



CCS Rule Change Notice For:

CLASSIFICATION OF SEA-GOING STEEL SHIPS

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PART ONE PROVISIONS OF CLASSIFICATION

CHAPTER 2 SCOPE AND CONDITIONS OF CLASSIFICATION

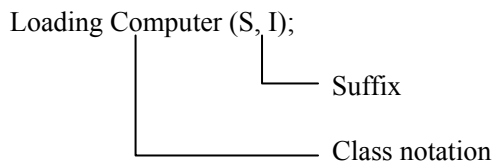
The Appendix 1 is replaced by the followings:

Appendix 1 LIST OF CLASS NOTATIONS FOR SEA-GOING SHIPS

Ships or machineries (including electrical installations) constructed or manufactured in accordance with relevant rules issued by CCS or other equivalent regulations accepted by it will be assigned appropriate class notations by CCS. CCS class notations in use for sea-going ships are listed in this Appendix for reference and application.

General principles for identification of class notations are as follows:

1. Class notations are marked after characters of classification, where the notations for type of ship, hull and service restriction or limitation, features, equipment, cargo and loading characteristics, survey, etc. are marked after the characters ★CSA and the notations for automation and special equipment of machinery, machinery survey, environmental protection, etc. are marked after the characters ★CSM.
2. The class notations for type of ship, service restriction or limitation and special duties are necessary notations and are to be assigned together with characters of classification.
3. Where a class notation (other than those referred to in 2 above) assigned to a specific ship together with characters of classification is required by the rules to which the ship is subject, such notation is a necessary one for this ship, or an optional one.
4. Where multiple class notations for type of ship are assigned, such individual notations are to be separated by the sign “/”, i.e. Offshore Tug/Supply ship; Ore/Bulk/Oil Carrier.
5. Any suffix to a class notation is to be bracketed and every two suffixes are to be separated by a comma “,”, i.e.:



6. Every two sets of class notations are to be separated by a semicolon “;”.
7. Unless specifically stated otherwise, class notations are generally given in the sequence A – K as shown in the table below:

Types of class notations	Type of ship	Service restriction or limitation	Special duties	Cargo and loading characteristics	Special features	Automation	Special equipment	Special survey	Environmental protection	Refrigerated cargo installation	Other notations
Table	Table A	Table B	Table C	Table D	Table E	Table F	Table G	Table H	Table I	Table J	Table K

For example, in respect to a bulk carrier constructed under supervision of CCS according to CSR rules, engaged in non-restricted service and service in floating ice condition, with design check by COMPASS-Structure software, with loading computer for calculation of overall strength, intact stability and bulk grains, machinery space periodically unattended, screwshaft condition monitoring and subject to in-water survey, the following characters of classification and class notations are to be assigned:

- ★CSA Bulk Carrier; CSR; BC-A (Holds Nos.2, 4 & 6 may be Empty) ; COMPASS(R, D, F); Grab(20); Ice Class B; Loading Computer(S, I, G); ESP; In-Water Survey
- ★CSM AUT-0; SCM

Type Notations

Table A

Class notation	Description		Technical requirements ^① to be complied with
General Dry Cargo Ship	General dry cargo ships	Ships intended primarily to carry dry cargo, and also liquid cargo contained in vessels, other than bulk carriers, container ships, ro-ro cargo ships, refrigerated cargo ships, cement carriers, livestock carriers, forest product carriers and wood chip carriers, deck cargo ships and general dry cargo ships of double side skin construction. Assignment of this notation is subject to compliance with survey requirements in Sec. 5, Ch. 5, Pt. 1 of the Rules. For general dry cargo ships of double side-skin construction, with double side-skin extending for the entire length of the cargo area, and for the entire height of the cargo hold to the upper deck, the notation “Double Side Skin” is to be added after their type notation and separated by a comma “,”, i.e. General Dry Cargo Ship, Double Side Skin. Assignment of this notation is subject to compliance with survey requirements in Sec. 4, Ch. 5, Pt.1 of the Rule	Ch.2, Pt.2 of the Rules
Cement Carrier	Cement Carrier	Ships designed and constructed specifically for the carriage of cement	Ch.2 and applicable section of other chapters, Pt.2 of the Rules
Wood Chip Carrier	Wood Chip Carrier	Ships designed and constructed specially for the carriage of wood chips	Ch.2 and applicable section of other chapters, Pt.2 of the Rules
Deck Cargo Ship	Deck Cargo Ship	Ships designed for the carriage of cargo exclusively above deck with no cargo hold fitted	Ch.2 and applicable section of other chapters, Pt.2 of the Rules
Refrigerated Cargo Ship	Refrigerated Cargo Ship	Ships fitted with refrigerated cargo installations, dedicated to the carriage of perishable goods such as fish, meet, fruits, vegetables, etc.	Ch.2, Pt.2 and Ch.1~3, Pt.5 of the Rules
Livestock Carrier	Livestock Carrier	Ships designed and constructed specially for the carriage of livestock such as cattle, sheep, etc.	Ch.2, Pt.8 of the Rules
Fly Ash Carrier	Fly Ash Carrier	Ships designed and constructed specially for the carriage of fly ash	Ch.2 and applicable section of other chapters, Pt.2 of the Rules
Sugar Carrier	Sugar Carrier	Ships designed and constructed specially for the carriage of sugar	Ch.2 and applicable section of other chapters, Pt.2 of the Rules
Passenger Ship	Passenger ships	Ships carrying more than 12 passengers	Ch. 9, Pt. 2 of the Rules
RO-RO Ship	Ro-ro ships	Ships carrying vehicles or cargo in pallet form or in containers and loaded/unloaded by wheeled vehicles	Ch. 9, Pt. 2 of the Rules
RO-RO Passenger Ship	Ro-ro passenger ships	Passenger ships with ro-ro cargo spaces or special category spaces and capable of carrying road vehicles	Ch. 9, Pt. 2 of the Rules
Train/RO-RO Passenger Ship	Train and ro-ro passenger ships	Ro-ro ships carrying more than 12 passengers and capable of carrying trains	Ch. 9, Pt. 2 of the Rules
Ferry	Ferries	Ships having a continuous deck and carrying passengers (without sleeping berths) and/or vehicles for regular voyages between two sides of straits or islands	Ch. 9, Pt. 2 of the Rules
Bulk Carrier	Bulk carriers	Ships carrying mainly dry cargo in bulk, normally constructed with single deck, topside tanks, hopper tanks and double bottom in cargo spaces, cargo holds bounded by side shell. For bulk carriers, of which all cargo holds are bounded by double side skin construction of not less than 1000 mm breadth at any location within the hold length, the notation “Double Side Skin” is to be added after their type notation	Ch. 8, Pt. 2 of the Rules

^① The technical requirements listed in this Table is the basic ones for the ship assigned to the notation, in other cases, special consideration is to be given by CCS according to the ship’s specific conditions.

Class notation	Description		Technical requirements [®] to be complied with
		and separated by a comma “,”, i.e. Bulk Carrier, Double Side Skin	
Ore Carrier	Ore carriers	Ships constructed with single deck, 2 longitudinal bulkheads and a double bottom throughout the cargo length area and intended primarily to carry ore cargoes in the centre holds only	Ch. 16, Pt. 2 of the Rules
Water Tanker	Water tankers	Tankers carrying fresh water	Ch.2 and applicable sections of Ch. 5 & 6, Pt. 2 of the Rules
Oil Tanker	Oil tankers	Ships carrying crude oil or oil products, note to be added according to flash point of oil carried: ① flash point above 60°C: F.P. >60°C ② flash point up to 60°C: F.P. ≤60°C	Ch. 6, Pt. 2 of the Rules
		For ships with distance between two hulls in compliance with the Rules, single deck and small-size hatches, carrying crude oil or oil products, the notation “Double Hull” may be added and separated by a comma “,”, i.e. Oil Tanker, Double Hull	Ch. 5, Pt. 2 of the Rules
Ore/Oil Carrier	Ore/oil carriers	Ships with single hull, single deck, 2 longitudinal bulkheads and double bottom, all or most of center holds used for carrying ore, side or side and some centre holds used for carrying oil	Ch. 5, Ch. 6 & Ch. 16, Pt. 2 of the Rules
Ore/Bulk/Oil Carrier	Ore/bulk/oil carriers	Ships with double hull, single deck, double bottom, topside tanks and hopper tanks, carrying oil or dry bulk cargo (including ore)	Ch. 5, Ch. 6, Ch. 8 & Ch.16, Pt. 2 of the Rules
Container Ship	Container ships	Ships having double bottom and double side skin construction with torsion box girders fitted at top sides, large deck openings, carrying containers, or as alternative, single side skin construction with double bottom and torsion box girders or equivalent structure	Ch. 7, Pt. 2 of the Rules
Car Carrier	Car carriers	Ships specially designed and constructed for carriage of commercial wheeled vehicles	Guidelines for Hull Structure of Car Carriers
Open-Top Container Ship	Open-top container ships	Ships having double bottom and double side skin construction with torsion box girders fitted at top sides, large deck openings, carrying containers, or as alternative, single side skin construction with double bottom and torsion box girders or equivalent structure, but no hatch covers for holds	Ch. 6, Pt. 8 of the Rules
Timber Carrier	Timber carriers	Dedicated log or timber carriers, provided with securing equipment, for which the notation Log Carrier may also be used	Ch. 2, Pt. 2 of the Rules and relevant requirements, <u>and Guidelines for Preparation of Cargo Securing Manual</u>
Barge	Barges	Ships not provided with main propulsion machinery used for navigation purposes. Where such ships are dedicated to carriage of a specific cargo, they may be identified, as necessary, by the notation X Barge where X is the name of the specific cargo	Ch. 12, Pt. 2 of the Rules
Oil Barge	Oil barges	Barges carrying crude oil or oil products within holds	Ch. 12, Pt. 2 of the Rules
Floating concrete mixer	Floating concrete mixers	Barges mixing concrete on the water and depositing concrete directly at the construction site	Ch.12, Pt.2 of the Rules
Chemical Barge	Chemical barges	Barges carrying chemicals within holds	Rules for Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
Gas Barge	Gas barges	Barges carrying liquefied gases within holds	Rules for Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk

Class notation	Description		Technical requirements[®] to be complied with
Pontoon Barge	Pontoon barges	Square barges carrying water-resistant cargoes on deck	Ch. 12, Pt. 2 of the Rules
Launch Barge	Launch barges	Barges dedicated to carriage of offshore jacket structures and for launching such jackets, which will be slid into water through trim of the barge by stern	Ch. 12, Pt. 2 of the Rules and relevant requirements
Barge Carrier	Barge carriers	Dedicated cargo barge and heavy cargo carriers with large deck area	Ch. 2, Pt. 2 of the Rules
Bridge Crane and Heavy Equipment Carrier	Bridge equipment carriers	Carriers having large deck areas and exclusively engaged in loading/unloading on decks and long-distance transportation by sea of complete sets of heavy equipment and project facilities with large dimension/heavy weight such as bridge cranes and heavy equipment	Ch. 18, Pt. 8 of the Rules
Live Fish Carrier	Live fish carriers	Ships fitted with live fish holds, provided with water cycling or exchanging, in some cases provided with devices for increasing oxygen, purifying water and reducing temperature, dedicated to carry live fish	Ch. 2, Pt. 2 of the Rules and relevant requirements
Semi-Submersible Vessel	Semi-submersible vessels	Ships capable of being semi-submersible when needed during loading and unloading or operation	Ch. 15, Pt. 2 of the Rules
Tug	Tugs	Ships fitted with towing equipment, dedicated to towing ships or other floating objects on water	Ch. 10, Pt. 2 of the Rules
Chemical Tanker	Chemical tankers	Ships similar as oil tankers, provided with cargo containment system, dedicated to carry liquid cargoes as listed in IBC Code. Chemical tankers constructed on or after 1 July 1986 and complying with IBC Code are to be assigned the following notations respectively, depending on the category of chemicals carried: ① Type 1: Carrying chemicals with very severe environmental and safety hazards, fitted with integral and independent tanks; ② Type 2: Carrying chemicals with appreciably severe environmental and safety hazards, fitted with integral and independent tanks; ③ Type 3: Carrying chemicals with sufficiently severe environmental and safety hazards, fitted with integral and independent tanks. Chemical tankers constructed before 1 July 1986 and complying with BCH Code are to be assigned the notations of Type I/Type II/Type III respectively instead of Type 1/Type 2/Type 3	Rules for Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
Liquefied Gas Carrier	Liquefied gas carriers	Ships provided with cargo containment system, dedicated to carry liquefied gases or other cargoes as listed in IGC Code. Liquefied gas carriers constructed on or after 1 July 1986 and complying with IGC Code are to be assigned the following notations respectively, depending on the preventive measures to preclude the escape of cargo: ① Type 1G: Maximum preventive measures are required to preclude the escape of cargo; ② Type 2G: Significant preventive measures are required to preclude the escape of cargo; Type 2PG: For gas carriers of 150 m in length or less and significant preventive measures are required to preclude the escape of cargo, and the products are carried in type C independent tanks designed for a MARVS of at least 0.7 MPa gauge and a cargo containment system design temperature of -55°C or above; ③ Type 3G: Moderate preventive measures are required to preclude the escape of cargo. Liquefied gas carriers constructed before 1 July 1986 and complying with GC Code are to be assigned the notations of Type IG/Type IIG/Type IIPG/ Type IIIG respectively instead	Rules for Construction and Equipment of Ships Carrying Liquefied Gases in Bulk

Class notation	Description		Technical requirements [®] to be complied with
		of Type 1G/Type 2G/Type 2PG/ Type 3G The following notations are to be assigned respectively, depending on the type of cargo containment systems: Type A Independent Tank Type B Independent Tank Type C Independent Tank Integral Tank Membrane Tank Semi-Membrane Tank Internal Insulation Tank	
LPG Carrier	LPG carriers	Liquefied gas carriers dedicated to carrying liquefied petroleum gas. The notations Type 1G/Type 2G/Type 2PG/ Type 3G or Type 1G/Type IIG/Type IIPG/ Type IIIG are to be added for preventive measures to preclude the escape of cargo, as stated in column Description for the notation Liquefied Gas Carrier	Rules for Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
LNG Carrier	LNG carriers	Liquefied gas carriers dedicated to carrying liquefied natural gas. The notations Type 1G/Type 2G/Type 2PG/ Type 3G or Type 1G/Type IIG/Type IIPG/ Type IIIG are to be added for preventive measures to preclude the escape of cargo, as stated in column Description for the notation Liquefied Gas Carrier.	Rules for Construction and Equipment of Ships Carrying Liquefied Gases in Bulk and/or Guidelines for Implementation of Liquefied Nature Gas Carrier Combined as Floating Storage Unit (2016)
LNG-FSU	LNG carrier combined as FSU	When the LNG carrier is also used as a LNG Floating Storage Unit (FSU), “LNG-FSU” is to be added after the class notation of LNG Carrier and separated by a comma “,”, such as LNG Carrier, LNG-FSU.	
CNG Carrier	CNG carriers	Liquefied gas carriers dedicated to carrying compressed natural gas. The notations Type 1G/Type 2G/Type 2PG/ Type 3G or Type 1G/Type IIG/Type IIPG/ Type IIIG are to be added for preventive measures to preclude the escape of cargo, as stated in column Description for the notation Liquefied Gas Carrier	Rules for Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
CO ₂ Carrier	CO ₂ carriers	Liquefied gas carriers dedicated to carrying compressed CO₂. The notations Type 1G/Type 2G/Type 2PG/ Type 3G or Type 1G/Type IIG/Type IIPG/ Type IIIG are to be added for preventive measures to preclude the escape of cargo, as stated in column Description for the notation Liquefied Gas Carrier	Rules for Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
Asphalt Carrier	Petroleum asphalt carriers	For ships dedicated to carrying melted petroleum asphalt, this type notation is to be assigned and the following notations are to be added: ① for independent tanks: independent tank, or ② for integral tanks: Integral tank; ③ for maximum cargo temperature: Maximum Cargo Temperature ≤ ×××°C; ④ for flash point above 60°C: F.P. > 60°C The notation of thermal stress calculation may be assigned if the requirements of Section 24, Chapter 2 of PART Two of the Rules are complied with. For ships with distance between two hulls in compliance with the Rules, the notation “Double Hull” may be added and separated by a comma “,”, i.e. Asphalt Carrier, Double Hull	Ch. 10, Pt. 8 of the Rules
Offshore Supply Ship	Offshore supply ships	Ships dedicated to supplying food, stores, etc. to installations and ships engaged in offshore operations	Ch. 11, Pt. 2 of the Rules
Offshore Tug/supply Ship	Offshore tug and supply ships	Ships capable of operating as offshore supply ships and of towing operations	Ch. 11, Pt.2 of the Rules
Stand-by Ship	Stand-by ships	Ships providing rescue operations and supporting services for mobile offshore drilling units or offshore oil/gas production facilities. Additional auxiliary functions such as fire fighting, towing,	Ch. 2, Pt. 2 of the Rules and relevant requirements

Class notation	Description		Technical requirements [®] to be complied with
		oil recovery, supply may be provided according to design purposes and multiple type notations may be assigned accordingly. For towing capacity fully complying with Chapter 10 of PART TWO, the notation Stand-by Ship/Tug may be assigned; and for towing capacity complying only with the requirements for towing arrangements in Chapter 10 of PART TWO, the suffix T may be added	
Floating Dock with F _L (××× t)	Floating docks with F _L (××× t)	A building used for shipbuilding and ship repairs, capable of being semi-submersible in or floating on water, with its special hull being open on both ends and corrugated in transverse section. The hull structure of the dock consists of wing walls and the dock's bottom. Wing walls and the dock's bottom are pontoons consisting of longitudinal or transverse members and face plates, divided transversely and longitudinally into watertight compartments. With water being filled into or discharged from the compartments, the amount of ballast water in the dock is increased or decreased so that the dock submerges into or rises out of water	Rules for Classification of Floating Docks, 2009
Cable Layer	Cable layers	Ships provided with cable laying machinery and other special equipment	Ch. 2, Pt. 2 of the Rules and relevant requirements
Pipe Layer	Pipe layers	Ships provided with special equipment for laying pipes	Ch. 2 & 13, Pt. 2 of the Rules
Chemical/Oil Tanker	Chemical/oil tankers	Tankers capable of carrying both chemicals and oil products	Rules for Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
Tug/Offshore Supply Ship/Fire Fighting Ship-N	Multi-purpose tugs	Tugs with more than 3 functions such as supplying and fire fighting (to be clearly stated) N—see description for the notation Fire Fighting Ship-N	Ch. 10 & 11, Pt. 2/Ch.1, Pt. 8 of the Rules
Fishing Vessel	Fishing vessels	Ships provided with fishing equipment	Ch. 5, Pt. 8 of the Rules
Floating Crane	Floating cranes	Ships fitted with lifting appliances on deck, dedicated to hoisting operations on water. The notation Lifting Appliance is to be added. For floating cranes operating in restricted service, one of the following service notations is to be assigned: (1) Lifting Within R1; (2) Lifting Within R2; (3) Lifting Within R3; (4) Lifting Within Harbor	Ch. 13, Pt. 2 of the Rules, Rules for Lifting Appliances of Ships and Offshore Installations
Salvage Ship	Salvage ships	Ships provided with equipment for salvaging sunken ships or other objects	Ch. 13, Pt. 2 of the Rules
Rescue Ship	Rescue ships	Ships engaged in rescue operations at sea for ships and crew in distress	Ch. 2, Pt. 2 of the Rules
Pile Driving Barge	Pile-driving barges	Barges fitted with pile driving equipment at end or centre of deck, dedicated to pile driving in water	Ch. 13 Pt. 2 of the Rules
Dredger	Dredgers	Ships fitted with dredging equipment, in general not operating independently	Ch. 14, Pt. 2 of the Rules
Trailing Suction Hopper Dredger	Trailing suction dredgers	Ships fitted with drag head and other dredging equipment	
Cutter Suction Dredger	Cutter suction dredgers	Ships fitted with cutter head and other dredging equipment	
Bucket Dredger	Bucket dredgers	Ships fitted with bucket and other dredging equipment	
Grab Dredger	Grab dredgers	Ships fitted with one or more grab machines	
Dipper Dredger	Dipper dredgers	Ships fitted with dippers. Where a back hoe is fitted, the notation "Back-hoe Dredger" may also be assigned	

Class notation	Description		Technical requirements [®] to-be-complied-with
Cutter Wheel Dredger	Cutter wheel dredgers	Ships fitted with cutter-wheel dredging apparatus	
Reclamation Craft	Reclamation craft	Ships fitted with suction pipes, nozzles, etc.	
Split Hopper Dredger	Split hopper dredgers	Ships with entire main hull being opened along longitudinal centerline for unloading	
Hopper Barge	Hopper barges	Barges dedicated to carrying mud. If self-propelled, the word signedress service notations is to be assigned	
Split Hopper Barge	Split hopper Barges	Barges with entire main hull being opened along longitudinal centerline for unloading. If self-propelled, the word “ship” is to be used in place of the word “barge”	
Wave Pierce Craft	Wave-piercing craft	A special type of catamaran high speed craft with large aspect ratio and small waterplane area	<p>HSC are ships with maximum speed not less than $3.7\sqrt{0.1667}$ m/s.</p> <p>For passenger ships as defined in 2.1.3.1(18) of Rules for Construction and Classification of Sea-Going High Speed Craft, the service notation Passenger A is to be added after type notation and where such ships are fitted with ro-ro spaces or special category spaces, the notation Ro-Ro Passenger A is to be added.</p> <p>For passenger ships as defined in 2.1.3.1(19) of Rules for Construction and Classification of Sea-Going High Speed Craft, the service notation Passenger B is to be added after type notation and where such ships are fitted with ro-ro spaces or special category spaces, the notation Ro-Ro Passenger B is to be added.</p> <p>For high speed cargo craft, the notation Cargo is to be added after type notation</p>
Air Cushion Craft	Air cushion craft	High speed craft wholly supported by air cushion	
Surface Effect Ship HSC	High speed surface effect craft (side wall hovercraft)	High speed craft with its air cushion being wholly or partially maintained by submerged permanent hard structure	
Catamaran HSC	Catamaran craft	High speed craft with upper parts of two parallel hulls being connected by strength framing	
Mono-Hull HSC	Mono-hull craft	High speed craft with one hull	
Hydrofoil Craft	Hydrofoil craft	Ships supported completely clear above water surface in non-displacement mode by hydrodynamic forces generated on foils	
SWATH-HSC	High speed small waterplane area twin hull craft	A special type of catamaran with small waterplane area, and with underwater portions of hulls being formed in shape of torpedo	Guidelines for Small Waterplane Area Twin Hull Craft
SWATH	Small waterplane area twin hull craft	A special type of catamaran with small waterplane area, and with underwater portions of hulls being formed in shape of torpedo	
Wing In Ground Craft	Wing-in-ground craft	Ships, which are supported by using ground effect above the water or some other surface, without constant contact with such a surface and supported in the air, mainly, by an aerodynamic lift generated on a wing (wings) which are intended to utilize the ground effect action, must be assigned this type notation with one of following suffixes being added thereafter: A — for craft certified for operation only in ground effect; B — for craft certified to temporarily increase its altitude to a limited height beyond ground effect but not exceeding a certain distance	Guidelines for Survey of Wing-in-Ground Craft
Passenger Boat	Passenger boats	Passenger ships less than 20 m in length	Rules for Construction of Coastal Boats

Class notation	Description		Technical requirements[®] to be complied with
Cargo Boat	Cargo boats	Cargo ships less than 20 m in length	Rules for Construction of Coastal Boats
Passenger Submersible Craft	Submersible passenger craft	Self-propelled free submersibles transporting or carrying passengers and capable of underwater sightseeing	Rules for the Construction and Classification of Diving Systems and Submersibles
Passenger Semi-submersible Craft	Semi-submersible passenger craft	Self-propelled free semi-submersibles transporting or carrying passengers and capable of underwater sightseeing, with some portion of their structure above water surface while submerging	Standard(s) acceptable to CCS
Rigid Connection PB Combination — Pusher	Rigid combination: Pusher tug	A combination consisting of a pusher tug and a barge wherein the pusher tug is secured in the barge notch by mechanical means. There is no relative motion between the tug and the barge, resulting in the two vessels acting as a single unit in a seaway. The pusher tug is a component part of the combination	Ch. 7, Pt. 8 of the Rules
Rigid Connection PB Combination — Barge	Rigid combination: Barge	A combination consisting of a pusher tug and a barge wherein the pusher tug is secured in the barge notch by mechanical means. There is no relative motion between the tug and the barge, resulting in the two vessels acting as a single unit in a seaway. The barge is a component part of the combination	Ch. 7, Pt. 8 of the Rules
Articulated Connection PB Combination — Pusher	Articulated combination: Pusher tug	A combination consisting of a pusher tug and a barge wherein the pusher tug is secured in the barge notch by mechanical means, allowing pitch between the tug and the barge in only one degree of freedom. The two vessels act as a single unit in a seaway and when disconnected from each other, both may moor or operate independently. The pusher tug is a component part of the combination	Ch. 7, Pt. 8 of the Rules
Articulated Connection PB Combination — Barge	Articulated combination: Barge	A combination consisting of a pusher tug and a barge wherein the pusher tug is secured in the barge notch by mechanical means, allowing pitch between the tug and the barge in only one degree of freedom. The two vessels act as a single unit in a seaway and when disconnected from each other, both may moor or operate independently. The barge is a component part of the combination	Ch. 7, Pt. 8 of the Rules
Aquatic Product Carrier	Aquatic product carriers	Dedicated to transporting aquatic products, characterized by using physical media such as ice, instead of refrigerating plant, for cold storage of aquatic products, with insulation layers fitted on inner surface of holds	Ch. 2, Pt. 2 of the Rules and relevant requirements
Yacht	Pleasure craft	Pleasure motorboats engaged in non-commercial sightseeing, entertainment, etc	Rules for Classification and Construction of Yachts
Offshore Engineering Support Ship	Offshore Engineering Support Ships	Ships providing nilt-functon support to offhosre engineering operaitons, e.g. offshore installation, survey and repair of sturctures, as well as underwater robot operation, diving operation, etc.	Ch. 2, Pt. 2 of the Rules and relevant requirements
Lanuching work barge	Lanuching work barges	Work barges dedicated to launching ships, offshore installaitons or other heavy cargoes within shipyard and/or port waters. Such operation may also include cargo moving from water to shore and short-distance movement of cargoes within above-mentioned waters (The ship does not have self-propulsion capability, and movement is driven by other power ships such as tugs or other facilities)	Ch. 17, Pt.2 of the Rules
Catamaran	Catamarans	Ships with upper parts of two separate hulls being connencted by strength framing	Ch. 18, Pt. 2 of the Rules
Sand Carrier	Sand Carrier	Ships designed and constructed specially for the carriage of sand, <u>to be surveyed in accordance with the requirements of double-hull bulk carriers</u>	Ch. 19, Pt. 2 of the Rules

Service Restriction or Limitaton Notations

Table B

Class notation	Description		Technical requirements to be complied with
R1	Service category 1	Within 200 (summer/tropical*) or 100 (winter*) n mile off the shore	Ch. 1, Pt. 2 of the Rules
R2	Service category 2	Within 20 (summer/tropical*) or 10 (winter)* n mile off the shore	
R3	Service category 3	Sheltered waters**	
×× — ×× service	Specified route service	On specified route service, e.g. Shanghai — Osaka Service	The Rules
Greater Coastal Service Restriction	Greater coastal service restriction	For craft engaged on voyages in the sea area within 200 nautical miles off the shore, which proceed in the course of a voyage for a time specified below, at operational speed from a place of refuge when fully laden: ① not more than 4 hr for passenger craft; ② not more than 8 hr for cargo craft	Rules for Construction and Classification of Sea-Going High Speed Craft
Coastal Service Restriction	Coastal service restriction	For craft engaged on voyages in the sea area within 20 nautical miles off the shore, which proceed in the course of a voyage for a time specified below, at operational speed from a place of refuge when fully laden: ① not more than 4 hr for passenger craft; ② not more than 8 hr for cargo craft	Rules for Construction and Classification of Sea-Going High Speed Craft
Sheltered Water Service Restriction	Sheltered water service restriction	For craft engaged on voyages in the sea areas between islands and the shore and between islands with a distance of less than 10 n miles in between, which forms a comparatively good sheltered condition with a little wave, or within 10 nautical miles off the shore. Such craft do not proceed in the course of a voyage more than 2 hr at operational speed from the shore when fully laden, with wind force not exceeding Beaufort scale 6 and visual wave height not more than 2.0 m	Rules for Construction and Classification of Sea-Going High Speed Craft Rules for Construction of Coastal Boats
Calm Water Service Restriction	Calm water service restriction	For craft engaged on voyages in the sea areas within 5 nautical miles off the shore. Such craft do not proceed in the course of a voyage more than 2 hr at operational speed from the shore when fully laden, with wind force not exceeding Beaufort scale 6 and visual wave height not more than 1.0 m	Rules for Construction and Classification of Sea-Going High Speed Craft Rules for Construction of Coastal Boats
Weather Restriction N	Weather restriction	Weather restriction for wing-in-ground craft, with N being one of the following: I: Significant wave height not exceeding 3.0 m and wind force not exceeding Beaufort scale 7 for the restricted service II: Significant wave height not exceeding 2.0 m and wind force not exceeding Beaufort scale 6 for the restricted service III: Significant wave height not exceeding 1.0 m and wind	Guidelines for Survey of Wing-in-Ground Craft

Class notation	Description		Technical requirements to be complied with
		force not exceeding Beaufort scale 5 for the restricted service IV: Significant wave height not exceeding 0.5 m and wind force not exceeding Beaufort scale 4 for the restricted service	
Dredging Within R3	Operation within R3 service area	Restricted service area for dredgers	Ch. 14, Pt. 2 of the Rules
Dredging Within R2	Operation within R2 service area	Restricted service area for dredgers	Ch. 14, Pt. 2 of the Rules
Dredging Within R1	Operation within R1 service area	Restricted service area for dredgers	Ch. 14, Pt. 2 of the Rules

Special Duties Notations

Table C

Class notation	Description		Technical requirements ^① to be complied with
Fire Fighting Ship N	Fire fighting ships of Grade N	Ships capable of fire fighting are to be assigned this notation, with N being one of the following: 1 – for early stage fire fighting; 2 – for large fire fighting; 3 – for large or oil fire fighting. For ships provided with a water spraying system for delivering efficient cooling water spraying over all the exposed vertical surfaces of the hull so as to enable the ship to approach the burning object for fire-fighting and/or rescue purposes, the notation Water Spraying may be added after the above notation	Ch. 1, Pt. 8 of the Rules
Training Ship	Training ships	Ships dedicated to training of marine personnel	Ch.2, Pt.2 of the Rules and relevant requirements, <u>Code of Safety for Special Purpose Ships</u>
Fish-Factory Ship	Fisheries processing ships	Specialized in fish processing	
Research Ship	Research ships	Ships specialized in marine research and study, survey, exploration, etc. are to be assigned this notation	Ch.2 and Ch. 9, Pt.2 of the Rules and relevant requirements, <u>Code of Safety for Special Purpose Ships</u>
Oil Recovery Ship with Cargo Tank	Oil recovery ships equipped with means for the recovery and discharge of oil as well as with tanks for storing the recovered oil	Steel ships equipped for the recovery of oil floating on the sea with a flash point not exceeding 60°C (closed-cup test) and a Reid vapour pressure below atmospheric pressure	Ch.3, Pt.8 of the Rules
Oil Recovery Ship without Cargo Tank	Oil recovery ships without tanks for storing the recovered oil and equipped with means for the recovery, but not for discharge of oil	Steel ships equipped for the recovery of oil floating on the sea with a flash point not exceeding 60°C (closed-cup test) and a Reid vapour pressure below atmospheric pressure	Ch.3, Pt.8 of the Rules
Oil Recovery Ship not suitable for products with a flash point of 60l and less	Oil recovery ships equipped with means for the recovery of oil with a flash point exceeding 60i	Steel ships equipped for the recovery of oil floating on the sea with a flash point exceeding 60e (closed-cup test) and a Reid vapour pressure below atmospheric pressure	Ch.3, Pt.8 of the Rules
Traffic Ship	Traffic ships	For transporting personnel, but not as passenger transport	Ch. 2, Pt. 2 of the Rules

^① The technical requirements listed in this Table is the basic ones for the ship assigned to the notation, in other cases, special consideration is to be given by CCS according to the ship's specific conditions.

Class notation	Description		Technical requirements ^① to be complied with
		service. The notation "Crew Boat" is used for traffic ships flying the flag of Saint Vincent and Grenadines	<u>and relevant requirements</u> 1. For ships with the length of 20 m and above. Ch.2, Pt.2 of the Rules is to be complied with; for the high-speed craft, the Rules for Construction and Classification of Sea-going High Speed Craft is to be complied with;
Public Affair Ship	Public affair ships	Ships owned or operated by the Government and used only for non-commercial services	2. For ships with the length less than 20 m, the Rules for Construction of Coastal Boats is to be complied with; 3.Code of Safety for Special Purpose Ships
× Boat	Work boats	Ships dedicated to specific services. × is to be substituted by a specific service, e.g.: Pilot Boat: Ships dedicated to pilot service; Anchor Boat: Ships dedicated to operations related to anchoring and mooring; Light Boat: Ships dedicated to serving as navigational marks; Diving Boat: Work boats dedicated to diving operations	Ch. 2, Pt. 2 of the Rules and relevant requirements. For ships less than 20 m in length, the Rules for Construction of Coastal Boats is to be complied with 1.For ships with the length of 20 m and above. Ch.2, Pt.2 of the Rules is to be complied with, for the high-speed craft, the Rules for Construction and Classification of Sea-going High Speed Craft is to be complied with; 2.For ships with the length less than 20 m, the Rules for Construction of Coastal Boats is to be complied with
Sewage Recovery Ship	Sewage recovery ships	Ships dedicated to recovery of rubbish	Ch. 2, Pt. 2 of the Rules <u>and relevant requirements</u>
SPS	Special purpose ships	This notation may be assigned to ships for which the Special Purpose Ship Safety Certificate is issued according to IMO Code of Safety for Special Purpose Ships or a standard acceptable to the Administration. This notation may be assigned separately, or as a special duty notation for certain ship types	Code of Safety for Special Purpose Ships or a standard acceptable to the Administration
Well Stimulation	Well stimulation	Offshore engineering support ships used for or designed to be used for the operation of offshore well stimulation	Guidelines for Well Stimulation Vessels
LNG Bunkering Ship	LNG Bunkering ships	Ships with the function of LNG bunkering	Rules for LNG Bunkering Ships

Cargo and Loading Notations

Table D

Class notation	Description		Technical requirements to be complied with
BC-A	Harmonized notation BC-A	Bulk carriers are to be assigned this notation, provided they ① are designed to carry dry bulk cargoes of density 1.0 t/m ³ and above; ② have specified holds empty at maximum draught;	Ch. 8, Pt. 2 of the Rules

Class notation	Description		Technical requirements to be complied with
		③ have BC-B requirements included in loading conditions	
BC-B	Harmonized notation BC-B	Bulk carriers are to be assigned this notation, provided they ① are designed to carry dry bulk cargoes of density of 1.0 t/m ³ and above; ② have all cargo holds loaded; ③ have BC-C requirements included in loading conditions	Ch. 8, Pt. 2 of the Rules
BC-C	Harmonized notation BC-C	Bulk carriers are to be assigned this notation, provided they are ① designed to carry dry bulk cargoes of density less than 1.0 t/m ³	Ch. 8, Pt. 2 of the Rules
Maximum Cargo Density (×× t/m ³)	Maximum cargo density (×× t/m ³)	This notation is to be added after a harmonized notation to show the limitation when maximum design cargo density is less than 3.0 t/m ³ , and maximum allowed cargo density is to be indicated in the brackets. This notation is applicable only to BC-A and BC-B	Ch. 8, Pt. 2 of the Rules
No MP	No loading and unloading in multiple ports	This notation is to be added after a harmonized notation to show the limitation when the ship has not been designed for loading and unloading in multiple ports in accordance with the Rules. This notation is applicable to all harmonized notations (BC-A, BC-B, BC-C)	Ch. 8, Pt. 2 of the Rules
Allowed combination of specified empty holds	Combination of empty holds allowed	This notation is to be added after a harmonized notation when specified empty holds are allowed in design. The notation is applicable only to BC-A	Ch. 8, Pt. 2 of the Rules
Holds Nos. ××× may be empty	Holds nos. ××× may be empty	For bulk carriers with specified or alternate holds empty, this notation to be added after a harmonized notation	Ch. 8, Pt. 2 of the Rules
Holds Nos. xxx May Be Empty With Restrictions Imposed By SOLAS XII/14	Restrictions from sailing with any hold empty	Existing ships, if not meeting the structural strength requirements for with standing flooding of any one cargo hold as specified in SOLAS regulation XII/5.1 and the strength standards and renewal criteria for single-side skin construction as specified in resolution MSC.168(79), are not to sail with any cargo hold loaded to less than 10% of the hold's maximum allowable cargo weight when in the full load condition, on and after 1 July 2006 or reaching 10 years of age, whichever is later	SOLAS XII/14
Max. Cargo Density ××× kg/m ³	Maximum cargo density ××× kg/m ³	For bulk chemical tankers, scantlings of structural members of cargo tanks are determined to the maximum design pressure, maximum temperature and maximum cargo density, in accordance with the characteristics of cargoes intended to be carried	Rules for Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
Max. Pressure ××× MPa	Maximum pressure ××× MPa		
Max. Cargo Temperature ×××°C	Maximum Cargo Temperature ×××°C		
Max. Vapour Pressure ××× MPa	Maximum vapour pressure ××× MPa	For liquefied gas carriers, scantlings of structural members of cargo tanks are determined to the maximum design pressure, material properties and minimum cargo temperature, in accordance with the characteristics of cargoes intended to be carried.	Rules for Construction and Equipment of Ships Carrying Liquefied Gases in Bulk
Minimum Cargo Temperature ×××°C	Minimum cargo temperature ×××°C		
LG	Reliquefaction of gas	Where fitted with reliquefaction or refrigeration equipment, the notation LG may be added	
Max. Cargo Density in ××× Tank (xx t/m ³)	Maximum cargo density in tank	××× tank is designed to carry liquid cargo of density less than ×× t/m ³ The notation is only to be added after "Offshore Supply Ship"	Sec. 13, Ch. 2, Pt.2 of the Rules

Special Features Notations

Table E

Class notation	Description		Technical requirements to be complied with
Strengthened For Heavy Cargoes	Strengthened for heavy cargoes	Ships with longitudinal framing for strength deck and bottom within cargo area, and double bottom and strengthening for bottom framing within cargo area, may be assigned this notation	Sec.22, Ch. 2, Pt. 2 of the Rules
COMPASS	COMPASS	For ships the design of which has been checked using CCS COMPASS-Structure software, one or more of the following suffixes R, D and F are to be added. Meanings of the suffixes are as follows: R: for ships the check of which against rules has been performed using COMPASS-Structure; D: for ships of which hull structure direct calculations have been performed using COMPASS-Structure; F: for ships of which hull structure fatigue strength assessment has been performed using COMPASS-Structure. Such notation is necessary for CSR Ships	COMPASS-Structure software
ERS	Emergency response service	Upon prior ERS agreement between the owner and CCS and an electronic database for stability and structural strength of a ship, CCS will in case of emergency of the ship, e.g. collision at sea, grounding, oil spillage, etc. and at request of the owner, initiate an emergency response procedure to provide calculation and analysis for damage stability, structural strength and spillage, giving technical support to the ship in getting out of danger and recommendations to the owner/master in making final decision	<u>ERS Agreement or statement signed by shipping company or shipping operator and ERS onshore service unit designated by the Administration is to be provided onboard the ships</u>
Icebreaking	Capable of breaking ice	Operation in first-year ice conditions and having independent icebreaking capability. This notation is to be used in conjunction with ice notations and added before the type notation, e.g. Icebreaking Tug, Ice Class B1	Ch. 9, Pt. 8 of the Rules
Bottom Strengthened for Operating Aground	Bottom strengthened for operating aground	Bottom of dredgers strengthened for operating aground	Ch. 14, Pt. 2 of the Rules
Grab (X)	Structural strengthening for loading/unloading by grabs	Strengthening of inner bottom plating, lower strake of hopper tank sloping plate and transverse lower stool plating for holds designed for loading/unloading by grabs having a maximum weight up to × tons	Ch. 12, Pt. 10 of the Rules
Grab* (X)	Structural strengthening for loading/unloading by grabs	Strengthening of inner bottom plating, lower stake of hopper tank sloping plate and transverse lower stool plating for holds of non-CSR ships designed for loading/unloading by grabs having a maximum weight up to x tons	<u>Sec. 23, Ch.2, Pt.2 of the Rules</u>
CSR	Common structural rules	For ships designed and constructed in accordance with common structural rules contained in PART NINE or PART TEN of CCS Rules, this notation is to be added after type notation	Pt. 9 of the Rules
Stainless Steel	Stainless steel	Cargo spaces of bulk chemical tankers are constructed of stainless steel	Rules for Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
Lining with Corrosion Resistant Lining	Fitted with corrosion resistant lining	Cargo spaces of bulk chemical tankers are fitted with corrosion resistant lining	

Class notation	Description		Technical requirements to be complied with
PSPC	Protective coating	Ships of which specific spaces comply with IMO Performance Standard for Protective Coatings may be assigned this notation, with one or more of suffixes B, C, D and V being added thereafter. Meanings of the suffixes are as follows: B: protective coatings applied in dedicated seawater ballast tanks of all types of ships; C: protective coatings applied in cargo oil tank spaces of crude oil tankers; D: protective coatings applied in double-side skin spaces; V: protective coatings applied in void spaces of bulk carriers and oil tankers Note: B, C, D and V can operate both separately and together	PSPC(B) and PSPC(D) are to comply with the requirements of IMO MSC.215(82); PSPC(C) is to comply with the requirements of IMO MSC.288(87); PSPC(V) is to comply with the requirements of IMO MSC.244(83)
SOLAS II-2 Reg 19	Fit for carriage of dangerous goods	Ships fit for carriage of dangerous goods in packaged form or solid dangerous goods in bulk and holding a certificate of fitness for carriage of dangerous goods, may be assigned this notation at the request of the owner	SOLAS Reg. II-2/19
LSFO	Low sulphur fuel oil	Ships intended to use low sulphur fuel oil with sulphur content not exceeding 0.10% (m/m) may be assigned this notation if the requirements of Guidelines for Use of Low Sulphur Fuel Oils in Ships are complied with	Guidelines for Use of Low Sulphur Fuel Oils in Ships
Anchor Handling	Handling of anchors	Ships capable of handling anchors	Ch. 20, Pt. 8 of the Rules
CM	Monitoring of construction of hull structure	Ships for which the control of structural precision at critical locations of hull (including alignment, fitting-up, edge treatment and technological standards) is in compliance with an approved plan. For tankers and bulk carriers subject to SOLAS Chapter II-1 Part A-1 Regulation 3-10 (Goal-based ship construction standards for bulk carriers and oil tankers) this class notation is necessary	Guidelines for Monitoring of Construction of Hull Structure
PC 1	Operation in polar waters covered by multi-year ice	Year-round operation in all polar waters	Ch. 13, Pt.8 of the Rules
PC 2		Year-round operation in moderate multi-year ice conditions	
PC 3		Year-round operation in second-year ice which may include multi-year ice inclusions	
PC 4		Year-round operation in thick first-year ice which may include old ice inclusions	
PC 5		Year-round operation in medium first-year ice which may include old ice inclusions	
PC 6		Summer/autumn operation in medium first-year ice which may include old ice inclusions	
PC 7		Summer/autumn operation in thin first-year ice which may include old ice inclusions	
Ice Class B1*	Operation in waters covered by first-year ice ^①	Operation in severe ice conditions, not requiring ice breaker assistance. Maximum and minimum ice class draughts fore, amidships and aft, and minimum required main engine output to be stated in classification certificate	Ch. 4, Pt. 2/Ch. 14, Pt. 3 of the Rules ^②
Ice Class B1		Operation in severe ice conditions and if necessary, with ice breaker assistance. Maximum and minimum ice class draughts fore, amidships and aft, and minimum required main engine output to be stated in classification certificate	
Ice Class B2		Operation in moderate ice conditions and if needed, with ice breaker assistance. Maximum and minimum ice class draughts fore, amidships and aft, and minimum required main engine output to be stated in classification certificate	
Ice Class B3		Operation in light ice conditions and if needed, with ice breaker assistance. Maximum and minimum ice class draughts fore, amidships and aft, and minimum required main engine output to be stated in classification certificate	

Class notation	Description		Technical requirements to be complied with
Ice Class B		Operation in very light ice conditions and if needed, with ice breaker assistance	Ch. 4, Pt. 2 and Ch. 14, Pt. 3 of the Rules
WD (xx.xx m)	Operating draft (xx.xx m)	Marking the operating draft assigned to floating cranes, dredgers and hopper barges, with the value in the brackets indicating the maximum draft allowed for operations of these working ships, in m	Sec. 13, Ch. 1, Pt. 2 of the Rules
FL	Minimum design fatigue life	Where a ship is designed for a minimum design fatigue life of 25 years or more, the class notation FL may be assigned at 5-year intervals starting from the 25th year, e.g. FL (25), FL (30)	Guidelines for Fatigue Strength of Ship Structure
MCRS	Corrosion resistant steel	Corrosion resistant steel is used as an alternative to protective coating for cargo oil tanks of crude oil tankers in accordance with IMO resolution MSC.289(87)	Relevant requirements of the Guidelines for Survey of Corrosion Resistant Steel of Cargo Oil Tanks of Crude Oil Tankers
Strengthened for Deck Cargoes	Strengthened for deck cargoes	The deck structure of specified deck cargo area is designed to be strengthened. The permissible loads, in xxx t/m ² , in cargo area of strengthened deck are to be indicated in operation documents. The notation is only to be added after "Offshore Supply Ship"	The cargo deck plating in deck cargo area to comply with the requirements of 11.3.2 of Sec. 3, Ch. 11, Pt. 2 of the Rules. The cargo deck framing to deck cargo area to comply with the requirements for cargo deck plating as specified in Sec. 4, Ch. 11, Pt. 2 and Se4c.8, Ch. 2, Pt. 2 of the Rules
ACC (DST)	Ships operating in low air temperature environments	The basic Anti-Cold Climate notation, applicable for ships intended to operate in non-polar waters in low air temperature environments	Ch. 23, Pt. 8 of the Rules
ACC-POLAR (DST)		The polar Anti-Cold Climate notation, applicable for ships intended to operate in polar waters in low air temperature environments	
H (DST)		The hull Anti-Cold Climate notation, applicable for materials used for hull structures of ships intended to operate in low air temperature environments	
DE-ICE		The DE-ICE notation, applicable for ships operating occasionally in low air temperature environments and in addition, for ships operating in areas and during periods where more severe ice and snow accretion are likely to occur	

Notes:

- ① Such as Northern Baltic Sea in winter, Bohai Sea in winter and Northern Huanghai Sea in winter.
- ② Attention is to be paid to relevant special requirements of international industrial organizations and oil companies.

Machinery Notations

Table F

Class notation	Description		Technical requirements to be complied with
AUT-0	Machinery space periodically unattended	Main propulsion machinery remotely controlled from BCS, machinery space including CCS periodically unattended	Ch. 3, Pt. 7 of the Rules
MCC	Central control of machinery spaces	Ships with this notation are to be provided with CCS and LCS. When machinery and electrical equipment are in normal operation, CCS is to be constantly attended by watch-keepers	Sec. 2, Ch. 4, Pt. 7 of the Rules
BRC	Remote control from bridge	Main propulsion machinery remotely controlled from BCS, machinery spaces constantly attended by watch-keepers	Sec. 3, Ch. 4, Pt. 7 of the Rules

Special Equipment and System Notations

Table G

Class notation	Description		Technical requirements to be complied with
Equipped with Container Securing Arrangement	Container securing arrangements	Ships other than container ships fitted with container securing arrangements may be assigned this notation	Appendix 1 of Ch. 7, Pt. 2 of the Rules
Emergency Towing Arrangements	Emergency towing arrangements	Tankers provided with emergency towing arrangements <u>may</u> be assigned this notation	Sec.5, Ch. 3, Pt. 2 of the Rules
Loading Computer	Loading computers	Ships provided with approved loading computers are to be assigned this notation, with one or more of suffixes OA, S, I, G and D being added thereafter. Meanings of the suffixes are as follows: OA: Capable of calculating optimal trim curve in each loading condition and creating optimal envegy-saving loading plan by automatic optimization; S: Capable of calculating and checking hull strength under various loading conditions; I: Capable of calculating and checking intact stability; G: Capable of calculating and checking stability of grain in bulk; D: Capable of calculating and checking damage stability Note: S, I, G and D can operate both separately and together	Appendices 1 & 2 of Ch. 2, Pt. 2 of the Rules and Guidelines for Application of Automatically Optimized Loading Computers
Equipped with Single Point Mooring Connecting Installation	Equipped with Single Point Mooring Connecting Installation	Ships equipped with single point mooring connecting instalton according to relevant requirements are to be assigned the notation	To be in compliance with the standard accepted by CCs, such as relevant requirements of internal industry organizations and oil companies <u>Guidelines for Mooring Equipment (OCIMF)</u>
IGS	Inert gas systems	For ships provided with inert gas system. Note: "IGS" has the same meaning as "Inert Gas System"	Ch. 4, Pt. 6 of the Rules
COW	Crude oil washing system	This notation may be added for ships fitted with crude oil washing system	Annex I to MARPOL 73/78 to be complied with, as appropriate
CBT	Clean ballast tank	This notation may be added for ships fitted with clean ballast tanks	Annex I to MARPOL 73/78 to be complied with, as appropriate
SBT	Segregated ballast tank	This notation may be added for ships fitted with segregated ballast tanks. Where segregated ballast tanks are in a protective location, the notation PL is to be added after SBT	Annex I to MARPOL 73/78 to be complied with, as appropriate
Helicopter Facilities	Helicopter facilities	For ships with areas and structures for takeoff and landing of helicopters, and storage, fire protection and oil supply facilities for helicopters, this notation may be added	Sec. 18, Ch. 2, Pt. 2 & Ch. 5, Pt. 6 of the Rules
Electrical Propulsion System	Electrical propulsion systems	For ships fitted with electrical propulsion system, this notation may be added	Ch.15, Pt. 8 of the Rules
LPG Fuel System	Using liquefied petroleum gas as fuel	For ships using liquefied petroleum gas as fuel, this notation may be added	Standard(s) accepted to CCS Guidelines for <u>Survey of Ships Powered by LPG Fuel</u>
Water Jet Units	Water jet units	For ships fitted with water jet units, this notation may be added	Standard(s) acceptable to CCS, such as CB3404-91, <u>Technical Conditions of Mix-flow Pump and Axial Flow Pump for Marine Water Jet Unit</u>
Z-propulsion	Z-propulsion system	For ships fitted with Z-propulsion system, this notation may be added	Ch. 11, Pt. 3 of the Rules
Non-propulsion	No propulsion	This notation is assigned to those ships not fitted with	

Class notation	Description		Technical requirements to be complied with
	machinery	propulsion equipment used for main propulsion purposes or those ships fitted with propulsion machinery used only for purposes such as lateral thrusting, operational actions or auxiliary propulsion during tugging, and is to be added after the type notation. In case of a type notation indicating that the ship is not self-propelling, e.g. "Barge, Oil Barge, Pontoon Barge, Floating Dock, Hopper Barge, Split Hopper Barge", this notation need not be added	
Cargo Handling by Conveyer System	Self-unloading systems	For ships fitted with conveyors for cargo handling and capable of self-loading or self-unloading, this notation may be added. In the case of cement carriers fitted with compression operated cargo handling system, this notation may be replaced by the notation Air Slid Conveyer System, as necessary	<u>Standard(s) acceptable to CCS Rules for Lifting Appliances of Ships and Offshore Installations</u>
VCS	Vapour control systems	For ships fitted with systems for control of vapour emission from tanks in compliance with the Rules (excluding requirements for VCS-T), this notation may be added	Ch. 15, Pt. 3 of the Rules
VCS-T	Vapour control systems – transfer	For ships fitted with systems for control of vapour emission from tanks in compliance with the Rules, this notation may be added	Ch. 15, Pt. 3 of the Rules
Auxiliary Propelling/ Maneuvering Units	Auxiliary propelling/ maneuvering units	For ships fitted with auxiliary propelling/maneuvering units which are intended not for navigation purposes, but only for locally adjusting operation position of the ship, this notation may be added	<u>Standard(s) acceptable to CCS Pt. 3 of the Rules</u>
Lifting Appliance	Lifting appliances	Marine lifting appliances. This notation is to be added together with the notation Floating Crane for floating cranes and upon request, for other ships	Rules for Lifting Appliances of Ships and Offshore Installations
PR-N	Redundant propulsion system	Ships, of which the main propulsion machinery and/or the steering gear is provided with redundancy, may be assigned this notation wherein the letter N indicates one of the following cases: 1 – A ship fitted with two or more propulsion machines but only a single propulsor and a single steering system. 2 – A ship fitted with two or more propulsion machines and also two or more propulsors and two or more steering systems. 1S – A ship fitted with only a single propulsor and a single steering system but having two or more propulsion machines arranged in separate compartments. 2S – A ship fitted with two or more propulsion machines and also two or more propulsors and two or more steering systems, having the propulsion machines, propulsors and associated steering systems arranged in separate compartments	Ch. 14, Pt. 8 of the Rules
DFD	Dual fuel diesel engine used as power plant	The class notation may be assigned to LNG carriers fitted with dual fuel diesel engines as power plant in compliance with the requirements of the Guidelines	Guidelines for Design and Installation of Dual Fuel Engine System-(2007)
LNG Fuel	Liquefied natural gas used as fuel	This notation may be added for ships using liquefied natural gas as fuel	Rules for Ships Powered by Natural Gas Fuel
CNG Fuel	Compressed natural gas used as fuel	This notation may be added for ships using compressed natural gas as fuel	
Dual Fuel	Dual fuel	This notation may be added for ships which not only use natural gas as fuel but also burn fuel oil, or burn fuel oil and natural gas fuel at the same time	
HMS	Hull monitoring system	This notation may be assigned when only sensors monitoring the global longitudinal stress amidships are installed in the hull monitoring system	Ch. 21, Pt. 8 of the Rules
HMS(×)		This notation may be assigned when not only sensors monitoring the global longitudinal stress amidships are installed in the hull monitoring system, but also	

Class notation	Description		Technical requirements to be complied with
		<p>sensors/components monitoring other parameters are selected, where within the brackets there will be letters specifying the selected sensors/components and multiple letters are separated by comma “,”. The following sensors/components may be selected for the hull monitoring system:</p> <p>G: Sensor monitoring the global hull strain D: Sensor monitoring the local hull strain O: Sensor monitoring the propulsion shaft(s) output A: Sensor monitoring the axial acceleration M: Device for monitoring of hull rigid body motions (six degrees of freedom) P: Sensor monitoring the transient sea pressure acting on the hull (slamming) S: Sensor monitoring the liquid motion pressures in tanks (sloshing) T: Sensor monitoring the temperature B: Device for monitoring the wave W: Wind sensor N: Navigation sensors C: Online link to loading computer that is continuously up-dating the loading condition</p>	
HMS-HSC		This notation may be assigned to the hull monitoring system installed on high speed crafts	
ECL	Ergonomic Container Lashing	This notation may be assigned to ships the decks of which are loaded with containers and specially designed for the safety of securing personnel	Ch.22, Pt.8 of the Rules
DP-N	Dynamic positioning systems	<p>Vessels with dynamic positioning systems are to be assigned this notation, with N being one of the following:</p> <p>1 Vessels with dynamic positioning systems can automatically keep their position and heading within specified environmental conditions. In addition, independent centralized manual position control and automatic heading control are to be provided.</p> <p>2 Vessels with dynamic positioning systems can automatically keep their position and heading in case of a single failure (excluding loss of a cabin or cabins) within specified environmental conditions and operating limits.</p> <p>3 Vessels with dynamic positioning systems can automatically keep their position and heading in case of a single failure (including total loss of a cabin caused by fire or flooding) within specified environmental conditions and operating limits</p>	Ch. 11, Pt. 8 of the Rules
DFDR (X ₁ , ..., X _N)	Natural gas fuel ready system	<p>A ship assigned with the class notation of DFDR may has one or more suffix(es) of X_N. The intention of X_N is as follows:</p> <p>H: the hull structures have been strengthened in accordance with the relevant requirements of natural gas fuel powered ships T: the natural gas fuel containment system (bunkers/fuel tanks) and its supporting members have been installed M: the main engine installed in ship’s construction is a dual fuel engine m: main engine installed in ship’s construction may be converted to a dual fuel engine in future A: the auxiliary engine installed in ship’s construction is a dual fuel engine a: the auxiliary engine installed in ship’s construction may be converted to a dual fuel engine in future B: the boiler installed in ship’s construction is a dual fuel boiler P: the arrangement in ship’s construction has been</p>	CCS Guidelines for Natural Gas Fuel Ready Ships

Class notation	Description		Technical requirements to be complied with
		<p>considered the approaching installation of natural gas fuel supply system and related to, including the arrangement of piping, bunkering station, compressor room, gas valve unit, fire-fighting system, etc.</p> <p>E: the power distribution system has been reserved for the equipment related to natural gas fuel powered system in ship's construction</p> <p>D: the gas dangerous zones have been taken into consideration in ship's construction</p> <p>Note: It must be alternative to the suffixes M or m; it is optional for the other suffixes</p>	
OMBO	One man bridge operation	Arrangement of bridge and wheelhouse together with navigational equipment and system are suitable for one man bridge operated ships	Ch. 4, Pt. 6 of the Rules
SPV	Solar photovoltaic system	For ships fitted with solar photovoltaic system, this notation may be added	Guidelines for Survey of Solar Photovoltaic System and Lithium Iron Phosphate Battery System

Special Survey Notations

Table H

Class notation	Description		Technical requirements to be complied with
ESP	Enhanced survey programme	This notation is required for oil tankers, oil/bulk carriers, oil/bulk/ore carriers, chemical tankers, bulk carriers and Self-Unloading <u>bulk carriers</u> engaged on international voyages. This notation is optional by the owner for oil tankers, oil/bulk carriers, oil/bulk/ore carriers, chemical tankers, bulk carriers, Self-Unloading <u>bulk carriers</u> subject to ESP and engaged on non-international voyages, with attention being given to the special requirements of the flag States	Ch. 5, Pt. 1 of the Rules
In-Water Survey	In-water survey	For ships suitable for in-water surveys, this notation may be assigned	Ch. 12, Pt. 8 of the Rules
CHS	Continuous hull survey	Where continuous survey system for hull is adopted in lieu of special survey and items required in special survey are to be surveyed in regular rotation with uniform annual share within the five-year class period, this notation may be assigned and applies to ships other than general dry cargo ships, oil tankers, combination carriers, chemical tankers and bulk carriers only	Ch. 5, Pt. 1 of the Rules
CMS	Continuous machinery survey	Where continuous survey system for machinery is adopted in lieu of special survey and items required in special survey are to be surveyed in regular rotation with uniform annual share within the five-year class period, this notation may be assigned	Ch. 5, Pt. 1 of the Rules
SCM	Screwshaft condition monitoring	This notation may be assigned to oil-lubricated or water-lubricated propeller shafts fitted with approved shaft seals and complying with Appendix 14 "Guidelines for Screwshaft Condition Monitoring System" of Ch. 5, Pt. 1 of the Rules	Sec. 12 and Appendix 14 "Guidelines for Screwshaft Condition Monitoring System", Ch. 5, Pt. 1 of the Rules

Class notation	Description		Technical requirements to be complied with
ECM	Diesel engine lube oil condition monitoring	This notation may be assigned to ships having lubricating oil condition monitoring system of diesel engines and complying with Appendix 15 “Guidelines for Lubricating Oil Condition Monitoring System of Diesel Engines” of Ch. 5, Pt. 1 of the Rules. Lubricating oil analysis is to cover lubricating oil in use for cylinders, pistons, piston rings, piston rods, piston pins, crossheads, crosshead pins, guides, crankshafts and all bearings, connecting rods, piston rod stuffing boxes. Results of the analysis is to be used to determine whether an overhaul is necessary analyzed through lube oil according to and other parameters	Appendix 15 “Guidelines for Lubricating Oil Condition Monitoring System of Diesel Engines” of Ch. 5, Pt. 1 of the Rules
PMS	Planned maintenance scheme (PMS) for machinery	This notation may be assigned to ships for which CCS-approved PMS is adopted as an alternative to special or continuous (if adopted) survey of machinery and electrical installations	Appendix 16 “Guidelines for Survey of Planned Maintenance Scheme (PMS) for Machinery” of Ch. 5, Pt. 1 of the Rules

Environmental Protection Notations

Table I

Class notation	Description		Technical requirements to be complied with
Clean	Clean	This notation may be assigned to ships complying with relevant requirements for pollution-preventing structures, equipment and operational procedures in CCS rules, in addition to statutory requirements for pollution prevention	Sec.2, Ch. 8, Pt. 8 of the Rules
FTP(+)	Fuel oil tank protection	This notation may be assigned to ships with all fuel tanks provided with double-hull protection	Sec. 3, Ch. 8, Pt. 8 of the Rules
FTP	Fuel oil tank protection	This notation may be assigned to ships with double-hull protection or equivalent protective measures	
GWC	Gray water control	This notation may be assigned to ships having control of drainage from laundry, bathroom, galley, accommodation and fitted with a grey water holding tank of required capacity, high level alarm and a sewage disposal system with required processing capacity	
RSC	Refrigeration system control	This notation may be assigned to ships, of which all refrigerants used are to have an Ozone Depleting Potential (ODP) rating of zero and a Global Warming Potential (GWP) of less than 2,000	Sec. 3, Ch. 8, Pt. 8 of the Rules
SEC(I)	SO _x emission control	Sulphur content of all fuel oils used on board is not to exceed 1.0% (m/m) or equivalent means are used	
SEC(II)		Sulphur content of all fuel oils used on board is not to exceed 0.5% (m/m) or equivalent means are used	
SEC(III)		Sulphur content of all fuel oils used on board is not to exceed 0.1% (m/m) or equivalent means are used	
AFS	Anti-fouling system	This notation may be assigned to ships, of which anti-fouling system is not to contain any biocides	Sec. 3, Ch. 8, Pt. 8 of the Rules
BWMP	Ballast Water Management Plan	For ships implementing approved ballast water management plan on board	Guidelines for Development of Ship’s Ballast Water Management Plan, 2006
COMF (NOISE) N	Comfort (noise)	This notation may be assigned of the noise levels in related spaces of the ship meet the Rules requirements for comfort of crew and passengers, with N =1 or 2 or 3 indicating different comfort levels, where 1 represents the highest comfort level	Ch. 16, Pt. 8 of the Rules

Class notation	Description		Technical requirements to be complied with
COMF (VIB) N	Comfort (vibration)	Ships of 65 m in length and over, of which vibration in related compartments is controlled at the specified level, may be assigned this notation, with suffixes N1 or 2 or 3 indicating different comfort levels, where 1 represents the highest comfort level	Ch. 16, Pt. 8 of the Rules
HAB(VIB)	Habitability (vibration)	This notation may be assigned if the vibration levels in related spaces of the ship meet the habitability requirements regarding crew and passengers in ISO6954	Ch. 14 & 15 of CCS Guidelines for Shipboard Vibration Control
VIB(S)	Structural vibration	This notation may be assigned if related structures of the ship meet the structural vibration requirements in the Guidelines and to damage will be caused due to structural fatigue	Ch. 14 & 15 of CCS Guidelines for Shipboard Vibration Control
VIB(M)	Machinery vibration	This notation may be assigned if related machineries of the ship meet the mechanical vibration requirements in the Guidelines and no damage due to mechanical fatigue or accelerated wear of moving parts will be caused	Ch. 14 & 15 of CCS Guidelines for Shipboard Vibration Control
VIB	Vibration	This notation may be assigned if the ship meets the requirements for both structural vibration VIB(S) and mechanical vibration VIB(M)	Ch. 14 & 15 of CCS Guidelines for Shipboard Vibration Control
Green Ship I	Green ship	The green elements of the ship in terms of environmental protection, energy efficiency (including design energy efficiency and operation energy efficiency) and working environment comply with all applicable requirements for Green Ship I	CCS Rules for Green Ships
Green Ship II		The green elements of the ship in terms of environmental protection, energy efficiency (including design energy efficiency and operation energy efficiency) and working environment comply with all applicable requirements for Green Ship II	
Green Ship III		The green elements of the ship in terms of environmental protection, energy efficiency (including design energy efficiency and operation energy efficiency) and working environment comply with all applicable requirements for Green Ship III	
EEDI(I)	Energy efficiency in ship design	The ship's attained EEDI value is equivalent to the requirement for EEDI Phase 0 of MARPOL Annex VI	Rules for Green Ships
EEDI(II)		The ship's attained EEDI value is equivalent to the requirement for EEDI Phase 1 of MARPOL Annex VI	
EEDI(II+)		The ship's attained EEDI is equivalent to the requirement for EEDI Phase 2 of MARPOL Annex VI	
EEDI(III)		The ship's attained EEDI value is equivalent to the requirement for EEDI Phase 3 of MARPOL Annex VI	
NEC (II)	NO _x emission control	In compliance with standards of Tier II in Annex VI to MARPOL	
NEC (III)		In compliance with standards of Tier III in Annex VI to MARPOL	
GPR	Green passport	The ship is to carry an Inventory of Hazardous Materials verified by CCS and complying with the requirements of Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships, 2009	Sec.3, Ch.8, Pt.8 of the Rules
GPR(EU)		The ship is to carry the Inventory of Hazardous Materials verified by CCS and complying with the requirements of EU Regulation No.1257/2013	
BWMS	Ballast water management system	Ship's ballast water management system must be approved and comply with the requirements for the installation and arrangements of the Rules	
SEEMP(I)	Ship energy efficiency management plan	The ship is to carry a Ship Energy Efficiency Management Plan (SEEMP) developed according to the relevant guidelines of IMO	Ch. 2 of Rules for Green Ships
SEEMP(II)		For a ship with notation SEEMP(I), where a ship energy efficiency management system is established by the Company	

Class notation	Description		Technical requirements to be complied with
		or the Operator of the ship and certified by CCS, this notation may be assigned	
SEEMP(III)		For a ship with notation SEEMP(II), where a ship has software for real time monitoring of e.g. route optimization and hull biofouling so as to monitor relevant parameters affecting ship energy efficiency and/or adjust energy efficiency measures at any time, this notation may be assigned	
Crew Accommodation (MLC)	Accommodation of crew members	This notation may be assigned to ships meeting the plan approval and construction requirements for accommodation of crew members on board sea-going ships in CCS Guidelines, in addition to those statutory requirements	Guidelines for Implementation of Inspection of Maritime Labour Conditions
AMPS	High-voltage Shore Connection System	The class notation may be assigned to a ship fitted with a high-voltage shore connection system having rated alternating voltage above 1 kV and up to and including 15 kV for supplying shore power while in port so as to ensure normal operation of equipment intended to be used when generating sets of the ship are stopped	Ch. 19, Pt. 8 of the Rules
IBTS	Integrated Bilge Water Treatment System	The IBTS notation may be assigned for ships the management and discharge arrangements of the bilge water from machinery spaces complying with the requirements of the integrated bilge water treatment system (IBTS) as specified in MEPC.1/Circ.642, as revised by MEPC.1/Circ.676 and MEPC.1/Circ.760	
EAL	Environmentally Acceptable Lubricants	The EAL notation may be assigned for ships the lubricants used for the oil/water interfaces complying with the relevant provisions on environmentally acceptable lubricants as specified in CCS Guidelines for implementation of the survey of the requirements for environmentally acceptable lubricants by US EPA	Ch.8, Pt. 8 of the Rules
Biofouling-C	Biofouling Control	The Biofouling-C notation may be assigned for ship having a biofouling management plan, which is prepared in accordance with 2011 Guidelines for the control and management of ships' biofouling to minimize the transfer of invasive aquatic species adopted by IMO by resolution MEPC.207(62) and to be approved by CCS	

Refrigerated Cargo Installation Notations

Table J

Class notation	Description		Technical requirements
CRS (×× Hold ××°C, ××°C Max. Sea Water)	Refrigerated cargo	For ships fitted with refrigerated cargo installations, this notation is to be added after type notation, and minimum temperature(s) to be maintained by the installation at maximum sea water temperature stated and cargo area covered by the minimum temperature(s) are to be stated	Ch. 1 to Ch.3, Pt. 5 of the Rules
CF	Preservation of fruit	For refrigerated installations for cargo fruits, this notation is to be added	Ch. 1 to Ch.3, Pt. 5 of the Rules
QF	Quick freezing	For refrigerated cargo installations having a quick-freezing capability for fishing vessels, this notation is to be added	Ch. 1 to Ch.3, Pt. 5 of the Rules
CRC (×× Holds), AC f/WC	Carriage of refrigerated containers in holds	For container ships capable of carrying refrigerated containers in holds, this notation may be added, where: AC — Air-cooled refrigerated containers; f — Simultaneity factor for refrigerating plant; WC— Water-cooled refrigerated containers	Ch. 4, Pt. 5 of the Rules

Other Notations

Table K

Class notation	Description		Technical requirements to be complied with
OTA	Ship's optimal trim decision	Capable of applying technical means of optimal trim operation recommended by IMO or trim optimization system installed on board for guiding operational trim adjustment	Guidelines for Application of Ship's Optimal Trim Decision <u>Rules for Intelligent Ships</u>
EOM	Ship's energy efficiency real-time on-line monitoring	Capable of monitoring ship's operation in real time and supporting decision on operational energy efficiency management and optimization by collecting operational parameters of ship's energy-consuming equipment and navigational equipment and synchronizing with shore-based equipment	Sec. 7, Ch.6, Pt.1 of the Rules
COS	Oil tanker's cargo operational emulate optimization	Capable of automatically creating and optimizing cargo oil unloading operation plan or installing oil tanker unloading operation intelligent decision-making system by carrying out emulation or real-time monitoring of oil tanker in-port operation	Guidelines for Application of Oil Tanker's Cargo Operational Emulate Optimization <u>Rules for Intelligent Ships</u>
HLM	Hull structure full-life-cycle management	Intelligent solution based on 3D emulate technology, creating digital hull information model, serving each phase of ship construction and operation and facing healthy monitoring management of hull structure	Guidelines for Hull Structure Full life cycle Management <u>Rules for Intelligent Ships</u>
HIMS	Hull inspection and maintenance scheme	Periodical inspection and maintenance scheme for hull structure and deck equipment. By implementation of scheme, which is implemented by means of computerized management system	Guidelines for Hull Inspection and Maintenance Scheme
TS-N	Hull structure thickness monitoring and strength assessment	Relating thickness measurement data collected by CCS hull structure thickness measurement software with digital hull model based on 3D emulate technology and creating hull structure thickness database to monitor structure thickness and forecast corrosion trend, and evaluating hull structural strength. The following notation may be assigned, where N being one of them: 1 - Hull structure thickness monitoring; 2 - Hull structure thickness monitoring, longitudinal bending strength evaluation 3 - Hull structure thickness monitoring, longitudinal bending strength evaluation, fatigue strength evaluation	Guidelines for Hull Structure Thickness Monitoring and Strength Assessment <u>Rules for Intelligent Ships</u>
Train (X)	Crew training system	To be assigned for ships with CCS crew training system, and affixed with one or more notations as follows: HIMS: Hull inspection and maintenance Scheme; PSC: Port state control; C: Ship's elementary certificate system and survey	CCS Crew Training System