

## SECTION 2

## CLASSIFICATION NOTATIONS

### 1 General

#### 1.1 Purpose of the classification notations

**1.1.1** The classification notations give the scope according to which the class of the ship has been based and refer to the specific rule requirements which are to be complied with for their assignment. In particular, the classification notations are assigned according to the type, service and navigation of the ship and other criteria which have been provided by the Interested Party, when applying for classification.

The Society may change the classification notations at any time, when the information available shows that the requested or already assigned notations are not suitable for the intended service, navigation and any other criteria taken into account for classification.

Note 1: Reference should be made to Sec 1, [1.3] on the limits of classification and its meaning.

**1.1.2** The classification notations assigned to a ship are indicated on the Certificate of Classification, as well as in the Register of Ships published by the Society.

##### 1.1.3 (1/7/2008)

Ships and units, other than those covered in Parts B, C, D, E and F, are to comply with specific Rules published by the Society, which also stipulate the relevant classification notations.

**1.1.4** The classification notations applicable to existing ships conform to the Rules of the Society in force at the date of assignment of class, as indicated in Ch 2, Sec 1. However, the classification notations of existing ships may be updated according to the current Rules, as far as applicable.

#### 1.2 Types of notations assigned

**1.2.1** The types of classification notations assigned to a ship are the following:

- a) main class symbol
- b) construction marks
- c) service notations with additional service features, as applicable
- d) navigation notations
- e) operating area notations (optional)
- f) additional class notations (optional)

The different classification notations and their conditions of assignment are listed in [2] to [6] below, according to their types.

**1.2.2** As an example, the classification notations assigned to a ship may be as follows (the kind of notation shown in

brackets does not form part of the classification notation indicated in the Register of Ships and on the Certificate of Classification):

**C** ✕ **HULL** ✕ **MACH**

(main class symbol, construction marks)

**oil tanker-chemical tanker-ESP-Flash point > 60°C**

(service notation and additional service features)

**Unrestricted navigation**

(navigation notation)

✕**SYS - NEQ**

(additional class notation).

### 2 Main class symbol

#### 2.1 Main class symbol

**2.1.1** The main class symbol expresses the degree of compliance of the ship with the rule requirements as regards its construction and maintenance. There is one main class symbol, which is compulsory for every classed ship.

##### 2.1.2 (1/1/2009)

The main class symbol C is assigned to ships built in accordance with the requirements of the Rules or other rules recognised as equivalent, and maintained in a condition considered satisfactory by the Society. The period of class (or interval between class renewal surveys) assigned to a ship is maximum 5 years; see Ch 2, Sec 2, [4].

Except for special cases, class is assigned to a ship only when the hull, propulsion and auxiliary machinery installations, and equipment providing essential services have all been reviewed in relation to the requirements of the Rules.

Note 1: The symbol C with the 5 year class period is to be understood as being the highest class granted by the Society.

Note 2: The symbol C may be followed by the additional construction feature **light ship** in case of ships or other units having restricted navigation notations and generally having length not greater than 50 m as well as speed greater than 15 knots, whose hull scantlings and outfitting comply with the applicable requirements of Chapters 3 and 6 of the "Rules for the Classification of High Speed Craft", issued separately by the Society.

### 3 Construction marks

#### 3.1 General

**3.1.1** The construction mark identifies the procedure under which the ship and its main equipment or arrangements have been surveyed for initial assignment of the class. The procedures under which the ship is assigned one of the construction marks are detailed in Ch 2, Sec 1.

**3.1.2** One of the construction marks defined below is assigned separately to the hull of the ship and its appendages, to the machinery installation, and to some installations for which an additional classification notation (see [6] below) is assigned.

The construction mark is placed before the symbol **HULL** for the hull, before the symbol **MACH** for the machinery installations, and before the additional class notation granted, when such a notation is eligible for a construction mark.

When the same construction mark is assigned to both hull and machinery, the construction mark is assigned globally to the ship without indication **HULL** and **MACH** after the main class symbol.

If the ship has no machinery installations covered by classification, the symbol **MACH** is not granted and the construction mark will be placed before the symbol **HULL**.

**3.1.3** The construction marks refer to the original condition of the ship. However, the Society may change the construction mark where the ship is subjected to repairs, conversion or alterations.

## 3.2 List of construction marks

**3.2.1** The mark ✕ is assigned to the relevant part of the ship, when it has been surveyed by the Society during its construction in compliance with the new building procedure detailed in Ch 2, Sec 1, [2.1].

### 3.2.2 (1/7/2011)

The mark ✕ is assigned to the relevant part of the ship, when the latter is classed after construction in compliance with the procedure detailed in Ch 2, Sec 1, [3.2] and it was built under the survey of a QSCS Classification Society and was assigned by this Society a class deemed equivalent to that described in the Rules.

This mark is assigned to ships:

- admitted to class in the course of construction surveyed by another QSCS Classification Society;
- for which the procedure detailed in Ch 2, Sec 1, [3.2] does not apply, as it was disclassified from a QSCS Classification Society for a period longer than six months, but which was built according to the Rules and under the survey of a QSCS Classification Society. In this case, the admission to class survey is to confirm that the ship has not undergone conversions or modifications or alterations, which were not approved by a QSCS Classification Society.

**3.2.3** The mark ● is assigned to the relevant part of the ship, where the procedure for the assignment of classification is other than those detailed in [3.2.1] and [3.2.2], but however deemed acceptable.

## 4 Service notations

### 4.1 General

**4.1.1** The service notations define the type and/or service of the ship which have been considered for its classifica-

tion, according to the request for classification signed by the Interested Party. At least one service notation is to be assigned to every classed ship.

Note 1: The service notations applicable to existing ships conform to the Rules of the Society in force at the date of assignment of class. However, the service notations of existing ships may be updated according to the current Rules, as far as applicable, at the request of the Interested Party.

### 4.1.2 (1/4/2006)

The assignment of any service notation to a new ship is subject to compliance with general Rule requirements laid down in Part B, Part C and Part D of the Rules and, for some service notations, the additional requirements laid down in Part E and in the Common Structural Rules for bulk carriers and double hull oil tankers.

**4.1.3** A ship may be assigned several different service notations. In such case, the specific rule requirements applicable to each service notation are to be complied with. However, if there is any conflict in the application of the requirements applicable to different service notations, the Society reserves the right to apply the most appropriate requirements or to refuse the assignment of one of the requested service notations.

### 4.1.4 (1/7/2013)

A service notation may be completed by one or more additional service features, giving further precision regarding the type of service of the ship, for which specific rule requirements are applied.

For each service notation, the different service features which may be assigned are indicated in this item [4]. However, at the request of the Interested Parties, an additional service feature may be assigned together with service notations different from those for which the additional service feature is specifically foreseen in this item [4], upon acceptance of the Society, taking into account the service of the ship for which the assignment of the additional service feature is required.

### 4.1.5 (1/7/2009)

The different service notations which may be assigned to a ship are listed in [4.2] to [4.12], according to the category to which they belong. These service notations are also listed in alphabetical order in Tab 1.

As a rule, all notations in [4.2], [4.3], [4.5] and [4.6] are only to be assigned to self-propelled units.

### 4.1.6 (1/7/2009)

The list of the service notations which may be assigned in accordance with separate Rules is indicated in Tab 2.

In addition, for ships engaged in inland navigation the relevant list of service notations is given in the specific "Rules for the classification of inland waterway ships and for conformity to Directive 2016/1629/EU".

### 4.1.7 (1/7/2009)

The assignment of a service notation does not absolve the Interested Party from compliance with any international and national regulations established by the Administrations. Neither does it waive the requirements in Sec 1, [3.3.1].

## 4.2 Cargo ships

**4.2.1** The service notations related to self-propelled ships intended for the carriage of cargo are listed in [4.2.2] to [4.2.17] below.

**Table 1 : List of service notations assigned in accordance with the requirements of these Rules (1/1/2022)**

Service notation	Reference for definition	Reference chapter in Part E
asphalt tanker	[4.5.8]	Part E, Chapter 7
asphalt tanker ESP	[4.5.9]	Part E, Chapter 7
barge	[4.9.1]	Part E, Chapter 19
bulk carrier ch xii	[4.2.16]	(1)
bulk carrier ch xii - double side-skin	[4.2.17]	(1)
bulk carrier ESP	[4.3.2]	Part E, Chapter 4
bulk carrier ESP CSR	[4.3.3]	Part E, Chapter 4
cable laying unit	[4.8.7]	Part E, Chapter 7
chemical recovery ship	[4.8.6]	Part E, Chapter 28
car carrier	[4.2.5]	(1)
chemical tanker	[4.5.4]	Part E, Chapter 8
chemical tanker - assisted propulsion	[4.5.14]	Part E, Chapter 31
chemical tanker ESP	[4.5.4]	Part E, Chapter 8
cement carrier	[4.2.10]	Part E, Chapter 23
combination carrier/OBO ESP	[4.3.6]	Part E, Chapter 6
combination carrier/OOC ESP	[4.3.7]	Part E, Chapter 6
compressed natural gas carrier	[4.2.11]	Part E, Chapter 24
container ship	[4.2.6]	Part E, Chapter 2
deck cargo ship	[4.2.12]	(1)
dredger	[4.7.2]	Part E, Chapter 13
escort tug	[4.8.2]	Part E, Chapter 14
fire-fighting ship	[4.8.4]	Part E, Chapter 16
fishing vessel	[4.10.1]	Part E, Chapter 20
fly ash carrier	[4.2.9]	(1)
FLS tanker	[4.5.6]	Part E, Chapter 7
general cargo ship	[4.2.2]	(1)
general cargo ship - double-side-skin	[4.2.13]	(1)
hopper dredger	[4.7.2]	Part E, Chapter 13
hopper unit	[4.7.2]	Part E, Chapter 13
liquefied gas carrier	[4.5.5]	Part E, Chapter 9
livestock carrier	[4.2.7]	Part E, Chapter 3
marine mobile desalination unit	[4.5.13]	Part E, Chapter 30
offshore support vessel	[4.8.5]	Part E, Chapter 32
oil carrier - assisted propulsion	[4.5.11]	Part E, Chapter 25
oil recovery ship	[4.8.5]	Part E, Chapter 17
oil tanker	[4.5.2]	Part E, Chapter 7
<p>(1) No additional requirements are specified in Part E for this service notation.</p> <p>(2) No additional requirements are specified in Part E for this service notation; however the requirements of Part F, Chapter 8 for the assignment of the additional class notation <b>REF-CARGO</b> are to be applied.</p> <p>(3) These ships are considered on a case by case basis by the Society according to their type of service.</p>		

Service notation	Reference for definition	Reference chapter in Part E
oil tanker ESP	[4.5.2]	Part E, Chapter 7
oil tanker ESP CSR	[4.5.3]	Part E, Chapter 7
ore carrier ESP	[4.3.5]	Part E, Chapter 5
palm oil carrier - assisted propulsion	[4.5.12]	Part E, Chapter 26
passenger ship	[4.6.2]	Part E, Chapter 11
pipe laying unit	[4.8.9]	Part E, Chapter 22
pontoon	[4.9.2]	Part E, Chapter 19
refrigerated cargo ship	[4.2.5]	(2)
research ship	[4.8.8]	Part E, Chapter 21
ro-ro cargo ship	[4.2.3]	Part E, Chapter 1
ro-ro passenger ship	[4.6.3]	Part E, Chapter 12
salvage tug	[4.8.2]	Part E, Chapter 14
Self-Unloading Bulk Carriers ESP	[4.3.8]	Part E, Chapter 4
special service	[4.12.1]	(3)
split hopper dredger	[4.7.2]	Part E, Chapter 13
split hopper unit	[4.7.2]	Part E, Chapter 13
sugar carrier	[4.2.8]	(1)
supply vessel	[4.8.3]	Part E, Chapter 15
tanker	[4.5.7]	Part E, Chapter 10
transshipping unit transshipping floating terminal	[4.11.1]	Part E, Chapter 27
tug	[4.8.2]	Part E, Chapter 14
well stimulation	[4.8.10]	Part E, Chapter 29
wind turbine installation vessel	[4.8.12]	Part E, Chapter 33
wood chip carrier	[4.2.14]	(1)
<p>(1) No additional requirements are specified in Part E for this service notation.</p> <p>(2) No additional requirements are specified in Part E for this service notation; however the requirements of Part F, Chapter 8 for the assignment of the additional class notation <b>REF-CARGO</b> are to be applied.</p> <p>(3) These ships are considered on a case by case basis by the Society according to their type of service.</p>		

**Table 2 : List of service notations assigned in accordance with the requirements of separate Rules (1/1/2022)**

Service notation	Separate Rules for reference
<b>HSC (1) (2) (3)</b>	Rules for the Classification of High Speed Craft
<b>MODU</b>	Rules for the classification of floating offshore units at fixed locations and mobile offshore drilling units
<b>Fixed platform</b>	Rules for the Classification of Steel Fixed Offshore Platforms
<p><b>FPSO</b>: assigned to units intended for the production, storage and off-loading of liquid hydrocarbons</p> <p><b>FSO</b> : assigned to units intended for the storage and off-loading of liquid hydrocarbons</p> <p><b>FSRU</b>: assigned to units intended for off-loading, storage and/or regasification of liquefied natural gas (LNG) and/or liquefied petroleum gas (LPG)</p> <p><b>FLNG</b>: assigned to units intended for liquefaction, storage and off-loading of natural gas (LNG)</p>	Rules for the classification of floating offshore units at fixed locations and mobile offshore drilling units
<p>(1) The notation is completed by one of the following additional service features, specifying the category of the craft in accordance with the IMO "International Code of Safety for High Speed Craft" :</p> <ul style="list-style-type: none"> <li>• <b>A</b> for a passenger craft which can be defined according to the Code as category A</li> <li>• <b>B</b> for a passenger craft which can be defined according to the Code as category B</li> <li>• <b>C</b> for a cargo craft which can be defined according to the Code as category C.</li> </ul> <p>(2) The notation may also be completed by one of the following additional service features specifying the type of construction:</p> <ul style="list-style-type: none"> <li>• <b>MON</b> if the craft is a monohull</li> <li>• <b>CAT</b> if the craft is a catamaran</li> <li>• <b>HYF</b> if the craft is a hydrofoil</li> <li>• <b>ACV</b> if the craft is an air-cushion vehicle</li> <li>• <b>SES</b> if the craft is a surface effect ship</li> <li>• <b>SWATH</b> if the craft is a twin hull small waterplane vehicle.</li> </ul> <p>(3) The notation may be followed by the service notations specified in [4], as applicable; for example by the notation <b>ro-ro passenger ship</b> for a passenger craft specially equipped to load trains or wheeled vehicles.</p> <p>(4) The notation may be completed by the following additional service features:</p> <ul style="list-style-type: none"> <li>• <b>12 m SI</b> for boats of 12-metre international rating class</li> <li>• <b>6 m SI</b> for boats of 6-metre international rating class.</li> </ul> <p>(5) The notation may be completed by the following additional service features:</p> <ul style="list-style-type: none"> <li>• <b>Crew Transfer Vessel - CTV</b>: when workboat is designed to transport technician and other personnel out to sites.</li> <li>• <b>Dive Support Vessel - DSV</b>: when workboat is designed to support the offshore diving operation.</li> <li>• <b>MULTICAT</b>: when the workboat are designed as multi-purpose workboat for offshore works and transport. Normally a multicat is equipped with one or more winches and cranes as well as a spacious flat deck.</li> <li>• <b>Patrol and Guard Vessel</b>: when the workboat is designed to patrol a coastal area or site for security, observation and defense.</li> <li>• <b>Pilot boats</b>: when workboat is designed to transport maritime pilots from harbors to ships that need piloting, or vice versa.</li> <li>• <b>Seismic and Geotechnical Survey Vessel</b>: when workboat is designed for the purpose of research, seismic survey and mapping at seas</li> <li>• <b>Taxi</b>: when the workboat is designed to transport paying passengers on rivers, canals, or sea coastal area.</li> <li>• <b>Windfarm Service Vessel - WSV</b>: when workboat is designed to transport technician and other personnel to offshore wind farm and to support operations of wind farm maintenance and survey.</li> </ul> <p>(6) The notation may be completed by the following additional service features:</p> <ul style="list-style-type: none"> <li>• <b>passenger ship WIG - TYPE A</b> for a WIG which can be defined according to MSC.1/Circ.1592 as a Type A and which carry more than 12 passengers</li> <li>• <b>cargo ship WIG - TYPE A</b> for a WIG which h can be defined according to MSC.1/Circ.1592 as a Type A and which carry not more than 12 passengers</li> <li>• <b>passenger ship WIG - TYPE B</b> for a WIG which can be defined according to MSC.1/Circ.1592 as a Type B and which carry more than 12 passengers</li> <li>• <b>WIG -TYPE B cargo ship</b> for a WIG which can be defined according to MSC.1/Circ.1592 as a Type B and which carry not more than 12 passengers</li> </ul>	

Service notation	Separate Rules for reference
lifting unit	Rules for loading and unloading arrangements and for other lifting appliances on board ships
floating dock	Rules for the classification of floating docks
submersible	Rules for the classification of underwater units
submersible pontoon	Rules for the classification of underwater units
submersible pontoon launching	Rules for the classification of underwater units
submarine	Rules for the classification of underwater units
bathyscaphe	Rules for the classification of underwater units
mesoscaphe	Rules for the classification of underwater units
bathysphere	Rules for the classification of underwater units
mesosphere	Rules for the classification of underwater units
MSS	Rules for the classification of underwater units
hyperbaric diving bell	Rules for the classification of underwater units
Isobaric diving bell	Rules for the classification of underwater units
ROV	Rules for the classification of underwater units
diving-suit	Rules for the classification of underwater units
<p>(1) The notation is completed by one of the following additional service features, specifying the category of the craft in accordance with the IMO "International Code of Safety for High Speed Craft" :</p> <ul style="list-style-type: none"> <li>• <b>A</b> for a passenger craft which can be defined according to the Code as category A</li> <li>• <b>B</b> for a passenger craft which can be defined according to the Code as category B</li> <li>• <b>C</b> for a cargo craft which can be defined according to the Code as category C.</li> </ul> <p>(2) The notation may also be completed by one of the following additional service features specifying the type of construction:</p> <ul style="list-style-type: none"> <li>• <b>MON</b> if the craft is a monohull</li> <li>• <b>CAT</b> if the craft is a catamaran</li> <li>• <b>HYF</b> if the craft is a hydrofoil</li> <li>• <b>ACV</b> if the craft is an air-cushion vehicle</li> <li>• <b>SES</b> if the craft is a surface effect ship</li> <li>• <b>SWATH</b> if the craft is a twin hull small waterplane vehicle.</li> </ul> <p>(3) The notation may be followed by the service notations specified in [4], as applicable; for example by the notation <b>ro-ro passenger ship</b> for a passenger craft specially equipped to load trains or wheeled vehicles.</p> <p>(4) The notation may be completed by the following additional service features:</p> <ul style="list-style-type: none"> <li>• <b>12 m SI</b> for boats of 12-metre international rating class</li> <li>• <b>6 m SI</b> for boats of 6-metre international rating class.</li> </ul> <p>(5) The notation may be completed by the following additional service features:</p> <ul style="list-style-type: none"> <li>• <b>Crew Transfer Vessel - CTV</b>: when workboat is designed to transport technician and other personnel out to sites.</li> <li>• <b>Dive Support Vessel - DSV</b>: when workboat is designed to support the offshore diving operation.</li> <li>• <b>MULTICAT</b>: when the workboat are designed as multi-purpose workboat for offshore works and transport. Normally a multicat is equipped with one or more winches and cranes as well as a spacious flat deck.</li> <li>• <b>Patrol and Guard Vessel</b>: when the workboat is designed to patrol a coastal area or site for security, observation and defense.</li> <li>• <b>Pilot boats</b>: when workboat is designed to transport maritime pilots from harbors to ships that need piloting, or vice versa.</li> <li>• <b>Seismic and Geotechnical Survey Vessel</b>: when workboat is designed for the purpose of research, seismic survey and mapping at seas</li> <li>• <b>Taxi</b>: when the workboat is designed to transport paying passengers on rivers, canals, or sea coastal area.</li> <li>• <b>Windfarm Service Vessel - WSV</b>: when workboat is designed to transport technician and other personnel to offshore wind farm and to support operations of wind farm maintenance and survey.</li> </ul> <p>(6) The notation may be completed by the following additional service features:</p> <ul style="list-style-type: none"> <li>• <b>passenger ship WIG - TYPE A</b> for a WIG which can be defined according to MSC.1/Circ.1592 as a Type A and which carry more than 12 passengers</li> <li>• <b>cargo ship WIG - TYPE A</b> for a WIG which h can be defined according to MSC.1/Circ.1592 as a Type A and which carry not more than 12 passengers</li> <li>• <b>passenger ship WIG -TYPE B</b> for a WIG which can be defined according to MSC.1/Circ.1592 as a Type B and which carry more than 12 passengers</li> <li>• <b>WIG -TYPE B cargo ship</b> for a WIG which can be defined according to MSC.1/Circ.1592 as a Type B and which carry not more than 12 passengers</li> </ul>	

Service notation	Separate Rules for reference
<b>habitat</b>	Rules for the classification of underwater units
<b>SEALAB</b>	Rules for the classification of underwater units
<b>submersible igloo</b>	Rules for the classification of underwater units
<b>stowage reservoir</b>	Rules for the classification of underwater units
<b>decompression chamber</b>	Rules for the classification of underwater units
<b>diving system</b>	Rules for the classification of underwater units
<b>Y</b>	Rules for the Classification of Pleasure Yachts
<b>Y<sub>ch</sub></b>	Rules for the Classification of Yachts designed for commercial use
<b>racingsailing boat (4)</b>	Rules for the construction and classification of racing sailing boats
<b>WIG (6)</b>	Rules for the classification of Wing-In-Ground (WIG) Craft
<b>workboat (5)</b>	Rules for the Classification of Workboats
<p>(1) The notation is completed by one of the following additional service features, specifying the category of the craft in accordance with the IMO "International Code of Safety for High Speed Craft" :</p> <ul style="list-style-type: none"> <li>• <b>A</b> for a passenger craft which can be defined according to the Code as category A</li> <li>• <b>B</b> for a passenger craft which can be defined according to the Code as category B</li> <li>• <b>C</b> for a cargo craft which can be defined according to the Code as category C.</li> </ul> <p>(2) The notation may also be completed by one of the following additional service features specifying the type of construction:</p> <ul style="list-style-type: none"> <li>• <b>MON</b> if the craft is a monohull</li> <li>• <b>CAT</b> if the craft is a catamaran</li> <li>• <b>HYF</b> if the craft is a hydrofoil</li> <li>• <b>ACV</b> if the craft is an air-cushion vehicle</li> <li>• <b>SES</b> if the craft is a surface effect ship</li> <li>• <b>SWATH</b> if the craft is a twin hull small waterplane vehicle.</li> </ul> <p>(3) The notation may be followed by the service notations specified in [4], as applicable; for example by the notation <b>ro-ro passenger ship</b> for a passenger craft specially equipped to load trains or wheeled vehicles.</p> <p>(4) The notation may be completed by the following additional service features:</p> <ul style="list-style-type: none"> <li>• <b>12 m SI</b> for boats of 12-metre international rating class</li> <li>• <b>6 m SI</b> for boats of 6-metre international rating class.</li> </ul> <p>(5) The notation may be completed by the following additional service features:</p> <ul style="list-style-type: none"> <li>• <b>Crew Transfer Vessel - CTV</b>: when workboat is designed to transport technician and other personnel out to sites.</li> <li>• <b>Dive Support Vessel - DSV</b>: when workboat is designed to support the offshore diving operation.</li> <li>• <b>MULTICAT</b>: when the workboat are designed as multi-purpose workboat for offshore works and transport. Normally a multicat is equipped with one or more winches and cranes as well as a spacious flat deck.</li> <li>• <b>Patrol and Guard Vessel</b>: when the workboat is designed to patrol a coastal area or site for security, observation and defense.</li> <li>• <b>Pilot boats</b>: when workboat is designed to transport maritime pilots from harbors to ships that need piloting, or vice versa.</li> <li>• <b>Seismic and Geotechnical Survey Vessel</b>: when workboat is designed for the purpose of research, seismic survey and mapping at seas</li> <li>• <b>Taxi</b>: when the workboat is designed to transport paying passengers on rivers, canals, or sea coastal area.</li> <li>• <b>Windfarm Service Vessel - WSV</b>: when workboat is designed to transport technician and other personnel to offshore wind farm and to support operations of wind farm maintenance and survey.</li> </ul> <p>(6) The notation may be completed by the following additional service features:</p> <ul style="list-style-type: none"> <li>• <b>passenger ship WIG - TYPE A</b> for a WIG which can be defined according to MSC.1/Circ.1592 as a Type A and which carry more than 12 passengers</li> <li>• <b>cargo ship WIG - TYPE A</b> for a WIG which h can be defined according to MSC.1/Circ.1592 as a Type A and which carry not more than 12 passengers</li> <li>• <b>passenger ship WIG - TYPE B</b> for a WIG which can be defined according to MSC.1/Circ.1592 as a Type B and which carry more than 12 passengers</li> <li>• <b>WIG - TYPE B cargo ship</b> for a WIG which can be defined according to MSC.1/Circ.1592 as a Type B and which carry not more than 12 passengers</li> </ul>	

**4.2.2 (1/7/2015)**

**general cargo ship**, for ships intended to carry general cargo.

The service notation may be completed by the additional service features as per [4.2.15], as applicable.

Note 1: With respect to the survey requirements of Ch 4, Sec 8, "General Dry Cargo Ships" are those self-propelled general cargo ships of 500 gt and above carrying solid cargoes other than:

- bulk carriers and combination carriers of single side skin construction or double skin bulk carriers
- dedicated container carriers
- ro-ro cargo ships
- refrigerated cargo ships
- dedicated wood chip carriers
- dedicated cement carriers
- livestock carriers
- deck cargo ships (a "deck cargo ship" is a ship that is designed to carry cargo exclusively above deck without any access for cargo below deck),
- general 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,
- sugar carriers,
- fly ash carriers.

**4.2.3 (1/7/2015)**

**ro-ro cargo ship**, for ships specially intended to carry vehicles, trains or loads on wheeled beds. The additional requirements of Part E, Chapter 1 are applicable to these ships. The service notation may be completed by the additional service features as per [4.2.15], as applicable.

**4.2.4 (1/7/2016)**

**car carrier**, for ro-ro cargo ships specially intended with multi deck ro-ro spaces designed for the carriage of empty cars and trucks as cargo.

The service notation may be completed by the additional service features in [4.2.15], as applicable.

**4.2.5 (1/7/2015)**

**refrigerated cargo ship**, for ships specially intended to carry refrigerated cargo. No additional requirements are specified in Part E for this service notation; however, the requirements of Part F, Chapter 8 for the assignment of the additional class notation **REF-CARGO** are to be applied. The service notation may be completed by the additional service features as per [4.2.15], as applicable.

**4.2.6 (1/7/2015)**

**container ship**, for ships specially intended to carry containers in holds or on decks. The additional requirements of Part E, Chapter 2 are applicable to these ships.

The service notation may be completed by the additional service feature **OPEN TOP**. The additional service feature is assigned to container ships that are specially designed so that one or more of the cargo holds need not be fitted with hatch covers. The requirements for the assignment of this

additional service feature are given in Pt E, Ch 2, Sec 2, [2.1.4], [2.1.5] and Pt E, Ch 2, Sec 3, [1.1.1].

The service notation may be completed by other additional service features as per [4.2.15], as applicable.

**4.2.7 (1/7/2015)**

**livestock carrier**, for ships specially intended to carry livestock. The additional requirements of Part E, Chapter 3 are applicable to these ships.

**4.2.8 (1/7/2015)**

**sugar carrier**, for ships intended for the carriage of sugar in bulk and provided with loading and unloading arrangements such that these operations are not carried out by grabs heavier than 10 t, power shovels or other means which frequently damage cargo hold structures.

The service notation may be completed by the additional service features as per [4.2.15], as applicable.

**4.2.9 (1/7/2015)**

**fly ash carrier**, for ships intended for the carriage of fly ash in bulk and provided with loading and unloading arrangements such that these operations are not carried out by grabs heavier than 10 t, power shovels or other means which frequently damage cargo hold structures.

The service notation may be completed by the additional service features as per [4.2.15], as applicable.

**4.2.10 (1/7/2015)**

**cement carrier**, for ships specially intended to carry cement in bulk in holds and equipped with fixed arrangements for that purpose. The additional requirements of Part E, Chapter 23 are applicable to these ships.

The service notation may be completed by the additional service features as per [4.2.15], as applicable.

**4.2.11 (1/7/2012)**

**compressed natural gas carrier**, for ships specially intended to carry compressed natural gas (CNG ships) in specifically designed cargo tanks. The additional requirements of Part E, Chapter 24 are applicable to these ships.

**4.2.12 (1/7/2015)**

**deck cargo ship**, for ships intended to carry solid general cargo exclusively above deck without any access for cargo below deck.

The service notation may be completed by the additional service features as per [4.2.15], as applicable.

**4.2.13 (1/7/2015)**

**general cargo ship - double side-skin**, for ships intended to carry solid general cargo 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.

The service notation may be completed by the additional service features as per [4.2.15], as applicable.

**4.2.14 (1/7/2015)**

**wood chip carrier**, for ships intended for the carriage of wood chip.

The service notation may be completed by the additional service features in [4.2.15], as applicable.



**4.2.15 (1/7/2016)**

The service notations listed in [4.2.1] to [4.2.13] may be completed by the following additional service features, as applicable:

- **equipped for carriage of containers**, where the ship's fixed arrangements comply with the applicable rule requirements in Part E, Chapter 2
- **heavycargo [ AREA1, X1 kN/m<sup>2</sup> - AREA2, X2 kN/m<sup>2</sup> - ...**

when the cargo areas intended to support heavy cargoes fulfill the appropriate rule requirements. The values Xi indicate the maximum allowable local pressures on the various AREAs where the cargo is intended to be stowed. The requirements for the assignment of this additional service feature are given in Pt B, Ch 5, Sec 6, [4.1.2]

- **nonhomload**, when the ship has been designed in such a way that the cargo spaces may be loaded non-homogeneously, including cases where some holds may be empty, at a draught up to the scantling draught and fulfill the appropriate rule requirements for general strength, and when the corresponding loading conditions are listed in the reviewed loading manual. This notation can be completed with the indication of the different maximum loads allowed in each hold and which holds may be empty, if appropriate.
- **P** when the ship is intended for the exclusive carriage of goods in package or any other form excluding solid goods in bulk,
- **BC** applicable to:
  - a) single skin ship having length less than 100 m and no reduced freeboard which is intended to carry dry cargoes in bulk and comply with the following requirements of SOLAS Ch XII regulations:
    - XII/11: "Loading Instrument"
    - XII/12: "Hold, Ballast and Dry Space Water Ingress Alarms"
    - XII/13: "Availability of Pumping Systems".

Ships having length greater than or equal to 100 m or reduced freeboard are to comply with the requirements for the assignment of the additional service feature **BC Ch XII**.

- b) double skin ship having no reduced freeboard which is intended to carry dry cargoes in bulk and comply with the following requirements of SOLAS Ch XII regulations:
  - II-1/3-2.2: "Protective Coatings of Dedicated Seawater Ballast Tanks in All Types of Ships and Double-Side Skin Spaces of Bulk Carriers"
  - XII/6.2, 6.3 and 6.4: "Structural and Other Requirements for Bulk Carriers"
  - XII/11: "Loading Instrument"
  - XII/12: "Hold, Ballast and Dry Space Water Ingress Alarms"
  - XII/13: "Availability of Pumping Systems".

Ships having reduced freeboard are to comply with the requirements for the assignment of the additional service feature **BC Ch XII**.

- **BC Ch XII**: applicable to ships intended to primarily carry dry cargoes in bulk, which are not constructed with the typical midship section arrangements as per [4.3.2] or [4.3.3] and comply with the requirements in Parts A, B, C and D, as applicable, and with the requirements in SOLAS, Chapter XII.
- **H-CNG**: applicable to car carriers when ro-ro spaces comply with the rule requirements in Part E, Chapter 1.

**4.2.16 (20/9/2017)**

**bulk carrier ch xii**, for general cargo ships intended to primarily carry dry cargoes in bulk, which are not constructed with the typical midship section arrangements as per [4.3.2] or [4.3.3] and comply with the requirements in Parts A, B, C and D, as applicable, and with the requirements in SOLAS, Chapter XII.

At Owner request this notation can be assigned as equivalent to that assigned for a general cargo ship, with service feature **BC Ch XII** (refer to [4.2.15]).

**4.2.17 (1/1/2018)**

**bulk carrier ch xii - double side-skin** applies to ships in compliance with [4.2.16] and 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.

**4.3 Bulk, ore and combination carriers****4.3.1 (1/7/2016)**

The service notations related to self-propelled ships (see Note 1) intended for the carriage of dry cargo in bulk are listed in [4.3.2] to [4.3.7] below.

The service notations described in this item are always completed by the additional service feature **ESP**, which means that these ships are submitted to the Enhanced Survey Program as laid down in Ch 4, Sec 2.

Example: **ore carrier ESP**

Note 1: Self-propelled ships are ships with mechanical means of propulsion not requiring assistance from another ship during normal operation.

The service notation **bulk carrier** is completed by the additional service feature **CSR** for bulk carriers built in accordance with:

- the "Common Structural Rules for Bulk Carriers" (i.e. single side skin and double side skin bulk carriers with unrestricted navigation, having length L of 90 m or greater, contracted for construction on or after 1 April 2006 but before 1 July 2015), or
- the "Common Structural Rules for Bulk Carriers and Oil Tankers" (i.e. single side skin and double side skin bulk carriers, self-propelled with unrestricted navigation, having length L of 90 m or greater, contracted for construction on or after 1 July 2015).

Example: **bulk carrier ESP CSR**

**4.3.2 (1/4/2006)**

**bulk carrier ESP**, for self-propelled 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 (see Note 1). Typical midship sections are given in Fig 1. However, other midship

section arrangements may be accepted, if deemed equivalent by the Society.

The additional requirements of Part E, Chapter 4 are applicable to these ships.

Note 1: For bulk carriers with hybrid cargo hold arrangements, i.e. with some cargo holds of single side skin and others of double side skin, the requirements of Ch 4, Sec 2 are to apply to cargo holds of single side skin and those of Ch 4, Sec 9 to cargo holds of double side skin.

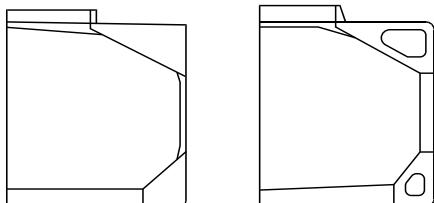
**4.3.3 (1/4/2006)**

**bulk carrier ESP CSR**, for self-propelled 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 dry cargoes in bulk (see Note 1), with unrestricted worldwide navigation, having length L of 90 m or greater, contracted for construction on or after 1 April 2006. Typical midship sections are given in Fig 1.

The additional requirements of Part E, Chapter 4 are applicable to these ships with the limitations indicated therein.

Note 1: For bulk carriers with hybrid cargo hold arrangements, i.e. with some cargo holds of single side skin and others of double side skin, the requirements of Ch 4, Sec 2 are to apply to cargo holds of single side skin and those of Ch 4, Sec 9 to cargo holds of double side skin.

**Figure 1 : Typical midship sections of ships with service notation bulk carrier ESP**



Left: Single side skin construction

Right: Double side skin construction

**4.3.4 (1/4/2006)**

The service notations in [4.3.2] and [4.3.3] may be completed by the following additional service features, as applicable:

- **heavycargo [HOLDi, Xi kN/m<sup>2</sup>, pi kN/m<sup>3</sup> - HATCHi, Yi kN/m<sup>2</sup>]**, when the ship's structure designed to support heavy cargoes fulfils the appropriate Rule requirements.

The values Xi and Yi indicate, respectively, the maximum allowable local pressures on the inner bottoms of the various HOLDi and on the hatch covers HATCHi where the cargo is intended to be stowed and pi is the maximum density of the bulk cargo allowable for carriage in the relevant HOLDi. The requirements for the assignment of this additional service feature are given in Pt E, Ch 4, Sec 3, [4.8];

- **nonhomload**, when the ship has been designed in such a way that the cargo spaces may be loaded non-homogeneously, including cases where some holds may be empty, at a draught up to the scantling draught and fulfil the appropriate Rule requirements for general strength, and when the corresponding loading conditions are listed in the reviewed loading manual. This notation can

be completed with the indication of the different maximum loads allowed in each hold and which holds may be empty, if appropriate.

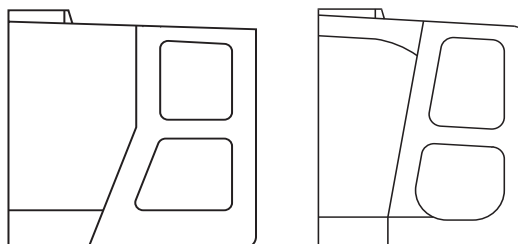
- **double skin**, when the ship is constructed in accordance with the definition given in Ch 2, Sec 2, [2.2.21].

**4.3.5 (1/1/2005)**

The notation **ore carrier ESP**, or equivalent, is to be assigned to self-propelled 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 2. However, other midship section arrangements may be accepted, if deemed equivalent by the Society.

The additional requirements of Part E, Chapter 5 are applicable to these ships.

**Figure 2 : Typical midship section of ship with service notation ore carrier ESP (1/1/2005)**

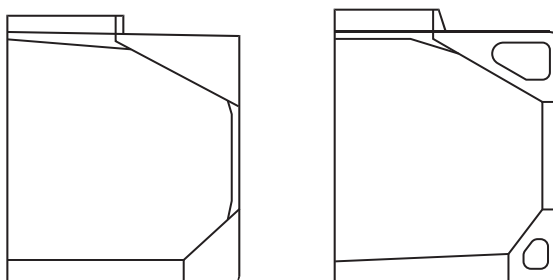


**4.3.6 (1/1/2012)**

**combination carrier/OBO ESP** for self-propelled ships intended to carry both oil and dry cargoes in bulk; these cargoes are not carried simultaneously, with the exception of oily mixture retained in slop tanks. This notation is 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. Typical midship sections are given in Fig 3. The additional requirements of Part E, Chapter 6 are applicable to these ships.

Note 1: Combination carriers/OBO that do not comply with MARPOL I/19 may be subject to international and/or national regulations requiring phase out.

**Figure 3 : Typical midship section of ship with service notation combination carrier/OBO ESP (1/1/2005)**



Left: Single side skin construction

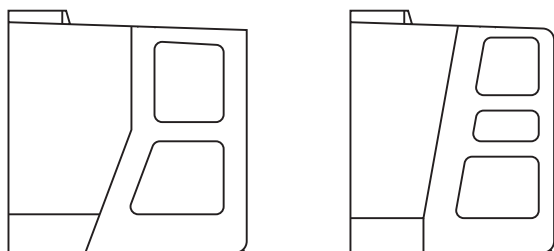
Right: Double side skin construction

#### 4.3.7 (1/1/2012)

**combination carrier/OOC ESP**, for self-propelled ships intended to carry both oil and dry cargoes in bulk; these cargoes are not carried simultaneously, with the exception of oily mixture retained in slop tanks. This notation is 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 and oil cargoes in the centre holds and wing tanks. Typical midship sections are given in Fig 4. The additional requirements of Part E, Chapter 6 are applicable to these ships.

Note 1: Combination carriers/OOC that do not comply with MARPOL I/19 may be subject to international and/or national regulations requiring phase out.

**Figure 4 : Typical midship sections of ships with service notation combination carrier/OOC ESP (1/1/2005)**

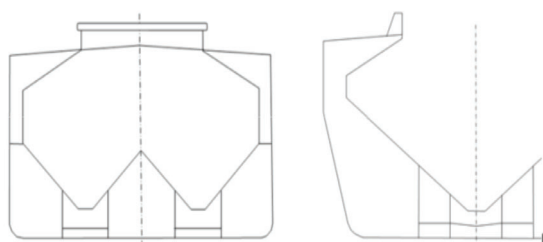


#### 4.3.8 (1/1/2017)

**Self-Unloading Bulk Carriers ESP**, or equivalent, is assigned self-propelled 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 5. However, other midship section arrangements may be accepted, if deemed equivalent by the Society.

Note 1: Combination carriers/OOC that do not comply with MARPOL I/19 may be subject to international and/or national regulations requiring phase out.

**Figure 5 : Typical midship sections of ships with service notation Self-Unloading Bulk Carriers/Self-Unloaders ESP (1/1/2017)**



### 4.4 Additional service features and corresponding design loading conditions for bulk carriers

#### 4.4.1 (1/1/2021)

The requirements of item [4.4] are applicable to bulk carriers as defined in [4.3.2]:

- having length as defined in Note 1 of 150 m or greater and contracted for new construction on or after 1 July 2003 but before 1 July 2020; and
- having length as defined in Note 2 of 150 m or greater and contracted for new construction on or after 1 July 2020.

For **bulk carriers ESP CSR**, as defined in [4.3.3], having length as defined in Note 1 of 150 m or greater and contracted for new construction on or after 1 April 2006 but before 1 July 2015, the requirements of the "Common Structural Rules for Bulk Carriers", Sec 1, [3] apply instead.

For **bulk carriers ESP CSR**, as defined in [4.3.3], having length as defined in Note 2 of 150 m or greater and contracted for new construction on or after 1 July 2015, the requirements of the "Common Structural Rules for Bulk Carriers", Ch 1, Sec 1, [3] apply instead.

Note 1: The length L is the distance, in m, measured on the summer load waterline, from the forward side of the stem to the after side of the rudder post, or to the centre of the rudder stock where there is no rudder post. L is to be not less than 96% and need not exceed 97% of the extreme length on the summer load waterline.

Note 2: The length L is the distance, in m, measured on the waterline at the scantling draught, from the forward side of the stem to the after side of the rudder post, or to the centre of the rudder stock where there is no rudder post. L is to be not less than 96% and need not exceed 97% of the extreme length on the waterline at the scantling draught.

#### 4.4.2 (1/7/2003)

The loading conditions listed in Pt E, Ch 4, Sec 3, [4.1], Pt E, Ch 4, Sec 3, [4.2] and Pt E, Ch 4, Sec 3, [4.3] are to be used for the checking of rule criteria regarding longitudinal strength (as required by Pt B, Ch 6, Sec 2, [3] and Pt E, Ch 4, Sec 3, [5]), local strength, capacity and arrangement of ballast tanks and stability. The loading conditions listed in Pt E, Ch 4, Sec 3, [4.8]) are to be used for the checking of rule criteria regarding local strength.

#### 4.4.3 (1/1/2021)

For the purpose of applying the conditions for the assignment of the additional service features in [4.4.4], maximum draught is to be taken as moulded summer load line draught.

#### 4.4.4 (1/7/2003)

Bulk carriers are to be assigned one of the following additional service features.

- BC-A:** for bulk carriers designed to carry dry bulk cargoes of cargo density  $1,0 \text{ t/m}^3$  and greater with specified holds empty at maximum draught in addition to **BC-B** conditions.
- BC-B:** for bulk carriers designed to carry dry bulk cargoes of cargo density of  $1,0 \text{ t/m}^3$  and greater with all cargo holds loaded in addition to **BC-C** conditions.
- BC-C:** for bulk carriers designed to carry dry bulk cargoes of cargo density less than  $1,0 \text{ t/m}^3$ .

The following additional service features are to be provided giving further detailed description of limitations to be observed during operation as a consequence of the design loading condition applied during the design in the following cases:

- **maximum cargo density** (in t/m<sup>3</sup>) for notations **BC-A** and **BC-B**, if the maximum cargo density is less than 3.0 t/m<sup>3</sup>
- **no MP** for all notations, when the vessel has not been designed for loading and unloading in multiple ports in accordance with the conditions specified in Pt E, Ch 4, Sec 3, [4.5.4]
- **allowed combination of specified empty holds** for notation **BC-A**.

Note 1: The requirements of this item [4.4] are not intended to prevent any other loading conditions being included in the loading manual, for which calculations are to be submitted as required; nor are they intended to replace in any way the required loading manual/instrument.

Note 2: A bulk carrier in actual operation may be loaded differently from the design loading conditions specified in the loading manual, provided limitations for longitudinal and local strength as defined in the loading manual and loading instrument on board and applicable stability requirements are not exceeded.

## 4.5 Ships carrying liquid cargo in bulk

### 4.5.1 (1/5/2013)

The service notations related to self-propelled ships (see Note 1) intended for the carriage of liquid cargo in bulk are listed in [4.5.2] to [4.5.10] below.

Note 1: Self-propelled ships are ships with mechanical means of propulsion not requiring assistance from another ship during normal operation.

The service notations related to assisted propulsion units (see [4.9.4]) intended for the carriage of liquid cargo in bulk are listed in [4.5.11] and [4.5.12] below.

### 4.5.2 (1/1/2012)

**oil tanker**, for self-propelled ships which are intended primarily to carry in bulk crude oil or other oil products having any flash point, liquid at atmospheric pressure and ambient temperature (or thus maintained by heating).

This notation is to be assigned to tankers of both single and double hull construction, as well as tankers with alternative structural arrangements, provided they are deemed equivalent by the Society.

For oil tankers with integral cargo tanks, the service notation **oil tanker** is always completed by the additional service feature **ESP** (i.e. **oil tanker ESP**), which means that these ships are submitted to the Enhanced Survey Program as laid down in Ch 4, Sec 3 or Ch 4, Sec 4, as applicable.

Note 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.

The service notation may be completed by the following additional service features, as applicable:

- **flash point > 60°C**, where the ship is intended to carry only such type of products, under certain conditions
- **double hull**, when the ship is constructed in accordance with the definition given in Ch 2, Sec 2, [2.2.18]
- **double hull (heavy grades)**, when the ship is constructed in accordance with the definition given in Ch 2, Sec 2, [2.2.20]
- **double hull (independent tanks)**, when the ship is constructed in accordance with the definition given in Ch 2, Sec 2, [2.2.19]
- **product**, where the ship is intended to carry only products other than crude oil.

The additional requirements of Part E, Chapter 7 are applicable to these ships.

### 4.5.3 (1/7/2016)

The service notation **oil tanker ESP** is always completed by the additional service feature **CSR** for oil tankers built in accordance with:

- the "Common Structural Rules for Double Hull Oil Tankers" (i.e. double hull oil tankers, having length L of 150 m or greater, contracted for construction on or after 1 April 2006 but before 1 July 2015), or
- the "Common Structural Rules for Bulk Carriers and Oil Tankers" (i.e. double hull oil tankers, self-propelled with unrestricted navigation, having length L of 150 m or greater, contracted for construction on or after 1 July 2015).

Example: **oil tanker ESP CSR**

The additional requirements of Part E, Chapter 7 are applicable to these ships with the limitations indicated therein.

### 4.5.4 (1/7/2011)

**chemical tanker**, for self-propelled ships which intended primarily to carry in bulk chemical products presenting safety and/or pollution hazards. This notation is to be assigned to tankers of both single and double hull construction, as well as tankers with alternative structural arrangements, provided they are deemed equivalent by the Society.

For chemical tankers with integral cargo tanks, the service notation **chemical tanker** is always completed by the additional service feature **ESP** (i.e. **chemical tanker ESP**), which means that these ships are submitted to the Enhanced Survey Program as laid down in Ch 4, Sec 5.

The additional requirements of Part E, Chapter 8 are applicable to these ships.

The list of products the ship is allowed to carry is attached to the Certificate of Classification or the Certificate of Fitness, where issued by the Society, including, where necessary, the maximum allowable specific gravity and/or temperature.

The service notation may be completed by the additional service feature **IMO 1**, **IMO 2** or **IMO 3**, when the ship complies with the requirements for the assignment of type 1, type 2 or type 3, respectively, in accordance with Chapter 2 of the IBC Code.

**4.5.5 (1/1/2021)**

**liquefied gas carrier**, for ships specially intended to carry liquefied gases or other substances listed in Pt E, Ch 9, Sec 1. The additional requirements of Part E, Chapter 9 are applicable to these ships.

The list of products the ship is allowed to carry is attached to the Certificate of Classification or the Certificate of Fitness, where issued by the Society, including, where necessary, the conditions of transportation (pressure, temperature, filling limits).

The service notation may be completed by the following additional service features:

- a) **LNG BUNKER** when the ship is in compliance with the requirements in Pt E, Ch 9, App 1; and
- b) **REGASIFICATION SYSTEM** when the ship is fitted with a regasification system in compliance with the requirements in Pt E, Ch 9, App 2.

**4.5.6 (1/4/2006)**

**FLS tanker**, for ships specially intended to carry in bulk flammable liquid products other than those covered by the service notations **oil tanker ESP**, **oil tanker ESP CSR**, **chemical tanker ESP** or **liquefied gas carrier**

The list of products the ship is allowed to carry may be attached to the Certificate of Classification, including, where necessary, the maximum allowable specific gravity and/or temperature.

The service notation may be completed by the additional service feature **flash point > 60°C**, where the ship is intended to carry only such type of products, under certain conditions.

For ships intended to carry only one type of cargo, the service notation may be completed by the additional service feature indicating the type of product carried, e.g. **FLS tanker-acetone**.

The additional requirements of Part E, Chapter 7 are applicable to these ships.

**4.5.7 tanker**, for ships intended to carry non-flammable liquid cargoes in bulk other than those covered by the service notations in [4.5.2] to [4.5.6] above, such as wine or water.

The list of cargoes the ship is allowed to carry may be attached to the Certificate of Classification.

For ships intended to carry only one type of cargo, the service notation may be completed by the additional service feature indicating the type of product carried, e.g. **tanker-potable water**.

The additional requirements of Part E, Chapter 10 are applicable to these ships.

**4.5.8 (1/7/2018)**

**asphalt tanker**, for self-propelled ships which are constructed with independent, non-integral cargo tanks, intended to only carry such type of products, under certain conditions. The maximum cargo temperature will be indicated on the Certificate of Classification.

The additional requirements of Part E, Chapter 7 are applicable to these ships.

For asphalt tankers assigned with other service notations, **asphalt carrier** may be used at the request of the Interested Party in lieu of asphalt tanker provided that all the requirements applicable to asphalt tankers are applicable to these ships.

**4.5.9 (1/7/2011)**

For asphalt tankers intended to only carry such type of products under certain conditions, but with integral cargo tanks, the service notation **asphalt tanker** is always completed by the additional service feature **ESP** (i.e. **asphalt tanker ESP**), which means that these ships are submitted to the Enhanced Survey Program as laid down in Ch 4, Sec 3. The maximum cargo temperature will be indicated on the Certificate of Classification.

The additional requirements of Part E, Chapter 7 are applicable to these ships.

**4.5.10** Refer also to [4.3.6] and [4.3.7] for **combination carrier** intended to carry alternatively oil products and dry cargo in bulk in cargo holds/tanks.

**4.5.11 (1/5/2013)**

**Oil carrier - assisted propulsion**, for assisted propulsion ships (see [4.9.4]) of limited size (DWT<10000 tonnes) which are intended primarily to carry in bulk crude oil or other oil products having any flash point, liquid at atmospheric pressure and ambient temperature (or thus maintained by heating) in restricted areas.

This notation is to be assigned to ships of both single and double hull construction, as well as ships with alternative structural arrangements, provided they are deemed equivalent by the Society.

The service notation may be completed by the following additional service features, as applicable:

- **flashpoint > 60°C**, where the ship is intended to carry only such type of products, under certain conditions
- **double hull**, when the ship is constructed in accordance with the definition given in Ch 2, Sec 2, [2.2.18]
- **double hull (heavy grades)**, when the ship is constructed in accordance with the definition given in Ch 2, Sec 2, [2.2.20] Ch 2, Sec 2, [2.2.19]
- **product**, where the ship is intended to carry only products other than crude oil.

The additional requirements of Part E, Chapter 25 are applicable to these ships with the limitations indicated therein.

**4.5.12 (1/5/2013)**

**Palm oil carrier- assisted propulsion**, for assisted propulsion ships (see [4.9.4]) of limited size (DWT<10000 tonnes) which are intended primarily to carry in restricted areas palm oil in bulk. This notation is to be assigned to ships of both single and double hull construction, as well as ships with alternative structural arrangements, provided they are deemed equivalent by the Society.

The additional requirements of Part E, Chapter 26 are applicable to these ships with the limitations indicated therein.

**4.5.13 (9/12/2019)**

**Marine mobile desalination unit**, for ships intended for production by means of desalination system, storage and carriage of potable water. The additional requirements of Part E, Chapter 30 are applicable to these ships.

**4.5.14 (1/1/2021)**

**Chemical tanker - assisted propulsion**, for assisted propulsion ships (see [4.9.4]) of limited size (DWT<10000 tonnes) which are intended primarily to carry in restricted areas in bulk chemical products presenting safety and/or pollution hazards. This notation is to be assigned to ships of both single and double hull construction, as well as ships with alternative structural arrangements, provided they are deemed equivalent by the Society.

The additional requirements of Part E, Chapter 31 are applicable to these ships with the limitations indicated therein.

**4.6 Ships carrying passengers**

**4.6.1** The service notations related to ships specially intended for the carriage of passengers are listed in [4.6.2] to [4.6.3] below.

**4.6.2 passenger ship**, for ships intended to carry more than 12 passengers. The additional requirements of Part E, Chapter 11 are applicable to these ships.

The service notation may be completed by the additional service feature < **36 passengers**, where the ship is intended to carry only such a limited number of passengers.

**4.6.3 ro-ro passenger ship**, for ships intended to carry more than 12 passengers and specially equipped to load trains or wheeled vehicles. The additional requirements of Part E, Chapter 12 are applicable to these ships.

The service notation may be completed by the additional service feature < **36 passengers**, where the ship is intended to carry only such a limited number of passengers.

**4.7 Ships for dredging activities**

**4.7.1** The service notations related to ships specially intended for dredging activities are listed in [4.7.2]. The additional requirements of Part E, Chapter 13 are applicable to these ships.

**4.7.2** The following notations are provided:

- a) **dredger**, for ships specially equipped only for dredging activities (excluding carrying dredged material)
- b) **hopper dredger**, for ships specially equipped for dredging activities and carrying spoils or dredged material
- c) **hopper unit**, for ships specially equipped for carrying spoils or dredged material
- d) **split hopper unit**, for ships specially equipped for carrying spoils or dredged material and which open longitudinally, around hinges
- e) **split hopper dredger**, for ships specially equipped for dredging and for carrying spoils or dredged material and which open longitudinally, around hinges.

**4.7.3** These ships which are likely to operate at sea within specific limits may, under certain conditions, be granted an operating area notation. For the definition of operating area notation, reference should be made to [5.3].

**4.8 Working ships**

**4.8.1 (1/1/2022)**

The service notations related to ships specially intended for different working services are listed in [4.8.2] to [4.8.12] below.

**4.8.2 (1/11/2016)**

The service notations for ships intended to tow and/or push other ships or units are:

- a) **tug**, for ships specially equipped for towing and/or pushing
- b) **salvage tug**, for ships specially equipped for towing and/or pushing having specific equipment for salvage
- c) **escort tug**, for ships specially equipped for towing and/or pushing having specific equipment for escorting ships or units during navigation.

The additional requirements of Part E, Chapter 14 are applicable to these ships.

These service notations may be completed by the additional service features:

- **barge combined**, when units are designed to be connected with barges and comply with the relevant requirements of Pt E, Ch 14, Sec 3. The barges to which the tug can be connected are specified in an annex to the Certificate of Classification.
- **rescue**, when units are specially equipped for rescue of shipwrecked persons and for their accommodation in accordance with Pt E, Ch 14, Sec 2, [2.10.2].
- **standby**, when the unit is also specially intended to perform rescue and standby services (e.g. **tug-standby**).
- **rescue (X, Y)**, when units are specially equipped for rescue of shipwrecked persons and for their accommodation in specified geographical areas, where Pt E, Ch 14, Sec 2, [2.10.3] applies.

The values X and Y indicate, respectively:

- X : maximum number of shipwrecked persons for which the unit is designed;
- Y : indication of the geographical areas and/or the maximum distance from the shore where the rescue operations are performed.

The relevant arrangements and equipment are recorded in the ship's status.

**4.8.3 (1/1/2022)**

The service notation **supply vessel** is assigned to ships specially intended for the carriage and/or storage of special material and equipment and/or which are used to provide facilities and assistance for the performance of specified activities.

When the above ships are primarily designed for offshore support services, the service notation **Offshore Support Vessel (OSV)** is assigned.

The service notation is to be completed by the additional service feature **oil product**, when the ship is also specially intended to carry oil products having any flash point.

The service notation is to be completed by the additional service feature **chemical product**, when the ship is also specially intended to carry chemical products having any flash point.

The service notation is to be completed by the additional service feature **standby**, when the ship is also specially intended to perform rescue and standby services for offshore installations (e.g. **supply vessel - standby**).

The service notation is completed by the additional service feature **rescue**, when the ship is specially equipped for rescue of shipwrecked persons and for their accommodation.

The service notation is completed by the additional service features:

- **anchor handling**, when the ship visibility from the bridge and equipment are specially designed for anchor handling operation; or
- **anchor handling stab**, when the ship is specially designed and equipped for anchor handling operation and also fulfils specific stability requirements related to this service.

The additional requirements of Part E, Chapter 15 are applicable to these ships.

**4.8.4** The service notation **fire-fighting ship** is assigned to ships specially intended and equipped for fighting fire. The additional requirements of Part E, Chapter 16 are applicable to these ships.

The service notation may be completed by the following additional service features, as applicable:

- **1** or **2** or **3**, when the ship complies with the applicable requirements of Pt E, Ch 16, Sec 3 and Pt E, Ch 16, Sec 4
- **E** when the characteristics of the fire-fighting system are not those required for the assignment of the additional service features **1**, **2** or **3**, and when the system is specially considered by the Society
- **water-spraying** when the ship is fitted with a self-protection water-spraying system complying with the applicable requirements of Pt E, Ch 16, Sec 4, [3].

#### **4.8.5** (1/1/2012)

The service notation **oil recovery ship** is assigned to ships specially equipped with fixed installations and/or mobile equipment for the removal of oil from the sea surface and its retention on board, carriage and subsequent unloading. The additional requirements of Part E, Chapter 17 are applicable to these ships.

The service notation may be completed by the additional service feature **flash point > 60°C**, where the ship collects only oil with flash point exceeding 60°C.

#### **4.8.6** (15/2/2016)

The service notation **chemical recovery ship** is assigned to ships designed for operation in hazardous atmosphere in case of accident involving chemical products and specially equipped with fixed installations and/or mobile equipment for the removal of chemical products from the sea surface

and its retention on board, carriage and subsequent unloading. The additional requirements of Part E, Chapter 28 are applicable to these ships.

#### **4.8.7** (1/1/2022)

The service notation **cable laying unit** is assigned to ships specially equipped for the carriage and/or laying, hauling and repair of submarine cables. The additional requirements of Part E, Chapter 18 are applicable to these ships.

#### **4.8.8** (1/7/2004)

The service notation **research ship** is assigned to ships specially intended for scientific or technological research. The additional requirements of Part E, Chapter 21 are applicable to these ships.

#### **4.8.9** (1/1/2022)

The service notation **pipe laying unit** is assigned to ships specially equipped for the carriage and/or laying, hauling and repair of submarine pipes. The additional requirements of Part E, Chapter 22 are applicable to these ships.

#### **4.8.10** (1/4/2016)

The service notation **well stimulation** is assigned to ships specially equipped permanently with specific systems for the stimulation of the well to improve their productivity.

The additional requirements of Part E, Chapter 29 are applicable to these ships.

#### **4.8.11** (1/1/2022)

The service notation **Offshore Support Vessel (OSV)** is assigned to ships primarily designed for offshore support services.

The service notation may be completed by the following additional service features:

- those described in [4.8.3]
- **W2W**, when the ship is equipped with a Walk-to-Work (W2W) system such as a motion compensated gangway used for personnel transfer from a mobile unit to an offshore facility (e.g. a wind farm) or to another mobile unit
- **WIND TURBINE MAINTENANCE**, for ships specially equipped for maintenance activities of Wind farms.

Wind farm maintenance may include:

- being a mother craft for smaller craft transferring technicians to and from offshore wind turbines
- transferring technicians directly to the wind turbine
- transferring supplies to the wind turbine
- perform smaller lifting operations onto the wind turbine.

The additional requirements of Part E, Chapter 32 are applicable to these ships.

#### **4.8.12** (1/1/2022)

The service notation **wind turbine installation vessel** is assigned to ships specially equipped with fixed installations and/or mobile equipment for the installation of fix or floating wind turbine.

The service notation is to be completed by the additional service feature **W2W**, when the ship is equipped with a Walk-to-Work system such as a motion compensated gang-

way used for personnel transfer from the ship to the wind turbine installation.

The additional requirements of Part E, Chapter 33 are applicable to these ships.

## 4.9 Non-propelled and assisted propulsion units, sailing ships

### 4.9.1 Barge (1/6/2021)

The service notation **barge** is assigned to non-propelled units intended to carry (dry or liquid) cargo inside holds or tanks. The type of cargo may be considered adding an additional service feature, e.g. **barge - oil**, **barge - liquefied gas**, **barge - LNG bunker**, **barge - chemical**, **barge - general cargo**. The additional requirements of Part E, Chapter 19 are applicable to these ships.

This service notation may be completed by the additional service feature **tug combined** when units are designed to be connected with tugs, and comply with the relevant requirements of Pt E, Ch 14, Sec 3. The tugs to which the barge can be connected are specified in an annex to the Certificate of Classification.

In the case of barges equipped with specific arrangements for accommodating on board, when moored, persons other than crew, the additional service feature **accommodation** is added to the notation **barge** (i.e. **barge-accommodation**). It covers units such as floating hotels used for different purposes like offshore industry support or other commercial uses. The notation **barge accommodation** is completed by the additional class notation **MOORING**.

### 4.9.2 Pontoon (1/7/2015)

The service notation **pontoon** is assigned to non-propelled units intended to carry cargo and/or equipment on deck only. This service notation may be completed by the service feature **crane** when a cargo lifting appliance, such as crane or derrick, is permanently fitted on board, the cargo lifting appliance is to be certified by the Society according to the "Rules for loading and unloading arrangements and for other lifting appliances on board of ships", or certified by another QSCS Classification Society according to its equivalent rules. The additional requirements of Part E, Chapter 19 are applicable to these ships.

### 4.9.3 Other units

Any non-propelled units other than those covered by the service notations listed above will be assigned the additional service feature **no propulsion**, to be added to their own service notation, e.g. **dredger - no propulsion**.

### 4.9.4 Assisted propulsion units (1/7/2017)

Any units having a propulsion system not enabling them to proceed at a speed greater than 7 knots, used for short transit voyages, will be assigned the additional service feature **assisted propulsion** to be added to their own service notation, e.g. **dredger - assisted propulsion**.

In case of units classified with a navigation not more than Coastal area and provided with propulsion system not enabling them to proceed at a speed greater than 7 knots, without any limitation of the length of the voyage, the additional

service feature **assisted propulsion unlimited** will be assigned.

### 4.9.5 Sailing ships (1/7/2009)

The additional service feature **sailing ships** is assigned to ships having no means of propulsion other than sails. These ships are to comply with the requirements of the "Rules for masting and rigging of sailing ships", issued separately by the Society.

### 4.9.6 Engine assisted sailing ship (1/7/2017)

The additional service feature **engine assisted sailing ship** is assigned to ships which are mainly propelled by sails complying with the following requirement:

As > 7,0 (Dmax)<sup>2/3</sup>

where:

As : sails surface, in m<sup>2</sup>

Dmax : maximum displacement, in tons [t],

and provided with internal combustion engine for auxiliary and emergency propulsion.

### 4.9.7 Engine powered sailing ship (1/7/2009)

The additional service feature **engine powered sailing ship** is assigned to ships propelled primarily by internal combustion engines of power adequate to maintain a speed of at least 7 knots (at continuous service rating, when the ship is fully loaded, in smooth water) when not under sail, but which are provided with sails as an emergency means of propulsion.

## 4.10 Fishing vessels

**4.10.1** The service notation **fishing vessel** is assigned to ships specially equipped for catching and storing fish or other living resources of the sea. The additional requirements of Part E, Chapter 20 are applicable to these ships.

Note 1: Units solely dedicated to service in a fishing flotilla by means of cold storage and/or transformation of fish are not covered by the service notation **fishing vessel**. They will be considered with the service notation **special service**.

## 4.11 Units intended for the transshipment of dry cargo in bulk

### 4.11.1 (1/7/2020)

The following service notations are assigned to units specially intended for the transshipment of dry cargo in bulk:

- a) **transshipping unit**, for units specially intended to transship the cargo from one delivering unit to one receiving unit; these units may either have or not have cargo storage capability
- b) **transshipping floating terminal**, for units specially intended to transship the cargo between more than one delivering and receiving units simultaneously; these units are normally to have cargo storage capability.

Self-propelled units are allowed to perform transfer voyages of very limited extension, between locations in the same area of operation, for loading/unloading operations or safety reasons. Longer voyages in ballast conditions may be accepted by the Society on a case-by-case basis. The depar-



ture and arrival locations are to be communicated by the Owner/Designer to the Society.

These service notations may be completed by the following service features:

- **buffer [X t, HOLD/DECK]** when the unit has bulk cargo storage capacity and is thus able to allow significant buffer capacity, ensuring continuous operation. The X value indicates the cargo mass, in t, which can be stored in holds or on deck (HOLD/DECK)
- **heavycargo [HOLD<sub>i</sub>, Xi kN/m<sup>2</sup>, σ<sub>i</sub> kN/m<sup>3</sup> - DECK, Yi kN/m<sup>2</sup>]** when the ship structure designed to support heavy cargoes fulfils the appropriate Rule requirements. The values Xi and Yi indicate, respectively, the maximum allowable local pressures on the inner bottoms of the various HOLD<sub>i</sub> and on the deck areas DECK<sub>i</sub>, where the cargo is intended to be stowed and σ<sub>i</sub> is the maximum density of the bulk cargo allowable for carriage in the relevant HOLD<sub>i</sub>. The requirements for the assignment of this additional service feature are given in Pt E, Ch 27, Sec 3, [3.2].

The service notation of units operating permanently anchored or moored in a fixed location is completed by the additional class notation "**MOORING**".

The service notation of units provided with at least one crane, fitted with a grab or a bucket, is completed by the additional class notation "**CARGO HANDLING**".

## 4.12 Miscellaneous units

**4.12.1** The service notation **special service** is assigned to ships which, due to the peculiar characteristics of their activity, are not covered by any of the notations mentioned above. The classification requirements of such units are considered by the Society on a case by case basis.

This service notation may apply, for instance, to ships engaged in research, expeditions and survey, ships for training of marine personnel, whale and fish factory ships not engaged in catching, ships processing other living resources of the sea, and other ships with design features and modes of operation which may be referred to the same group of ships.

An additional service feature may be specified after the notation (e.g. **special service - training, special service - ship lift, special service - fish factory**) to identify the particular service in which the ship is intended to trade. The scope and criteria of classification of such units are indicated in an annex to the Certificate of Classification.

## 5 Navigation and operating area notations

### 5.1 Navigation notations

**5.1.1** Every classed ship is to be assigned one navigation notation as listed in [5.2].

**5.1.2** The assignment of a navigation notation, including the reduction of scantlings or specific arrangements for restricted navigation notations, is subject to compliance

with the requirements laid down in Part B, Part C, Part D and Part E of the Rules.

**5.1.3** The assignment of a navigation notation does not absolve the Interested Party from compliance with any international and national regulations established by the Administrations for a ship operating in national waters, or a specific area, or a navigation zone. Neither does it waive the requirements in Sec 1, [3.3.1].

### 5.2 List of navigation notations

**5.2.1** The navigation notation **unrestricted navigation** is assigned to a ship intended to operate in any area and any period of the year.

**5.2.2** The navigation notation **summer zone** is assigned to ships intended to operate only within the geographical limits as defined in ILLC 1966 for the Summer zones.

**5.2.3** The navigation notation **tropical zone** is assigned to ships intended to operate only within the geographical limits as defined in ILLC 1966 for the Tropical zones.

**5.2.4** The navigation notation **coastal area** is assigned to ships intended to operate only within 20 nautical miles from the shore and with a maximum sailing time of six hours from a port of refuge or safe sheltered anchorage.

**5.2.5** The navigation notation **sheltered area** is assigned to ships intended to operate in sheltered waters, i.e. harbours, estuaries, roadsteads, bays, lagoons and generally calm stretches of water and when the wind force does not exceed 6 Beaufort scale.

#### 5.2.6 (1/7/2009)

The navigation notations defined in these items [5.2.1] to [5.2.5] are those considered as "normal". Where particular cases of navigation are to be assigned which are not included among those so defined, the navigation notation **special** is assigned, followed by specified restrictions (such as the designation of the geographical area, distance from the shore and/or the most unfavourable sea conditions considered).

#### 5.2.7 (1/7/2009)

The Society may assign navigation notations provided by the regulations of the flag Administration, which may be different from those defined in [5.2.1] to [5.2.6].

### 5.3 Operating area notations

**5.3.1** The operating area notation expresses the specified area where some service units are likely to operate at sea within specific restrictions which are different from normal navigation conditions.

The operating area notation is, in principle, solely granted to working units, such as dredgers and crane pontoons.

This operating area notation is indicated after the navigation notation.

Example: **unrestricted navigation - "operating area notation"**

**5.3.2** The following operating area notations may be assigned:

- a) notation **specified operating area**, where the specific operating conditions which have been considered by the Society are described in an annex to the Certificate of Classification (i.e. distance from shore or from port of refuge, weather or sea conditions)
- b) notation **operation service within 'x' miles from shore**, where the operating service is limited to a certain distance from the shore.

## 6 Additional class notations

### 6.1 General

**6.1.1** An additional class notation expresses the classification of additional equipment or specific arrangement, which has been requested by the Interested Party.

**6.1.2** The assignment of such an additional class notation is subject to the compliance with additional rule requirements, which are detailed in Part F of the Rules.

**6.1.3** Some additional class notations, due to the importance of relevant equipment or arrangements, are assigned a construction mark, according to the principles given in [3.1.2]. This is indicated in the definition of the relevant additional class notations.

**6.1.4** The different additional class notations which may be assigned to a ship are listed in [6.2] to [6.14], according to the category to which they belong. These additional class notations are also listed in alphabetical order in Tab 3.

### 6.2 System of Trace and Analysis of Records (STAR)

#### 6.2.1 General (1/7/2008)

**STAR** is a System of Trace and Analysis of Records integrating rational analysis with data and records from ship-in-service concerning planned inspection and ship maintenance.

The requirements for the assignment of these notations are given in Part F, Chapter 1.

#### 6.2.2 STAR-HULL (1/10/2000)

The additional class notation **STAR-HULL** is assigned to ships on which an Inspection and Maintenance Plan (IMP) for the hull is implemented.

The notation may be completed by the suffix **NB** when a structural tridimensional analysis has been performed for the hull structures, as defined in Pt B, Ch 7, App 1 or Pt B, Ch 7, App 2 or Pt B, Ch 7, App 3, as applicable, at the new building stage. The suffix **NB** is removed when the ship enters the **STAR-HULL** survey programme through the implementation of the Inspection and Maintenance Plan (IMP).

#### 6.2.3 STAR-MACH (1/7/2003)

The additional class notation **STAR-MACH** is assigned to ships on which an Inspection and Maintenance Plan (IMP)

for the machinery is implemented. This plan is based on a risk analysis review of the installation.

#### 6.2.4 STAR notation (STAR)

When ships are granted both **STAR-HULL** and **STAR-MACH**, the two separate notations are superseded by the cumulative additional class notation **STAR**.

### 6.3 Availability of machinery (AVM)

#### 6.3.1 General

The notations dealt with under this heading are relevant to systems and/or arrangements enabling the ship to carry on limited operations when single failure affects propulsion or auxiliary machinery or when an event such as fire or flooding involving machinery spaces affects the availability of the machinery.

In compliance with [6.1.3], these notations are assigned a construction mark, as defined in [3].

The requirements for the assignment of these notations are given in Part F, Chapter 2.

#### 6.3.2 AVM-APS (Alternative propulsion system) (1/7/2008)

The additional class notation **AVM-APS** or **AVM-APS-NS** are assigned to ships which are fitted with systems and/or arrangements enabling them to maintain operating conditions with some limitations in speed, range and comfort, in the case of any single failure of items relative to the propulsion.

When the auxiliary propulsion system is designed for use in conditions other than an emergency, the additional class notation **AVM-APS-NS** is assigned.

#### 6.3.3 AVM-IAPS (Independent alternative propulsion system) (1/7/2008)

The additional class notation **AVM-IAPS** is assigned to ships which are fitted with an independent propulsion system enabling them to maintain operating conditions with some limitations in power, speed, range and comfort, in the case of any single failure of items relative to the propulsion.

#### 6.3.4 AVM-DPS (Duplicated propulsion system) (1/7/2008)

The additional class notation **AVM-DPS** or **AVM-DPS-NS** are assigned to ships which are fitted with a duplicated propulsion system enabling them to maintain operating conditions with some limitations in power (but 50% of the main power is to be maintained), speed, range and comfort, in the case of any single failure of items relative to the propulsion.

When the duplicated propulsion system is designed for use in conditions other than an emergency, the additional class notation **AVM-DPS-NS** is assigned.

#### 6.3.5 AVM-IPS (Independent propulsion system) (1/7/2008)

The additional class notation **AVM-IPS** is assigned to ships which are fitted with an independent propulsion system enabling them to maintain operating conditions with some limitations in power (but 50% of the main power is to be

maintained), speed, range and comfort, in the case of any single failure of items relative to the propulsion.

## 6.4 Automated machinery systems (AUT)

### 6.4.1 General

The notations dealt with under this heading are relevant to automated machinery systems installed on board ships.

In compliance with [6.1.3], these notations are assigned a construction mark, as defined in [3].

The requirements for the assignment of these notations are given in Part F, Chapter 3.

### 6.4.2 Unattended machinery space (AUT-UMS)

The additional class notation **AUT-UMS** is assigned to ships which are fitted with automated installations enabling machinery spaces to remain periodically unattended in all sailing conditions including manoeuvring.

### 6.4.3 Centralised control station (AUT-CCS)

The additional class notation **AUT-CCS** is assigned to ships which are fitted with machinery installations operated and monitored from a centralised control station.

### 6.4.4 Automated operation in port (AUT-PORT)

The additional class notation **AUT-PORT** is assigned to ships which are fitted with automated installations enabling the ship's operation in port or at anchor without personnel specially assigned for the watch-keeping of the machinery in service.

## 6.5 Integrated ship systems (SYS)

### 6.5.1 General

The notations dealt with under this heading are relevant to operation of integrated systems regarding navigation, machinery, communication and specific cargo, as applicable.

In compliance with [6.1.3], these notations are assigned a construction mark, as defined in [3].

The requirements for the assignment of these notations are given in Part F, Chapter 4.

### 6.5.2 Centralised navigation equipment (SYS-NEQ)

The additional class notation **SYS-NEQ** is assigned to ships which are fitted with a centralised navigation control system so laid out and arranged that it enables normal navigation and manoeuvring operation of the ship by two persons in cooperation.

The additional class notation **SYS-NEQ-1** is assigned when, in addition to the above, the installation is so arranged that the navigation and manoeuvring of the ship can be operated under normal conditions by one person, for periodical one man watch. This notation includes specific requirements for prevention of accidents caused by the operator's unfitness.

### 6.5.3 Integrated bridge system (SYS-IBS)

The additional class notation **SYS-IBS** is assigned to ships which are fitted with an integrated bridge system which allows simplified and centralised bridge operation of all

main functions of navigation manoeuvring and communication, as well as monitoring from bridge of other functions related to specific cargoes and pollution ; for passenger ships, heating, ventilation and air conditioning are also included in the monitored functions.

### 6.5.4 Communication system (SYS-COM) (1/7/2009)

The additional class notation **SYS-COM** is assigned to ships which are fitted with a local area network including the alarm, monitoring and control systems and computers used for management operations and external communication devices for reporting ashore navigation, maintenance and operational information.

## 6.6 Monitoring equipment (MON)

### 6.6.1 General

The notations dealt with under this heading are relevant to hull and tailshaft monitoring equipment installed on board ships.

The requirements for the assignment of these notations are given in Part F, Chapter 5.

### 6.6.2 Hull stress monitoring (MON-HULL)

The additional class notation **MON-HULL** is assigned to ships which are fitted with equipment continuously monitoring ship's dynamic loads through measurements of motions in waves and stresses/deformations in the hull structure.

### 6.6.3 Tailshaft monitoring system (MON-SHAFT)

The additional class notation **MON-SHAFT** is assigned to ships which are fitted with a temperature monitoring system for the tailshaft sterntube bearings. The assignment of this notation allows the ship to be granted a reduced scope for complete tailshaft surveys, see Ch 2, Sec 2, [8.3.1].

## 6.7 Comfort on board ships and in port area (COMF)

### 6.7.1 General (1/1/2020)

The notations dealt with under this heading are relevant to the assessment of comfort on board ships and in port area with regard to the level of noise, vibration and/or air temperature/humidity.

The parameters which are taken into consideration for the evaluation of the comfort such as the level of noise, the level of vibration and the air temperature and/or humidity will be indicated in the Certificate of Classification.

These parameters are only verified once for all when the ship is classed.

The requirements for the assignment of these notations are given in Part F, Chapter 6.

### 6.7.2 Comfort with regard to noise on board ships (COMF-NOISE) (1/7/2020)

The additional class notation **COMF-NOISE** is assigned to ships satisfying levels of noise defined in Pt F, Ch 6, Sec 1. The assessment of noise levels is only carried out through design review and sea trials.

## Pt A, Ch 1, Sec 2

The notation is completed by a letter **A**, **B** or **C** which represents the merit level achieved for the assignment of the notation, the merit **A** corresponding to the lowest level of acceptable noise. The notation **COMF-NOISE** is only assigned if at least the merit level **C** is reached.

When the merit levels achieved for the passenger spaces (if any) and the crew spaces are different, the notation is completed by the suffix:

- **PAX**, for passenger spaces, and
- **CREW**, for crew spaces.

For crew spaces, the following comfort noise notations are equivalent to the noise level limits stated in IMO Resolution MSC.337(91) "Adoption of the code on noise levels on board ships", as follows:

- for ships in continuous service rate (CSR) condition (defined in Pt F, Ch 6, Sec 1, [2.3]) with gross tonnage equal to or greater than 10,000 GT: **COMF-NOISE CREW A**
- for ships in continuous service rate (CSR) condition (defined in Pt F, Ch 6, Sec 1, [2.3]) with gross tonnage from 1,600 GT up to 10,000 GT: **COMF-NOISE CREW B**.

### 6.7.3 Comfort with regard to vibration on board ships (**COMF-VIB**) (1/1/2020)

The additional class notation **COMF-VIB** is assigned to ships satisfying levels of vibration defined in Pt F, Ch 6, Sec 2. The assessment of vibration levels is only carried out through design review and sea trials.

The notation is completed by a letter **A**, **B** or **C**, which represents the merit level achieved for the assignment of the notation, merit **A** corresponding to the lowest level of vibration. The notation **COMF-VIB** is only assigned if at least merit level **C** is reached.

When the merit levels achieved for the passenger spaces (if any) and the crew spaces are different, the notation is completed by the suffix:

- **PAX**, for passenger spaces, and
- **CREW**, for crew spaces.

### 6.7.4 Comfort with regard to air temperature/humidity on board ships (**COMF-AIR**) (1/1/2020)

The additional class notation **COMF-AIR** is assigned to ships fitted with a combined heating-ventilation-air conditioning system (HVAC) satisfying levels of air temperature and humidity defined in Pt F, Ch 6, Sec 3. The assessment of air temperature/humidity levels is only carried out through design review and sea trials in Winter and Summer conditions.

The notation may be completed by one of the letters **W** or **S** when the HVAC system has been satisfactorily tested only in Winter or in Summer conditions respectively.

### 6.7.5 Comfort with regard to noise in port area (**COMF-NOISE-PORT**) (1/1/2020)

The additional class notation **COMF-NOISE-PORT** is assigned to ships satisfying levels of noise in port area defined in Pt F, Ch 6, Sec 4. The assessment of noise levels is only carried out through noise measurements in port area.

The notation is completed by a number (1-100) which represents the merit level achieved for the assignment of the notation, the merit 100 corresponding to the lowest level of noise.

The notation **COMF-NOISE-PORT(X)** is only assigned if at least merit level 1 is reached.

## 6.8 Pollution prevention

### 6.8.1 General

The notations dealt with under this heading are assigned to ships fitted with equipment and arrangements enabling them to reduce the pollution of the sea and/or air caused by release of solid waste and liquid and/or gaseous effluents.

The requirements for the assignment of these notations are given in Part F, Chapter 7.

### 6.8.2 Sea pollution prevention (**CLEAN-SEA**) (1/7/2006)

The additional class notation **CLEAN-SEA** is assigned to ships provided with construction and procedural means to prevent pollution of the sea.

This is achieved by compliance with the applicable requirements of Annex I, Annex II, Annex III, Annex IV and Annex V of MARPOL Convention, relevant to ship's liquid and solid releases, as well as additional requirements related to prevention of sea pollution as follows:

- prevention of accidental pollution by means of location of fuel and lube oil tanks above the double bottom and away from ship sides
- prevention of operational pollution by means of bilge water separation and filtering, holding tanks for treated sewage and grey water
- prevention of transfer of harmful organisms and pathogens in the ballast water
- prevention of pollution by tributyltin by means of TBT free antifouling paints
- prevention of pollution by solid garbage (resulting from the compacting device and incinerators) by means of proper storage of such waste
- ship recycling.

### 6.8.3 Air pollution prevention (**CLEAN-AIR**) (1/7/2009)

The additional class notation **CLEAN-AIR** is assigned to ships provided with construction and procedural means to prevent pollution of the air. This is achieved by compliance with the applicable requirements of Annex VI of MARPOL

Convention, as well as additional requirements related to low emissions to the air as follows:

- prevention of air pollution by exhaust gas (particles, CO<sub>x</sub>, NO<sub>x</sub>, SO<sub>x</sub>) by means of low emission engines, use of low sulphur content fuels and incinerators
- use of refrigerants and fixed fire fighting means with zero ozone depleting potential and low global warming potential
- control of release of refrigerants to the atmosphere by means of leak detection and evacuation systems
- recovery of vapours emitted from cargo systems of ships carrying dangerous liquid cargoes in bulk.

Note 1: For ships with the service notation **oil tanker, combination carrier/OBO, combination carrier/OOC, chemical tanker, FLS tanker**, excluding those intended for the carriage of products having flashpoint > 60°C or **liquefied gas carrier**, the assignment of the notation **VCS** (Vapour Control System) is a prerequisite for the assignment of the notation **CLEAN-AIR**. However, the notation **VCS** may also be assigned as a single notation as described in [6.14.7].

#### 6.8.4 Sea and air pollution prevention (GREEN PLUS - GREEN STAR 3 DESIGN - GREEN STAR 3 - GREEN STAR 3 (TOC)) (1/7/2020)

##### a) GREEN PLUS

The additional class notation **GREEN PLUS** is assigned to ships designed and provided with systems, components and procedural means to control and prevent the emission of polluting substances into the sea, the air and more in general the environment, in accordance with the requirements in Pt F, Ch 7, Sec 1.

##### b) GREEN PLUS T

The additional class notation **GREEN PLUS T** is assigned to units:

- intended to operate at a fixed location;
- provided with facilities to load and unload other units (e.g. bulk carriers, dry cargo ships carrying solid materials in bulk)

complying with the provision in a) and provided with solid bulk cargo handling systems designed to minimize their environmental impact according to Pt F, Ch 7, Sec 6.

##### c) GREEN STAR 3 DESIGN

When ships are assigned the notations **CLEAN-SEA** and **CLEAN-AIR**, the two separate notations are superseded by the cumulative additional class notation **GREEN STAR 3 DESIGN**.

##### d) GREEN STAR 3

The additional class notation **GREEN STAR 3** is assigned to ships provided with equipment and procedural means to prevent pollution of the sea and of the air. This is achieved by compliance with the applicable requirements of Annexes I to VI of MARPOL Convention, relevant to ship's liquid, solid and gas releases, as well as additional requirements related to prevention of sea and air pollution as follows:

- prevention of accidental pollution by means of on board equipment to combat oil spills;
- prevention of operational pollution by means of procedures, bilge water separation and filtering, hold-

ing tanks for treated sewage and grey water, development of an Environmental Management Plan and availability on board of an Environmental Ship Manager, use of refrigerants and fixed fire-fighting means with zero ozone depleting potential and low global warming potential, and use of procedures to control leakage;

- prevention of transfer of harmful organisms and pathogens in the ballast water;
- prevention of pollution by tributyltin by means of TBT free antifouling paints;
- prevention of pollution by solid garbage by means of proper storage of such waste, and for passenger ships other than ro-ro passenger, by means of a strategy of waste recycling;
- ship recycling.

Note 1: For ships with the service notation **oil tanker, combination carrier/OBO, combination carrier/OOC, chemical tanker, FLS tanker**, excluding those intended for the carriage of products having flashpoint > 60°C or **liquefied gas carrier**, the assignment of the notation **VCS** (Vapour Control System) is a prerequisite for the assignment of the notation **GREEN STAR 3**. However, the notation **VCS** may also be assigned as a single notation as described in [6.14.7].

##### e) GREEN STAR 3 (TOC)

The additional class notation **GREEN STAR 3 (TOC)** can be assigned to ships transferred to RINA class from another IACS classification society if, at the time of the transfer of class, they hold a sea and air pollution prevention class notation of the previous society

#### 6.8.5 Green and certified cargo handling systems (GC CARGO HANDLING) (1/7/2013)

The additional class notation **GC CARGO HANDLING** is assigned to ships provided with systems for handling solid bulk cargo which may be a source of sea or air pollution (e.g. those handling coal, iron ore, sulphur, etc), designed to minimize their environmental impact. The requirements for the assignment of this notation are given in Pt F, Ch 7, Sec 6.

### 6.9 Refrigerating installations

#### 6.9.1 General

The notations dealt with under this heading are relevant to refrigerating installations fitted on board ships, including machinery and storing equipment or arrangements.

In compliance with [6.1.3], these notations are assigned a construction mark, as defined in [3].

The requirements for the assignment of these notations are given in Part F, Chapter 8.

#### 6.9.2 Refrigerating installations for cargo (REF-CARGO)

The additional class notation **REF-CARGO** is assigned to ships fitted with refrigerating plants and holds intended to carry cargoes, with the condition that the number and the power of the refrigerating units are such that the specified temperatures can be maintained with one unit on standby.

### 6.9.3 Refrigerating installations for insulated containers (REF-CONT)

The additional class notation **REF-CONT** is assigned to ships fitted with refrigerating plants intended to supply refrigerated air to insulated containers carried in holds of container ships.

### 6.9.4 Refrigerating installations for domestic supplies (REF-STORE)

The additional class notation **REF-STORE** is assigned to ships fitted with refrigerating plants and spaces exclusively intended for the preservation of ship's domestic supplies.

**6.9.5** The above may also be completed by the following notations:

- a) **-PRECOOLING** when the refrigerating plants are designed to cool down a complete cargo of fruit and/or vegetables to the required temperature of transportation
- b) **-QUICKFREEZE** for the refrigerating plants of fishing vessels and fish factory ships where the design and equipment of such plants have been recognised suitable to permit quick-freezing of fish in specified conditions
- c) **-AIRCONT** when the refrigerating plants are equipped with controlled atmosphere installations or any other indication related to the specific features of the installation, when these features have been specially examined by the Society

## 6.10 Navigation in ice (ICE CLASS)

### 6.10.1 (1/7/2020)

The notations dealt with under [6.10.2] are relevant to ships strengthened for navigation in ice in accordance with the "Finnish-Swedish Ice Class Rules 2017" as adopted on 1 December 2017 by the Finnish Transport Safety Agency (TRAFI).

The requirements for the assignment of these notations are given in Part F, Chapter 9.

These requirements reproduce the provisions of the Finnish-Swedish Ice Class Rules cited above.

**6.10.2** The following additional class notations are assigned:

- a) **ICE CLASS IA SUPER**, for navigation in extreme ice conditions
- b) **ICE CLASS IA**, for navigation in severe ice conditions
- c) **ICE CLASS IB**, for navigation in medium ice conditions
- d) **ICE CLASS IC**, for navigation in light ice conditions.

Note 1: Attention is drawn to paragraph 9 of the 1985 Finnish-Swedish Ice Class Rules, where it is stated that these notations are assigned to the maximum permissible draught according to the Tonnage and Loadline Certificates.

Note 2: Attention is drawn to paragraph 2 of the above Rules, where it is stated that the requirements of Finnish-Swedish Ice Class Rules published on 6th April 1971 are still in force for ships whose keel was laid, or at a similar stage of construction, before November 1st 1986.

### 6.10.3 (1/1/2001)

The additional class notation **ICE CLASS ID** is assigned to ships whose reinforcements for navigation in ice are different from those required for the assignment of the notations

defined in [6.10.2], but which comply with the specific requirements detailed in Part F, Chapter 9.

### 6.10.4 (1/5/2016)

The above may also be completed by the notation **-HULL** when the reinforcements for navigation in ice are relevant to hull only, according to the relevant requirements in Pt F, Ch 9, Sec 1 and Pt F, Ch 9, Sec 2.

### 6.10.5 (1/1/2001)

The additional class notation **ICE** is assigned to ships whose reinforcements for navigation in ice are different from those required for the assignment of the notations defined in [6.10.2] and [6.10.3], when this has been specially considered by the Society.

## 6.11 Navigation in ice (POLAR CLASS)

### 6.11.1 (1/1/2022)

The following additional class notations are assigned to ships intended for navigation in ice-infested polar waters:

- **POLAR CLASS PC1**
- **POLAR CLASS PC2**
- **POLAR CLASS PC3**
- **POLAR CLASS PC4**
- **POLAR CLASS PC5**
- **POLAR CLASS PC6**
- **POLAR CLASS PC7**

The requirements for the assignment of these notations are given in Part F, Chapter 10.

The above class notations may also be completed by the additional notation "**Icebreaker**" for any ship with an operational profile that includes escort or ice management functions, having powering and dimensions that allow it to undertake aggressive operations in ice-covered waters, complying with the relevant requirements in Pt F, Ch 10, Sec 2 and Pt F, Ch 10, Sec 3.

## 6.12 WINTERIZATION (temp)

### 6.12.1 (1/7/2014)

The additional class notation **WINTERIZATION (temp)** is assigned to ships intended to be operated in a cold climate over long periods.

The value **temp**, in brackets, is the design temperature in °C and is to be taken as the lowest mean daily average air temperature in the area where the ship is intended to operate (see Pt F, Ch 11, Sec 1, [2]).

In order for the **WINTERIZATION (temp)** notation to be granted, the ship is to be assigned the additional class notation **GREEN PLUS** or **GREEN STAR 3 DESIGN** or equivalent and one of the following class notations:

- **POLAR CLASS**
- **ICE CLASS IA SUPER**
- **ICE CLASS IA**
- **ICE CLASS IB**
- **ICE CLASS IC**

The requirements for the assignment of this notation are given in Part F, Chapter 11.

### 6.13 Planned maintenance scheme and condition based maintenance (PMS/CBM)

#### 6.13.1 General (1/7/2009)

The notations dealt with under this item [6.13] are assigned to ships where a Planned Maintenance Scheme (hereinafter denominated PMS) has been implemented according to the requirements given in Part F, Chapter 12.

#### 6.13.2 PMS (1/7/2009)

Where a Planned Maintenance Scheme is approved by the Society the additional class notation **PMS** is assigned. An implementation survey is to be carried out to confirm the validity of the additional class notation.

The requirements for the assignment of this notation are given in Pt F, Ch 12, Sec 1.

#### 6.13.3 PMS-CM(PROP) (1/7/2009)

Where a Planned Maintenance Scheme approved by the Society is implemented and Condition Based Maintenance complying with the requirements of Pt F, Ch 12, Sec 2 relevant to the propulsion system is applied, the additional class notation **PMS-CM(PROP)** is assigned.

#### 6.13.4 PMS-CM(HVAC) (1/7/2009)

Where a Planned Maintenance Scheme approved by the Society is implemented, and Condition Based Maintenance complying with the requirements of Pt F, Ch 12, Sec 3 relevant to the heating, ventilation and air conditioning (HVAC) system is applied, the additional class notation **PMS-CM(HVAC)** is assigned.

#### 6.13.5 PMS-CM(CARGO) (1/7/2009)

Where a Planned Maintenance Scheme approved by the Society is implemented, and Condition Based Maintenance complying with the requirements of Pt F, Ch 12, Sec 4 relevant to the cargo system is applied, the additional class notation **PMS-CM(CARGO)** is assigned.

#### 6.13.6 PMS-CM(ELE) (1/7/2009)

Where a Planned Maintenance Scheme approved by the Society is implemented, and Condition Based Maintenance complying with the requirements of Pt F, Ch 12, Sec 5 relevant to electrical switchboards is applied, the additional class notation **PMS-CM(ELE)** is assigned.

#### 6.13.7 PMS-CM(FDS) (1/7/2009)

Where a Planned Maintenance Scheme approved by the Society is implemented, and Condition Based Maintenance complying with the requirements of Pt F, Ch 12, Sec 6 relevant to the fire detection system is applied, the additional class notation **PMS-CM(FDS)** is assigned.

#### 6.13.8 PMS-CM (1/1/2020)

Where a Planned Maintenance Scheme approved by the Society is implemented, and Condition Based Maintenance complying with the requirements of Pt F, Ch 12, Sec 7 relevant to individual items selected by the Owner is applied, the additional class notation **PMS-CM** is assigned.

### 6.14 Other additional class notations

#### 6.14.1 Strengthened bottom - Not always afloat but safe aground (NAABSA) (15/10/2019)

The additional class notation **STRENGTHBOTTOM-NAABSA** may be assigned to ships built with specially strengthened bottom structures so as to be able to be loaded and/or unloaded when properly stranded.

The requirements for the assignment of this notation are given in Pt F, Ch 13, Sec 1.

#### 6.14.2 Loading by grabs (1/4/2006)

a) The additional class notation **GRABLOADING** may be assigned to ships with hold tank tops specially reinforced for loading/unloading cargoes by means of grabs or buckets.

The requirements for the assignment of this notation are given in Pt F, Ch 13, Sec 2.

However, this does not preclude ships not assigned with this notation from being loaded/unloaded with grabs.

b) The additional class notation **GRAB [X]** may be assigned to ships with hold tank tops designed for loading/unloading cargoes by means of grabs having a maximum mass of [X] tonnes.

The requirements for the assignment of this notation are given in Pt F, Ch 13, Sec 2 (see also Note 2).

Note 1: These additional class notations may only be assigned to ships with the service notation **general cargo ship** (intended to carry dry bulk cargoes), **bulk carrier**, **ore carrier**, **combination carrier/OBO** or **combination carrier/OOC**.

Note 2: The specific requirements for the assignment of the notation **GRAB [X]** to bulk carriers with the service feature **CSR** are given in the Common Structural Rules (Ch 1, Sec 1, [3]).

#### 6.14.3 In-water survey

The additional class notation **INWATERSURVEY** may be assigned to ships provided with suitable arrangements to facilitate the in-water surveys as provided in Ch 2, Sec 2, [7.1.4].

The requirements for the assignment of this notation are given in Pt F, Ch 13, Sec 3.

#### 6.14.4 Single point mooring

The additional class notation **SPM** (Single Point Mooring) may be assigned to ships fitted with a specific mooring installation.

The requirements for the assignment of this notation are given in Pt F, Ch 13, Sec 4.

These requirements reproduce the provisions of "Recommendations for Equipment Employed in the Mooring of Ships at Single Point Mooring" (3rd edition 1993), issued by OCIMF (Oil Companies International Marine Forum).

#### 6.14.5 Container lashing equipment (1/7/2017)

The additional class notation **LASHING** is assigned to ships initially fitted with mobile container lashing equipment that is documented, tested and checked.

The notation **ROUTE DEPENDENT LASHING (start date - end date)** is assigned to ships initially fitted with mobile container lashing equipment that is documented, tested and

checked for specific routes and for the period of year defined by the specification start date - end date.

These notations are assigned only to ships having the service notation **container ship** or the additional service feature **equipped for carriage of containers**.

The requirements for the assignment of the notations are given in Pt F, Ch 13, Sec 5.

This equipment, however, will not be verified any longer at the periodical class surveys to which the ship is submitted.

#### 6.14.6 Dynamic positioning (1/1/2021)

a) The additional class notation **DYNAPOS** may be assigned to ships equipped with a dynamic positioning system.

In compliance with [6.1.3], this notation is assigned a construction mark, as defined in [3].

The additional class notation **DYNAPOS** is assigned, in accordance with [6.1.3], to ships fitted with dynamic positioning installations complying with the requirements of this Section, as follows:

- **DYNAPOS-SAM**
- **DYNAPOS-DP1**
- **DYNAPOS-DP2**
- **DYNAPOS-DP3**

**DYNAPOS-SAM** (semi-automatic control): the control system of installation is to be achieved by automatic conversion of the instructions issued by the operator in thruster commands: the operator's manual intervention is necessary for position keeping.

**DYNAPOS-DP1** (automatic control): position keeping is automatically achieved and loss of position and/or heading may occur in the event of a single failure.

**DYNAPOS-DP2** (automatic control): position keeping is automatically achieved, but loss of position and/or heading is not to occur in the event of a single failure in any active component or system.

**DYNAPOS-DP3** (automatic control): position keeping is automatically achieved, but loss of position and/or heading is not to occur in the event of a single failure of any active component or system, any static component or loss of any one watertight compartment and any one fire sub-division, due to fire or flooding.

The scope of the notation, including the additional keys for the description of capability of the installation and the requirements for assignment, are given in Pt F, Ch 13, Sec 6.

The notations may be completed by the feature **SKC (L, I1, I2, I3, I4)**, which provides information about the position keeping ability of the ship at the most unfavourable heading for specified limiting environmental conditions; it is defined in Pt F, Ch 13, Sec 10.

b) The additional class notation **DP PLUS** may be assigned to ships having the additional class notation **DYNAPOS-DP2** or **DYNAPOS-DP3** when the dynamic positioning system is in compliance with the requirements in Pt F, Ch 13, Sec 6, [11]. The **DP PLUS** notation may be

assigned as addendum of **DYNAPOS** notation as follows:

- **DP PLUS - DFS**
- **DP PLUS - FFP**
- **DP PLUS - PRD**

**DP PLUS-DFS** (Dual Feeding System): dual feeding operation of thrusters is allowed.

**DP PLUS-FFP** (Fire and Flooding Protection): fire and flooding characteristics of machinery space are beyond those for the **DYNAPOS** notations.

**DP PLUS-PRD** (Predictive): power generation system and power distribution of the main switchboard comply with requirements beyond those for the **DYNAPOS** notations.

#### 6.14.7 Vapour control system (1/10/2000)

The additional class notation **VCS** (Vapour Control System) may be assigned to ships equipped with cargo vapour control systems both in way of midship cargo crossovers and in way of stern cargo manifolds. The notation **-MIDSHIP** is added to the notation where the ship is equipped with cargo vapour control systems only in way of cargo midship crossovers. The notation **-TRANSFER** is added to the notation where, in addition, the ship is fitted with specific arrangements for transferring cargo vapours to another ship.

This notation is assigned only to ships having the service notation **oil tanker, combination carrier/OBO, combination carrier/OOC, liquefied gas carrier, chemical tanker** or **FLS tanker**.

The requirements for the assignment of this notation are given in Pt F, Ch 13, Sec 7.

#### 6.14.8 Cofferdam ventilation (1/7/2001)

The additional class notation **COVENT** (Cofferdam Ventilation) may be assigned to ships having all cofferdams (including ballast tanks) in the cargo area provided with fixed ventilation systems or having movable components included in the ship equipment complying with the requirements of Pt F, Ch 13, Sec 8.

This notation is assigned only to ships having the service notation **bulk carrier, ore carrier, oil tanker, combination carrier/OBO, combination carrier/OOC, liquefied gas carrier, chemical tanker** or **FLS tanker**.

The requirements for the assignment of this notation are given in Pt F, Ch 13, Sec 8.

#### 6.14.9 Centralised cargo control

The additional class notation **CARGOCONTROL** may be assigned to ships (carrying liquid cargo in bulk) equipped with a centralised system for handling cargo and ballast liquids.

In principle, this notation is assigned only to ships having the service notation **oil tanker, combination carrier/OBO, combination carrier/OOC, chemical tanker** or **FLS tanker**.

The requirements for the assignment of this notation are given in Pt F, Ch 13, Sec 9.

#### 6.14.10 Ship manoeuvrability (1/7/2009)

The additional class notation **MANOVR** may be assigned to ships complying with manoeuvring capability standards,



defined in IMO Resolution MSC.137(76) - "Standards for Ship Manoeuvrability".

The requirements for the assignment of this notation are given in Pt F, Ch 13, Sec 10.

These requirements reproduce the provisions of IMO Resolution MSC.137(76) and are applicable to ships of all rudder and propulsion types, of 100 m in length and over, and to chemical tankers and gas carriers regardless of the length, which were constructed on or after 1 July 1994.

#### 6.14.11 Damage stability (1/10/2005)

The additional class notation **DMS** may be assigned to ships complying with the damage stability requirements given in Pt F, Ch 13, Sec 11.

#### 6.14.12 Protective coatings in water ballast tanks (1/7/2006)

The additional class notation **COAT-WBT** may be assigned to ships surveyed during construction by the Society, whose water ballast tanks have been provided with protective coatings complying with the requirements for the assignment of this notation given in Pt F, Ch 13, Sec 12.

The notation may be assigned to ships having any service notation.

#### 6.14.13 Fatigue Life (1/2/2008)

The additional class notation **FATIGUELIFE (Y)** is assigned to ships designed for a fatigue life greater than Y years. In general, Y is to be greater than 20 years; for ships with one of the service notations **bulk carrier ESP CSR** or **oil tanker ESP CSR**, Y is to be greater than 25 years.

The fatigue life is to be calculated in accordance with the applicable criteria defined in the Rules.

For Y greater than 30 years, the strength calculation and construction criteria are to be defined by the Society on a case-by-case basis.

#### 6.14.14 Permanent means of access (1/2/2008)

The additional class notation **PMA** is assigned to cargo ships that are provided with permanent means of access complying with SOLAS Regulation II-1/3-6, as amended by Resolution MSC 151(78), with the associated "Technical provisions for means of access for inspections" in IMO Resolution MSC 158(78) and the relevant interpretations in IACS UI SC191.

Note 1: For bulk carriers (as defined in SOLAS Regulation IX/1-6) of 20000 GT or more and oil tankers of 500 GT or more, compliance with the above is requested by SOLAS Regulation II-1/3-6.

#### 6.14.15 Ballast water management (1/2/2008)

The additional class notation **BWM-E** is assigned to ships complying with the "International Convention for the Control and Management of Ship's Ballast Water and Sediments" as adopted by IMO on 13 February 2004, by means of a Ballast Water Exchange system.

The notation is to be completed by one of the following features, as applicable:

- **sequential** when the Ballast Water Exchange system is of sequential type
- **flow-through** when the Ballast Water Exchange system is of flow-through type
- **dilution** when the Ballast Water Exchange system is of dilution type.

Note 1: according to the above Convention, Ballast Water Exchange will be phased out as an acceptable method, depending on the ballast water capacity and date of delivery of the vessel. After phasing out, the only acceptable method will be Ballast Water Treatment. Therefore the class notation BWM-E will be withdrawn when the Ballast Water Exchange is phased out.

The additional class notation **BWM-T** is assigned to ships complying with the "International Convention for the Control and Management of Ship's Ballast Water and Sediments" as adopted by IMO on 13 February 2004, by means of a Ballast Water Treatment system.

#### 6.14.16 Crew Accommodation and Recreational Facilities according to the Marine Labour Convention, 2006 (MLCDESIGN) (1/7/2008)

The additional class notation **MLCDESIGN** is assigned to ships having crew accommodation and recreational facilities complying with the Marine Labour Convention, 2006 - Title 3 and with the requirements of Pt F, Ch 13, Sec 13.

#### 6.14.17 Ships equipped to support diving operations (1/7/2009)

The additional class notation **DIVINGSUPPORT** is assigned to ships equipped to support diving operations, which are provided with a diving system.

Diving systems installed on ships classified by the Society assigned the **DIVINGSUPPORT** notation are to be certified by the Society according to the "Rules for the classification of underwater units". Certificates issued by another QSCS Classification Society may be accepted.

The requirements for the assignment of this notation are given in Pt F, Ch 13, Sec 14.

#### 6.14.18 High Voltage Shore Connection (HVSC) (1/7/2009)

The additional class notation **HVSC** is assigned to ships fitted with high voltage shore connection systems complying with the requirements given in Pt F, Ch 13, Sec 15.

#### 6.14.19 Helicopter facilities (1/7/2010)

The additional class notation **HELIDECK** may be assigned to ships fitted with helicopter facilities. In particular, the notation **HELIDECK-H** is assigned to ships fitted with helicopter facilities including hangar and refuelling or maintenance facilities, while the notation **HELIDECK** is assigned when the helicopter facilities do not include hangar and refuelling or maintenance facilities.

The requirements for the assignment of these notations are given in Pt F, Ch 13, Sec 16.

#### 6.14.20 Inert gas systems (1/7/2016)

The additional class notation **INERTGAS-A** may be assigned to ships having the service notation:

- a) built before 1 January 2016 having the service notation:
- **oil tanker, combination carrier/OBO, combination carrier/OOC, FLS tanker**, having deadweight equal to or greater than 20,000 tonnes, or
  - **chemical tanker and liquefied gas carrier**, having deadweight equal to or greater than 20,000 tonnes but not complying with Pt C, Ch 4, Sec 1, [8.2.4] b)
- b) built on or after 1 January 2016:
- **oil tanker, combination carrier/OBO, combination carrier/OOC, FLS tanker**, having deadweight equal to or greater than 8,000 tonnes, or
  - **chemical tanker and liquefied gas carrier**, having deadweight equal to or greater than 8,000 tonnes but not complying with Pt C, Ch 4, Sec 1, [8.2.4]

for which the installation of the inert gas system is compulsory.

The installed inert gas system is to comply with Pt C, Ch 4, Sec 1, [9] except Pt C, Ch 4, Sec 1, [9.6].

The additional class notation **INERTGAS-B** may be assigned to ships:

- a) built before 1 January 2016 having the service notation:
- **oil tanker, combination carrier/OBO, combination carrier/OOC, FLS tanker**, whose deadweight is less than 20,000 tonnes, or
  - **chemical tanker and liquefied gas carrier**, having deadweight equal to or greater than 20,000 tonnes but complying with Pt C, Ch 4, Sec 1, [8.2.4] b) or having deadweight less than 20,000 tonnes
- b) built on or after 1 January 2016:
- **oil tanker, combination carrier/OBO, combination carrier/OOC, FLS tanker**, whose deadweight is less than 8,000 tonnes, or
  - **chemical tanker and liquefied gas carrier**, having deadweight equal to or greater than 8,000 tonnes but complying with Pt C, Ch 4, Sec 1, [8.2.4] b) or having deadweight less than 8,000 tonnes

for which the installation of the inert gas system is not compulsory but fitted with an inert gas system complying with the requirements in Pt C, Ch 4, Sec 1, [9.6].

The additional class notation **INERTGAS-C** may be assigned to ships having the service notation:

- a) built before 1 January 2016 having the service notation:
- **oil tanker, combination carrier/OBO, combination carrier/OOC, FLS tanker**, whose deadweight is less than 20,000 tonnes, or
  - **chemical tanker and liquefied gas carrier**, having deadweight equal to or greater than 20,000 tonnes but complying with Pt C, Ch 4, Sec 1, [8.2.4] b) or having deadweight less than 20,000 tonnes
- b) built on or after 1 January 2016:
- **oil tanker, combination carrier/OBO, combination carrier/OOC, FLS tanker**, whose deadweight is less than 8,000 tonnes, or
  - **chemical tanker and liquefied gas carrier**, having deadweight equal to or greater than 8,000 tonnes

but complying with Pt C, Ch 4, Sec 1, [8.2.4] b) or having deadweight less than 8,000 tonnes

for which the installation of the inert gas system is not compulsory but fitted with an inert gas system complying with the requirements in Pt C, Ch 4, Sec 1, [9] except Pt C, Ch 4, Sec 1, [9.6].

#### 6.14.21 Safe return to port, orderly evacuation and abandonment (SRTP) (1/7/2010)

The additional class notation **SRTP** is assigned to passenger ships complying with SOLAS Regulations II-1/8-1, II-2/21 and 22 and with the "Interim Explanatory Notes for the assessment of passenger ship systems' capabilities after a fire or a flooding casualty" as per IMO MSC.1/Circ. 1369. Solutions providing an equivalent level of safety as those contained in the above-mentioned IMO MSC.1/Circ. 1369 may be accepted by the Society, on a case-by-case basis.

#### 6.14.22 Fire Protection (FIRE) (1/1/2020)

The following additional class notations are assigned to ships having enhanced features relevant to fire protection:

- **FIRE**
- **FIRE-AS**
- **FIRE-MS**
- **FIRE-MS (hot-spots)**
- **FIRE-CS**

The requirements for the assignment of these notations are given in Part F, Ch 13, Sec 17.

#### 6.14.23 Gas Fuelled (1/7/2018)

##### a) GAS FUELLED

The additional class notation **GAS FUELLED** is assigned to ships operating with liquefied or compressed natural gas as fuel for their internal combustion engines or boilers, complying with the design and constructional requirements of:

- Pt E, Ch 9, Sec 16, for liquefied gas carriers,
- Pt C, Ch 1, App 7, for other ship types.

##### b) GAS FUELLED (Main)

The additional class notation **GAS FUELLED (Main)** is assigned to ships operating with liquefied or compressed natural gas as fuel for their internal combustion main engines, complying with the design and constructional requirements of:

- Pt E, Ch 9, Sec 16, for liquefied gas carriers,
- Pt C, Ch 1, App 7, for other ship types.

##### c) GAS FUELLED (Aux)

The additional class notation **GAS FUELLED (Aux)** is assigned to ships operating with liquefied or compressed natural gas as fuel for their internal combustion auxiliary engines, complying with the design and constructional requirements of:

- Pt E, Ch 9, Sec 16, for liquefied gas carriers,
- Pt C, Ch 1, App 7, for other ship types.

#### 6.14.24 Carriage of specific solid cargoes in bulk (1/8/2011)

The additional class notation **IMSBC-A** is assigned to ships specially constructed or fitted for the carriage of cargoes

belonging to Group A as defined in the IMSBC Code (see Note 1) at a moisture content in excess of their Transportable Moisture Limit (TML).

The additional class notation **IMSBC-nitrate** is assigned to ships intended for the carriage of nitrate cargoes, belonging to Group B of the IMSBC Code, for which a fixed gas fire-extinguishing system is ineffective and for which a water fire-extinguishing system is provided (see Note 2).

The additional class notation **IMSBC-non cohesive** is assigned to ships intended for the carriage of non-cohesive cargoes with an angle of repose less than or equal to 30°.

The cargoes for which each of the above notations is granted are to be listed in the Certificate of Classification.

The requirements for the assignment of these additional class notations are given in Pt F, Ch 13, Sec 18.

Note 1: International Maritime Solid Bulk Cargoes Code, IMO Resolution MSC.286(85).

Note 2: Reference is made to IMO MSC/Circ. 1146 as it may be amended.

#### **6.14.25 Compliance with the Code of Safety for Special Purpose Ships (1/7/2017)**

The additional class notation **SPS** is assigned to ships constructed in compliance with the requirements of the Code of Safety for Special Purpose Ships, 2008, adopted by IMO through Resolution MSC.266(84), as amended or with the requirements of the Code of Safety for Special Purpose Ships, IMO Resolution A.534(13), as amended.

#### **6.14.26 Self-unloading (1/1/2013)**

The additional class notation **SELF-UNLOADING** is assigned to ships having one of the following service notations:

- **bulk carrier ESP**
- **bulk carrier ESP CSR**
- **general cargo ship**

provided with permanent on-board loading and unloading equipment which complies with the following conditions:

- a) the equipment that is fitted above the deck is certified in accordance with the "Rules for loading and unloading arrangements and for other lifting appliances on board ships",
- b) the equipment that is fitted inside the holds (horizontal and vertical conveyors) is certified and tested in compliance with a recognised standard.

#### **6.14.27 Technical Advisor Service (TAS) (1/7/2013)**

The additional class notation **TAS** is assigned to ships whose approved geometry and structural data are stored in a database in order to allow the Society to provide, through dedicated computer programs, the necessary assistance in the event of damage.

#### **6.14.28 Efficient ship (S, DWT) (1/2/2014)**

The additional class notation **EFFICIENT SHIP (S, DWT)** is assigned to ships achieving a level of efficiency as required by Pt F, Ch 13, Sec 19.

The notation is completed by two numbers, between brackets, which represent the reference speed S and deadweight DWT at which the ship has been evaluated.

#### **6.14.29 Mooring (1/7/2014)**

The additional class notation **MOORING** is assigned to units provided with arrangements for permanent mooring (anchoring) at a certain location. The mooring arrangement is to comply with Pt F, Ch 13, Sec 21.

#### **6.14.30 Cargo Handling (1/7/2014)**

The additional class notation **CARGO HANDLING** is assigned to a unit that is provided with lifting arrangements to load and unload cargoes:

- from the unit itself to shore facilities and vice versa
- from the unit itself to another unit and vice versa (transshipment)
- from a delivery unit to a receiving unit.

The lifting arrangements are to comply with the "Rules for loading and unloading arrangements and for other lifting appliances on board ships or other similar units".

#### **6.14.31 Navigation surrounding the arabian peninsula (SAHARA) (1/7/2014)**

The additional class notations **C-SAHARA** and **SAHARA** are assigned to ships complying with the requirements of Pt F, Ch 13, Sec 20, intended to operate in the areas surrounding the Arabian Peninsula:

- Arabian Gulf
- Oman Gulf
- Red Sea
- Arabian Sea along the South-East Coast of the Arabian Peninsula.

The additional class notation **C-SAHARA** is assigned to ships with unrestricted navigation notation.

The additional class notation **SAHARA** is assigned to ships for which navigation in the Arabian Sea along the South-East Coast of the Arabian Peninsula is limited to sea states with significant wave height not greater than 2 meters and intended to operate only within 50 nautical miles from the shore. For these ships, according to [5.2.6], the navigation notation **special (Arabian Peninsula)** is assigned and the specific restrictions (wave height, operating distance from the shore or any specific operating area) are to be indicated.

#### **6.14.32 Risk of failure reduction (RISK MITIGATION) (1/1/2015)**

The additional class notation **RISK MITIGATION (...)** is assigned to ships for which additional measures are adopted in order to reduce the risk of failures in specific technical matters such as fire protection, propulsion systems, etc. which are indicated between brackets in the notation itself.

Details of the adopted measures are indicated in an annex to the Certificate of Classification of the ship.

#### **6.14.33 Indoor Air Quality Monitoring (AIR MON) (1/7/2015)**

The additional class notation **AIR MON** is assigned to ships for which an air quality management system is implemented and verified by the Society according to the requirements of Pt F, Ch 13, Sec 22.

#### 6.14.34 DANGEROUS GOODS (1/7/2015)

The additional class notation **DANGEROUS GOODS** is assigned to ships that comply with the provisions for the carriage of dangerous goods given in SOLAS Regulation II-2/19.

#### 6.14.35 INF 1, INF 2, INF 3 (1/7/2015)

The additional class notations **INF 1**, **INF 2**, **INF 3** are assigned to ships that comply with the requirements of the International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and High-level Radioactive Wastes on Board Ships (INF Code).

The notation **INF 1** is assigned to ships that are certified to carry packaged irradiated nuclear fuel, plutonium and high-level radioactive wastes with an aggregate activity less than 4000 TBq.

The notation **INF 2** is assigned to ships that are certified to carry packaged irradiated nuclear fuel or high-level radioactive wastes with an aggregate activity less than  $2 \times 10^6$  TBq and ships which are certified to carry plutonium with an aggregate activity less than  $2 \times 10^5$  TBq.

The notation **INF 3** is assigned to ships that are certified to carry packaged irradiated nuclear fuel or high-level radioactive wastes and ships which are certified to carry plutonium with no restriction of the maximum aggregate activity of the materials.

#### 6.14.36 Dedicated Oil Recovery System (DORS) (15/7/2015)

The additional class notation **DORS** is assigned to ships with cargo tanks and fuel oil tanks provided with two or more connectors in order to allow the recovery of the content of the tanks.

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 23.

#### 6.14.37 GAS READY (X1, X2, X3...) (1/10/2015)

The additional class notation **GAS READY (X1, X2, X3...)** is assigned to ships whose design is in compliance with the applicable Rules for Gas Fuelled Ships, and the relevant systems and arrangement are partially installed on board, thus easing a future ship conversion into a Gas Fuelled Ship.

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 24.

#### 6.14.38 Temporary Refuge (RISKS) (1/7/2016)

The additional class notation **TEMPORARY REFUGE (RISKS)** is assigned to ships whose design includes specific characteristics and facilities in order to safely accommodate persons, granting temporary protection from the consequences (**RISKS**) of a possible major accident, as defined by the Designer.

The design of the temporary refuge ship is to be developed in accordance with the criteria of a recognised standard and is to include:

- the identification and quantification of the risks by the Designer and the duration of exposure to these risks,
- the assessment of its protection characteristics and capabilities effectiveness with respect to their progressive impairment,
- the adoption of an appropriate programme of tests, inspections, maintenance, repair and replacement, which contribute to the impairment detection, prevention and mitigation.

#### 6.14.39 DOLPHIN QUIET SHIP or DOLPHIN TRANSIT SHIP (1/3/2017)

The additional class notations **DOLPHIN QUIET SHIP** or **DOLPHIN TRANSIT SHIP** are assigned to ships whose design is such as to ensure a low environmental impact originated from underwater noise radiation.

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 25.

#### 6.14.40 GREAT LAKES ST LAWRENCE SEAWAY (1/7/2017)

The additional class notation **GREAT LAKES ST LAWRENCE SEAWAY** is assigned to ships whose design and equipment is in compliance with the applicable requirements issued by issued by "The St. Lawrence Seaway Management Corporation and the Saint Lawrence Seaway Development Corporation". The relevant arrangements and equipment are recorded in the ship's status.

#### 6.14.41 EGCS-SOX/NOX (1/7/2017)

The additional class notation **EGCS-SOX** and/or **EGCS-NOX** are assigned to ships equipped respectively with exhaust gas cleaning systems suitable to reduce the SOx emissions (i.e. typically scrubbers) and the NOx emissions (i.e typically Selective Catalytic Reduction systems) .

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 26.

#### 6.14.42 BATTERY POWERED SHIPS (1/1/2019)

The additional class notation **BATTERY POWERED SHIPS**, is assigned to ships where batteries, other than Lead and Nickel-Cadmium batteries, having a capacity of 50 kWh or above are installed to supply essential or not-essential services and emergency services, in compliance with the requirements of Pt C, Ch 2, App 2.

#### 6.14.43 Man Overboard Detection System (MOB) (1/11/2018)

The additional class notation **MOB** is assigned to ships equipped with a Man Overboard Detection System capable of detecting persons that pass through the MOB detection zone while going overboard.

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 27.

**6.14.44 Hybrid Propulsion Ship (HYB-...) (1/1/2019)**

The additional class notation **HYBRID PROPULSION SHIP (HYB-...)** is assigned to ships equipped with an hybrid propulsion system.

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 28.

**6.14.45 Cyber Resilience (1/1/2019)**

The additional class notations **CYR (Cyber resilience)**, **CYR-OT (Cyber resilience of Operational Technology)** and **CYR-IT (Cyber resilience of Information Technology)** assigned to ships complying with the cyber resilience requirements given in Pt F, Ch 13, Sec 29.

**6.14.46 Digital Ship (1/1/2019)**

The additional class notation **DIGITAL SHIP** is assigned to ships fitted with an automatic data collection system enabling the collection of navigation and machinery data and their transmission on shore.

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 30.

**6.14.47 Air Lubrication System (AIR LUB) (1/4/2019)**

The additional class notation **AIR LUB** is assigned to ships equipped with an air lubrication system according to Pt F, Ch 13, Sec 31.

An air lubrication system is an energy saving system utilizing microbubbles to reduce hull skin friction. The consistent release of microbubbles forms an air-water layer around the hull that can result in reduced skin friction for ships.

**6.14.48 Persons with reduced mobility (PMR-ITA) (13/12/2019)**

The additional class notation **PMR-ITA** is assigned to ships designed in such a way that a person with reduced mobility can embark and disembark easily and safely and that there is barrier free passage in public spaces on board and in escape routes to muster stations.

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 32.

**6.14.49 BIOSAFE SHIP (15/6/2020)**

The additional class notation **BIOSAFE SHIP** is assigned to:

- Cruise ships and ro-ro passenger ships with sleeping facilities for passengers
- Passenger ships, high-speed passenger craft and ro-ro passenger ships in short sea voyages
- Cargo ships

designed and provided with systems, components and operative procedures to control and prevent possible on board infection outbreak.

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 33.

**6.14.50 REMOTE SURVEYABLE SHIP (REMOTE) (5/6/2020)**

The additional class notation **REMOTE** is assigned to ships deemed by the Society eligible to remotely carry out the

largest scope of class surveys, including periodical surveys, on the basis of:

- their age and service;
- their records of maintenance and operation; and,
- the specific arrangements and qualified personnel available on board to facilitate remote surveys (see Note 1).

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 34.

Note 1: Remote Survey: a survey carried out by the Society without the physical attendance of the Surveyor on board,

**6.14.51 LPG Fuelled (1/5/2021)**

The additional class notation **LPG FUELLED** is assigned to ships operating with LPG as fuel for their internal combustion engines or boilers, complying with the design and constructional requirements of Pt C, Ch 1, App 13.

**6.14.52 NH3 Fuelled (1/5/2021)**

The additional class notation **NH3 FUELLED** is assigned to ships operating with Ammonia as fuel for their internal combustion engines or boilers, complying with the design and constructional requirements of Pt C, Ch 1, App 13.

**6.14.53 NH3 FUELLED READY (X1, X2, X3) (1/5/2021)**

The additional class notation **NH3 FUELLED READY (X1, X2, X3...)** is assigned to ships whose design is in compliance with Pt C, Ch 1, App 13, and the relevant systems and arrangement are partially installed on board, thus easing a future ship conversion into a NH3 Fuelled Ship.

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 35.

**6.14.54 SUSTAINABLE SHIP (1/7/2021)**

The additional class notation **SUSTAINABLE SHIP** is assigned to ships complying with the sustainability criteria given in Pt F, Ch 13, Sec 36 relevant to:

- a) design and provision of systems, components and procedural means to control and prevent the emission of polluting substances into the sea, the air and, more in general, the environment (reference is made to **GREEN PLUS** additional class notation)
- b) underwater noise limitation (reference is made to **DOLPHIN** additional class notations)
- c) noise and vibration limitation on board (reference is made to **COMF-NOISE** and **COMF-VIB** additional class notations)
- d) compliance with **COMF-NOISE-PORT(X)** additional class notation
- e) compliance with **MLCDESIGN** additional class notation
- f) compliance with **BIOSAFE SHIP** additional class notation
- g) achievement of EEDI and EEXI values 40% lower than those in Phase 0 EEDI reference lines (see Note 1) in MARPOL Annex VI, according to the 2030 target in Initial IMO strategy on reduction of GHG emissions from ships (Res. MEPC.304(72)).

Note 1: For ro-ro cargo ships and ro-ro passenger ships, reference is made to Phase 2 EEDI reference lines

### 6.14.55 Maritime Autonomous Surface Ship (MASS) (1/10/2021)

The additional class notations **MASS** are assigned to ships having one of the following degrees of autonomy:

- **MASS-ADS:** ship with Automated processes and Decision Support: seafarers are on board to operate and control shipboard systems and functions. Some operations may be automated and at times be unsupervised but with seafarers on board ready to take control.
- **MASS-RCM:** Remotely Controlled Manned ship: the ship is controlled and operated from another location. Seafarers are available on board to take control and to operate the shipboard systems and functions.
- **MASS-RCU:** Remotely Controlled Unmanned ship: the ship is controlled and operated from another location. There are no seafarers on board.
- **MASS-FAS:** Fully Autonomous Ship: the operating system of the ship can make decisions and determine actions by itself.

For the assignment of the additional class notations **MASS**, in its variants, the ship is to comply with the requirements given in Pt F, Ch 13, Sec 37.

### 6.14.56 H2 FUELLED (1/10/2021)

The additional class notation **H2 FUELLED** is assigned to ships using hydrogen as fuel, complying with the design and constructional requirements of Pt C, Ch 1, App 14.

### 6.14.57 H2 FUELLED READY (X1, X2, X3) (1/10/2021)

The additional class notation **H2 FUELLED READY (X1, X2, X3...)** is assigned to ships whose design is in compliance

with Pt C, Ch 1, App 14, and the relevant systems and arrangement are partially installed on board, thus easing a future ship conversion into a H2 FUELLED ship.

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 38.

### 6.14.58 METHYL/ETHYL ALCOHOL FUELLED (1/1/2022)

The additional class notation **METHYL/ETHYL ALCOHOL FUELLED** is assigned to ships using methyl/ethyl alcohol as fuel, complying with the design and constructional requirements of Pt C, Ch 1, App 15.

### 6.14.59 METHYL/ETHYL ALCOHOL FUELLED READY (X1, X2, X3) (1/1/2022)

The additional class notation **METHYL/ETHYL ALCOHOL FUELLED READY (X1, X2, X3...)** is assigned to ships whose design is in compliance with Pt C, Ch 1, App 15, and the relevant systems and arrangement are partially installed on board, thus easing a future ship conversion into a METHYL/ETHYL ALCOHOL FUELLED ship.

The requirements for the assignment of this additional class notation are given in Pt F, Ch 13, Sec 39.

## 7 Other notations

### 7.1

**7.1.1** The Society may also define other notations by means of provisional requirements and guidelines, which may then be published in the form of tentative rules.

**Table 3 : List of additional class notations (1/1/2022)**

Additional class notation	Reference for definition	Reference	Remarks
<b>AIR LUBRICATION SYSTEM (AIR LUB)</b>	[6.14.47]	Pt F, Ch 13, Sec 31	
<b>AIR-MON</b>	[6.14.33]	Pt F, Ch 13, Sec 22	
<b>AUT-CCS</b>	[6.4.3]	Pt F, Ch 3, Sec 2	(1)
<b>AUT-PORT</b>	[6.4.4]	Pt F, Ch 3, Sec 3	(1)
<b>AUT-UMS</b>	[6.4.2]	Pt F, Ch 3, Sec 1	(1)
<b>AVM-APS or AVM-APS-NS</b>	[6.3.2]	Pt F, Ch 2, Sec 1	(1)
<b>AVM-IAPS</b>	[6.3.3]	Pt F, Ch 2, Sec 2	(1)
<b>AVM-DPS or AVM-DPS-NS</b>	[6.3.4]	Pt F, Ch 2, Sec 3	(1)
<b>AVM-IPS</b>	[6.3.5]	Pt F, Ch 2, Sec 4	(1)
<b>BATTERY POWERED SHIPS</b>	[6.14.42]	Pt C, Ch 2, App 2	
<b>BIOSAFE SHIP</b>	[6.14.49]	Pt F, Ch 13, Sec 33	
<b>BWM-E</b>	[6.14.15]	NA	(5)
<b>BWM-T</b>	[6.14.15]	NA	
<b>CARGOCONTROL</b>	[6.14.9]	Pt F, Ch 13, Sec 9	
<p>(1) A construction mark is added to this notation.            (2) This notation may be completed by the specific notations <b>-PRECOOLING</b>, <b>-QUICKFREEZE</b> and/or <b>-AIRCONT</b> (see [6.9.5]).            (3) This notation may be completed by the specific notations <b>-MIDSHIP</b> and <b>-TRANSFER</b> (see [6.14.7]).            (4) When ships are assigned the notations <b>CLEAN-SEA</b> and <b>CLEAN-AIR</b>, the two separate notations are superseded by the cumulative additional class notation <b>GREEN STAR 3 DESIGN</b> (see [6.8.4]).            (5) This notation may be completed by the specific features: <b>sequential</b>, <b>flow-through</b>, <b>dilution</b>.            (6) This notation may be completed by the specific notation <b>-HULL</b> (see [6.10.4]).            (7) This notation may be completed by the specific notation <b>Icebreaker</b> (see [6.11.1]).</p>			

Additional class notation	Reference for definition	Reference	Remarks
<b>CARGO HANDLING</b>	[6.14.30]	NA	
<b>CLEAN-AIR</b>	[6.8.3]	Pt F, Ch 7, Sec 3	(4)
<b>CLEAN-SEA</b>	[6.8.2]	Pt F, Ch 7, Sec 4	(4)
<b>COAT-WBT</b>	[6.14.12]	Pt F, Ch 13, Sec 12	
<b>COMF-AIR</b>	[6.7.4]	Pt F, Ch 6, Sec 3	
<b>COMF-NOISE</b>	[6.7.2]	Pt F, Ch 6, Sec 1	
<b>COMF-NOISE-PORT</b>	[6.7.5]	Pt F, Ch 6, Sec 4	
<b>COMF-VIB</b>	[6.7.3]	Pt F, Ch 6, Sec 2	
<b>COVENT</b>	[6.14.8]	Pt F, Ch 13, Sec 8	
<b>CYBER RESILIENCE (CYR, CYR-OT and CYR-IT)</b>	[6.14.45]	Pt F, Ch 13, Sec 29	
<b>DANGEROUS GOODS</b>	[6.14.34]	NA	
<b>DIGITAL SHIP</b>	[6.14.46]	Pt F, Ch 13, Sec 30	
<b>DIVINGSUPPORT</b>	[6.14.17]	Pt F, Ch 13, Sec 14	
<b>DOLPHIN QUIET SHIP or DOLPHIN TRANSIT SHIP</b>	[6.14.39]	Pt F, Ch 13, Sec 25	
<b>DORS</b>	[6.14.36]	Pt F, Ch 13, Sec 23	
<b>DMS</b>	[6.14.11]	Pt F, Ch 13, Sec 11	
<b>DYNAPOS</b>	[6.14.6] a)	Pt F, Ch 13, Sec 6	(1)
<b>DP PLUS</b>	[6.14.6] b)	Pt F, Ch 13, Sec 6	
<b>EGCS-SOX and/or EGCS-NOX</b>	[6.14.41]	Pt F, Ch 13, Sec 26	
<b>EFFICIENT SHIP (S, DWT)</b>	[6.14.28]	Pt F, Ch 13, Sec 19	
<b>FATIGUELIFE (Y)</b>	[6.14.13]	NA	
<b>FIRE</b>	[6.14.22]	Pt F, Ch 13, Sec 17	
<b>FIRE-AS</b>	[6.14.22]	Pt F, Ch 13, Sec 17	
<b>FIRE-MS</b>	[6.14.22]	Pt F, Ch 13, Sec 17	
<b>FIRE-MS (hot-spots)</b>	[6.14.22]	Pt F, Ch 13, Sec 17	
<b>FIRE-CS</b>	[6.14.22]	Pt F, Ch 13, Sec 17	
<b>GAS FUELLED</b>	[6.14.23] a)	Pt C, Ch 1, App 7 and Pt E, Ch 9, Sec 16	
<b>GAS FUELLED (Main)</b>	[6.14.23] b)	Pt C, Ch 1, App 7 and Pt E, Ch 9, Sec 16	
<b>GAS FUELLED (Aux)</b>	[6.14.23] c)	Pt C, Ch 1, App 7 and Pt E, Ch 9, Sec 16	
<b>GAS READY (X1, X2, X3...)</b>	[6.14.37]	Pt F, Ch 13, Sec 24	
<b>GRABLOADING and GRAB (X)</b>	[6.14.2]	Pt F, Ch 13, Sec 2	
<b>GREAT LAKES ST LAW-RENCE SEAWAY</b>	[6.14.41]	NA	
<b>GREEN PLUS</b>	[6.8.4] a)	Pt F, Ch 7, Sec 1	
<b>GREEN PLUS T</b>	[6.8.4] b)	Pt F, Ch 7, Sec 1 and Pt F, Ch 7, Sec 6	
<b>GREEN STAR 3 DESIGN</b>	[6.8.4] c)	Pt F, Ch 7, Sec 2	This cumulative notation supersedes the notations <b>CLEAN-SEA</b> and <b>CLEAN-AIR</b> , when both are assigned
<p>(1) A construction mark is added to this notation.</p> <p>(2) This notation may be completed by the specific notations <b>-PRECOOLING</b>, <b>-QUICKFREEZE</b> and/or <b>-AIRCONT</b> (see [6.9.5]).</p> <p>(3) This notation may be completed by the specific notations <b>-MIDSHIP</b> and <b>-TRANSFER</b> (see [6.14.7]).</p> <p>(4) When ships are assigned the notations <b>CLEAN-SEA</b> and <b>CLEAN-AIR</b>, the two separate notations are superseded by the cumulative additional class notation <b>GREEN STAR 3 DESIGN</b> (see [6.8.4]).</p> <p>(5) This notation may be completed by the specific features: <b>sequential</b>, <b>flow-through</b>, <b>dilution</b>.</p> <p>(6) This notation may be completed by the specific notation <b>-HULL</b> (see [6.10.4]).</p> <p>(7) This notation may be completed by the specific notation <b>Icebreaker</b> (see [6.11.1]).</p>			

Additional class notation	Reference for definition	Reference	Remarks
GREEN STAR 3	[6.8.4] d)	Pt F, Ch 7, Sec 5	
GREEN STAR 3 (TOC)	[6.8.4] e)	-	
GC CARGO HANDLING	[6.8.5]	Pt F, Ch 7, Sec 6	
H2 FUELLED	[6.14.56]	Pt C, Ch 1, App 14	
H2 FUELLED READY (X1, X2, X3)	[6.14.57]	Pt F, Ch 13, Sec 38	
HELIDECK	[6.14.19]	Pt F, Ch 13, Sec 16	
HELIDECK-H	[6.14.19]	Pt F, Ch 13, Sec 16	
HYBRID PROPULSION SHIP (HYB-...)	[6.14.44]	Pt F, Ch 13, Sec 28	(1)
HVSC	[6.14.18]	Pt F, Ch 13, Sec 15	
ICE	[6.10.5]	-	
ICE CLASS IA	[6.10.2]	Part F, Chapter 9	(6)
ICE CLASS IA SUPER	[6.10.2]	Part F, Chapter 9	(6)
ICE CLASS IB	[6.10.2]	Part F, Chapter 9	(6)
ICE CLASS IC	[6.10.2]	Part F, Chapter 9	(6)
ICE CLASS ID	[6.10.3]	Part F, Chapter 9	(6)
IMSBC-A	[6.14.24]	Pt F, Ch 13, Sec 18	
IMSBC-nitrate	[6.14.24]	Pt F, Ch 13, Sec 18	
IMSBC-non cohesive	[6.14.24]	Pt F, Ch 13, Sec 18	
INERTGAS-A	[6.14.20]	Pt C, Ch 4, Sec 1	
INERTGAS-B	[6.14.20]	Pt C, Ch 4, Sec 1	
INERTGAS-C	[6.14.20]	Pt C, Ch 4, Sec 1	
INWATERSURVEY	[6.14.3]	Pt F, Ch 13, Sec 3	
INF 1, INF 2, INF 3	[6.14.35]	NA	(1)
LASHING	[6.14.5]	Pt F, Ch 13, Sec 5	
LPG FUELLED	[6.14.51]	Pt C, Ch 1, App 13	
MAN OVERBOARD DETECTION SYSTEM (MOB)	[6.14.43]	Pt F, Ch 13, Sec 27	
MANOVR	[6.14.10]	Pt F, Ch 13, Sec 10	
MASS-ADS MASS-RCM MASS-RCU MASS-FAS	[6.14.55]	Pt F, Ch 13, Sec 37	
METHYL/ETHYL ALCOHOL FUELLED	[6.14.58]	Pt C, Ch 1, App 15	
METHYL/ETHYL ALCOHOL FUELLED READY (X1, X2, X3)	[6.14.59]	Pt F, Ch 13, Sec 39	
MLCDESIGN	[6.14.16]	Pt F, Ch 13, Sec 13	
MON-HULL	[6.6.2]	Pt F, Ch 5, Sec 1	
MON-SHAFT	[6.6.3]	Pt F, Ch 5, Sec 2	
MOORING	[6.14.29]	Pt F, Ch 13, Sec 21	
NH3 FUELLED	[6.14.52]	Pt C, Ch 1, App 13	
NH3 FUELLED READY (X1, X2, X3)	[6.14.53]	Pt F, Ch 13, Sec 35	
<p>(1) A construction mark is added to this notation.</p> <p>(2) This notation may be completed by the specific notations <b>-PRECOOLING</b>, <b>-QUICKFREEZE</b> and/or <b>-AIRCONT</b> (see [6.9.5]).</p> <p>(3) This notation may be completed by the specific notations <b>-MIDSHIP</b> and <b>-TRANSFER</b> (see [6.14.7]).</p> <p>(4) When ships are assigned the notations <b>CLEAN-SEA</b> and <b>CLEAN-AIR</b>, the two separate notations are superseded by the cumulative additional class notation <b>GREEN STAR 3 DESIGN</b> (see [6.8.4]).</p> <p>(5) This notation may be completed by the specific features: <b>sequential</b>, <b>flow-through</b>, <b>dilution</b>.</p> <p>(6) This notation may be completed by the specific notation <b>-HULL</b> (see [6.10.4]).</p> <p>(7) This notation may be completed by the specific notation <b>Icebreaker</b> (see [6.11.1]).</p>			



Additional class notation	Reference for definition	Reference	Remarks
<b>PERSONS WITH REDUCED MOBILITY (PMR-ITA)</b>	[6.14.48]	Pt F, Ch 13, Sec 32	
<b>PMA</b>	[6.14.14]	NA	
<b>PMS</b>	[6.13.2]	Pt F, Ch 12, Sec 1	
<b>PMS-CM(PROP)</b>	[6.13.3]	Pt F, Ch 12, Sec 2	
<b>PMS-CM(HVAC)</b>	[6.13.4]	Pt F, Ch 12, Sec 3	
<b>PMS-CM(CARGO)</b>	[6.13.5]	Pt F, Ch 12, Sec 4	
<b>PMS-CM(ELE)</b>	[6.13.6]	Pt F, Ch 12, Sec 5	
<b>PMS-CM(FDS)</b>	[6.13.7]	Pt F, Ch 12, Sec 6	
<b>PMS-CM</b>	[6.13.8]	Pt F, Ch 12, Sec 7	
<b>POLAR CLASS</b>	[6.11.1]	Part F, Chapter 10	(7)
<b>REF-CARGO</b>	[6.9.2]	Pt F, Ch 8, Sec 2	(1) (2)
<b>REF-CONT</b>	[6.9.3]	Pt F, Ch 8, Sec 3	(1) (2)
<b>REF-STORE</b>	[6.9.4]	Pt F, Ch 8, Sec 4	(1) (2)
<b>REMOTE SURVEYABLE SHIP (REMOTE)</b>	[6.14.50]	Pt F, Ch 13, Sec 34	
<b>RISK MITIGATION (...)</b>	[6.14.33]	NA	
<b>ROUTE DEPENDENT LASHING (start date - end date)</b>	[6.14.5]	Pt F, Ch 13, Sec 5	
<b>☉ SAHARA SAHARA</b>	[6.14.31]	Pt F, Ch 13, Sec 20	
<b>SELF-UNLOADING</b>	[6.14.26]	NA	
<b>SPM</b>	[6.14.4]	Pt F, Ch 13, Sec 4	
<b>SPS</b>	[6.14.25]	NA	
<b>SRTP</b>	[6.14.21]	NA	
<b>STAR</b>	[6.2.4]	Part F, Chapter 1	This cumulative notation supersedes the notations <b>STAR-HULL</b> and <b>STAR-MACH</b> , when both are assigned
<b>STAR-HULL</b>	[6.2.2]	Pt F, Ch 1, Sec 1	
<b>STAR-MACH</b>	[6.2.3]	Pt F, Ch 1, Sec 2	
<b>STRENGTHBOTTOM-NAABSA</b>	[6.14.1]	Pt F, Ch 13, Sec 1	
<b>SUSTAINABLE SHIP</b>	[6.14.54]	Pt F, Ch 13, Sec 36	
<b>SYS-COM</b>	[6.5.4]	Pt F, Ch 4, Sec 3	
<b>SYS-IBS</b>	[6.5.3]	Pt F, Ch 4, Sec 2	(1)
<b>SYS-NEQ SYS-NEQ-1</b>	[6.5.2]	Pt F, Ch 4, Sec 1	(1)
<b>TAS</b>	[6.14.27]	NA	
<b>TEMPORARY REFUGE (RISKS)</b>	[6.14.38]	NA	
<b>VCS</b>	[6.14.7]	Pt F, Ch 13, Sec 7	(3)
<b>WINTERIZATION (temp)</b>	[6.12.1]	Part F, Chapter 11	

(1) A construction mark is added to this notation.  
(2) This notation may be completed by the specific notations **-PRECOOLING**, **-QUICKFREEZE** and/or **-AIRCONT** (see [6.9.5]).  
(3) This notation may be completed by the specific notations **-MIDSHIP** and **-TRANSFER** (see [6.14.7]).  
(4) When ships are assigned the notations **CLEAN-SEA** and **CLEAN-AIR**, the two separate notations are superseded by the cumulative additional class notation **GREEN STAR 3 DESIGN** (see [6.8.4]).  
(5) This notation may be completed by the specific features: **sequential**, **flow-through**, **dilution**.  
(6) This notation may be completed by the specific notation **-HULL** (see [6.10.4]).  
(7) This notation may be completed by the specific notation **Icebreaker** (see [6.11.1]).