

# **Portable Instruments for Measuring Oxygen Concentrations and Portable Gas Detectors**

## **Amended Rules and Guidance**

Rules for the Survey and Construction of Steel Ships Part R  
Guidance for the Survey and Construction of Steel Ships Part R

## **Reason for Amendment**

IACS Unified Requirement (UR) F7 (Rev.2) specifies that all oil tankers are to be equipped with two portable instruments for measuring oxygen concentrations and two portable gas detectors for measuring flammable vapour concentrations. In addition, when an inert gas system installed, it is also specified that two portable gas detectors are to be provided for measuring flammable vapour concentrations in an inert atmosphere. This UR has been already incorporated into the ClassNK Rules.

The UR, however, makes no mention of instruments that are capable of measuring both oxygen and flammable vapour concentrations; moreover, the requirements for the performance of gas detectors are unclear. Therefore, IACS reviewed the UR and adopted a revised version of it as UR F7 (Rev.3) in June 2020.

Accordingly, relevant requirements were amended in accordance with UR F7 (Rev.3). In addition, as part of the comprehensive review of the ClassNK Rules, relevant requirements for portable gas detectors required for ships equipped with inert gas equipment were amended to be consistent with UR F7.

## **Outline of Amendment**

- (1) Clarified requirements for the performance of portable gas detectors measuring flammable vapour concentrations required for oil tankers and ships equipped with inert gas systems.
- (2) Amended the provisions on the dual use of portable combustible gas detectors required for oil tankers and portable combustible gas detectors required for ships equipped with inert gas systems by transferring it from Chapter R4 to Chapter R35 of the Guidance for the Survey and Construction of Steel Ships Part R.
- (3) Amended requirements for oxygen concentration with respect to portable gas detectors required for ships equipped with inert gas equipment to be consistent with UR F7.

## **Amended Requirements**

Rules for the Survey and Construction of Steel Ships  
Part R: 4.5.7, 35.2.2  
Guidance for the Survey and Construction of Steel Ships  
Part R: R4.5.7, R35.2.2