

### 5.1.3 Rudder

The rudder is to be examined and, when required, lifted and the gudgeons rebushed. The condition of carrier and steadiment/rudder stock bearings and the effectiveness of stuffing boxes are to be ascertained when the rudder is lifted.

### 5.1.4 Anchor and Chain Cable

The anchors and chain cables are to be ranged, examined and the required complement and condition confirmed. The chain locker, holdfasts, hawse pipes and chain stoppers are to be examined and pumping arrangements of the chain locker operationally tested.

At Special Periodical Survey No. 2 and subsequent Special Periodical Surveys, chain cables are to be gauged and renewed in cases where their mean diameter is 12% or more below the original required nominal size. Where structural alterations to the vessel have resulted in a higher equipment numeral, the original chain cables may be used until their mean diameter has been reduced to 12% below the nominal diameter of the larger cable required by the higher equipment numeral.

### 5.1.5 Shell Openings and Their Closures

All openings in the shell including overboard discharges and ash chutes are to be examined.

### 5.1.6 Decks, Bulkheads and Shell Plating

All decks, watertight bulkheads, and internal and external surfaces of shell plating are to be examined. Plating in way of sideshell or superstructure portlights is to be especially examined.

### 5.1.7 Overall Survey Requirements

*5.1.7(a) Spaces.* An Overall Survey of all spaces including holds and their tween decks, where fitted; double bottom, deep, ballast, peak and cargo tanks; pumprooms, pipe tunnels, duct keels, machinery spaces, dry spaces, cofferdams and voids, including the plating and framing, bilges and drain wells, sounding, venting, pumping and drainage arrangements.

*(1 July 2006)* Internal examination of fuel oil, lube oil and fresh water tanks is to be carried out in accordance with 7-3-2/5.1.7(d).

Where sounding pipes are fitted, the Surveyor is to confirm that a thick steel plate is securely fixed below the sounding pipe for the rod to strike upon.

Electrical bonding arrangements, including bonding straps where fitted, for the piping systems located within cargo tanks, pipe tunnels, cofferdams and void spaces bounding cargo tanks are also to be examined.

*(1 July 2006)* This examination is to be supplemented by thickness measurement and testing as required to ensure that the structural integrity remains effective. The aim of the examination is to discover substantial corrosion, significant deformation, fractures, damages or other structural deterioration, that may be present.

*5.1.7(b) Engine Room Spaces (2003).* Engine room structure is to be examined. Particular attention is to be given to tank tops, shell plating in way of tank tops, brackets connecting side shell frames and tank tops, and engine room bulkheads in way of tank top and bilge wells. Particular attention is to be given to the sea suction, seawater cooling pipes and overboard discharge valves and their connection to the side shell plating. Where extensive areas of wastage are found, thickness measurements are to be carried out, and renewals and/or repairs made where wastage exceeds allowable margins.

*5.1.7(c) Ballast Tanks and Combined Cargo/Ballast Tanks (1 July 2006).* Where provided, the condition of corrosion prevention system of ballast tanks and combined cargo/ballast tanks is to be examined.