

Cargoworthiness - Dry Cargo

In determining a vessel's cargo worthiness the surveyor should pay particular attention to the following items when inspecting the vessel's cargo arrangements:-

- Condition of main and tween deck hatch covers and securing arrangements, (compression bars, sealing rubbers, cleats and securing dogs, landing pads (bearing pads), non-return drain valves).
- Type and condition of hold ventilators.
- Condition of booby hatches, manhole covers and sealing arrangements.
- Condition of bulkheads and tank tops.
- Type and condition of hold coatings.
- Condition of air and sounding pipes and protection arrangements.
- Type and condition of spar and tanktop ceiling.
- Cleanliness of bilges and other areas which might trap water or residues of previous cargoes creating potential future cargo contamination issues.

As well as inspecting the cargo arrangements as described above, the surveyor should conduct a series of tests to establish the watertight integrity of the cargo holds. The extent and sequence of testing to be carried out will depend upon such factors as the vessel's condition and schedule, whether or not the cargo and ballast tanks are empty and safe for entry and whether the vessel is loading or discharging cargo, together with any other specific concerns that the surveyor may have. Upon boarding the vessel, the surveyor should meet with ship's staff in order to agree a programme of tests that will allow him to conduct as many of the following and any other tests that are practicable, applicable and appropriate to the vessel and her intended service:

- Mechanical hatch covers to be opened and closed to ensure correct operation.
- Hatch covers to be battened down and tested preferably by use of ultrasonic equipment, but where this is not possible or practicable through the use of hose or chalk tests to determine weathertightness. If fitted, hold ventilators, access hatches and water tight doors are to be included in the test.
- All water ballast tanks adjacent to cargo holds to be pressed up until they overflow on deck if permissible and possible.
- Bilge suctions to be tested.
- Bilge main to be pressure tested with only the screw down non-return valve closed.

On completion of the above tests, the holds should be closely examined for leakage from the hatch covers, bulkheads, tanktops, air pipes, sounding pipes and bilge pipes/valves.