FIRE PROTECTION – MAINTENANCE OF PORTABLE FIRE EXTINGUISHERS

Notice to Shipowners, Masters, Deck and Engineer Officers, Certifying Authorities and Surveyors

Summary

Portable fire extinguishers are pressure containers that require correct maintenance. The marine environment can be harsh and special care is needed to ensure long-term safe operation.

Introduction/Background

1. Two recent fatalities to people operating marine portable fire extinguishers have been attributed to corrosion of the extinguisher bases. The structure in both cases was weakened to such an extent that the extinguishers exploded when activated.

2. The need for examination and testing of portable fire extinguishers is specified in the UK and international legislation listed at the end of this notice.


4. Table 1 below is based on BS 5306 and indicates the intervals for basic service, extended service and overhaul. However the marine environment can be harsh and the International Maritime Organization’s Resolution A.951(23) provides for additional checks to ensure safety of portable fire extinguishers.
Table 1: Extinguisher Servicing Intervals

<table>
<thead>
<tr>
<th>Type of portable extinguisher</th>
<th>Basic service</th>
<th>Extended service (test discharge)</th>
<th>Overhaul (hydraulic test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water, foam, &amp; water based</td>
<td>Every year</td>
<td>Every 5 years</td>
<td>Every 10 years</td>
</tr>
<tr>
<td>Powder</td>
<td>Every year</td>
<td>Every 5 years</td>
<td>Every 10 years</td>
</tr>
<tr>
<td>Powder – primary sealed</td>
<td>Every year</td>
<td>Every 10 years*</td>
<td>Every 10 years*</td>
</tr>
<tr>
<td>CO2</td>
<td>Every year</td>
<td>Every 5 years*</td>
<td>Every 10 years</td>
</tr>
</tbody>
</table>

*Primary sealed portable fire extinguishers should be returned to the manufacturer/supplier for recharge.

bThis service is only necessary for cylinders which have been previously hydraulically tested.

cIMO Resolution A.951 (23).

5. The maintenance procedures (basic, extended service and overhaul) should be carried out by a “Competent Person”. This is defined in the British Standard as a “Person with the necessary training and experience, with access to the relevant tools, equipment and information, manuals and knowledge of any special procedures recommended by the manufacturer of the portable fire extinguisher, to carry out the relevant maintenance procedures”.

6. MCA interpretation of “Competent Person” in this case is that basic and extended services may be carried out onboard ship under the supervision of an experienced person holding a Merchant Shipping STCW II/2 or III/2 unlimited certificate of competency and an Advanced Fire Fighting certificate. This should be carried out as part of a Planned Maintenance System with all necessary procedures, work instructions, tools and equipment readily available.

7. During these services any plastic collars, etc. which may conceal the condition of the cylinder underneath need to be removed to aid in the inspection.

8. Each extinguisher should be provided with a sign (maintenance label) indicating that it has been examined on a certain date by a competent person.

Note – The MCA may inspect premises servicing portable fire extinguishers or other fire fighting equipment for use on UK ships and fishing vessels to ensure correct maintenance standards are being applied.

Regulations and standards for maintenance of portable fire extinguishers:

SOLAS Chapter II-2 Regulations 10-3 and 14,
IMO Resolution A.951 (23) Improved Guidelines for Marine Portable Fire Extinguishers,
Merchant Shipping Notice MSN 1665(M) - Schedule 8 Paragraph 5, Fishing Vessels (Safety Provisions) Rules 1975 – Regulation 104(7),

British Standards may be obtained from the British Standards Institution, Customer Services:
Tel: 02089 969 000
Fax: 02089 967 001

IMO publications may be obtained from the IMO website at www.imo.org

UK regulations and notices may be obtained from the MCA website.
Further Information
Further information on the contents of this Notice can be obtained from the address at the end of this Notice.

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