SSSCL Section – Pre arrival

Part 1A. Tanker: checks pre-arrival			
Item	**Check**	**Status**	**Remarks**
1	Pre-arrival information is exchanged (6.5, 21.2)	✓ Yes	
2	International shore fire connection is available (5.5, 19.4.3.1)	✓ Yes	
3	Transfer hoses are of suitable construction (18.2)	Yes	Marine Loading Arm / Transfer Hose supplied by the terminal
4	Terminal information booklet reviewed (15.2.2)	✓ Yes	
5	Pre-berthing information is exchanged (21.3, 22.3)	✓ Yes	information transmitted to Vopak via agency
6	Pressure/vacuum valves and/or high velocity vents are operational (11.1.8)	✓ Yes	
7	Fixed and portable oxygen analysers are operational (2.4)	✓ Yes	

Part 1B. Tanker: checks pre-arrival if using an inert gas system			
Item	**Check**	**Status**	**Remarks**
8	Inert gas system pressure and oxygen recorders are operational (11.1.5.2, 11.1.11)	✓ Yes	
9	Inert gas system and associated equipment are operational (11.1.5.2, 11.1.11)	✓ Yes	
10	Cargo tank atmospheres' oxygen content is less than 8% (11.1.3)	✓ Yes	
11	Cargo tank atmospheres are at positive pressure (11.1.3)	✓ Yes	

OR

Part 1B. Tanker: checks pre-arrival if using an inert gas system			
Item	**Check**	**Status**	**Remarks**
8	Inert gas system pressure and oxygen recorders are operational (11.1.5.2, 11.1.11)	Yes	N/A
9	Inert gas system and associated equipment are operational (11.1.5.2, 11.1.11)	Yes	N/A
10	Cargo tank atmospheres' oxygen content is less than 8% (11.1.3)	Yes	N/A
11	Cargo tank atmospheres are at positive pressure (11.1.3)	Yes	N/A

- Tanker complete part 1A (and 1B if using an IG system) and Terminal complete part 2, then forward a copy to each other for review before arrival.
- If it is not possible to send a copy of the completed part to the tanker and/or terminal, then a message should be sent confirming the time and date of completion to the relevant party before arrival.
- If there are any outstanding issues not marked `' in the status box, this should be explained in this communication.
- *25.4.1* Are the following items being addressed pre-arrival?

Part 1A. Tanker: checks pre-arrival

1. Pre-arrival information is exchanged (6.5 Security plans, 21.2)

Before the tanker arrives at the terminal, it should provide any information demanded by local, regional, national and international requirements. The pre-arrival exchange of information between the tanker and terminal should cover items as per ISGOTT section 21.2.

Part 1A. Tanker: checks pre-arrival

2. International shore fire connection is available (5.5, 19.4.3.1)

All tankers and terminals should be able to interconnect the fire mains on board and ashore so that an external water supply can be coupled to any hydrant in the ship's fire main. The international shore fire connection is a standardised way of connecting two systems that might have individual couplings or connections that do not match. This connection should be ready for immediate use.

Part 1A. Tanker: checks pre-arrival

3. Transfer hoses are of suitable construction (18.2)

- Oil cargo hoses should conform to recognised standard specifications, or as recommended by OCIMF/established hose manufacturers. Hoses should be of a grade and type suitable for the service and operating conditions in which they are to be used.
- *Types; Marking; Flow velocities; Inspection; Pressure.*

Marine Terminal Information Booklet

Guidelines and Recommendations

(First edition 2018)

Part 1A. Tanker: checks pre-arrival

4. Terminal information booklet reviewed (15.2.2)

Vessel should familiarize themselves with TIB including mooring plans shared by the Terminal.

Part 1A. Tanker: checks pre-arrival

5. Pre-berthing information is exchanged (21.3, 22.3)

The pre-arrival exchange of information between the tanker and terminal should cover pre-berthing checks required for Tanker to terminal and/or pilot and Terminal and/or pilot to tanker.

Part 1A. Tanker: checks pre-arrival

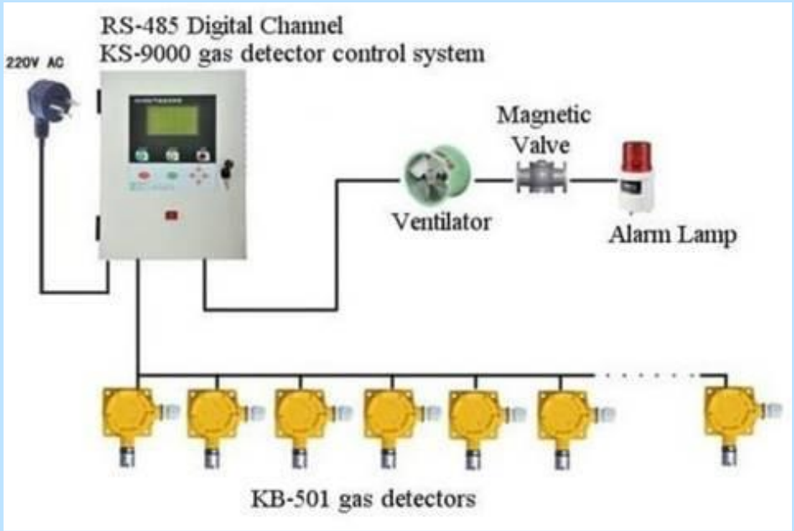
Pressure/vacuum valves and/or high velocity vents are operational (11.1.8)

Venting systems should be thoroughly checked to ensure that they are correctly set and operational for the intended operation. Once operations have started, further checks should be made for any abnormalities, e.g. unusual noises of vapour escaping under pressure or P/V valves lifting.

Part 1A. Tanker: checks pre-arrival

7. Fixed and portable oxygen analysers are operational (2.4)

- Tankers should be equipped with at least two instruments capable of measuring, as a minimum, concentrations of oxygen,
- flammable gases or vapours (% LFL), H2S and CO in order to carry out the tests required for enclosed space entry.



Part 1B. Tanker: checks pre-arrival if using an inert gas system

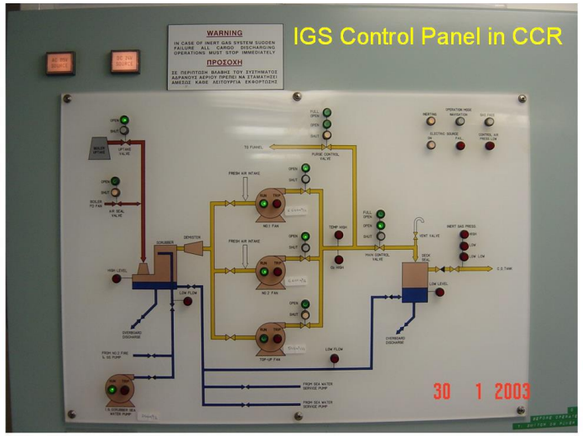
8. Inert gas system pressure and oxygen recorders are operational (11.1.5.2, 11.1.11)

Before the IG system is operated the tests required by the operations manual or the manufacturer's instructions should be carried out. The fixed oxygen analyser and recorder should be tested and proved to be in good order. Portable oxygen and hydrocarbon meters should also be prepared and tested.

Part 1B. Tanker: checks pre-arrival if using an inert gas system

9. Inert gas system and associated equipment are operational (11.1.5.2, 11.1.11)

The deck and engine departments should cooperate closely to ensure the IG system is maintained and operated properly. It is important to make sure that non-return barriers function correctly, especially the deck water seal or block and bleed valves, so that there is no possibility of petroleum gas or liquid petroleum passing back to the machinery spaces. To demonstrate that the IG plant is fully operational and in good working order, a record of inspection of the plant, including defects and their rectification, should be maintained on board.



IGS Control Panel in CCR

Part 1B. Tanker: checks pre-arrival if using an inert gas system

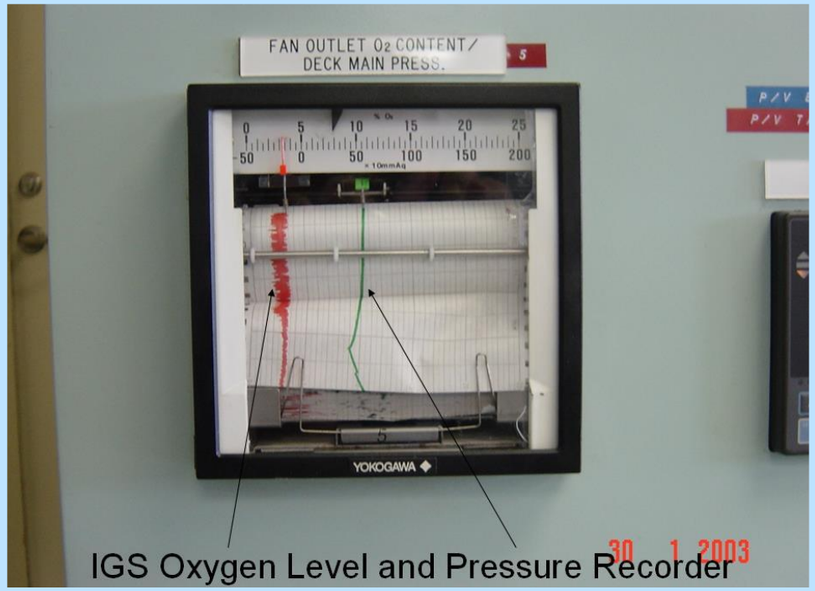
10.Cargo tank atmospheres' oxygen content is less than 8% (11.1.3)

SOLAS requires IG systems to deliver IG with an oxygen content in the IG main of not more than 5% by volume at any required rate of flow. SOLAS also requires that IG systems keep positive pressure in the cargo tanks and have an oxygen content of not more than 8% (except when it is necessary for the tank to be gas free). In certain ports, the maximum oxygen content of IG in the cargo tanks may be set at 5% to meet safety requirements, e.g. the operation of a Vapour Emission Control System (VECS). When such a limitation is in place, the ship should be advised of the requirement in the pre-arrival information exchange.

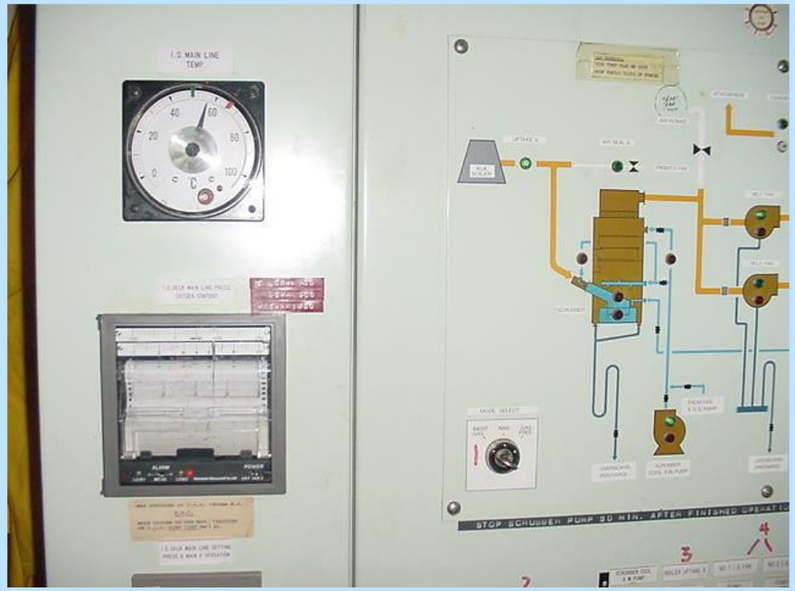
Part 1B. Tanker: checks pre-arrival if using an inert gas system

11.Cargo tank atmospheres are at positive pressure (11.1.3)

SOLAS requires that IG systems keep positive pressure in the cargo tanks and have an oxygen content of not more than 8% (except when it is necessary for the tank to be gas free).



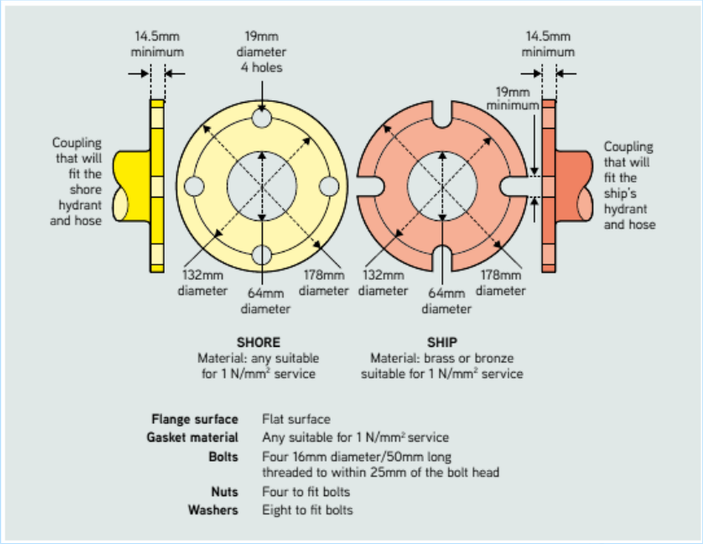
IGS Oxygen Level and Pressure Recorder



Part 2. Terminal: checks pre-arrival

12.Pre-arrival information is exchanged (6.5, 21.2)

Before the tanker arrives at the terminal, it should provide any information demanded by local, regional, national and international requirements. The pre-arrival exchange of information between the tanker and terminal should cover items as per ISGOTT section 21.2.



Part 2. Terminal: checks pre-arrival

13.International shore fire connection is available (5.5, 19.4.3.1, 19.4.3.5)

All tankers and terminals should be able to interconnect the fire mains on board and ashore so that an external water supply can be coupled to any hydrant in the ship's fire main. The international shore fire connection is a standardised way of connecting two systems that might have individual couplings or connections that do not match. This connection should be ready for immediate use.

Part 2. Terminal: checks pre-arrival

14.Transfer equipment is of suitable construction (18.1, 18.2)

For MLA design information see OCIMF's Design and Construction Specification for Marine Loading Arms. Oil cargo hoses should conform to recognised standard specifications, or as recommended by OCIMF/established hose manufacturers. Hoses should be of a grade and type suitable for the service and operating conditions in which they are to be used.

Part 2. Terminal: checks pre-arrival

15. Terminal information booklet transmitted to tanker (15.2.2)

- The format of the TIB should follow OCIMF's Marine Terminal Information Booklet: Guidelines and Recommendations. This guidance gives terminal operators a template for presenting important
- terminal and port information in a booklet, for easy and consistent reference by ship personnel, shipowners, operators, charterers and others. The TIB can be stored as an attachment to the MTPQ to facilitate access for stakeholders and to ensure the latest version of the TIB is always available.

Part 2. Terminal: checks pre-arrival

16. Pre-berthing information is exchanged (21.3, 22.3)

The pre-arrival exchange of information between the tanker and terminal should cover pre-berthing checks required for Tanker to terminal and/or pilot and Terminal and/or pilot to tanker.

SSSCL Section – Checks after mooring

Part 3. Tanker: checks after mooring			
Item	Check	Status	Remarks
17	Fendering is effective (22.4.1)	Yes	
18	Mooring arrangement is effective (22.2, 22.4.3)	Yes	
19	Access to and from the tanker is safe (16.4)	Yes	
20	Scuppers and savealls are plugged (23.7.4, 23.7.5)	Yes	
21	Cargo system sea connections and overboard discharges are secured (23.7.3)	Yes	
22	Very high frequency and ultra high frequency transceivers are set to low power mode (4.11.6, 4.13.2.2)	Yes	
23	External openings in superstructures are controlled (23.1)	Yes	
24	Pumproom ventilation is effective (10.12.2)	Yes	
25	Medium frequency/high frequency radio antennae are isolated (4.11.4, 4.13.2.1)	Yes	
26	Accommodation spaces are at positive pressure (23.2)	Yes	
27	Fire control plans are readily available (9.11.2.5)	Yes	

Part 4. Terminal: checks after mooring			
Item	Check	Status	Remarks
28	Fendering is effective (22.4.1)	Yes	
29	Tanker is moored according to the terminal mooring plan (22.2, 22.4.3)	Yes	
30	Access to and from the terminal is safe (16.4)	Yes	
31	Spill containment and sumps are secure (18.4.2, 18.4.3, 23.7.4, 23.7.5)	Yes	

- Tanker complete part 3 and Terminal complete part 4, then give a copy to each other as soon as possible, but no later than at the Pre-transfer conference.

Part 3. Tanker: checks after mooring

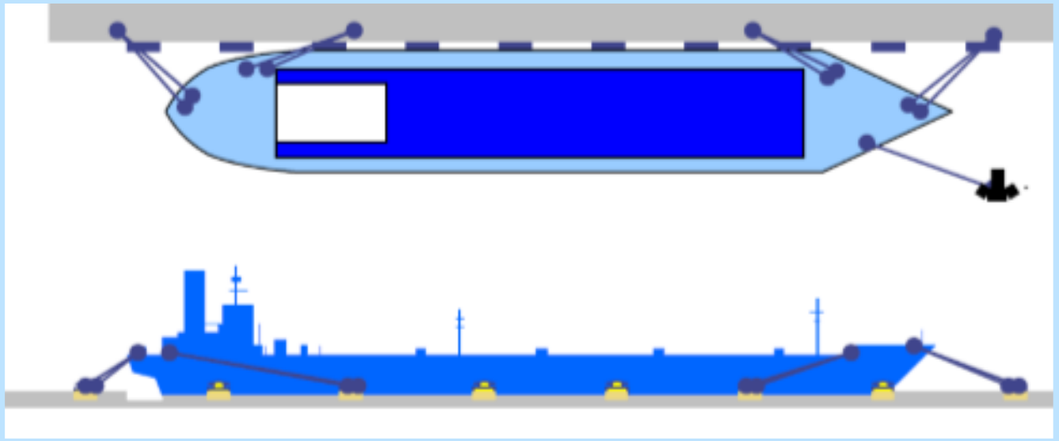
17.Fendering is effective (22.4.1)

Fendering systems at each berth should be engineered to suit the range of tanker sizes & types that use the berth. They should be capable of withstanding expected loads without causing damage to tanker or berth.

Part 3. Tanker: checks after mooring

18.Mooring arrangement is effective (22.2, 22.4.3)

Tanker personnel are responsible for the frequent monitoring and tending of the moorings. If moorings become too slack or too taut, the mooring system should be reviewed overall so that the tightening or slackening of individual lines does not allow the tanker to move or place undue loads on other lines. The tanker should maintain contact with the fenders.



Part 3. Tanker: checks after mooring

19.Access to and from the tanker is safe (16.4)

The means of access to the Ship and shore by accredited staff should be safe and there should be adequate landing area on the berth to provide the gangway with sufficient clean run of space and so maintain safe and convenient access to the ship at all states of tide and changes in the ship’s freeboard. Safety nets are required when gangway is not fixed to shore or provided with permanent system of handrails.

Part 3. Tanker: checks after mooring

20. Scuppers and savealls are plugged (23.7.4, 23.7.5)

Before cargo handling commences, all deck scuppers and savealls, where applicable must be effectively plugged to prevent spilled oil escaping into the water around the tanker. Equipment should be ready to promptly remove any spill on deck. Any oil spill should be reported to the terminal and port authorities.

Part 3. Tanker: checks after mooring

Cargo system sea connections and overboard discharges are secured (23.7.3)

Sea and overboard discharge valves connected to the cargo and ballast systems should be closed and secured using a Lock-out/Tag-out system (LO/TO) and may be sealed when not in use. In-line blanks should be inserted where provided. Shore Officer are not allowed to enter confined space and this should be confirmed verbally from Chief Officer.

Part 3. Tanker: checks after mooring

22. Very high frequency and ultra high frequency transceivers are set to low power mode (4.11.6, 4.13.2.2)

- Permanently and correctly installed VHF and UHF equipment are safe to use when the tanker is at the terminal, but it is
- recommended that the transmission is set to low power (one watt or less).

Part 3. Tanker: checks after mooring

23.External openings in superstructures are controlled (23.1)

- Tanker accommodation and machinery spaces contain equipment that is not suitable for use in flammable atmospheres, so it is important to keep hydrocarbon gas out of these spaces. Where practical, working access in port should be via a single door.

Part 3. Tanker: checks after mooring

24. Pump room ventilation is effective (10.12.2)

- Given the potential presence of hydrocarbon gas in the pump room, mechanical ventilation by extraction is required in a safe atmosphere. If fitted, the gas detection system should be functioning correctly.

Part 3. Tanker: checks after mooring

25.Medium frequency/high frequency radio antennae are isolated (4.11.4, 4.13.2.1)

- Main transmitting antennae of medium and high frequency radio equipment should be earthed or isolated when the tanker is alongside the berth.

Part 3. Tanker: checks after mooring

26.Accommodation spaces are at positive pressure (23.2)

The accommodation should be kept under positive pressure to prevent the entry of hydrocarbon vapours. External air conditioning units, e.g. window or split air conditioning types, should not be operated.

Part 3. Tanker: checks after mooring

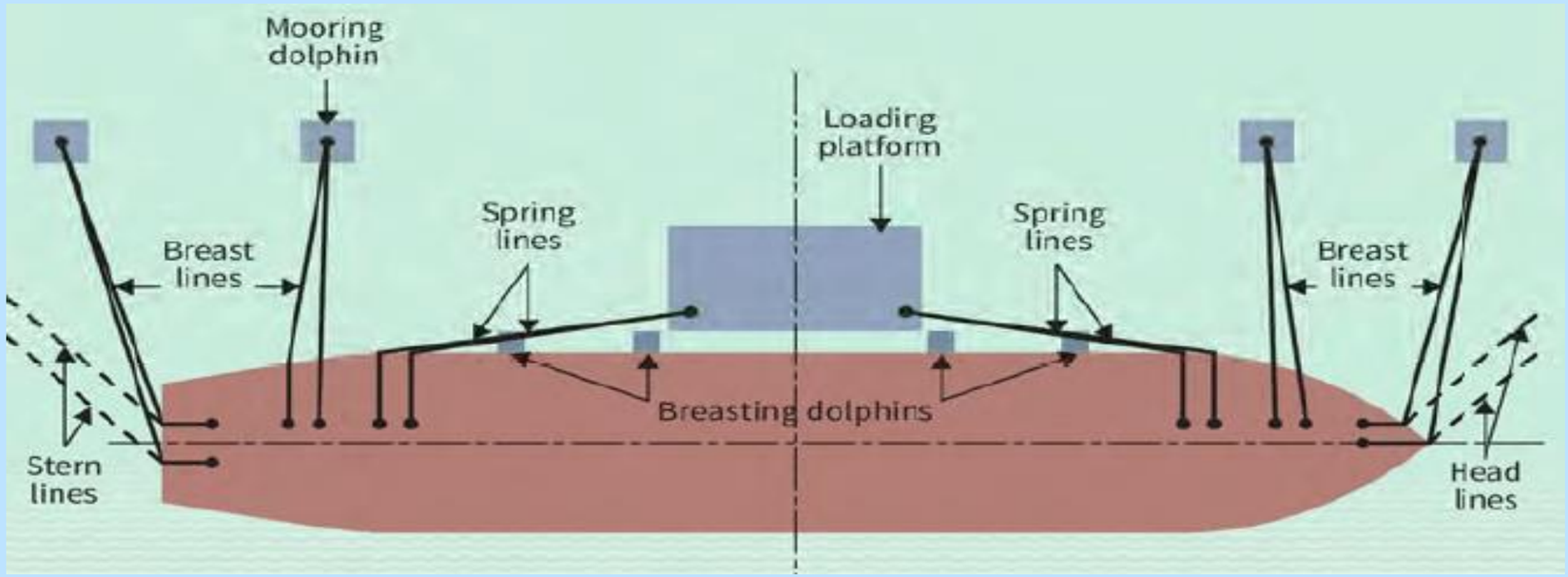
27.Fire control plans are readily available (9.11.2.5)

- Fire control plans should be displayed outside the accommodation block, showing clearly for each deck the location and details of all
- firefighting equipment, dampers, controls, etc. for the Shore based Fire-fighting personnel.

Part 4. Terminal: checks after mooring

28.Fendering is effective (22.4.1)

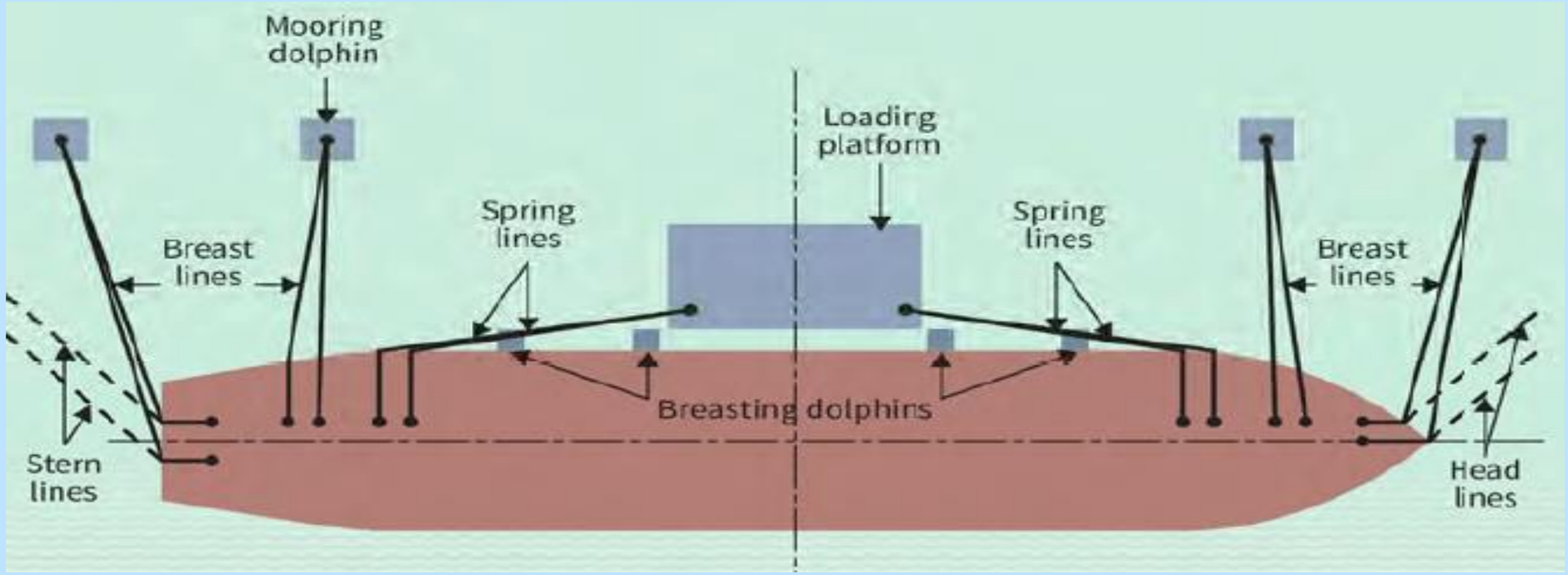
The spacing between outer breasting dolphins should be between 0.25 and 0.40 LOA.



Part 4. Terminal: checks after mooring

29.Tanker is moored according to the terminal mooring plan (22.2, 22.4.3)

Qualified terminal personnel should also check the moorings periodically. The number of layers on the drum.



Part 4. Terminal: checks after mooring

30. Access to and from the terminal is safe (16.4)

Responsibility for the provision of safe tanker/terminal access is jointly shared between tanker and terminal personnel. Requirements for provision of safe access should be detailed in the pre-arrival communications. The preferred means for access between tanker and terminal is a shore based gangway.

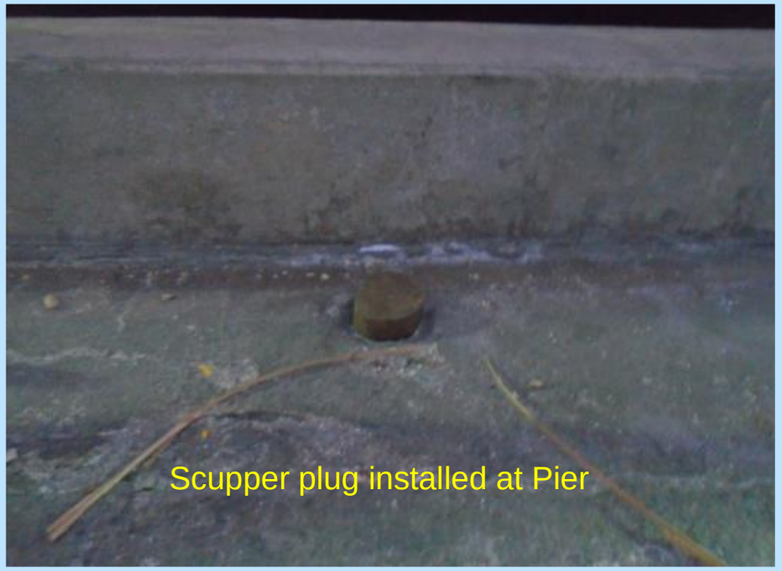
Part 4. Terminal: checks after mooring

31.Spill containment and sumps are secure

(18.4.2, 18.4.3, 23.7.4, 23.7.5)

Before cargo handling commences, all open drains and save-alls on the jetty must be effectively plugged to prevent spilled oil escaping into the water around the terminal.

A permanently fitted spill tank or bund .



Scupper plug installed at Pier

Shore Spill Containment

Part 4. Terminal: checks after mooring

31.Spill containment and sumps are secure

(18.4.2, 18.4.3, 23.7.4, 23.7.5)

- walls, provided with suitable means of draining, should be
- fitted under all shore manifold connections. If no permanent
- means are fitted, portable drip trays should be placed under
- each connection to retain any leakage.

Reference

- **OCIMF Marine Terminal Operator Competence and Training Guide**
- **International Safety Guide for Oil Tankers and Terminals (IGSOTT) 6th edition**

Q&A