

Chapter 9 Facilities for Ship Service

1 General

[Ministerial Ordinance] (Performance Requirements for Facilities for Ship Service)

Article 47

- 1 The performance requirements for facilities for ship service shall be such that the requirements specified by the Minister of Land, Infrastructure, Transport and Tourism are satisfied for the provision of safe and smooth services to ships in light of the geotechnical characteristics, meteorological characteristics, sea states and other environmental conditions, as well as the conditions of ship entry.
- 2 The performance requirements for water supply facilities for ships shall be such that the requirements specified by the Minister of Land, Infrastructure, Transport and Tourism are satisfied for the sanitary supply of water to ships.
- 3 The performance requirements for ship storage facilities shall be as prescribed respectively in the following items:
 - (1) The requirements specified by the Minister of Land, Infrastructure, Transport and Tourism shall be satisfied so as to enable ships to be safely brought in and out of the facilities.
 - (2) The requirements specified by the Minister of Land, Infrastructure, Transport and Tourism shall be satisfied so as to enable ships to be properly secured to the facilities.

[Ministerial Ordinance] (Necessary Items concerning Facilities for Ship Service)

Article 48

The items necessary for enforcement of the performance requirements for ship service facilities as specified in this Chapter by the Minister of Land, Infrastructure, Transport and Tourism and other requirements shall be provided by Public Notice.

[Public Notice] (Facilities for Ship Service)

Article 89

The items to be specified by Public Notice under Article 48 of the Ministerial Ordinance concerning the performance requirements of ship service facilities shall be as specified in the following Article.

1.1 Water Supply Facilities for Ships

[Public Notice] (Performance Criteria of Water Supply Facilities for Ships)

Article 90

The performance criteria of water supply facilities for ships shall be as prescribed respectively in the following items:

- (1) The water supply facilities shall be installed at appropriate locations corresponding to the conditions of use by ships.
- (2) The water supply facilities shall have the appropriate water supply capacity corresponding to the dimensions of the design ships.
- (3) The water supply facilities shall have structures which are capable of preventing water pollution, and water hydrants shall be maintained in a sanitary condition.

- (1) The layout and capacity of the hydrants shall be determined appropriately according to the types of ships.
- (2) Water supply facilities shall meet the following sanitation requirements:

- ① The hydrants of water supply facilities shall have structures that can prevent water pollution.
 - ② Periodic and ad-hoc water quality tests shall be conducted in accordance with Article 15 of **the Ordinance for Enforcement of the Water Supply Act** (the final revision of the Ordinance of the Ministry of Health, Labour and Welfare of No. 133 of August 31, 2015), and the hygiene of the hydrants of the water supply facilities shall be appropriately maintained.
- (3) The hydrant outlets shall be positioned so as to enable hoses to be easily attached and shall have structures that prevent water pollution. In particular, the hydrant outlets shall be provided with drain systems when they are buried below apron floors and shall be provided with caps.

(4) Water Supply Volumes

For the water supply volumes to ships, refer to the values shown in **Table 1.1.1**. In the case of large ships, the capacities of water tanks are in many cases around 800 m³ because such ships have their own fresh water production equipment.

(5) Hydrants, Oil Feed Plugs and Water Supply Pipes

Hydrants are preferably positioned as close to the face lines of mooring facilities as possible. Hydrants are normally buried below the pavement surface with manholes which are closed when not in use. Furthermore, water supply pipes are preferably buried below the pavement surface or suspended from superstructures in the case of piled piers so as not to interfere with vehicle traffic and cargo handling operation. However, hydrants, oil feed plugs and water supply pipes are preferably provided with the appropriate corrosion prevention measures to prevent damage due to salt injury. In addition, oil feed pipes shall be carefully connected to prevent leakage due to the vibration and settlement of the mooring facilities. The water volumes in **Table 1.1.1** correspond to 80% of the capacity of the water tanks, and in many cases, ships only receive about half that amount at ports of call.

Table 1.1.1 Hydrants and Water Supply Volumes

Tonnage of ship (gross tonnage)	Required water supply volume (m ³)	Time required to supply water (h)	Hydrant spacing (m)	Number of hydrants per berth (number of points)	Water supply capacity of each hydrant (m ³ /h)
500	40	5	30	2	4
1,000	80	5	30–40	2	8
3,000	250–300	5	40–50	3–4	16
5,000	500	5	40–50	4	18
10,000	800	5	40–50	4	28

1.2 Other Facilities for Ship Service

- (1) For the performance verification of other facilities for ship service, refer to **Part III, Chapter 7, Cargo Sorting Facilities and other equivalent provisions**.
- (2) Port management bodies shall take the necessary measures to establish systems obliging ocean shipping companies, shipping agents and waste disposers to receive waste generated by ships under the MARPOL Convention, which was revised in January 2013, so as to prohibit in principle the ocean disposal of waste generated by ships.
- (3) Facilities for ship service shall be provided with passages enabling ships to be safely brought in and out of the facilities and equipment to secure the ships to the facilities.