

CHAPTER 33

DIESEL OIL SYSTEM

33-1 FILLING:-

The six Diesel oil or Ballast tanks and four Diesel oil tanks are filled through individual 2-1/2" filling connections located on the Superstructure Deck between frames 13 and 28, port and starboard. See CHAPTER 24, TABLE 24-1, for location of each filling connection.

Each tank is provided with a combined over-flow and air escape which terminates with a screened outlet, open to the atmosphere. These outlets are located in the Tank Well longitudinal bulkheads, port and starboard, between frames 11 and 28.

33-2 SOUNDING:-

Diesel oil tanks are sounded by a steel tape through screw cover sounding tube deck plates. These deck plates are located on the Main Deck, in the Tank Well, between frames 11 and 28. See CHAPTER 24, TABLE 24-3, for location of each sounding tube.

33-3 PUMPS:-

The Diesel oil transfer system is served by an electric motor driven, rotary pump having a capacity of 44 g.p.m. at 440 r.p.m. with a discharge pressure of 35 p.s.i.

A hand-operated Diesel oil transfer pump is also provided. This pump has a capacity of 10 g.p.m. at approximately 50 double strokes with a discharge pressure of 15 p.s.i.

The tank manifolds and transfer pumps, main and hand-operated, are interconnected by a separate suction and discharge main so that Diesel oil may be transferred from any tank to any other tank; to the settling tanks; to the service tanks; to the deck filling and discharge connection or to discharge overboard. Diesel oil may also be discharged to other vessels by means of the ballast pump through a 4" flanged connection.

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33-4 PURIFIER:-

An electric-motor-driven Diesel oil Purifier complete with pumps is provided. This purifier has a capacity of 225 g.p.h. when handling oil having a viscosity of 45 s.s.u. at a temperature of 100° F.

The purifier takes suction from both Settling Tanks and the Impure Oil Leakage Tank and discharges to the Clean Diesel Fuel Oil Tank and Service Tanks.

33-5 SERVICE TANKS:-

A Diesel Oil Service Tank for each of the main engines and one tank for the Diesel generators are provided on the upper level of the engine room, B-1. Each of these tanks are provided with a service line connection; return line connection; filling, drain and overflow connections; try cocks and sight flow and air escapes terminating on the weather deck.

A Boiler Fuel Oil Service Tank, provided with the same connections as furnished for the service tanks is located in the boiler room, C-101-1/2E.

33-6 SERVICE PIPING:-

Service Piping for the main engines and Diesel generators consists of a service line from the service tanks to engines and a return line from engines to service tanks. The main engines are provided with drain lines to the Impure Oil Tank, (Fairbanks-Morse only).

For detailed information concerning fuel oil service piping and injection for the main engines and Diesel generators, see instruction books furnished the vessels.

For list of Diesel oil tanks and capacities see CHAPTER 32.

For further information concerning the Diesel Oil System, see PLATE XI.

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