

Bulletin

CCS Australian Office, No. 044, 2015 Issue 004

AMSA PSC Information

---How to Inspect the Funnel Fire Damper of Engine Room

As per latest <Port State Control Annual Report> on AMSA website, fire safety related deficiency ranked second right after ISM deficiency, among which Engine Room ventilation fan fire damper and Engine Room Funnel fire damper often detected detainable deficiencies during AMSA PSC inspections.

This issue will present and assist crew staff on how to inspect Engine Room (E/R) Funnel Fire Damper, especially with type of Funnel Louver.

1、Closing device to Funnel Louver.

1) Manually closing devices

Whenever fire occurs in E/R, the Louver can be closed immediately by pulling the steel cable of the closing device, or turning the lever/wheel of the closing devices located outside the engine room, as indicated in the following picture.



The closing device consists of Steel cable, blocks and pulling ring (or lever). The blocks are hung on the inside of E/R funnel bulkhead, the pull ring (lever) is fitted outside of the funnel bulkhead. Winding through the blocks, steel cable establishes linkage between Funnel Louver connection rod and pulling ring (lever).

2) Remote closing devices

The Funnel Louver is normally remotely opened/closed by a pneumatic actuator (i.e. cylinder) using pressure air coming through from fire control station, in some cases pressure air coming through from other location outside of the engine room.

Below picture demonstrates a typical pneumatic actuator (cylinder).



Whenever fire occurs in E/R, the Funnel Louver will be closed by the action of cylinder after releasing the pressure air from the fire control station on board or from other location outside of engine room. Once pressure air supply stopped, the louver would self-open again.

For some vessels, Funnel louver is reset with the help of reset spring, which is fitted on the Louver connection rod. In this situation, the duty crew is suggested to pay more attention to the balance between spring torque and pneumatic actuator (cylinder) torque to avoid possible failing to completely close and open the Funnel Louver.



2、 Frequently occurred deficiencies

- After closing the Funnel Louver, larger gap exists between the blades, and/or between the blade and frame of Funnel Louver, which resulting Funnel Louver not fully closed and regarded as defective. During PSC inspection, PSCO will inspect whether any light is found inside the funnel when the Funnel Louver is closed. When in doubt, PSCO may climb up to the top of the funnel to confirm the condition of louver in its close and open state. Below left photo regard as defective, the right regards as acceptable.



- Lacking maintenance to the closing device, resulting the steel cable or blade seize its' functionally operation and the Funnel Louver could not be closed completely.
- Low air pressure causes failure to Funnel Louvre remote closing devices.
- Air-leakage exists at the pressure air pipe joint at control location or at pneumatic actuator (cylinder) nearby of Funnel Louver remote closing devices.
- O-ring in pneumatic actuator becomes defective, which causes low operational air pressure and Funnel Louver thus incompletely closes.
- Reset springs of pneumatic actuator fails to work; closed Funnel Louver cannot be reset or reopened after testing.
- Due to lack of reset spring torque, thus some crews temporarily hang weights on Funnel Louver connection rod.

NOTE: Any of above deficiencies resulting failure to close Funnel Louvre will be regarded as detainable deficiency.

3、 Requirement of Inspection

- Taking timely routinely maintenance and testing to the Funnel Louvre and closing device as per the SMS requirement.
- The duty crew staff is strongly recommended to climb up to the top of funnel to carry out close-up inspection and confirm the effectiveness of Funnel Louver during Vessel Arrival Inspection.

CCS Australian Office

March 12, 2015

Announcement:

1. Intention is to assist and ensure owners to understand and well prepared, ensuring all updated requirements from AMSA can be met
2. For more information, please visit AMSA website at www.amsa.gov.au and CCS website at www.ccs.org.cn
3. The information contained does not and cannot supersede any AMSA or related governing parties requirements as well as CCS class rules and regulations.