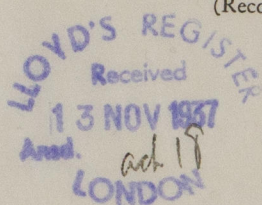


# Lloyd's Register of Shipping.

(Reconnu par la Loi Belge sur la sécurité des Navires.)  
(Arrêté Ministériel du 8 Janvier, 1921.)



Mersey House,  
Quai de Rouen, 1,

Antwerp, 12th November 1937.

Dear Sir,

When carrying out survey on the starboard boiler of the steamer "IRENE MARIA" at Ghent on the 9th instant, serious cracking between the rivet holes of the centre and starboard combustion chamber wrapper plates was observed, as shown in the accompanying sketches.

As there is a possibility of this being due to chemical embrittlement, samples of the water from the Port boiler - stated to be from the same source as that used in the starboard boiler, are being forwarded, together with samples of the soda regularly used.

The outer lower shell butt strap has been exposed, all rivets tested and, so far as could be seen, they are sound. A small ball of salt, due to a pin leak was found on the lower edge, in way of the third rivet from the forward end. A sample of this salt is also being forwarded.

The Chief Engineer stated that leakage from the starboard combustion chamber was first observed on the 29th September 1937 on leaving Amsterdam and on examination on the fire side, cracks were found between five rivet holes in the back tube



plate flange at bottom. These cracks were then caulked and the vessel proceeded to Archangel where they were again caulked and made tight under 120 lbs. steam pressure.

During the voyage from Archangel to Ghent, on the 4th instant leakage developed in both the centre and starboard combustion chambers.

The Chief Engineer states that the treatment of the boilers is as follows:-

Fresh river water is always used for filling boilers and reserve tanks, and on filling a boiler, which contains about 23 tons at working level, he adds 10 Kg. of calcinated soda, adding about 4 Kg. per day to commence with, reducing to 2 Kg per day later.

An alkalinity test is carried out every second day.

No other treatment is given to the boiler water.

The starboard boiler was cleaned and refilled in August last and the Port boiler in July, both at Zaandam near Amsterdam.

It has been recommended that the starboard boiler should not be used until permanently repaired, which so far as can be ascertained at present will be the renewal of practically all the wrapper plates in the centre and starboard combustion chambers.

It has also been recommended that the shell butt strap rivet in way of the slight leak observed be drilled out for examination and a fitted bolt fitted if all is found well.

The Master is in communication with his Owners in Copenhagen and it is thought that repairs may be carried out in Rotterdam.

The Secretary,  
LONDON.

We are, Dear Sir,  
Yours faithfully,  
The Surveyors

per.- Geo. A. Loring



Referred to the Chief Engineer Surveyor

13 NOV 1937

Also for Mr. Hill to note

*Handwritten signature*

The Port Boiler is stated to have developed similar cracks in the seam of its combustion chambers a few years ago which were repaired by part renewal of the wrapper plates.

A sample of a cracked wrapper plate from the Port boiler, which the Chief Engineer had kept, is also enclosed.

*Handwritten initials*