water), which have a carrying capacity of not less than 13 persons other than employees, such as floating hotel, floating restaurant and floating performing place, etc.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Floating Structure	Guidance for Floating Structures	Guidance for Floating Structures

≪KRS 0S - Floating Structure Leisure	
Leisure	



# 30. Floating Structure

### NOTATIONS (Special Feature Notations)

Hotel		
Restaurant		
Leisure		

#### DESCRIPTIONS

Hotel : to be assigned to floating structures which are constructed to be used such as a floating hotel.

- Restaurant : to be assigned to floating structures which are constructed to be used such as a floating restaurant.
- Leisure : to be assigned to floating structures which are constructed to be used such as a floating performing place.

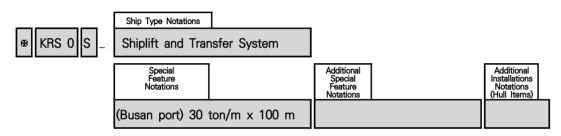
## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Hotel	Guidance for Floating Structures	-
Restaurant	Guidance for Floating Structures	-
Leisure	Guidance for Floating Structures	-

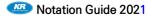
≪KRS 0S - Floating Hotel	Structure	
∞KRS 0S - Floating <b>Restaura</b>		
	Structure	

# 31. Shiplift and Transfer System

Ship Type Notations	Special Feature Notations	
Shiplift and Transfer System	Port to be installed	Total net lifting capacity
	(port to be specified)	MDL x effective platform length







## 31. Shiplift and Transfer System

## NOTATIONS (Ship Type Notations)

Shiplift and Transfer System

#### DESCRIPTIONS

Shiplift and Transfer System : to be assigned to the shiplift and transfer systems in which vessels are raised and lowered by means of winches or jacks when docked on a flexible or rigid platform structure.

#### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Shiplift and Transfer System	Guidance for Shiplift and	Guidance for Shiplift and
Shipint and Transfer System	Transfer Systems	Transfer Systems

#### **EXAMPLES**

∞KRS 0S - **Shiplift and Transfer System** (Busan port) 30 ton/m x 100 m



## 31. Shiplift and Transfer System

## NOTATIONS (Special Feature Notations)

(Port to be Specified) MDL x effective platform length

#### DESCRIPTIONS

(Port to be Specified) : to be assigned to Shiplift and Transfer System for service at ...... (port to be specified).

#### MDL (Maximum Ditributed Load, tonnes/metre) x effective platform length

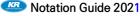
: to be assigned to Shiplift and Transfer System for service for the total net lifting capacity.

## **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
(Port to be Specified)	Guidance for Shiplift and	
	Transfer Systems	_
MLD x effective platform length	Guidance for Shiplift and	
	Transfer Systems	_

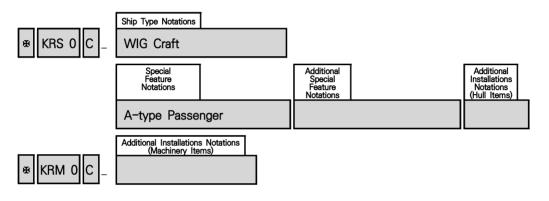
#### **EXAMPLES**

♥KRS 0S - Shiplift Transfer System (Busan port) 30 ton/m x 100 m



Ch 2

Ship Type Notations	Special Feature Notations	
WIG Craft	A (Type)	B (Purpose)
	A-type	Passenger
	B-type	General
		Small(Commercial)
		Small(Non-commercial)



### NOTATIONS (Ship Type Notations)

WIG Ship

#### DESCRIPTIONS

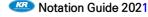
WIG Craft : to be assigned to the craft which is a multimodal craft which, in its main operational mode, flies by using ground effect above the water or some other surface, without constant contact with such a surface and supported in the air, mainly, by an aerodynamic lift generated on a wing(wings), hull, or their parts, which are intended to utilize the ground effect action. (Wing-In-Ground effect craft)

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
WIG Craft	Guidance for WIG crafts	Guidance for WIG crafts

#### **EXAMPLES**

∞KRS 0S - **WIG Craft** A-type Passenger ∞KRM 0S



Ch 2

NOTATIONS (Special Feature Notations - Type)

A-Type B-Type

#### DESCRIPTIONS

- A-Type : to be assigned to the craft which is certified for operation only in ground effect. Within prescribed operational limitations, the structure and/or the equipment of such a WIG craft should exclude any technical possibility to exceed the flight altitude over the maximum vertical extent of ground effect.
- B-Type : to be assigned to the craft which is certifed for main operation in ground effect and to temporarily increase its altitude outside ground effect to a limited height, but not exceeding 150 m above the surface, in case of emergency and for overcoming obstacles.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
A-Type	Guidance for WIG crafts	-
B-Type	Guidance for WIG crafts	-

 - WIG Craft <b>A-Type</b> General
 - WIG Craft <b>B-Type</b> Passenger
 - WIG Craft <b>B-type</b> Small(Commercial)

## NOTATIONS (Special Feature Notations - purpose )

#### Passenger

General

#### DESCRIPTIONS

Passenger : a WIG craft which carries more than 12 passengers.

- General : any WIG craft other than a Passenger WIG craft, which has a full load displacement of more than 10 tonnes.
- Small(Commercial) : a small WIG craft which is engaged in trade, commerce, on charter, carrying cargo or carrying passengers up to 12 persons for the purpose of benefit and having a full load displacement of not more than 10 tonnes.
- Small(Non-commercial) : any small WIG craft other than a commercial small WIG craft. and having a full load displacement of not more than 10 tonnes.

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Passenger	Guidance for WIG crafts	-
General	Guidance for WIG crafts	-
Small(Commercial)	Guidance for WIG crafts	-
Small(Non-commercial)	Guidance for WIG crafts	-

∞KRS OS - WIG Craft A-type <b>Passenger</b> ∞KRM OS	
≪KRS OS - WIG Craft B-type <b>General</b> ≪KRM OS	
★KRS 0S - WIG Craft B-type Small(Non-commercial) ★KRM 0S	

# 33. Floating LNG Bunkering Terminal

Ship Type Notations	Special Feature Notations
Floating LNG Bunkerign Terminal	

Ship Type Notations Floating LNG Bunke	ering Terminal	]	
Special Feature Notations	Additional Special Feature Notations	]	Additional Installations Notations (Hull Items)



## 33. Floating LNG Bunkering Terminal

## NOTATIONS (Ship Type Notations)

#### Floating LNG Bunkering Terminal

#### DESCRIPTIONS

#### Floating LNG Bunkering Terminal

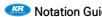
: to be assigned to a barge that moor permanently of for a long period on the specific waters where it is to be installed and stores LNG transported in by in ships carrying liquefied gas in bulk and unloads it to the receiving vessels

### **REQUIREMENTS / RULE REFERENCES**

Notations	Design	Survey
Floating LNG Bunkering Terminal	Guidance for Floating LNG	Guidance for Floating LNG
Floating Ling buikening remina	Bunkering Terminal	Bunkering Terminal

#### **EXAMPLES**

\* KRS OS - Floating LNG Bunkering Terminal



## 2-2 Remarks of SHIP TYPE - SPECIAL FEATURE NOTATIONS

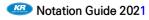
Ship Types	Special Feature Notations	Remarks
1. Oil Tanker <sup>(2-0)</sup> 'ESP' <sup>(2-1)</sup> (Double Hull) <sup>(2-2)</sup> (Double Hull)(EXP) <sup>(2-3)</sup> (FAC) <sup>(1)</sup> (FAO) <sup>(1)</sup> (FBC) <sup>(1)</sup> (CSR) <sup>(2-4)</sup>	Crude Product Crude/Product Product/Asphalt Asphalt	<ul> <li>(1) : The notations FA, FB, FAC, FAO and FBC in rows 1, 3, 4, 8, 9 and 18 of the first column imply: FA : Flash point above 60°C FB : Flash point of 60°C and below FAC : FA with controlled tank vents FAO : FA with open tank vents FBC : FB with controlled tank vents</li> <li>(2-0) : See examples given in Annex 1, 2.1</li> </ul>
		(2-1): The notation "ESP" shall be assigned to ships which are con- structed generally with integral tanks and intended primarily to carry oil in bulk. This type notation shall be assigned to tank- ers of both single and double hull construction, as well as tankers with alternative structural arrangements, e.g. mid-deck designs. (Typical midship sections are given in Fig 1)
		<ul> <li>Note:</li> <li>1) Oil Tankers that do not comply with MARPOL I/19 may be subject to international and/or national regulations requiring phase out under MARPOL I/20 and/or MARPOL I/21.</li> </ul>
		<ol> <li>Oil Tankers carrying oil in independent tanks not part of ship's hull such as aspalt carriers do not fall within the scope of the Enchanced Survey Programme(ESP).</li> </ol>
		Fig 1 Typical midship sections of Oil Tanker 'ESP'
		(2-2) : The notation "(Double Hull)" shall be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks protected by a double hull complied with the Reg. 19.3 of Annex I of MARPOL 73/78 which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces.
		<sup>(2-3)</sup> : Any ships not applicable to <sup>(2-2)</sup> , the notation "(Double Hull)(E)" shall be assigned to ships which are constructed primarily for the carriage of oil in bulk, which have the cargo tanks protected by a double hull complied with the Reg. 19.6 of Annex I of MARPOL 73/78 which extends for the entire length of the cargo area, consisting of double sides and double bottom spaces for the carriage of water ballast or void spaces.
		<sup>(2-4)</sup> : This notation shall be assigned to ships comply with the requirements specified in <b>Pt 12</b> or <b>Pt 13 of the Rules</b> .

Sł	nip Typ	pes	S	pec	ial F	eature Nota	itions	Remarks
	(3	3-1)	A	В	(C)	D or P	IMO Code <sup>(5)</sup>	<ul> <li><sup>(3-1)</sup>: See examples given in Annex 1, 2.2</li> <li><sup>(4)</sup> : The notation "LPG" shall be assigned to liquefied gas</li> </ul>
	Liquef Gas Ca <i>(2017</i>	arrier	1G 2G 2P G 3G		(P) (RP)	Design Pressure, Minimum Temperatur e and Specific Gravity(SG)	(NIGC) (IGC) (GC) (GCX)	carriers carrying only propane and butane. However, the names of the following cargoes, instead of pro- pane and butane, may be given for vessels carrying cargoes other than propane and butane under the ap- proval of the Society. (Example) : Ammonia, Butadiene, Propylene, VCM, Ethylene Oxide, Ethylene, etc.
						Name of Liquefied Gas when exclusively carried		<ul> <li><sup>(5)</sup> : As shown in the following:</li> <li>1) The notation "NIGC" shall be appended to vessels built in compliance with the requirements given in Pt 7, Ch 5 of the Rules and constructed on or after 1 July, 2016.</li> </ul>
						<ol> <li>The notation "IGC" shall be appended to vess built in compliance with the requirements gi in Pt 7, Ch 5 of the Rules and constructed or after 1 July, 1986.</li> </ol>		
				LPG <sup>(4)</sup>				<ol> <li>The notation "GC" shall be appended to vessels built in compliance with the IMO Res.A328(IX).</li> </ol>
			LPG <sup>\v</sup>			LPG."		<ol> <li>The notation "GCX" shall be appended to ves- sels built in compliance with the IMO Res. A329(IX).</li> </ol>
								<ol> <li>For the ships except the above, additional nota- tion is not assigned.</li> </ol>
		(3-2)		А		В		<sup>(3-2)</sup> : See examples given in <b>Annex 1, 2.3</b>
Ν	Compr latural Carrier	ressed Gas			ure,	<ul> <li><sup>(3-3)</sup>: This notation shall be assigned to ships having coiled cargo tanks which are complied with Ch 3, 402. 1 (2)</li> <li>(A) of the Guidance for Ships Carrying CNG in Bulk.</li> </ul>		
								<ul> <li><sup>(3-4)</sup>: This notation shall be assigned to ships having cylin- derical cargo tanks which are complied with Ch 3, 402. 1 (2) (B) of the Guidance for Ships Carrying CNG in Bulk.</li> </ul>



Ship	Types	Special Feature Notations			ations	Remarks
(6)		A	В	D or P	IMO Code <sup>(8)</sup>	(6) : See examples given in Annex 1, 2.4
	'ESP' <sup>(7-1)</sup>	          &	1G 2G 1P	Apparent Specific Gravity (SG) Name of	(IBC) (BCH) (BCX)	(7-1) : The notation "ESP" shall be assigned to ships which are constructed generally with integral tanks and intended primarily to carry chem- icals(liquid cargoes specified in Pt 7, Ch 6, Sec 17 of the Rules) in bulk. This type notation shall be assigned to tankers of both single or
				Chemical when exclusively carried		double hull construction, as well as tankers with alternative structural arrangements. (Typical midship sections are given in Fig 2)
3-1. Chen (FAC) <sup>(1)</sup> (FAO) <sup>(1)</sup> (FBC) <sup>(1)</sup>	)					
3-2. NLS	Tanker	Categ	gory	Z(18) <sup>(7-2)</sup>		Fig 2 Typical midship sections of Chemical Tanker 'ESP'
						(7-2) : This notation shall be appended to vessels carrying only cargoes in bulk, except liquid cargoes specified in Pt 7, Ch 6, Sec 17 of the Rules, classified as pollution category Z, or category Z and OS, which are not subject to IBC code, specified in Pt 7, Ch 6, Sec 18 of the Rules.
						<sup>(8)</sup> : As shown in the following:
						<ol> <li>The notation "IBC" shall be appended to vessels built in compliance with the require- ments given in Pt 7, Ch 6 of the Rules and constructed on or after 1 July, 1986.</li> </ol>
						<ol> <li>The notation "BCH" shall be appended to vessels built in compliance with the require- ments given in Pt 7, Ch 6 of the Rules and constructed before 30 June, 1986 and on or after 12 April, 1972.</li> </ol>
						<ol> <li>The notation "BCX" shall be appended to vessels built in compliance with Para. 1.7.3 of BCH code and constructed before 11 April, 1972</li> </ol>
4. Oil/Che Tanker (Double H (Double H 'ESP' <sup>(2-1)</sup> (FAC) <sup>(1)</sup>	Hull) <sup>(2–2)</sup> Hull)(EXP) <sup>(2–3)</sup>			eature Notat row 1 and r		<sup>(9)</sup> : See examples given in <b>Annex 1, 2.4</b> .
(FAC) <sup>(1)</sup> (FAO) <sup>(1)</sup> (FBC) <sup>(1)</sup> (CSR) <sup>(2-2</sup>	4)					

Ship Types		cial Feature Notations	Remarks
(10) 5-1. (2017) Bulk Carrier (Double Skin) <sup>(11-1)</sup> 'ESP'(EXP) <sup>(11-2)</sup> (CSR) <sup>(11-4)</sup> 5-2. (2017) Bulk Carrier <sup>(14)</sup> (Double Skin) <sup>(11-1)</sup> (CSR) <sup>(11-4)</sup> 5.3. (2017) Self-Unloading Bulk Carrier 'ESP' <sup>(11-3)</sup> (Double Skin) <sup>(11-1)</sup>	- HC <sup>(12)</sup> HC/E <sup>(13)</sup> BC-A*1 BC-B*2 BC-C*3	A GRAB[X] <sup>*4</sup> max cargo den- sity (t/m3) <sup>*5</sup> no MP <sup>*6</sup> Holds Nos may be empty <sup>*7</sup> Block loading <sup>*8</sup>	<ul> <li>(10) : See examples given in Annex 1, 2.5.</li> <li>(11-1) : This notation shall be assigned in the following cases. (Note: The relevant requirements specified in Pt 1, Ch 3, Sec 6 of the Rules, Double Skin Bulk Carriers are to be applied if applicable even if the ship has no Double Skin notation)</li> <li>(1) the ships, constructed before 1 July 1999, have double side skin construction of not less than 760 mm breadth at any location within the hold length, measured perpendicular to the side shell</li> <li>(3) the ships, constructed on or after 1 January 2000, have double side skin construction of not less than 1000 mm breadth at any location within the hold length, measured perpendicular to the side shell</li> <li>(11-2) : The notation "ESP" shall be assigned to ships which are constructed generally with single deck, double bottom, hopper side tanks and topside tanks and with single or double side skin construction in cargo length area and intended primarily to carry dry cargoes in bulk. For ships constructed on or after 1 July 2010, however, the notation "ESP" shall be assigned even if they lack some or all of the specified constructional feature above and (EXP) notation shall be followed. (Typical midship sections are given in Fig 3-1)</li> </ul>
			Fig 3-1 Typical midship sections of Bulk Carrier 'ESP' (11-3) : The notation "ESP" shall be assigned to ships which are constructed generally with single deck, double bottom, hopper side tanks and topside tanks and with single or double side skin construction in cargo length area and intended to carry and self-unload dry cargoes in bulk. (Typical midship sections are given in Fig 3-2) Fig 3-2 Typical midship sections of Self-Unloading Bulk Carrier 'ESP'
			<ul> <li>(11-4): This notation shall be assigned to ships comply with the requirements specified in Pt 11 or Pt 13 of the Rules.</li> <li>(12): The additional notation, HC, is normally assigned to a ship with the double bottom structure specially strengthened for the carriage of heavy cargoes having mass density, <i>g</i>, specified in Pt 3, Ch 7, 101. 6 of the Rules, not less than 1.25(t/m<sup>3</sup>).</li> <li>(13): The additional notation, HC/E, is normally assigned to a ship intended for the alternate loading, in addition to the requirements specified in (12) above.</li> <li>(14): Where ships constructed before 1 July 2010 with other structural configurations than stated in (11-2) above comply with the applicable requirements specified in Pt 7, Ch 3 of the Rules, the notation "Bulk Carrier", upon the request of the satisfaction of the Society. In such cases, the additional requirements for Bulk Carrier 'ESP' and Bulk Carrier(Double Skin) 'ESP' specified in Pt 1 of the Rules shall not be applied.</li> </ul>



Ship Types	Special Feature Notations	Remarks (continued)
	A - GRAB[X]*4 HC <sup>(12)</sup> (max cargo HC/E <sup>(13)</sup> density DC A*1	<ul> <li>*1 : Bulk carriers designed to carry dry bulk cargoes of cargo density of 1.0 t/m<sup>3</sup> and above with specified holds empty at maximum draught in addition to BC-B conditions as Pt 7, Ch 3, Sec 2 or Pt 11, Ch 1, Sec 1 or Pt 13, Sub-part 1, Ch 1, Sec 1 of the Rules.</li> </ul>
	BC-A*1 (t/m3)*5 BC-B*2 (no MP)*6 BC-C*3 (Holds Nos may be empty)*7 (Duri	<ul> <li>*2 : Bulk carriers designed to carry dry bulk cargoes of cargo density of 1.0 t/m<sup>3</sup> and above with all cargo holds loaded in addition to BC-C conditions as Pt 7, Ch 3, Sec 2 or Pt 11, Ch 1, Sec 1 or Pt 13, Sub-part 1, Ch 1, Sec 1 of the Rules.</li> </ul>
	(Block loading) <sup>*8</sup>	*3 : Bulk carriers designed to carry dry bulk cargoes of cargo density of less than 1.0 $t/m^3$ as Pt 7, Ch 3, Sec 2 or Pt 11, Ch 1, Sec 1 or Pt 13, Sub-part 1, Ch 1, Sec 1 of the Rules.
		*4 : The additional notation GRAB[X] is assigned to ships with holds designed for loading/unloading by grabs having a maximum specific weight up to [X] tons in compliance with the requirements of Pt 11, Ch 12, Sec 1 or Pt 13, Sub-part 2, Ch 1, Sec 6 of the Rules, the GRAB[X] notation is mandatory for ships having one of BC-A or BC-B, ac- cording to Pt 11, Ch 1, Sec 1 or Pt 13, Sub-part 1, Ch 1, Sec 1 of the Rules and these ships are to be complied with for an unladen grab weight X equal to or greater than 20 tons. See (Note) of Additional Special Feature Notations.
		*5 : For additional service features BC-A and BC-B if the max- imum cargo density is less than 3.0 t/m3 as Pt 7, Ch 3, Sec 2 or Pt 11, Ch 4, Sec 7 or Pt 13, Sub-part 1, Ch 4, Sec 8 of the Rules.
		<ul> <li>*6 : For all additional service features when the ship has not been designed for loading and unloading in multiple ports as Pt 7, Ch 3, Sec 2 or Pt 11 Ch 4 Sec 7 or Pt 13 Sub-part 1 Ch 4 Sec 8 of the Rules.</li> </ul>
		*7 : For additional service feature BC-A as Pt 7, Ch 3, Sec 2 or Pt 11, Ch 4, Sec 7 or Pt 13, Sub-part 1, Ch 4, Sec 8 of the Rules.
		*8 : For additional service feature BC-A, when the ship is in- tended to operate in alternate block load condition as Pt 13, Sub-part 1, Ch 4, Sec 8 of the Rules.

Ship Types	Special Feature Notations	Remarks
Ship Types 6. Cargo Ship <i>(2017)</i>	Special Feature Notations - HC <sup>(12)</sup> General Dry Cargo <sup>(15-1)</sup> Wood Chip Carrier <sup>(15-2)</sup> Cement Carrier <sup>(15-3)</sup> Livestock Carrier <sup>(15-4)</sup> Deck Cargo Ship <sup>(15-5)</sup> General Dry Cargo(Double Skin) <sup>(15-6)</sup> Liquid Cargo(Category OS only) <sup>(15-7)</sup> Container <sup>(15-8)</sup>	<ul> <li>Remarks</li> <li>(15-1) : This notation shall be assigned to all self-propelled general dry cargo ships of 500 GT and above carrying solid cargoes and the additional requirements for General Dry Cargo Ship specified in Pt 1, Ch 2, Sec 14 of the Rules are to be applied. However the following ships are to be omitted.</li> <li>bulk carriers and double skin bulk carriers subject to the enhanced survey programme(ESP)</li> <li>dedicated container carriers</li> <li>ro-ro cargo ships</li> <li>refrigerated cargo ships</li> <li>dedicated wood chip carriers (A ship that is specially designed to carry wood chip)<sup>(15-2)</sup></li> <li>dedicated corrent carriers (A ship that is specially designed to carry cement)<sup>(15-4)</sup></li> <li>deck cargo ships (A ship that is specially designed to carry livestock)<sup>(15-4)</sup></li> <li>deck cargo ships of double side-skin construction, with double side-skin extending for the entire length of the cargo area, and for the entire height of the cargo area, and for the entire height of the cargo ships carrying only liquid cargoes in bulk classified as pollution category OS, which are not subject to IBC code, specified in Pt 7, Ch 6, Sec 18 of the Rules.</li> </ul>
7. Ore Carrier 'ESP' <sup>(16)</sup>	A no MP* <sup>1)</sup> GRAB[X]* <sup>2)</sup>	<ul> <li><sup>(16)</sup>: The notation "ESP" shall be assigned to ships which are constructed generally with single deck, two longitudinal bulkheads and a double bottom throughout the cargo length area and intended primarily to carry ore cargoes in the centre holds only. (Typical midship sections are given in Fig 4)</li> <li>Fig 4 Typical midship sections of Ore Carrier 'ESP'</li> <li>*<sup>10</sup>: This notation shall be assigned to ships has not been designed for loading and unloading in multiple ports as Pt 7 Annex 7–10 of the Guidance.</li> <li>*<sup>20</sup>: This notation shall be assigned to ships with holds designed for loading/unloading by grabs having a maximum specific weight up to [X] tons in compliance with the requirements of Pt 7, Ch 2, 101. 2 of the Guidance.</li> </ul>

Ship Types	Special Feature Notations	Remarks
8–1. Ore/Oil Carrier 'ESP' <sup>(17–1)</sup> (FAC) <sup>(1)</sup> (FAO) <sup>(1)</sup> (FBC) <sup>(1)</sup>	Special Feature Notations given in row 1 and row 7	<sup>(17-1)</sup> : The notation "ESP" shall be assigned to ships which are constructed generally with single deck, two lon- gitudinal bulkheads and a double bottom throughout the cargo length area and intended primarily to carry ore cargoes in the centre holds or of oil cargoes in centre holds and wing tanks. However, these cargoes are not carried simultaneously. (Typical midship sec- tions are given in Fig 5-1) Note: Ore/Oil Carriers that do not comply with MARPOL I/19 may be subject to international and/or national regulations requiring phase out.
		Fig 5-1 Typical midship sections of Ore/Oil Carrier 'ESP'
8–2. Ore/Chemical Carrier 'ESP' <sup>(17–2)</sup> (FAC) <sup>(1)</sup> (FAC) <sup>(1)</sup> (FBC) <sup>(1)</sup>	Special Feature Notations given in row 3 <sup>(9)</sup> and row 7	<sup>(17-2)</sup> : The notation "ESP" shall be assigned to ships which
		Fig 5-2 Typical midship sections of Ore/Chemical Carrier 'ESP'
9. Oil/Bulk/Ore Carrier 'ESP' <sup>(18)</sup> 'ESP'(EXP) <sup>(18)</sup> (FAC) <sup>(1)</sup> (FAC) <sup>(1)</sup> (FAC) <sup>(1)</sup>	Special Feature Notations given in row 1, row 5 and row 7	<sup>(18)</sup> : The notation "ESP" shall be assigned to ships which are constructed generally with single deck, double bottom, hopper side tanks and topside tanks and with single or double side skin construction in the cargo length area and intended primarily to carry oil or dry cargoes including ore, in bulk. However, these cargoes are not carried simultaneously. For ships constructed on or after 1 July 2010, the notation "ESP" shall be assigned even if they lack some or all of the specified constructional feature above and (EXP) notation shall be followed. (Typical midship section is given in Fig 6)
		Note: Oil/Bulk/Ore Carriers that do not comply with MARPOL I/19 may be subject to international and/or national regulations requiring phase out.
		Fig 6 Typical midship sections of Oil/Bulk/Ore Carrier 'ESP'

Ship Types	Special Feature Notations	Remarks
10. RoRo Ship	- Car Carrier <sup>(19-1)</sup> Car/Cargo <sup>(19-2)(19-4)</sup> Car/Container <sup>(19-2)(19-4)</sup> Car/Bulk <sup>(19-2)(19-4)</sup> Car Ferry <sup>(19-3)(19-4)</sup> Cassette <sup>(19-5)</sup>	<ul> <li>Additional notation is not required for ships not intended to carry vehicles.</li> <li><sup>(19-1)</sup>: This notation shall be assigned to ships, other than car ferry ships engaged in national voyages and subject to Pt 7, Annex 7-3 of the Guidance, which are intended primarily to carry vehicles on vehicle decks in roll-on/roll-off system. For pure car carriers or pure car/truck carriers intended primarily to carry vehicles on several vehicle decks in superstructure running the entire length and breadth of the hull, fully enclosed as well as on vehicle decks under the freeboard deck in roll-on/roll-off system, "PCC" notation shall be assigned additionally after "Car Carrier" notation.</li> <li><sup>(19-2)</sup>: This notation shall be assigned to ships intended to carry not only vehicles in roll-on/roll-off system but also the relevant cargoes in loading/unloading system other than roll-on/roll-off system such as general cargo ships, container ships or bulk carriers. If these ships are car ferry ships engaged in national voyages which are subject to Pt 7, Annex 7-3 of the Guidance, the notation "Car Ferry/Cargo", "Car Ferry/Container" or "Car Ferry/Bulk" shall be assigned instead of these notations applicable.</li> <li><sup>(19-3)</sup>: This notation shall be assigned to car ferry ships, other than specified in (19-2), which are engaged in national voyages and subject to Pt 7, Annex 7-3 of the Guidance.</li> <li><sup>(19-4)</sup>: The notation "(open space)" shall be assigned additional voyages and subject to Pt 7, Annex 7-3 of the Guidance.</li> <li><sup>(19-5)</sup>: This notation shall be assigned to car ferry ships, other than specified in (19-2), which are engaged in national voyages and subject to Pt 7, Annex 7-3 of the Guidance.</li> </ul>
11. Container Ship <sup>(20)</sup>	LS <sup>(20-1)</sup> LS(CL) <sup>(20-2)</sup> LS(CL, RS) <sup>(20-3)</sup> LS(CL, RS+) <sup>(20-4)</sup>	<ul> <li>(20) : This notation shall be assigned to ships designed and constructed to carry containers exclusively.</li> <li>(20-1) : This notation shall be assigned to ships where container securing arrangements are fitted, and design and construction of the system are in accordance with Pt 7, Annex 7-2 of the Guidance.</li> <li>(20-2) : This notation shall be assigned to ships where the program for lashing calculations is approved by the Society and installed and maintained onboard in accordance with Pt 7, Annex 7-2 of the Guidance in addition to <sup>(20-1)</sup> above.</li> <li>(20-3) : This notation shall be assigned to ships where the contents related to the application of the specific route reduction factors provided by the Society are included in Cargo Securing Manual and the specific route reduction shall be assigned to the application of the user-specified route reduction factors provided by the Society are included in Cargo Securing Manual and the application of the user-specified route reduction factors provided by the Society are included in Cargo Securing Manual and ships equipped with a program that can calculate the route reduction factors for an arbitrary route in accordance with Pt 7, Annex 7-2 of the Guidance in addition to <sup>(20-2)</sup> above.</li> </ul>

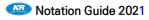
Ship Types	Special Feature Notations	Remarks
<ul> <li>12. Fishing Vessel<sup>(21)</sup></li> <li>13. Fish Carrier</li> </ul>	Long Liner, Stern Trawler, Side Trawler, Whaler, Purse Seiner, Gill Net, Angling, Stick-held Dip Net, Bottom Long Liner, Trap, Stow Net, Lift Net, Dredge Net, Seiner, Stab Net, Lighting, Pole and Line Fresh and Live Fish Fresh Fish	<sup>(21)</sup> : See examples given in <b>Annex 1, 2.6</b> .
	Live Fish Fish Factory	
(22) 14. Passenger Ship	(Type)(Additional purpose)Max.HydrofoilCargosubmSide WallContainerdepthAir CushionLeisuretime	
15–1. Tug Boat	A* (Purpose) - Salvage Supply Anchor Fire-Fighting(GA or GC) <sup>(24)</sup> Oil Recovery (GA, GB or GC) <sup>(25)</sup>	<ul> <li>A* : In relation to Special Feature Notation, A(Purpose), Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8 of the Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel.</li> <li>- : Additional notation is not required for tug boats or pushers built only for the purpose of tug or pusher work.</li> <li>(24) : When it complies with the</li> </ul>
15–2. Pusher	- (Type A) (Type B) Pusher/Tug (Type A) (Type B)	<ul> <li>"Enforcement Regulations of Ship Arrival and Departure, Annex 2, Standards for Fire Extinguishing Facilities," etc., the "Fire-Fighting" specialty feature notations shall be granted. GA or GC are shown in the following:</li> <li>1) GA : Regarding the fire fighting equipment for other vessels, this notation shall be assigned to ships complied with the requirements for explosion-protected electrical equipment in dangerous zone.</li> <li>2) GC : Regarding the fire fighting equipment for other vessels, this notation shall be assigned to ships not applied to the requirements for explosion-protected electrical equipment in dangerous zone.</li> <li>2) GC : Regarding the fire fighting equipment for other vessels, this notation shall be assigned to ships not applied to the requirements for explosion-protected electrical equipment in dangerous zone.</li> <li>Type A : permanent connection type Type B : removable connection type</li> </ul>

Ship Types	Special Feature Notations	Remarks
Ship Types 16. Work Vessel	Special Feature Notations A* (Purpose) - Launch Cable Layer Crane Anchor Ice Breaker Supply Oil Recovery(GA, GB or GC) <sup>(25)</sup> Salvage Repair Work Tender Dredging	<ul> <li>A* : In relation to Special Feature Notation, A(Purpose), Offshore Support Vessel's special feature notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8 of the Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel.</li> <li>- : Additional notation is not re- quired for work vessels built only for the purpose of work.</li> <li>(25) : As shown in the following:</li> <li>1) GA : This notation shall be as- signed to ships equipped for recovery and storage of spilled oil, and complied with the requirements for explosion-protected electrical equipment in dangerous zone.</li> <li>2) GB : This notation shall be assigned to ships equipped for the recovery and storage of spilled oil, and complied with the re- quirements for explosion- protected electrical equipment at work and storage spaces.</li> <li>3) GC : This notation shall be assigned to ships equipped for the re- covery and storage of spilled oil, and not applied to the requirements for explosion-</li> </ul>
17. Special Purpose Ship	A* (Purpose)	A* : In relation to Special Feature Notation, A(Purpose), Offshore Support Vessel's special feature
	<ul> <li>Soil, Geological</li> <li>Survey Boat, Submersible Support</li> <li>Diving Support, Hopper/Waste</li> <li>Waste, Hospital</li> <li>Hydro Survey, Seismic Survey</li> <li>Fire-Fighting(GA or GC)<sup>(24)</sup></li> <li>Buoy Laying, Fishery Training</li> <li>Fishery Patrol, Fishery Research</li> <li>Patrol, Pilot</li> <li>Observation, Training</li> <li>Research</li> </ul>	<ul> <li>notations, FFS1, FFS2, FFS3 or FF, shall be assigned to ships if they are complied with Ch 8 of the Guidance for OSV and the requirements of FFS1, FFS2, FFS3 or FF, which are Special Feature Notations of Offshore Support Vessel.</li> <li>Additional notation is not re- quired for Special Purpose Ships built only for the purpose of special purpose.</li> </ul>

Ch 2

Ship Types	Special F	eature Notations	Remarks
18. Barge (FAC) <sup>(1)</sup> (FAO) <sup>(1)</sup>	A (Type)	B (Loaded cargo name or additional purpose)	<ul> <li>Additional notation is not required for barge excluding 3 types of barge below, and for barges with</li> </ul>
(FBC) <sup>(1)</sup>	– Pontoon Integrated Pusher Barge (Type A) (Type B) Hopper(or Dump)	Chemical <sup>(26)</sup> Oil Container Sand Crane Pipe-Laying Piling Cable-Laying Salvage Submersible Accommodation Waste Log Heavy Cargo Oil Recovery (GA, GB or GC) <sup>(25)</sup> Power Plant Wind Turbine Transportation	<ul> <li>(26) : See special feature for chemical tanker as shown in row 3, and examples given in Annex 1, 2.4.</li> <li>Type A : permanent connection type</li> <li>Type B : removable connection type</li> </ul>
19-1. Dredger	Trailing Suction Cutter Suction Grab		
19-2. Dredger (Self-propelled)	Bucket Dipper Suction/Dump Reduced Freeboard		

Ship Types		Special Feature Notations			Remarks			
(27) 20. Special Purpo	A se Manned	Sel	B f-pro-	C Research	1	D Max. sub-	<sup>(27)</sup> : See examples given in Annex 1, 2.8.	
Submersible	Unmanr	ned pell	led n-pro-	Rescue Leisure <sup>(28</sup> Special Work		merging depth and time	(28) : This notation shall be assigned to special purpose submersible accompanying person- nel not exceeding 13.	
21. Fixed Offshor	e	A(Type)			B(Pur	pose)		
Structure		nt Tower ed Tower		Drilling Productio	Drilling Production			
22. Mobile Offsho	ore	A(Type)			B(Pur	pose)		
Unit	Self-ele Column Ship Ty Barge T	-stabilized		Crane Accomm Floating		on		
23. Mobile Offsh			A(T	ype)			<sup>(29)</sup> : See examples given	
Drilling Unit <sup>(2</sup>	Self-ele	-stabilized					in Annex 1, 2.9.	
24-1. Floating	A(	A(Type) E		В	С		(C) : This notation shall be assigned when an exist- ing vessel is converted to a floating production unit and is classed with	
Production, Storage and Offloading L 24-2. Floating	Init Barge T	Ship Type Barge Type Column-stabi-		ectable	Production able Import Export Import-Export			
Production a Offloading L	ind Spar	ar		στ-εχροτ		the Society. Disconnectable : This nota-		
24-3. Floating Storage and Offloading L	Init						tion shall be assigned for the floating production unit that has a propulsion system and a means of disengaging the unit from its mooring and riser systems.	
25-1-1. Floating L		А			В		(C) : This notation shall be	
Storage a Regasifica Unit	(( ')			Regasific Export	ation	I	assigned when an ex- isting vessel is con- verted to a floating liq-	
25-1-2. Floating L Regasifica Unit	• •			Process Import			uefied gas unit and is classed with the Society. Disconnectable : This no- tation shall be assigned	
25-1-3. Floating L Storage U		Disconnectable (C) Disconnectable		Export	Export			
25-2. Floating LN Production, Storage an Offloading I	Disconn			Process Import			for the floating liquefied gas unit that has a propulsion system and a means of disengaging the unit from its moor- ing and riser systems.	



Ship	Types	Special Feat	ure Notations	Remarks
	(30)	А	В	<sup>(30)</sup> : See examples given in Annex 1, 2.10.
26. Support Vesse	Offshore	Supply AH Tow HL WTIMR FFS1 FFS2 FFS3 FF Oil Spill Recovery	HDC( <i>P</i> , Locations) HLC(ρ, Tanks)	
27-1. Floa	ting Dock			
27-2. Doc	k Gate			
27–3. Skid Barge	Launching e			
28. Refrige Cargo Carrier				
	(31)	A (Type)	B (Equipment)	<sup>(31)</sup> : See examples given in
29. Single Moorir <i>(2017)</i>	ng	CALM SALM VALM SPMT	Buoy Body Sub-sea Pipeline Anchor Leg PLEM Floating Hose	Ch 1 103. 1. of Guidance for Single Point Mooring.
30. Structu	Floating ure	Hotel Restaurant Leisure		
	(32)	A (Port to be installed)	B (Total net lifting ca- pacity)	(32) : See example given in Ch 1 Section 1 & Section 2
31. Shiplif Transf	t and er System	(port to be specified)	MDL x effective platform length	of Guidance for Shiplift and Transfer System
		A (Type) <sup>(33)</sup>	B (Purpose) (34)	
32. WIG (	Craft	A-type B-type	Passenger General Small(Commercial) Small(Non-commercial)	<ul> <li>(33) : See Ch. 1, 104. in Guidance for WIG Crafts</li> <li>(34) : See Ch. 1, 103. 11~13. in Guidance for WIG Craft</li> </ul>
33. Floatin Bunke Termir	ring			This notation shall be as- signed to a barge comply with the requirements speci- fied in Guidance for Floating LNG Bunkering Terminal.

## CHAPTER 3 ADDITIONAL SPECIAL FEATURE NOTATIONS

The following Additional Special Feature Notations are to be appended to ships complying with the relevant requirements. The Additional Special Feature Notations are to be located in the order or the following table under Service Restriction Notations of Hull after Special Feature Notations regardless whether they are hull items or machinery items.(See Ch 1, 2 (6))

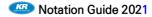
Additional Special Feature Notations		Relevant Requirements
SeaTrust (DSA1, DSA2, FSA1, FSA2, FSA3, SPR1, SPR2 HCM)	DSA1, DSA2, FSA1, FSA2, FSA3.	to ships comply with the Guidance for the direct structure and fatigue assessment specified in <b>Pt 3, Annex 3-2</b> and <b>3-3.</b> However, the (CSR) notation includes SeaTrust(DSA1, FSA2[NA]) notations, not additionally assigned. For container ships in accordance with <b>Pt 14,</b> ships complying with <b>Pt 14, Ch 7</b> and <b>Ch 9</b> are assigned the notation SeaTrust(DSA1, FSA2). The notations of FSA1 to FSA3 are assigned including the following notation about evaluated sea area: [NA] : North Atlantic, [WW] : Worldwide, (e.g. SeaTrust(FSA1[NA]), SeaTrust(FSA1[WW])). The notation of [XX years] can be assigned to FSA1 to FSA3 additionally when exceeding the following design fatigue life: to ships comply with <b>Pt 13</b> and <b>Pt 14</b> : 25 years, to other ships : 20 years, (e.g. SeaTrust(FSA1[WW, 30 years])). (DSA : Direct Strength Assessment, FSA : Fatigue Strength Assessment)
	SPR1, SPR2	to ships comply with the fatigue strength requirements specified in Guidance for Fatigue Strength Assessment Including Springing.
	НСМ	to ships comply with the Guidance for the hull construction monitoring procedure, Pt 3, Annex 3-4. However, for the ship built in accordance with Common Structural Rules for Bulk Carriers and Oil Tankers(Pt 13), Hull Consturction Monitoring notation, SeaTrust(HCM), shall be assigned mandatory. (HCM : Hull Construction Monitoring procedure)
WHIP		to ships comply with the strength requirements specified in <b>Guidance on</b> Strength Assessment of Containerships Considering the Whipping Effect.

Additional Special Feature Notations	Relevant Requirements
IA Super	to ships where IA Super Classification of Ice Strengthening specified in Ch 1 of the Guidance for Ships for Navigation in Ice is applied.
to ships where IA Classification of Ice Strengthening specified in Ch 1 Guidance for Ships for Navigation in Ice is applied.	
IBto ships where IB Classification of Ice Strengthening specified in Ch 1Guidance for Ships for Navigation in Ice is applied.	
IC	to ships where IC Classification of Ice Strengthening specified in <b>Ch 1 of the Guidance for Ships for Navigation in Ice</b> is applied.
ID to ships where ID Classification of Ice Strengthening specified in Ch Guidance for Ships for Navigation in Ice is applied.	
<b>PC</b> 1, PC2, PC3, PC4, PC5, PC6, PC7	to ships comply with Polar Class specified in Ch 2 of the Guidance for Ships for Navigation in Ice of the Guidance.
Icebreaker3, Icebreaker4, Icebreaker5, Icebreaker6	to ships comply with Icebreaker Class specified in <b>Ch 3 of the Guidance for</b> <b>Ships for Navigation in Ice</b> .
Arctic4, Arctic5, Arctic6, Arctic7, Arctic8, Arctic9	to ships with ice breaking capability comply with Arctic Class specified in <b>Ch</b> <b>3 of the Guidance for Ships for Navigation in Ice</b> . Where a ship performs ice breaking operations periodically and complies with the relevant requirements of Icebreaker, one of Icebreaker3 or Icebreaker4 notations may be assigned additionally.

Additional Special		Relevant Requirements		
Feature Notations				
	<ul> <li>to ships where materials for Hull construction at an external design</li> <li>H(t) air temperature of t degrees Celsius specified in Ch 4, Sec 2 of the</li> <li>Guidance for Ships for Navigation in Ice are applied.</li> </ul>			
	M(t) to ships where Materials for equipment and components at a external design air temperature of t degrees Celsius specified compliance with Ch 4, Sec 3 of the Guidance for Ships for Navigation in Ice are applied.			
Winterization (H(t), M(t), E1( <i>t</i> ), E2( <i>t</i> ), E3( <i>t</i> ), <b>S</b> (A), S(B), S(C), D( <i>t</i> ), <b>IR</b> )	E1(t), E2(t), E3(t) S(A), S(B),	to ships where Equipment and systems are in compliance with Ch 4, Sec 4, Sec 5 and Sec 6 of the Guidance for Ships for Navigation in Ice in association with an external design air temperature of t degrees Celsius. to ships where Stability are in compliance with Ch 4, Sec 7 of the Guidance for Ships for Navigation in Ice in association with the ice accretion values specified in Ch 4, Sec 7 of the Guidance for Ships		
	D(t)	for Navigation in Ice. to ships where alternative Designs complied with Ch 4, Sec 8 of the Guidance for Ships for Navigation in Ice in association with an external design air temperature of t degrees Celsius are applied.		
	IR	to ships where Ice Removal specified in compliance with Ch 4, Sec 9 of the Guidance for Ships for Navigation in Ice is applied.		
<b>PL</b> 10, Icebreaker PL10, PL20, Icebreaker PL20, PL30, Icebreaker PL30	specified	consideration, be given intermediate		
ICE05, Icebreaker ICE05, ICE10, Icebreaker ICE10, ICE15, Icebreaker ICE15	specified	s comply with ICE class in Pt 3, Ch 22 of the which was specified until 1 2015. notations(e.g. PL25). The design ambient air temperature, the maximum operational speed and/or the maximum amidships draught may be assigned, if applicable, in accordance with Pt 3, Ch 22 of the Guidance which was specified until 1 January 2015, and the design ambient air temperature shall be assigned as DAT(-x°C).		
		<ol> <li>Only ships which had been assigned these notations before 1 January 2015 can keep these notations, but these notations are not to be newly assigned to any ships after 1 January 2015.</li> </ol>		
FH	in floode scantling	where the requirements regarding longitudinal strength of hull girder ed condition, evaluation of allowable hold loading and evaluation of s of corrugated transverse watertight bulkheads for bulk carriers in <b>Pt 7, Ch 3, Sec 10</b> to <b>Sec 12 of the Rules</b> are applied.		

Additional Special Feature Notations	Relevant Requirements
IWS	to ships where an In-Water Survey, in lieu of the Docking Survey, is desired according to the requirement in Pt 1, Ch 2, 604. of the Rules and complying with the requirements specified in Pt 1, Ch 2, 604. 3 (8) of the Rules.
ERS	to ships where classed with the Emergency Response Service System of the Society.
CDG	to ships comply with the requirements specified in Pt 8, Ch 12 of the Rules. (Cargo Dangerous Goods)
AFP-A (Additional Fire Protection and fire extinction)	to ships comply with the requirements specified in Pt 8, Annex 8-9, Sec.2 of the Guidance. (Accommodation)
AFP- <b>M</b>	to ships comply with the requirements specified in Pt 8, Annex 8-9, Sec.3 of the Guidance. (Machinery)
AFP- <b>C</b> AFP-C(1) AFP-C(2) AFP-C(3) AFP-C( <b>FSC</b> )	<ul> <li>AFP-C: to ships comply with the related requirements specified in Pt 8, Annex 8-9, Sec.4 of the Guidance. (Cargo space)</li> <li>AFP-C(1): to container ships where cargo space in accordance with the requirements specified in Pt 8, Annex 8-9, Sec.4 405. 2 of the Guidance.</li> <li>AFP-C(2): to container ships where cargo space in accordance with the requirements specified in Pt 8, Annex 8-9, Sec.4 405. 3 of the Guidance.</li> <li>AFP-C(3): to container ships where cargo space in accordance with the requirements specified in Pt 8, Annex 8-9, Sec.4 405. 4 of the Guidance.</li> <li>AFP-C(3): to container ships where cargo space in accordance with the requirements specified in Pt 8, Annex 8-9, Sec.4 405. 4 of the Guidance.</li> <li>AFP-C(FSC): to container ships where cargo space in accordance with the requirements specified in Pt 8, Annex 8-9, Sec.4 405. 5 of the Guidance.</li> <li>(Flooding System for Container)</li> </ul>
SPS	to ships comply with the Code of Safety for Special Purpose Ships(SPS Code)
Grab	to ships which do not comply with the IACS CSR for Bulk Carriers and where cargo holds are protected from loading/discharge equipment in accordance with the requirements specified in Pt 7, Annex 7–7, 2 of the Guidance.
PCP	to ships where the cargo oil pipings are protected according to the requirements specified in Pt 7, Ch 1, 1002. 4 of the Guidance. (Protected Cargo oil Pipings)
IHM	to ships which comply with Hong Kong international convention for the safe and environmentally sound recycling of ships.
CLEAN1, CLEAN2, CLEAN3	to ships which comply with the additional requirements for pollution prevention system specified in Ch 1 of Guidance for Prevention System of Pollution from ships.
PSPC	to ships comply with the Performance Standard for Protective Coatings specified in Pt 3, Ch 1, 803. of the Guidance.
BLU	to ships comply with the additional requirements for the safe loading and unloading specified in Pt 3, Annex 3-1, 3 (3) of the Guidance. (Bulk cargo safe Loading & Unloading system)
EDD	to ships carrying out the Extended Dry-Docking Interval System specified in Pt 1, Ch 2, 605. of the Rules.
OHIMP	to ships comply with the Owner's Hull Inspection and Maintenance Program specified in Pt 1, Annex 1–13 of the Guidance.

Additional Special Feature Notations	Relevant Requirements		
(LC), (LC-G), (HSLC – SA0, SA1, SA2, SA3, SA4, SA5) <i>(2018)</i>	<ul> <li>LC : to Light Craft as specified in Pt 1, Ch 1, 103. (1) of the Rules for the Classification of High Speed and Light Crafts. (Light Craft)</li> <li>LC-G : to Light Craft as specified in Annex 1 and Annex 2 of the Guidance Relating to the Rules for the Classification of High Speed and Light Crafts, 1998 edition.</li> <li>HSLC : to High Speed and Light Craft as specified in Pt 1, Ch 1, 103. (2) of the Rules for the Classification of High Speed and Light Crafts. (High Speed Light Craft)</li> </ul>		
	<ul> <li>SA0, SA1, SA2, SA3, SA4, SA5</li> <li>The service restriction notation specified in Pt 3, Ch 1, 121. of the Rules for the Classification of High Speed and Light Crafts. (Service Area restriction)</li> </ul>		
(HSC), (HSC-A), HSC-B), (FGHSC)	<ul> <li>HSC : to High-Speed Crafts, other than High-speed Passenger Crafts, comply with IMO HSC Code(International Code of Safety for High-speed Craft)</li> <li>HSC-A : to High-speed Category A Passenger Crafts comply with IMO HSC Code(International Code of Safety for High-speed Craft)</li> <li>HSC-B : to High-speed Category B Passenger Crafts comply with IMO HSC Code(International Code of Safety for High-speed Craft)</li> <li>HSC-B : to High-speed Category B Passenger Crafts comply with IMO HSC Code(International Code of Safety for High-speed Craft)</li> <li>FGHSC : to High-speed Crafts engaged in domestic voyages, comply with the FlaG administration's domestic laws for High-Speed Crafts, not comply with IMO HSC Code(International Code of Safety for High-speed Craft).</li> </ul>		
LFFS (DF-LNG, SF-LNG) (DF-Methanol, SF-Methanol) (DF-Ethanol, SF-Ethanol) (DF-LPG, SF-LPG)	to ships comply with the requirements of the Rules and Guidance for the Classification of Ships Using Low-flashpoint Fuels in which engines using low-flashpoint fuelt are installed, other than ships carrying gas in bulk. (Low-Flashpoint Fuel Ship) DF-LNG Dual fuel engines using LNG as fuel are installed SF-LNG Single fuel engines using LNG as fuel are installed DF-Methanol Dual fuel engines using methyl alcohol as fuel are installed SF-Methanol Single fuel engines using ethyl alcohol as fuel are installed DF-Ethanol Dual fuel engines using ethyl alcohol as fuel are installed SF-Lthanol Dual fuel engines using ethyl alcohol as fuel are installed SF-Ethanol Dual fuel engines using ethyl alcohol as fuel are installed SF-Ethanol Single fuel engines using ethyl alcohol as fuel are installed SF-LPG Dual fuel engines using LPG as fuel are installed SF-LPG Single fuel engines using LPG as fuel are installed		
LNG Ready D	to ships for which the generic Design is prepared in accordance with Ch 2, Sec 2 of the Guidance for LNG Fuel Ready Ships.		
LNG Ready I (SR, FT, TV, FS, BS, ME, AE, B, ME-C, AE-C, B-C)	to ships for which parts of the systems are installed with the detailed design in accordance with Ch 2, Sec 3 of the Guidance for LNG Fuel Ready Ships. (partial Installation) (SR : hull Structure Reinforcement for LNG fuel tank FT : LNG Fuel Tank TV : LNG fuel Tank Venting systems FS : gas Fuel Supply systems BS : gas fuel Bunkering Systems ME : gas fired Main Engines AE : gas fired Auxiliary Engines B : gas fired Boilers ME-C : gas fired Auxiliary Engines - Conversion AE-C : gas fired Boiler - Conversion B-C : gas fired Boiler - Conversion)		



Additional Special	Relevant Requirements
Feature Notations	to ships for which the generic Design is prepared in accordance with Ch 3
	Sec.3 of Guidance for Prevention System of Pollution from ships.
	(Exhaust Gas Cleaning system)
EGC Ready D-	(D : Dry type
D, O, C, H	O: Wet Open type
	C:Wet Closed type
	H:Wet Hybrid type)
	to ships for which parts of the systems are Installed with the detailed design
	in accordance with Ch 3 Sec.3 of Guidance for Prevention System of
	Pollution from ships.
EGC Ready I(SR,	(SR : Hull Structural arrangement and Reinforcement
EX, WR, CH, SD, EG)-	EX : EXhaust gas system
D, O, C, H	WR : WashwateR system
	CH : CHemical treatment system, if applicable
	SD : Re <mark>SiD</mark> ue system
	EG : SOx Scrubber system)
	to ships comply with the requirements of the Guidance for Fuel Cell Systems
FC, FC-PWR	on Board Ships in which fuel cell systems on board of ships used s auxiliary or main source of power are installed. (Fuel Cell-PoWeR)
	· · · · · · · · · · · · · · · · · · ·
<b>RP</b> 1, RP2,	to ships comply with the additional requirements for the redundant propulsion
RP1- <b>S</b> , RP2-S	and steering systems specified in <b>Pt 5, Annex 5–10 of the Guidance</b> .
	(RP : Redundant Propulsion and steering system, −S : in Separate space)
CEmN-SCR (Control of Emission	to ships comply with the additional requirements for the selective catalytic reduction system specified in <b>Ch 2 Sec.1</b> of the <b>Guidance for Prevention</b>
Nitrogen oxides)	System of Pollution from ships. (Selective Catalytic Reduction system)
	to ships comply with the additional requirements for the exhaust gas
CEmN-EGR	recirculation system specified in Ch 2 Sec.1 of the Guidance for Prevention
CLINIX EOK	System of Pollution from ships. (Exhaust Gas Recirculation system)
	to ships reducing emission of nitrogen oxides by adjusting combustion
CEm N. EQE	environment and/or fuel used in engines specified in Ch 2 Sec.1 of the
CEmN- <b>E&amp;F</b>	Guidance for Prevention System of Pollution from ships.
	(E&F : Engine & Fuel)
CEmS-EGC-D, O, C, H	to ships comply with the additional requirements for the exhaust gas cleaning
(Control of Emission	systems specified in Ch 3 Sec. 2 of the Guidance for Prevention System of
<mark>S</mark> ulphur oxides)	Pollution from ships. (Exhaust Gas Cleaning system)
	to ships comply with the additional requirements for the exhaust gas cleaning
CEmS-EGC(R)-D, O, C, H	system specified in Ch 3 Sec. 2 of the Guidance for Prevention System of
	Pollution from ships. (R : Redundancy)
	to ships comply with the additional requirements for the exhaust gas cleaning
CEmS-EGC <b>(S)-</b> D, O, C, H	system specified in Ch 3 Sec. 2 of the Guidance for Prevention System of
	Pollution from ships. (S : Survey)
	to ships using low sulphur fuel without exhaust gas cleaning system
CEmS-LSF	specified in Ch 3 Sec.1 of the Guidance for Prevention System of Pollution
	from ships. (LSF : Low Sulphur Fuel)

Additional Special Feature Notations	Relevant Requirements
NVH-N1, NVH-N2, NVH-N3	to ships comply with the additional requirements for Noise Criteria specified in Ch 3, of the Guidance for Noise and Vibration. (Noise, Vibration and Habitability - Noise)
<b>NVH-V</b> 1, NVH-V2, NVH-V3	to ships comply with the additional requirements for Noise Criteria specified in Ch 4, of the Guidance for Noise and Vibration. (Noise, Vibration and Habitability - Vibration)
URN-T(XX), URN-Q(XX)	to ships comply with the additional requirements for Underwater Radiated Noise Criteria specified in Ch 3 of the Guidance for Underwater Radiated Noise. (URN: Underwater Radiated Noise, $-T$ : Transit for normal operation mode, $-Q$ : Quiet for quiet operation mode, XX: Vessel speed of each mode in knots)
<b>CS</b> 1, CS2, CS3	to ships with the maritime cyber security system specified in the Guidance for Maritime Cyber Security System (CS: Cyber Security)
CS READY	to ships with the maritime cyber security system specified in the Guidance for Maritime Cyber Security System
<b>AL</b> 1, AL2, AL3, AL4, AL5	to ships with the autonomous systems specified in the <b>Guidance for Autonomous Ships</b> (AL: Autonomy Level)
CSAP	to ships comply with the additional requirements specified in Pt. 7 Annex 7-11 Guidelines on providing safe working conditions for securing of containers on deck (CSAP : Cargo Safety Access Plan)
FTS	to ships where fuel oil treatment system specified in Pt 5, Ch 6, Annex 5-13 of the Guidance are provided onboard. (Fuel oil Treatment System)
ISPM(0), ISPM(1), ISPM(2), ISPM(3)	to ships operating the integrated software process specified in the Guidance for Integrated Software Process Management
PID	to ships comply with the requirements to prevent the spread of infectious disease in the event of an outbreak of an infectious disease on board in Guidelines for Ships designed to Prevent the spread of Infectious Disease

#### **Note**

Special Feature Notations Remarks	Ship Type	Rule
GRAB[X]	CSR Bulk Carrier BC-A or BC-B	Rule Pt 11 Ch 2 or Rule Pt 13 Sub-part 2 Ch 1
	Ore Carrier Ore / Oil Carrier Ore / Chemical Carrier Oil / Bulk / Ore Carrier	Guidance Pt 7 Ch2 101. 2
Additional Special Feature Notations	Ship Type	Rule
Grab	-	Guidance Pt 7 Annex 7-7 2 (not CSR Bulk carrier)

ψ

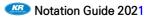
## CHAPTER 4 ADDITIONAL INSTALLATION NOTATIONS

The following Additional Installations Notations may be appended to ships complying with the relevant requirements in the order of following table. (See Ch 1, 2 (7))

Addit	ional Installation Notations	Relevant Requirements
Hull Items	HMS, HMS1	to ships where the Hull Monitoring System specified in Pt 9, Ch 6 of the Rules is provided onboard.
	LG	to ships where the Cargo Handling Appliances specified in <b>Pt 9, Ch 2 of the</b> <b>Rules</b> are provided onboard. (Lifting appliance + loose Gear)
	PA	to ships where the Personnel Lift specified in Pt 9, Ch 2 of the Rules are provided onboard. (Personnel lifting Appliance)
	LI	to ships where the Loading Instrument on Stability specified in Pt 1, Ch 1, 307. of the Rules or the Longitudinal Strength Loading Instrument specified in Pt 3, Ch 3, 104. of the Rules is provided onboard.
	EQ-SPM	to ships where the EQuipment Employed in the Mooring of Ships at Single Point Mooring specified in Pt 4, Ch 10, 101. 7 of the Rules is provided onboard.
	PKS	to offshore units where the Position Keeping System specified in Ch 4, Sec 6 of the Rules for the Classification of Mobile Offshore Units or Ch 3, 415. of the Rules for the Classification of Mobile Offshore Drilling Units is provided onboard.
	SUR, BOU, SAT	to ships where the diving systems specified in Pt 9, Ch 7, 602. 1 of the Rules are provided onboard. (SUR : SURface supplied air diving) (BOU : BOUnce Diving) (SAT : SATuration Diving)
	ADUW	to ships where the anchoring systems in deep and unsheltered water specified in <b>Pt 4, Annex 4-3 of the Guidances</b> are installed onboard. (ADUW : Anchoring in Deep and Unsheltered Water)
	<b>ES-Wind,</b> ES-Wind1	to ships where the systems for assisting ship propulsion from wind in Guidelines for Wind Assisted Propulsion Systems are installed onboard. (Energy Saving-Wind power)

Additional Installation Notations		Relevant Requirements	
	UMA	to ships where the Operating Systems for Periodically Unattended MAchinery Spaces specified in Pt 9, Ch 3 of the Rules are provided onboard.	
	UMA1, UMA2, UMA <b>3</b>	to ships where the Automation Equipment specified in Pt 9, Ch 3 of the Rules is provided onboard. (UMA with automation equipments of Class 1, 2, 3)	
	СМА	to ships where the Centralized monitoring and control system for Main propulsion and essential Auxiliary machinery specified in Pt 9, Ch 3 of the Rules is provided onboard.	
	PMS	to ships where the Planned Maintenance System specified in Pt 1, Ch 2, 903. of the Rules is applied.	
	STCM	to ships where the Stern Tube Condition Monitoring system specified in Ch 2, 701. 3 of the Guidance is provided onboard.	
	<b>DPS</b> (0), DPS(1), DPS(2), DPS(3)	to ships where the Dynamic Positioning System specified in Pt 9, Ch 4 of the Rules is provided onboard.	
	NBS, NBS1, NBS2	to ships where Bridge Layouts and Bridge Working Environments, Navigation Equipments, Accident Prevention Systems and Bridge Work Assist Systems specified in <b>Pt 9</b> , <b>Ch 5 of the Rules</b> are provided. (Navigation Bridge System)	
Machi nery Items	HVSC	to ships where the High Voltage Shore Connection systems specified in Pt 9, Ch 8 of the Rules are provided onboard.	
	HVSC-Partial	to ships where a part of high voltage shore connection systems specified in <b>Pt 9, Ch 8 of the Guidance</b> are provided onboard.	
	BWE	to ships in which the Ballast Water Exchange system is installed in accordance with Pt 9, Ch 10, Sec 2 for ballast water management. Howerver, ships not applying to Pt 9, Ch 10, Sec 2 of the Rules are to comply with relevant requirement of BWE specified in Pt 1, Annex 1–1, 1.1 of the Guidance 2015. However, at the request of the Owner, BWMP(T, F, S, D) may be assigned to ships which have no IBWM Statement of Compliance, until the International Convention for the	
	BWT	to ships in which the ballast water management system is installed in accordance with Pt 9, Ch 10 Sec 3 for ballast water management. Howerver, ships not applying to Pt 9, Ch 10, Sec 2 of the Rules are to comply with relevant requirement of BWT specified in Pt 1, Annex 1–1, 1.1 of the Guidance 2015. (Ballast Water Treatment)	

Addit	ional Installation Notations	Relevant Requirements
Machi nery Items	VEC1	to ships in which cargo Vapour Emission Control system is installed in accordance with Pt 9, Ch 9, Sec 2 of the Rules. However, for ships having VEC2 notation, VEC1 notation shall not be assigned.
	VEC2	to ships in which cargo vapour emission control system is installed in accordance with <b>Pt 9, Ch 9, Sec 3 of the Rules</b> . However, for ships having VECL notation, VEC2 notation shall not be assigned.
	VECL	to ships engaged in the transportation of cargoes between a facility and another ship and vice versa, and in which wapour balancing system are installed in accordance with Pt 9, Ch 9, Sec 4 of the Rules. (Vapor Emission Control system – Lightering operation)
	IGS	to ships where the Inert Gas Systems specified in Pt 8, Ch 2, 405 of the Rules are provided onboard, other than ships carrying liquefied gases in bulk. to ships carrying liquefied gases in bulk where the Inert Gas Systems specified in Pt 7, Ch 5, 905. 1 of the Rules are provided onboard.
	COW	to ships where the Crude Oil Washing System specified in "Annex I of MARPOL" are provided onboard.
	RMC	to ships where the Cargo Refrigerating Installations specified in Pt 9, Ch 1 of the Rules are provided onboard. (Refrigerating Machinery for Cargo)
	ns-NH3	to fishing vessels where ammonia refrigerating installations are installed in machinery spaces in accordance with the requirements specified in Pt 5, Ch 6, 1201. 1 (14) (B) of the Guidance.
	GCU	to liquefied natural gas carriers where the Gas Combustion Unit for disposal of boil-off gas specified in Pt 7, Ch 5, 701. 1 of the Guidance is provided onboard.
	Reliquefaction	to liquefied natural gas carriers where the <b>Reliquefaction</b> Plant of methane specified in <b>Pt 7, Ch 5, 703. 2 of the Guidance</b> is provided onboard.
	DFDE (LNG, LPG)	to liquefied natural gas carriers where the Dual-Fuel Diesel Engine utilizing methane gas specified in Pt 7, Ch 5, 1607. of the Guidance is provided onboard, or to LPG carriers where the Dual-fuel Diesel Engine utilizing LPG specified in Pt 7, Ch 5, Annex 7A-5 207. 4 of the Guidance is provided onboard.
	Drilling System	to ships where the Drilling System specified in Annex 1 of the Rules for the Classification of Mobile Offshore Drilling Units is provided onboard.
	Battery- <b>M</b> ,	to ships where the battery system with a capacity of 50 kWh or more
	Battery-A	specified in Guidance for Battery Systems on Board of Ships are provided onboard. (M : Main, A : Additional)
	LNG Bunker	to ships where LNG bunkering systems specified in Pt 7, Ch 5, Annex 7A-3 of the Guidance are provided onboard.
	VRS	to ships where arrangements for handling excess vapor specified in Pt 7, Ch 5, Annex 7A-3 203. 2 of the Guidance and Ch 1, 102. 2 of Guidelines for Floating LNG Bunkering Terminal are provided onboard. (Vapour Recovery System)



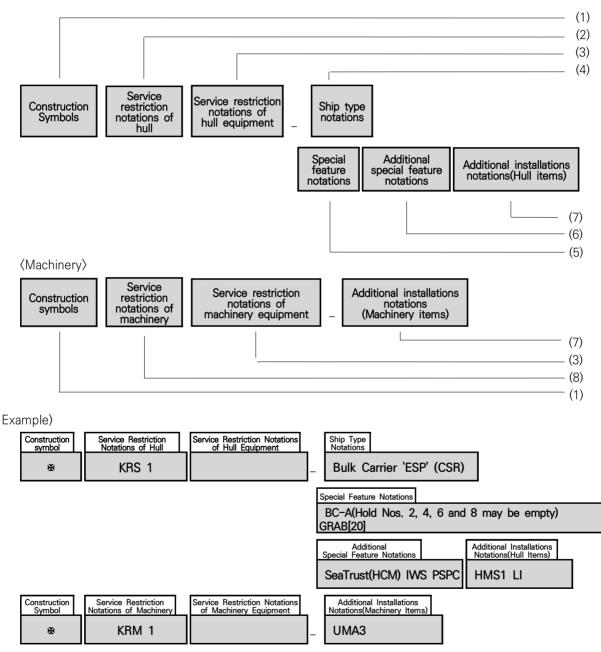
# Annex 1 Written Examples of Class Notations

## 1. General

A typical arrangement of Class Notations will consist of the following structure.

The class will be distinguished by the class notations and the typical arrangement of class notations will consist of the following structure.

(Hull)



# 2. Written Examples of Ship Types

# 2.1 Oil Tanker

Class Character :

KRS 1 – Oil Tanker Special Feature KRS 1 – Oil Tanker 'ESP' Special Feature KRS 1 – Oil Tanker(Double Hull) 'ESP' Special Feature

Example :

1) For dedicated asphalt carriers of which all cargo tanks are independent type

KRS 1 – Oil Tanker (FAO) Asphalt

2) For oil tankers

KRS 1 – Oil Tanker 'ESP' (FBC) Crude/Product

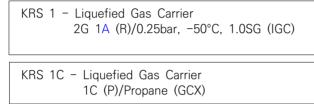
3) For double hull oil tankers comply with the requirements specified in Pt 12 or Pt 13 of the Rules

KRS 1 – Oil Tanker(Double Hull) 'ESP' (FBC) (CSR) Crude/Product

#### The symbols A, B, (C), D and P imply : 2.2 Liquefied Gas Carrier Class Character : А : Type of Ship KRS 1 - Liquefied Gas Carrier В : Type of Tank D А В (C) (IGC) (C) : Transportation Mode KRS 1C - Liquefied Gas Carrier : Design Pressure, Temperature and D Specific Gravity (SG) В (C) Ρ (GCX) Ρ : Name of Product when exclusively carried

### Example :

1) For ships to comply with IGC or GC code



2) For ships not to comply with IGC or GC codeA) For ships carrying exclusively LPG, i.e., Propane or Butane

KRS 1 - Liquefied Gas Carrier LPG

B) For ships carrying Liquefied Gases those other than LPG

KRS 1C - Liquefied Gas Carrier VCM

А

means type of ship to be determined by "damage assumptions"(203.), "location of cargo tanks"(204.), "standard of damage"(206.) and "survival requirements"(207.) specified in Pt 7, Ch 5, Sec 2 and Sec 19 of the Rules.

Ship Type	Contents(*)
1G	Gas carrier intended to transport products which require maximum preventive measures to pre- clude the escape of such cargo
2G	Gas carrier intended to transport products which require significant preventive measures to pre- clude the escape of such cargo
2PG	Gas carrier of 150 m in length or less intended to transport products which require significant preventive measures to preclude the escape of such cargo, and where the products are carried in independent type C tanks designed for a MARVS of at least 7 bar gauge and a cargo containment system of design temperature of $-55^{\circ}$ C or above. (Note : a ship of this description, but over 150 m in length is to be considered a type 2G ship.)
3G	Gas carrier intended to carry products which require moderate preventive measures to preclude the escape of such cargo
	) Gee column C of "Summary of Minimum Requirements" specified in <b>Pt 7, Ch 5, Sec 19 of the</b> R <b>ules</b>

В

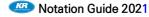
means type of tank to be determined by "cargo containment" specified in Pt 7, Ch 5, Sec 4 of the Rules. (2017)

Tank Type	Symbol	Contents
Integral Tank	21	<ol> <li>(1) Tank to form a structural part of the ship's hull(primary barrier for containment of cargo)</li> <li>(2) Design vapour pressure Po not to normally exceed 0.25 bar(Max. 0.7 bar)</li> <li>(3) Boiling point of the cargo To not to be below -10° c</li> </ol>
Membrane Tank	ЗМ	<ol> <li>Non-self supporting tanks which consist of a thin layer(membrane) supported through insulation by the adjacent hull structure</li> <li>Design vapour pressure Po not to normally exceed 0.25 bar(Max. 0.7 bar)</li> <li>Thickness of the membrane not to normally exceed 10 mm</li> </ol>
Semi-membrane Tank	3S	<ol> <li>Non-self supporting tanks in the loaded condition, which consist of a layer, part of which is supported through insulation by the adjacent hull structure(primary barrier for containment of cargo)</li> <li>Design vapour pressure Po not to normally exceed 0.25 bar(Max. 0.7 bar)</li> </ol>
Independent Tank Type A	1A	<ol> <li>Gravity tanks</li> <li>Tanks designed using the requirements of Pt 3, Ch 15 of the Rules</li> <li>Design vapour pressure Po less than 0.7 bar(for plane surfaces)</li> </ol>
Independent Tank Type B	1B	<ol> <li>Gravity tanks or pressure vessels</li> <li>Tanks designed using model tests, refined analytical tools and analysis methods</li> <li>Design vapour pressure Po less than 0.7 bar(for plane surfaces)</li> </ol>
Independent Tank Type C	1C	<ol> <li>Pressure vessels</li> <li>Tanks designed using the requirements of Pt 5, Ch 5 of the Rules</li> <li>Design vapour pressure to be specially considered</li> </ol>
(NOTES) The number in the second column indicates: 1: independent, 2: integral, 3: membrane		

С

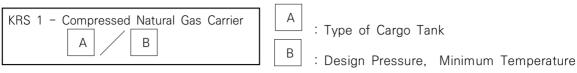
means transportation mode.

Symbol	Contents
(R)	Fully Refrigerated
(P)	Fully Pressurized
(RP)	Refrigerated and Pressurized



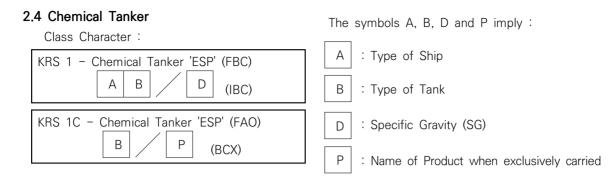
# 2.3 Compressed Natural Gas Carrier

Class Character :



Example :

KRS 1 – Compressed Natural Gas	Carrier
CY/13MPa, −30 ℃	



#### Example :

1) For chemical tanker

KRS	1 - Chemical Tanker 'ESP' (FBC) II 2G/1.0SG (IBC)
KRS	1C – Chemical Tanker (FAO) 1G/Sulphur Molten (BCX)

2) For combination carrier of oil and chemical

KRS 1 – Oil/Chemical Tanker 'ESP' (FAC)	
Product/III 2G/1.2SG (IBC)	

means type of ship to be determined by "damage assumption", "location of cargo tanks", "standard of damage" and "survival requirements" specified in Pt 7, Ch 6, Sec 2 of the Rules.

Ship Type	Contents(*)
I	Chemical tanker intended to transport products with very severe environmental and safety hazards which require maximum preventive measures to preclude an escape of such cargo
11	Chemical tanker intended to transport products with appreciably severe environmental and safety hazards which require significant preventive measures to preclude an escape of such cargo
111	Chemical tanker intended to transport products with sufficiently severe environmental and safety hazards which require a moderate degree of containment to increase survival capability in a damaged condition
(NOTES) (*) : See column E of "Summary of Minimum Requirements" specified in <b>Pt 7, Ch 6, Sec 17 of the Rules</b> .	



А

В

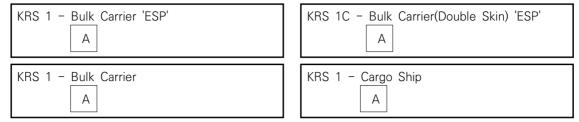
means type of tank to be determined by "cargo containment" specified in Pt 7, Ch 6, Sec 4 and Sec 17 of the Rules, as shown in the following.

1G	
2G	
1P	

Symbol	Tank Type	Contents
1	Independent Tank	<ol> <li>Gravity tanks or pressure vessels</li> <li>Tanks designed using the requirements of Pt 3, Ch 15 and Pt 5, Ch 5 of the Rules.</li> </ol>
2	Integral Tank	<ol> <li>Self-supporting hull construction tank</li> <li>Tank having a design pressure not greater than 0.25 bar(Max. 0.7 bar)</li> <li>Boiling point of the cargo not to be below -10°C</li> </ol>
G	Gravity Tank	<ul><li>(1) Independent or integral</li><li>(2) Tank having a design pressure not greater than 0.7 bar</li></ul>
Р	Pressure Tank	<ol> <li>Independent tank</li> <li>Tank designed using the requirements of Pt 5, Ch 5 of the Rules</li> <li>Tank having a design pressure greater than 0.7 bar</li> </ol>

#### 2.5 Bulk Carrier or Cargo Ship

Class Character :



Example :

1) For ships with double bottom structures specially strengthened for the carriage of heavy cargoes KRS 1 - Bulk Carrier 'ESP'

HC

2) For ships with double bottom structures specially strengthened for the carriage of heavy cargoes as an alternate loading

4) In cases where the ship is fitted with BC-B and the maximum cargo density is less than 3.0

KRS 1 - Bulk Carrier 'ESP' HC/E(Hold Nos. 2, 4, 6 and 8 may be empty)

3) In cases where the ship is fitted with BC-B

KRS 1 - Bulk Carrier 'ESP' BC-B

 $t/m^3$ 

- KRS 1 Bulk Carrier 'ESP' BC-B(max cargo density --- t/m<sup>3</sup>)
- 5) In cases where the ship is fitted with BC-A KRS 1 - Bulk Carrier 'ESP' BC-A(Hold Nos. 2, 4, 6 and 8 may be empty)

t/m<sup>3</sup>

- KRS 1 Bulk Carrier 'ESP' BC-A(Hold Nos. 2, 4, 6 and 8 may be empty with max cargo density --- t/m<sup>3</sup>)
- 7) In cases where the ship is fitted with BC-A and the maximum cargo density is less than 3.0  $t/m^3\,$

6) In cases where the ship is fitted with BC-A and the maximum cargo density is less than 3.0

and intended to operate in alternate block load condition.

KRS 1 - Bulk Carrier 'ESP' (CSR) BC-A(Hold Nos. 2, 4, 6 and 8 may be empty with max cargo density --- t/m<sup>3</sup>) (Bock loading)

8) In cases where the ship has not been designed for loading and unloading in multiple ports in accordance with the conditions specified in Pt 7, Ch 3, 201. 5 (3) or Pt 11, Ch 4, Sec 7, [3.3] or Pt 13, Sub-part 1, Ch 4, Sec 8, [4.2.2] of the Rules

KRS 1 – Bulk Carrier 'ESP' BC-A(or BC-B, BC-C) (no MP)



9) In cases where the ship is complied with for unladen grab weight X equal to or greater than 20 tons according to Pt 11, Ch 12, Sec 1 or Pt 13, Sub-part 2, Ch 1, Sec 6 of the Rules

KRS 1 -	Bulk Carrier 'ESP' (CSR) BC-A(or BC-B) GRAB[X]
Othors	

10) Others

KRS 1 - Bulk Carrier

KRS 1C - Cargo Ship HC

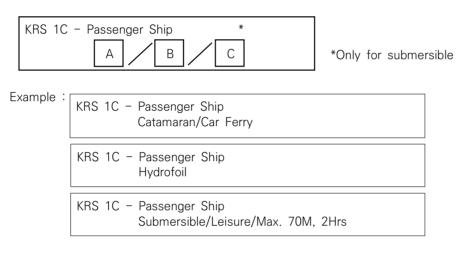


## 2.6 Fishing Vessel

Class Character :

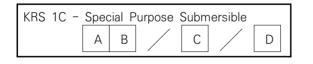
	KRS	1 - Fishing Vessel (Special Feature)
Exar	mple 3	KRS 1 - Fishing Vessel Long Liner and Angling
		KRS 1 - Fishing Vessel Stern Trawler

# 2.7 Passenger Ship



# 2.8 Special Purpose Submersible

Class Character :



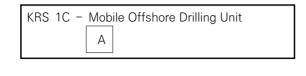
Example :

KRS 1C - Special Purpose Submersible Manned Self-Propelled/Research/Max. 70M, 1.5Hrs



# 2.9 Mobile Offshore Drilling Unit

Class Character :



Example :	KRS 1 – Mobile Offshore Drilling Unit
	Column-stabilized

#### 2.10 Offshore Support Vessel

Class C	haracter	:
---------	----------	---

KRS 1 -	Offsł	nore	Support Vessel
	А	В	

Example :

KRS 1 -	Offshore Support Vessel Supply AH Tow HDC(30 $kN/m^2$ , main deck)
KRS 1 -	Offshore Support Vessel Supply AH Tow HLC(2.5SG, Tank Nos. 3 and 5)

А

Special Feature Notation may be assigned as following according to the specialized functional service of the Offshore Support Vessel.

Special Feature Notation	Specialized Functional Service
Supply	to ships for supply service
AH	to ships for anchor handling service
Tow	to ships for towing service
HL	to ships for heavy lift service
WTIMR	to ships for wind turbine installation, maintenance and repair service
FFS1, FFS2, FFS3	to ships for fire fighting service, FFS1, FFS2 or FFS3 shall be as- signed according to the minimum requirement of Table 8.1 of the <b>Guidance for Offshore Support Vessels</b> . Where a ship, which is comply with the requirements for FFS1, is comply with the re- quirements for FFS2 or FFS3 also, the class notation, Offshore Support Vessel – FFS1 FFS2 or Offshore Support Vessel – FFS1 FFS3 may be assigned.
FF	to ships not in full compliance with Ch 8 of the Guidance for Offshore Support Vessels or not specifically built for the service in- tended to be covered by Ch 8 of the Guidance for Offshore Support Vessels but equipped with some fire fighting capability in accord- ance with Ch 8 of the Guidance for Offshore Support Vessels.
Oil Spill Recovery	to ships for oil spill recovery service

В

- Offshore Support Vessels built with strengthened for carrying heavy cargoes specified in accordance with **Ch 3, 202**. of the **Guidance for Offshore Support Vessels** may be assigned the relevant Special Feature Notation HDC(P, Locations) or HLC( $\rho$ , Tanks) additionally.
- (1) For example, an Offshore Support Vessel for supply service, anchor handling service and towing service, strengthened for heavy deck cargo of  $30 \ kN/m^2$  at main deck may be assigned the class notation Offshore Support Vessel Supply AH Tow HDC( $30 \ kN/m^2$ , main deck).
- (2) For example, an Offshore Support Vessel for supply service, anchor handling service and towing service, strengthened for heavy liquid cargo of specific gravity 2.5 in number 3 and 5 cargo tanks may be assigned the class notation Offshore Support Vessel – Supply AH Tow HLC(2.5SG, Tank Nos. 3 and 5).

# 3.0 Special feature

#### Example :

In cases where the ship is applied to the reduced scantling as the restriction of navigation area and condition :

₩ KRS 0 - Barge

Service between Korea and Sakhalin during May and June

\* Comparison of Ice Class of the Society with Finnish-Swedish Ice Class Rules 2010 and Arctic Shipping Pollution Prevention Regulations

lce Class of the Society	lce Class of Finish-Swedish Ice Class Rules 2010
IA Super	IA Super
IA	IA
IB	IB
IC	IC
×	II

Ice Class of the Society	Ice Class of Arctic Shipping Pollution Prevention Regulations
IA Super	Туре А
IA	Туре В
IB	Туре С
IC	Type D
ID	Type D

### (NOTES)

\*) ID class of the Society is not equal to II class of the Finnish-Swedish Ice Class Rule, because ID class requires strengthening of forward region.