§ 34.20–1

Subpart 34.20—Deck Foam System, Details

§ 34.20–1 Application—T/ALL.

(a) Where a deck foam system is installed, the provisions of this subpart, except §34.20–90, apply to all installations that are contracted for on or after January 1, 1970, unless otherwise indicated.

(b) Installations contracted for prior to January 1, 1970, shall meet the requirements of §34.20–90.

(c) Foreign flag crude oil tankers and product carriers required to have fixed deck foam systems by this subpart must have systems that are designed and installed in accordance with Regulation 61 of Chapter II–2 of SOLAS 1974. (Senate Document, 57–1180, GPO, Washington, 1976; “Message from the President of the United States transmitting, the International Convention for the Safety of Life at Sea, 1974, Done at LONDON, November 1, 1974”).

(46 U.S.C. 391a; 49 CFR 1.46(n)(4))


§ 34.20–3 Cargo area definition—T/ALL.

(a) For the purpose of this subpart, the term cargo area is defined as the maximum beam of the vessel times the total longitudinal extent of the cargo tank spaces.

§ 34.20–5 Quantity of foam required—T/ALL.

(a) Area protected. Systems of this type are designed to give primary protection to the spaces over the cargo tanks.

(b) Rate of application. The water rate of the foam production equipment shall be determined as follows:

1. For usual petroleum products the rate of supply of foam solution shall be not less than the greatest of the following:
   (i) 0.6 liters/min per square meter of cargo tanks deck area, where cargo tanks deck area means the maximum breadth of the ship multiplied by the total longitudinal extent of the cargo tank spaces;
   (ii) 6 liters/min per square meter of the horizontal sectional area of the single tank having the largest such area; or
   (iii) 3 liters/min per square meter of the area protected by the largest monitor, such area being entirely forward of the monitor, but not less than 1,250 liters/min.

2. For polar solvent products (e.g. alcohols, ketones, etc.) the water rate shall be determined for each vessel. The rate will depend upon the vessel design, products to be carried and foam system to be used.

(c) Supply of foam-producing material. Each deck foam system must have a supply of foam-producing material sufficient to operate the system at its designed rate of foam production for the following periods:

1. For installations contracted for on or after January 1, 1970, 15 minutes without recharging, except as required in paragraph (c)(2) of this section.

2. For installations on ships that have a keel laying date on or after January 1, 1975, 20 minutes without recharging.

(d) Separate supply of foam-producing material. Where the same foam-producing material may be used for this system as well as a fixed foam system, separate supplies need not be provided for each space protected. The total available supply shall be at least sufficient for the space requiring the greatest amount.

(e) Water supply. Suitable pumps shall be provided capable of producing the required water rate. The fire pumps required by subpart 34.10 may be used for this purpose; however, the operation of the deck foam system shall not interfere with the simultaneous use of the fire main system.


§ 34.20–10 Controls—T/ALL.

(a) The foam agent, its container, measuring devices, and other items peculiar to this system shall be of an approved type.

(b) The foam agent container and the main controls for operating the system shall be located in a protected space