

Oil Mist Detection Arrangements

Object of Amendment

Guidance for the Approval of Materials and Equipment for Marine Use

Reason for Amendment

The type approval requirements for oil mist detection arrangements are specified in IACS Unified Requirement (UR) M67. These requirements assume that oil mist detection arrangements are used to detect oil mist concentration in the crankcases of internal combustion engines burning conventional oil fuels.

In recent years, however, there has been an increase in ships equipped with internal combustion engines using gas fuels and low-flashpoint fuels. Therefore, IACS reviewed UR M67 (Rev.2), taking into account the differences in characteristics between oil fuels and gas/low-flashpoint fuels, and adopted UR M67 (Rev.3) in April 2025 to address type approval requirements applicable to such engines.

Accordingly, the relevant requirements are amended based on UR M67 (Rev.3).

Outline of the Amendment

The main amendments are as follows:

- (1) Adds requirements to verify the suitability of materials used in oil mist detection arrangements.
- (2) Adds requirements related to the submission of documentation for explosion protected electrical equipment for oil mist detection arrangements.

Effective Date and application

This amendment applies to oil mist detection arrangements for which the application for approval is submitted to the Society on or after 1 January 2027.

ID:DD26-06

Amended-Original Requirements Comparison Table (Oil Mist Detection Arrangements)

Amended	Original	Remarks
Guidance for the Approval of Materials and Equipment for Marine Use Part 7 CONTROL AND INSTRUMENTATION EQUIPMENT AND ELECTRICAL INSTALLATIONS Chapter 6 TYPE APPROVAL OF CRANKCASE OIL MIST DETECTION ARRANGEMENTS 6.2 Application 6.2.2 Documents <u>1</u> The documents listed (1) through <u>(5)</u> and <u>(8)</u> through <u>(12)</u> below are to be submitted together with the application form specified in 6.2.1. <u>In cases where type approval is sought for oil mist detection arrangements to be installed on an internal combustion engine using gas fuel or low-flashpoint fuel (hereinafter referred to as “alternative fuels” in this chapter), the documents specified in (6) and (7) are also to be submitted.</u> (1) Specifications (2) Construction drawings and summary of working principles (3) Description of oil mist detection/monitoring equipment and system, including alarms (4) Schematic layout of oil mist detection arrangements showing location of detectors/sensors and piping arrangements and dimensions	Guidance for the Approval of Materials and Equipment for Marine Use Part 7 CONTROL AND INSTRUMENTATION EQUIPMENT AND ELECTRICAL INSTALLATIONS Chapter 6 TYPE APPROVAL OF CRANKCASE OIL MIST DETECTION ARRANGEMENTS 6.2 Application 6.2.2 Documents The documents listed (1) through <u>(10)</u> below, are to be submitted together with the application form specified in 6.2.1. (1) Specifications (2) Construction drawings and summary of working principles (3) Description of oil mist detection/monitoring equipment and system including alarms (4) Schematic layout of oil mist detection arrangements showing location of detectors/sensors and piping arrangements and dimensions	

Amended-Original Requirements Comparison Table (Oil Mist Detection Arrangements)

Amended	Original	Remarks
(5) Maintenance and test manual which is to include the following information: (a) Intended use of equipment and its operation (b) Functionality tests (to demonstrate that the equipment is operational and that any faults can be identified and corrective actions notified) (c) Maintenance routines and spare parts recommendations (d) Limit setting and instructions for safe limit levels (e) Where necessary, details of configurations in which the equipment is and is not to be used (6) <u>A list of alternative fuels corresponding to the intended service environment, and documentation of explosion protected electrical equipment in oil mist detection arrangements (i.e. Ex-Certificates and test reports issued by an appropriate authority in accordance with IEC standards or their equivalents, such as an IECEx Certification Body)</u> (7) <u>Documentation demonstrating the suitability of materials for atmospheres involving alternative fuels</u> (8) Approval test plan (the place of test and scheduled date of test are to be entered) (9) Data on the summary of test facilities (10) Information on the manufacturing and quality control standards (11) Records of manufacture and delivery (if any) (12) Others which are considered necessary by the Society 2 <u>With respect to the “documentation demonstrating the suitability of materials for atmospheres involving alternative fuels” as referred to in -1(7), the manufacturer is to select materials that are suitable for the atmosphere to which the oil</u>	(5) Maintenance and test manual which is to include the following information: (a) Intended use of equipment and its operation (b) Functionality tests (to demonstrate that the equipment is operational and that any faults can be identified and corrective actions notified) (c) Maintenance routines and spare parts recommendations (d) Limit setting and instructions for safe limit levels (e) Where necessary, details of configurations in which the equipment is and is not to be used (Newly added) (Newly added) (6) Approval test plan (the place of test and scheduled date of test are to be entered) (7) Data on the summary of test facilities (8) Information on the manufacturing and quality control standards (9) Records of manufacture and delivery (if any) (10) Others which are considered necessary by the Society (Newly added)	UR M67 rev.3 12.2.5 UR M67 rev.3 13.1

Amended-Original Requirements Comparison Table (Oil Mist Detection Arrangements)

Amended	Original	Remarks
<u>mist detection arrangement is exposed within the crankcase and is to include the specifications of the selected materials together with their justification for suitability. Notwithstanding the above, additional documentation may be required where deemed necessary by the Society.</u>		
EFFECTIVE DATE AND APPLICATION		
1. The effective date of the amendments is 1 January 2027. 2. Notwithstanding the amendments, the current requirements may apply to oil mist detection arrangements other than those for which the application for approval is submitted to the Society on and after the effective date.		