GUIDANCE NOTES
GD 23-2022

CHINA CLASSIFICATION SOCIETY

GUIDELINES FOR OIL FLOATING STORAGE VESSELS FIXED AT ANCHORAGE

2022

Effective from 15 September 2022

Beijing

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CHAPTER 1 GENERAL

1.1 Scope of application

1.1.1 The Guidelines apply to classification surveys of oil storage vessels satisfying the following conditions:

(1) Double hull oil tankers not engaged in cargo oil transportation between various ports / locations;

(2) Berthing in a dedicated location, which means the sheltered water area designated by the Administration of the coastal State, or an anchorage location that enables the vessels to quickly move away from a severe weather conditions.

1.1.2 The Guidelines are not apply to the followings:

(1) Newly built oil floating storage units or vessels;

(2) The oil storage vessel leaving its dedicated oil storage location, except for evacuation from severe weather conditions.

1.1.3 For those not covered in the Guidelines, the requirements of the Rules for Classification of Sea-Going Steel Ships of China Classification Society (hereinafter referred to as CCS) are to be complied with.

1.2 Characters of classification and class notations

1.2.1 The oil storage vessels to which the Guidelines apply is to be assigned with CSA characters of classification, after which is added with following class notation of ship type (including the anchorage location), but ESP notation is unnecessary to be added:

Oil FSV Fixed at XXX Anchorage

1.2.2 The oil storage vessel to which the Guidelines apply is to be assigned with CSM characters of classification, so that it may take refuge by itself from severe weather. At the meanwhile, the vessel may also be allowed to proceed on a single direct ballast voyage without loaded with any cargoes from fixed anchorage to the repair yard or site of lay up on a case by case basis.

1.2.3 The oil storage vessels equipped with single point mooring connecting installations according to relevant requirements are to be assigned with Equipped with Single Point Mooring Connecting Installation notation.

1.2.4 The SCM notation is to be assigned to oil storage vessels that comply with the Guidelines for Screwshaft Condition Monitoring system in Appendix 14, Chapter 5, PART ONE of the Rules for Classification of Sea-going Steel Ships.

1.3 Plans and documents

1.3.1 The following plans and documents are to be submitted to CCS for information:

(1) STS operating plan.

1.3.2 The plans and documents of an initially classed oil storage vessel are to be checked in accordance with the requirements of oil tankers in 5.14.3 in Section 14, Chapter 5 of PART ONE of CCS Rules for Classification of Sea-Going Steel Ships.

1.3.3 For special structures and arrangements, additional plans and information may be required, if considered necessary by CCS.

1.4 Statutory requirements

1.4.1 In addition to the requirements of the Guidelines, an oil storage vessel is also to comply with relevant requirements of the Administration (flag State/ coastal State). CCS is to carry out statutory surveys within the scope of authorization.

CHAPTER 2 SURVEY AND CERTIFICATION

2.1 Surveys

2.1.1 In addition to 2.1.4 of this Chapter and the following requirements for surveys of the outside of the ship's bottom, various surveys of an oil storage vessel are to be conducted in accordance with relevant applicable requirements for double hull oil tankers with ESP notation in CCS Rules for Classification of Sea-Going Steel Ships.

2.1.2 With the consent of the Administration, the examinations of outside of ship's bottom and related items of oil storage vessel may be normally accomplished by in-water survey for up to 10 years of storage service. For an oil storage vessel with more than 10 years of storage service, CCS will give special consideration to deciding whether to accept the application for replacing docking surveys with in-water surveys submitted by the owner, taking into account the detailed situation and condition of last survey. If the in-water survey reveals any damage or deterioration that requires early attention, the surveyor is to require that the vessel be dry-docked in order that a detailed survey can be undertaken and the necessary repairs carried out.

2.1.3 In addition to the applicable items specified above, the followings are to be added for the annual survey of oil storage vessels:

(1) Verifying that the stability data, loading manual and loading computer have covered the relevant provisions in Chapter 3 of the Guidelines;

(2) Verifying whether the vessels with Equipped with Single Point Mooring Connecting Installation notation meet the relevant requirements;

(3) Verifying whether the grounding requirement and STS system meet the relevant provisions in Chapter 3 of the Guidelines.

2.1.4 In addition to the requirements of 1.3.2 in Chapter 1 of the Guidelines, annual survey required by the Guidelines is to be conducted for the initially classed oil storage vessels transferred from a classification society accepted by CCS up to 20 years of its storage service, and additional 20% ballast tanks and 20% cargo tanks are to be inspected. Special survey required by the Guidelines is to be carried out for the storage vessel with the storage service more than 20 years.

2.2 Issuance and endorsement of certificates

2.2.1 A classification certificate with Oil FSV Fixed at XXX Anchorage notation is to be issued by CCS to a double oil tanker which is used as an oil storage vessel complying with the Guidelines and the relevant requirements. In case of any change to the working environment of the oil storage vessel, the application unit is to submit all the information specified in 1.3, Chapter 1 of the Guidelines to CCS for review so as to maintain the validity of the certificate.

2.2.2 The CCS class of an oil storage vessel which has been carried out survey after construction and in compliance with the requirements of the Guidelines will continue to be valid, and CCS is to issue or endorse the classification certificate with Oil FSV Fixed at XXX Anchorage notation.

CHAPTER 3 TECHNICAL REQUIREMENTS

3.1 Class requirements

3.1.1 Hull

3.1.1.1 The intact stability of an oil storage vessel is to comply with relevant requirements of Section 9, Chapter 1, PART TWO in CCS Rules for Classification of Sea-going Steel Ships.

3.1.1.2 The damage stability of an oil storage vessel is to comply with the relevant requirements of Section 10, Chapter 1, PART TWO in CCS Rules for Classification of Sea-going Steel Ships.

3.1.1.3 The minimum freeboard, load line mark and assignment of an oil storage vessel are to comply with relevant requirements of Annex I to International Convention on Load Lines.

3.1.1.4 The oil storage vessel is to be provided with loading guidance documents containing sufficient information to guide the oil storage vessel to carry out loading, unloading, ballasting and load adjustment for the purposes of possible inspection and repair at sea and maintain the oil storage vessel within the stipulated operational limitations. The loading guidance documents are to include an approved Loading Manual and Loading Computer System.

3.1.1.5 The hull structure of an oil storage vessel is to comply with the requirements of Chapter 5, PART TWO of CCS Rules for Classification of Sea-Going Steel Ships.

3.1.2 Equipment and outfits

3.1.2.1 The anchoring equipment of an oil storage vessel is to comply with relevant requirements of Section 2, Chapter 3 of PART TWO of CCS Rules for Classification of Sea-Going Steel Ships.

3.1.2.2 The emergency towing arrangements of an oil storage vessel are to comply with relevant requirements of Section 5, Chapter 3 of PART TWO of CCS Rules for Classification of Sea-Going Steel Ships.

3.1.2.3 Where single point mooring arrangements are fitted, standards (such as international industry standards and relevant requirements of oil companies) accepted by CCS are to be complied with.

3.1.2.4 The mooring arrangements of the oil storage vessels are the responsibility of the shipowners, including compliance with the requirements of the flag State and the Administration of the fixed anchorage. The mooring arrangements plan is to be available on board for the crew operation guidance.

3.1.2.5 The supporting structures of anchoring equipment, mooring equipment, emergency towing device and lifting equipment of the oil storage vessel are to meet the relevant requirements of Section 7, Chapter 3, Part TWO of CCS Rules for Classification of Sea-going Steel Ships.

3.1.3 Machinery installations

3.1.3.1 The piping system of an oil storage vessel is to comply with relevant requirements of Chapter 5, PART THREE of CCS Rules for Classification of Sea-Going Steel Ships.

3.1.3.2 Fire safety measures of an oil storage vessel are to comply with relevant requirements of

Chapter 3, PART SIX of CCS Rules for Classification of Sea-Going Steel Ships.

3.1.3.3 The inert gas system of an oil storage vessel is to comply with relevant requirements of Chapter 4, PART SIX of CCS Rules for Classification of Sea-Going Steel Ships.

3.1.3.4 Carbon steel or stainless steel used for the heating pipeline of cargo oil tank of oil storage vessel is to meet the relevant requirements in Chapter 2, PART THREE of CCS Rules for Classification of Sea-going Steel Ships.

3.1.4 Electrical installations

3.1.4.1 In addition to the following requirements, the electrical installations of an oil storage vessel are also to comply with relevant requirements of PART FOUR of CCS Rules for Classification of Sea-Going Steel Ships.

3.1.4.2 The environmental conditions of electrical installations are to comply with the requirements of 1.2.1.1 of Chapter 1, PART FOUR of CCS Rules for Classification of Sea-Going Steel Ships. Special consideration may be given by CCS to the operating environment conditions of electrical equipment which permanently works at the same fixed waters.

3.1.4.3 During the connection / disconnection of the conveying pipeline and the cargo transfer operation, the electrical isolation between the ships participating in the ship to ship transfer operation is be ensured so as to reduce the risk of high-energy sparks due to the potential difference between the hulls. Electrical isolation is to meet the requirements of 3.10.5 in Chapter 3 of CCS Guidelines for Ship to Ship Transfer.

3.2 Ship to ship transfer (STS)

3.2.1 Safety and environmental protection of ship to ship transfer operation

3.2.1.1 In order to ensure the safety of the STS transfer operation of oil storage vessels and prevent pollution to the marine environment, the ship to ship transfer (STS) operation plan is to meet the relevant requirements of CCS Guidelines for Ship to Ship Transfer, Guidelines for Preparation of Ship to Ship Transfer (STS) Operation Plan (oil tankers and chemical tankers), and is to be available on board for crew operation guidance.

3.2.1.2 The STS operation plan is to include the followings as a minimum:

(1) A step-by-step description of the entire STS operation;

(2) A description of the mooring and unmooring procedures and arrangements, including necessary drawings and mooring procedures during cargo transfer;

(3) A description of cargo and ballast management procedures for transfer operation, including procedures for connecting and testing integrity of cargo hoses and hose to manifold interface, topping-off cargo tank and disconnecting cargo hoses;

(4) The titles, locations and duties of all persons involving in the transfer operation;

(5) Procedures for operating the emergency shutdown, communication system and rapid breakaway;

(6) A description of the drip trays and procedures for empting them;

(7) Procedures for reporting oil spillage into the water;

(8) A contingency plan;

(9) A cargo and ballast plan.

3.2.2 Cut off and disengagement

3.2.2.1 In a contingency case, the oil storage vessels are to be able to realize emergency shutdown, stop the flow of cargo oil and maintain the cargo operation system in a static state.

3.2.2.2 Disengagement is to be divided into normal disengagement and emergency disengagement.

3.2.2.3 Normal disengagement and emergency disengagement are not to lead to oil leakage, ignition source or any damage to both ships.