

TITLE:	PRESSURE TESTING OF CARGO HOSES	DATE	15/07/2004
CATEGORY:	OPERATIONS	AREA:	WORLDWIDE

The Club has dealt with an increasing number of claims on behalf of Members engaged in the supply of bunkers which have been caused by the failure of cargo hoses. Invariably the failures have been due to sudden increases in discharge pressure, the cause of which is always the subject of debate between the supplier and receiver.

Investigations into the claims have shown that in most cases the physical condition of the hoses has been questionable, in some cases very poor - although all the hoses had been pressure tested to the requirements of the governing authority.

Pressure testing as required by the authorities is only a periodic assessment of the a hose's condition and is usually mandatory on an annual basis. However, if at any time during the period between these tests any doubt at all is cast over the condition of the hose, good practice states that it should be subjected to a further pressure test. A thorough visual examination of the hose prior to use should be carried out as a matter of routine to assess its condition.

The test data should be available on board and it is perfectly acceptable for the ship's staff to undertake the intermediate tests providing they are documented. Details of the test data (pressures and date of testing) should be clearly marked on the hose.

Ideally, the design pressure of the hoses should exceed the maximum discharge pressure of the vessel's cargo pumps or at least be higher than the safety valve settings of the ship's pipeline over pressurisation system (if fitted). It is important that the safety valves are correctly set and tested on a regular basis.

By the very nature of the business, bunker transfer hoses which are not part of a specifically designed transfer arrangement are subjected to aggressive wear and tear. Undue stress is placed on the hoses if specifically designed bridles or saddles are not used to suspend the hose from a crane or derrick (it is not unusual for a single strop to be used). Hoses are subjected to knocks and abrasions when dragged along decks and the outer casing can easily be damaged. The Club has found that hoses which have been bound with a protective layer of rope can also suffer damage and kinking. The major problem with such hoses is that damage is not always readily apparent.

In view of the frequency of this type of claim we would like to stress that the testing frequency of cargo transfer hoses should be governed by the condition of the hose and not solely upon the requirements of the governing authority. If not already available, we suggest that Members issue clear guidelines to their Masters detailing their requirements for the periodic examination and testing of cargo transfer hoses.

The Oil Companies International Marine Forum (OCIMF) publication, "Guidelines for the Handling, Storage, Inspection and Testing of Hoses in the Field" (section 4.5) and the International Safety Guide for Oil Tankers and Terminals (section 6.6) gives guidance on the pressure testing of hoses and Members are advised to consult these publications.