

E18 Recording of the Type, Location and Maintenance Cycle of Batteries

(July
2003)
(Rev.1
Dec
2014)

1. Where batteries are fitted for use for essential (UI SC134) and emergency services a schedule of such batteries is to be compiled and maintained. The schedule, which is to be reviewed by the Society during plan approval or the newbuilding survey, is to include at least the following information regarding the battery(ies):

- Type and manufacturer's type designation.
- Voltage and ampere-hour rating.
- Location.
- Equipment and/or system(s) served.
- Maintenance/replacement cycle dates.
- Date(s) of last maintenance and/or replacement.
- For replacement batteries in storage, the date of manufacture and shelf life.¹

2. Procedures are to be put in place to ensure that where batteries are replaced that they are of an equivalent performance type.

3. Where vented² type batteries replace valve-regulated sealed³ types, it is to be ensured that there is adequate ventilation⁴ and that the Society's requirements relevant to the location and installation of vented types batteries are complied with.

4. Details of the schedule and of the procedures are to be included in the ship's safety management system and be integrated into the ship's operational maintenance routine as appropriate⁵ to be verified by the Society's surveyor.

Note:

1. Rev.1 of this UR is to be uniformly implemented by IACS Societies from 1 January 2016.

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(cont)

1 Shelf life is the duration of storage under specified conditions at the end of which a battery retains the ability to give a specified performance.

2 A vented battery is one in which the cells have a cover provided with an opening through which products of electrolysis and evaporation are allowed to escape freely from the cells to atmosphere.

3 A valve-regulated battery is one in which cells are closed but have an arrangement (valve) which allows the escape of gas if the internal pressure exceeds a predetermined value.

4 The ventilation arrangements for installation of vented type batteries which have charging power higher than 2kW are to be such that the quantity of air expelled is at least equal to:

$$Q = 110/n$$

where

n = number of cells in series

I = maximum current delivered by the charging equipment during gas formation, but not less than 25 per cent of the maximum obtainable charging current in amperes

Q = quantity of air expelled in litres/hr.

The ventilation rate for compartments containing valve-regulated batteries may be reduced to 25 per cent of that given above.

5 See section 10 of the IMO ISM Code.

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