

Subject

Periodical Inspection and Maintenance of Fire-Fighting Systems and Portable Fire Extinguishers on board Malaysian Flag Vessels

# **ClassNK**

## ***Technical Information***

No. TEC-0876  
Date 24 November 2011

To whom it may concern

With reference to the periodical inspection and maintenance of fire-fighting systems and portable fire extinguishers on board Malaysian flag vessels, the flag requirements have been informed by ClassNK Technical Information No.TEC-0631 dated 14 June 2005. The Malaysian Government has notified ClassNK of the amended requirements as follows.

This ClassNK Technical Information supersedes the previous ClassNK Technical Information No.TEC-0631.

1. Periodical inspection and maintenance of fire-extinguishing system (General)
  - (1) All types of permanently installed fire-fighting systems, all types of portable fire extinguishers and breathing apparatus air cylinders must be subjected to periodical inspection and maintenance every year, by authorized service agent or related Malaysian government agency.
  - (2) The attending surveyor may require, if any deficiencies are found as the results of a periodical inspection, certain containers to be, also, tested hydrostatically.
  - (3) Hydrostatic testing is also required after repair.
  - (4) Where the loss of content exceeds 10% for CO<sub>2</sub> and 5% for Halon, the container must be recharged.
2. Fixed gas fire-extinguishing systems
  - (1) The quantity of medium in containers must be inspected every 12 months.
  - (2) Periodic hydrostatic testing of high-pressure containers must be carried out for not less than 10% of the containers during each 10 years period or 100% of the containers after reach 20 years from the date of manufacture.
  - (3) The test pressure shall not be less than 25 N/mm<sup>2</sup> for CO<sub>2</sub> containers and 1.5 times of the working pressure for Halon containers.
3. Fixed foam extinguishing system

Foam sample analysis shall be carried out after a period of 3 years of date manufacture and thereafter every year at authorized service agent or manufacturer's laboratory. Notwithstanding the aforementioned, occasional foam sample analysis may be requested at the discretion of the attending surveyor during the safety equipment survey.

(To be continued)

#### NOTES:

- ClassNK Technical Information is provided only for the purpose of supplying current information to its readers.
- ClassNK, its officers, employees and agents or sub-contractors do not warrant the accuracy of the information contained herein and are not liable for any loss, damage or expense sustained whatsoever by any person caused by use of or reliance on this information.
- Back numbers are available on ClassNK Internet Homepage (URL: [www.classnk.or.jp](http://www.classnk.or.jp)).

4. Portable fire extinguishers
  - (1) Water and Foam
    - (i) The charge must be replaced every 12 months.
    - (ii) Containers which are permanently under pressure must be tested hydrostatically every 5 years. Containers which are not kept under pressure must be tested every 10 years.
    - (iii) The test pressure shall not be less than 1.5 times the working pressure or  $2 \text{ N/mm}^2$  if the working pressure is unknown.
  - (2)  $\text{CO}_2$ 
    - (i) The charge must be checked every 12 months and replaced at 5 year intervals.
    - (ii) Containers must be hydrostatically tested every 10 years.
    - (iii) The test pressure shall not be less than  $25 \text{ N/mm}^2$ .
  - (3) Halon and Powder with shell kept under pressure
    - (i) The charge must be replaced every 2 years.
    - (ii) Containers must be hydrostatically tested every 10 years.
    - (iii) The test pressure shall not be less than 1.5 times the working pressure or  $2 \text{ N/mm}^2$  if the working pressure is unknown.
  - (4) Powder with shell not kept under pressure
    - (i) The charge must be checked every 12 months and replaced at 5 year intervals.
    - (ii) Containers must be hydrostatically tested every 10 years.
    - (iii) The test pressure shall not be less than 1.5 times the working pressure or  $2 \text{ N/mm}^2$  if the working pressure is unknown.
    - (iv) Propellant bottles of non-pressurized fire extinguishers
      - (a) The content must be checked every year.
      - (b) Bottles must be hydrostatically tested every 10 years.
      - (c) The test pressure shall not be less than 2 times the working pressure or  $25 \text{ N/mm}^2$  in the case of a  $\text{CO}_2$  type with safety devices or  $35 \text{ N/mm}^2$  in the case of a  $\text{CO}_2$  type without safety devices.
5. Air cylinders for breathing apparatus
  - (1) Inspection

All cylinders, high pressure fittings and hoses should be externally examined annually.
  - (2) Servicing
    - (i) The compressed air inside the cylinder to be changed once a year.
    - (ii) The cylinders must be hydrostatically tested every 5 years.
    - (iii) The test pressure shall not be less than 1.5 times the working pressure

(To be continued)

For any questions about the above, please contact:

NIPPON KAIJI KYOKAI (ClassNK)  
Survey Department, Administration Center, Head Office  
Address: 4-7 Kioi-cho, Chiyoda-ku, Tokyo 102-8567, Japan  
Tel.: +81-3-5226-2027  
Fax: +81-3-5226-2029  
E-mail: [svd@classnk.or.jp](mailto:svd@classnk.or.jp)

