

S. S. "MARI II"

Now done for Damage:

Auxiliaries: - Independent Centrifugal Circulating Pump, Pumps and Pumping Arrangements, Dynamo Steam Engine, Condenser, Feed Heater, Feed Filter, Steering Engine and Windlass opened up, cleaned, overhauled examined and found or placed in good condition.

Trials: - On completion of Repairs the Main and Aux Machinery tried under full working conditions during a 4 hours Sea Trial with satisfactory results.

Boilers: - The Two Main Boilers cleaned, examined internally and externally together with the Safety Valves and Mountings and found or placed in a good condition afterwards tested by hydraulic pressure to 200 lbs. \square and found sound & tight at that pressure.

Steam Pipes: - All Main & Aux Steam Pipes (Steel) removed ashore, cleaned, examined and tested to twice the Working Pressure with satisfactory results. The Boilers and Steam Pipes afterwards examined under steam and the Safety Valves adjusted to 160 lbs. \square

Electrical Equipment: - The Dynamo, Switchboard, Fittings, Cables etc examined and placed in a satisfactory condition. On completion of repairs a megger test was taken, and the insulation resistance found to be not less than 100,000 ohms. The Installation was tried under full working conditions during a Sea Trial, and found satisfactory.

Now done for Classification: - The Owner desires that the foregoing examination may be credited for Classification. Opportunity was taken during the opening up of Machinery of checking, as far as practicable, the scantlings of same & Boilers. The Arrangements of Sea Cocks, Bilge Fittings, Valves, etc were checked and amended to conform to the Requirements of the Rules. The Spare Gear was checked and placed in order.

N. B.: - On account of the age of the Vessel no particulars could be furnished respecting Testing of Steel.

Repairs for Damage: - Main Engines: - H.P., M.P. & L.P. Piston Rods & Valve Rods skimmed up and new neck & gland bushes fitted. H.P. Piston skimmed up in way of Rings and new Rings fitted. Crank Shaft lifted for cleaning bottom halves of Main Bearings. Bottom Half of No 1 Main Bearing retalled and Shaft polished. H.P. bottom end brasses retalled.

Main Eng Pumps: - Feed Pump Rams skimmed up, and new Neck & Gland Bushes fitted.

Thrust: - Two Thrust Shoes retalled.

Intermediate Shaft: - Four New Tunnel Keys fitted.

Condenser: - Steel clips forged and fitted over fracture in discharge branch. New Overboard Discharge Valve Body fitted together with new Discharge Pipe from Condenser to Valve (the old body & Pipe were fractured.)

N. B.: - Owing to complexity of Condenser casting the fracture in discharge branch had to be dealt with by effecting a temporary repair of clips and cement, ^{which} under test was found satisfactory. The Owner's proposal to deal with this defect at a more convenient opportunity is submitted for favourable consideration as the repairs in my opinion are sufficient.

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Repairs for Damages - cont'd

Dynamo Engine: - Crank Pin skimmed up, and bottom end bearings re-metalled.

Piston Rod, Valve Spindles & Top End Brasses renewed.

Governor Gear overhauled and part renewed. Stop Valve Body renewed.

Aux Pumps: - Aux Fuel Pumps & L. S. Pumps, Piston & Bucket Rings renewed and Ridges ground from the cylinders.

Independent Circulating Pump: - Crank Shaft Journals skimmed up, and bearings re-metalled.

Piston Rod skimmed up and new neck & gland bushes fitted.

Crosshead Pin & Top End Brasses renewed.

Impeller Shaft skimmed up & new neck & gland bushes fitted.

Two new Impeller Casing End Plates fitted.

Turning Engine & Ballast Pump minor repairs satisfactorily effected.

Steering Engine: - Piston Rings renewed. Piston Rods skimmed up & new neck and gland bushes fitted. Crank Shaft Journals skimmed up, Top End Pins renewed. Control Valve Liner renewed.

Sea Connections: - Main Inlet Valve Body renewed (Brass) Tested hydraulically to 75 lbs. " before fitting in place and found satisfactory.

Ballast Range: - 5 Pipes renewed and Range afterwards tested with satisfactory results.

Windlass: - Overhauled and minor repairs satisfactorily effected.

Electrical Equipment: - Dynamo rewound completely. Brush gear & bearings, Switchboard & fittings, & all cables renewed in their entirety.

Repairs for Wear & Tear: - On drawing the Screw Shaft inboard it was noted that the liner was in 3 sections with plain bolts at the joints. It was therefore recommended that the Screw Shaft be removed ashore for further examination of the Shaft in way of these joints. On cutting away the section of liner in way considerable corrosion was found on the Shaft, with nicking to a depth of about 7/8". The Shaft was recommended to be renewed, and a new one has been satisfactorily fitted.

Stamped LLOYD'S NO 1894. 11-10-41. - (M) R. Forging Certificate attached herewith.

Boilers:

Starboard Boiler: - Smoke box removed and all broken & defective studs removed & renewed.

Three fusible plugs removed from C.C. Tops and Screwed Stays and Nuts fitted.

Two bottom Manholes built up by Electric Welding.

Sanding edges in Starboard C.C. back built up by E.W. for approximately 2' 0".

Port Boiler: - Smoke box removed and all broken & defective studs removed & renewed.

Three fusible plugs removed from C.C. Tops & Screwed Stays & Nuts fitted.

Two bottom Manholes built up by E.W. and 4 New Bottom Dogs fitted.

Valves: - One new 2" Blow Down Valve fitted on the Boiler Shell of each Boiler in place of Cocks previously fitted.

Valves in all Bilge Distribution Boxes amended to the Non-return type.

Blow off Cocks Arrangements amended to suit Rule Requirements.

Pipes: - Lead Pipes in Bunkers replaced by W. Iron ones.

Other minor repairs and alterations satisfactorily effected.