TÜRK LOYDU

TECHNICAL CIRCULAR

Circular No: S-P 16/13 **Revision: 1** **Page:** 1 **Adoption Date:**29.04.2013

Related Requirement: TL- I SC189
Subject: High Pressure Oil Fuel Delivery Lines on Small Engines
Entry into Force Date:

SOLAS Regulations II-2/15.2.9 and 15.2.12 under MSC.31(63) read:

15.2.9 All external high-pressure fuel delivery lines between the high-pressure fuel pumps and fuel injectors shall be protected with a jacketed piping system capable of containing fuel from a high-pressure line failure. A jacketed pipe incorporates an outer pipe into which the high pressure fuel pipe is placed, forming a permanent assembly. The jacketed piping system shall include a means for collection of leakages and arrangements shall be provided for an alarm to be given of a fuel line failure.

15.2.12 Ships constructed before 1 July 1998 shall comply with the requirements of paragraphs 2.9 to 2.11 not later than 1 July 2003, except that a suitable enclosure on engines having an output of 375 kW or less having fuel injection pumps serving more than one injector may be used as an alternative to the jacketed piping system in paragraph 2.9.

Interpretation*

1. Application

1.1 This interpretation applies to ships constructed before 1 July 1998.

1.2 The requirements of SOLAS regulation II-2/15.2.9 and 15.2.12 are applicable to internal combustion engines installed in any area on board ships irrespective of service and location. These requirements do not apply to gas turbines.

1.3 Engines having a single cylinder, multi-cylinder engines having separate fuel pumps and those having multiple fuel injection pump units are included.

1.4 For the purpose of these regulations lifeboat engines are excluded.

2. Suitable enclosure

2.1 For engines of less than 375kW where an enclosure is fitted, the enclosure is to have a similar function to jacketed pipes i.e., prevent spray from a damaged injector pipe impinging on a hot surface.

2.2 The enclosure is to completely surround the injection pipes except that existing "cold" engine surfaces may be considered as part of the enclosure.

**This interpretation is implemented from 1 July 2004.*

2.3 All engine parts within the enclosure are to have a surface temperature not exceeding 220°C when the engine is running at its maximum rating.

2.4 The enclosure is to have sufficient strength and cover area to resist the effects of high pressure spray from a failed fuel pipe in service, prevent hot parts from being sprayed and restrict the area that can be reached by leaked fuel. Where the enclosure is not of metallic construction, it is to be made of non-combustible, non oil-absorbing material.

2.5 Screening by the use of reinforced tapes is not acceptable as a suitable enclosure.

2.6 Where leaked oil can reach hot surfaces, suitable drainage arrangements are to be fitted to enable rapid passage of leaked oil to a safe location which may be a drain tank. Leaked fuel flow onto "cold" engine surfaces can be accepted, provided that it is prevented from leaking onto hot surfaces by means of screens or other arrangements.

2.7 Where the enclosure has penetrations to accommodate high pressure fittings, the penetrations are to be a close fit to prevent leakage