

REPORT ON OIL ENGINE MACHINERY.

No. 19245

Port of Bremer Received at London Office 17 DEC 1930

Date, First Survey 1st APRIL 1930. Last Survey 11th DECEMBER 1930

On the Triple Screw vessel M/S "Adellen" Tons Gross Net

By whom built Blythwood & Co Ltd Yard No. 30 When built 1930

By whom made John & Trecaud Ltd Engine No. 1161 When made 1930

By whom made ditto Boiler No. 1161 When made 1930

Owners Adellen Shipping Coy Ltd Port belonging to London

Is Refrigerating Machinery fitted for cargo purposes 870 Is Electric Light fitted yes

Type of Engines Sumner & Co 2 or 4 stroke cycle H Single or double acting Single

Minimum pressure in cylinders 500 Diameter of cylinders 740 mm Length of stroke 1500 mm No. of cylinders 8 No. of cranks 8

Revolutions per minute 95 Wheel dia. 2450 mm Weight 2414 kgs Means of ignition Coumoria Kind of fuel used Diesel

Crank Shaft, dia. of journals as per Rule 446 mm as fitted 405 mm Crank pin dia. 495 mm Crank Webs Mid. length breadth Mid. length thickness Thickness parallel to axis 310 mm Thickness around eye-hole 209 mm

Intermediate Shafts, diameter as per Rule as fitted Thrust Shaft, diameter at collar as per Rule 13.3 as fitted 19 1/2

Screw Shaft, diameter as per Rule 14.1 as fitted 19 1/2 Is the tube screw shaft fitted with a continuous liner yes

Thrust Liners, thickness in way of bushes as per Rule 7/8 as fitted 7/8 Thickness between bushes as per rule 55 as fitted 7/8 Is the after end of the liner made watertight in the

celler boss yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive

two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after

of the tube shaft no Length of Bearing in Stern Bush next to and supporting propeller 6-0 1/4

Propeller, dia. 16.9 Pitch 11.3 No. of blades 4 Material Brass whether Moveable no Total Developed Surface 88 sq. feet

Method of reversing Engines air Is a governor or other arrangement fitted to prevent racing of the engine when disengaged yes Means of lubrication

needed Thickness of cylinder liners 53/32 mm Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with

conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine

Boiling Water Pumps, No. 2 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

Large Pumps worked from the Main Engines, No. four Diameter Stroke Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line { No. and Size 2 (7+8+8 Dupl.) (9+10+10 Dupl.) How driven Steam

Ballast Pumps, No. and size one 9+10+10 Lubricating Oil Pumps, including Spare Pump, No. and size 2 (one 6" dia) (one 10+10")

two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

pumps, No. and size:—In Machinery Spaces 3. 3 1/2 1.3 Coffordam Bilge one 2" Bilge Well.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2. 5"

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes yes Are the Bilge Suctions in the Machinery Spaces

from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges yes

Are all Sea Connections fitted direct on the skin of the ship yes Are they fitted with Valves or Cocks both

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates yes Are the Overboard Discharges above or below the deep water line both

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes

How are they protected Have they been tested as per Rule

Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes

Is the arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one

apartment to another yes Is the Shaft Tunnel watertight How fitted Is it fitted with a watertight door worked from

On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Main Air Compressors, No. one No. of stages 3 Diameters 750-675-1150 mm Stroke 610 mm Driven by Main Engine

Auxiliary Air Compressors, No. one No. of stages 3 Diameters 400-350-82 mm Stroke 260 mm Driven by Steam Engine

Small Auxiliary Air Compressors, No. No. of stages Diameters Stroke Driven by

Reversing Air Pumps, No. Diameter Stroke Driven by

Auxiliary Engines crank shafts, diameter as per Rule as fitted

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes

Can the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces manhole

Is there a drain arrangement fitted at the lowest part of each receiver yes

High Pressure Air Receivers, No. 2 Cubic capacity of each 200 litres Internal diameter 14" thickness 1/2"

Seamless, lap welded or riveted longitudinal joint Seamless Material SDS Range of tensile strength 29-33 Working pressure by Rules 1000

Starting Air Receivers, No. 2 Total cubic capacity 1400 cu ft. Internal diameter 6-0 3/16 thickness 1.5 3/16

Seamless, lap welded or riveted longitudinal joint TR.DBS Material S Range of tensile strength 28-32 Working pressure by Rules 362 lb

IS ^{Case} ~~DELLEN~~ BOILER FITTED? *Yes* If so, is a report now forwarded? *Yes*

PLANS. Are approved plans forwarded herewith for Shafting *Yes* Receivers *Yes* Separate Tanks *Yes*
^{Case} Boilers *Yes* General Pumping Arrangements *Yes* Oil Fuel Burning Arrangements *Yes*

SPARE GEAR required by the Rules *Yes* supplied. *Yes*
Spare cylinder head, Lewis compound Piston, Rod, Propeller shaft
& 6 Links of chain

The foregoing is a correct description,
For JOHN G. KINCAID & CO. LIMITED.

J. G. Kincaid Director, Manufacturer.

Dates of Survey while building
During progress of work in shops - (1930) Apr. 1, 13, 23, 25 May 4, 13, 14, 26 Jun. 7, 14, 18, 20, 23, 25, 26 July 15, 22, 29 Aug. 1, 4, 6, 7, 8, 11, 12, 13, 14, 18, 19, 21, 22, 26, 27, 29 Sept. 2, 9, 10, 11, 12, 15, 16, 18, 19, 27
During erection on board vessel - 29 Oct. 1, 2, 6, 7, 8, 13, 14, 15, 16, 17, 20, 22, 24, 29, 31 Nov. 5, 6, 7, 11, 12, 14, 18, 19, 20 Dec. 3, 5, 11
Total No. of visits *43*

Dates of Examination of principal parts - Cylinders 4-8-30 Covers 23-6-30 Pistons 15-4-30 Rods 19-8-30 Connecting rods 19-5-30
Crank shaft 29-4-30 Flywheel shaft *✓* Thrust shaft 29-9-30 Intermediate shafts *✓* Tube shaft *✓*
Screw shaft 12-0-30 Propeller 12-9-30 Stern tube 10-9-30 Engine seatings *see 4th Rept.* Engines holding down bolts 31-10-30
Completion of fitting sea connections *see 4th Rept.* Completion of pumping arrangements 15-12-30 Engines tried under working conditions 11-12-30
Crank shaft, Material *S* Identification Mark *LR 161 WGM* Flywheel shaft, Material *✓* Identification Mark *✓*
Thrust shaft, Material *S* Identification Mark *LR 1820 WGM* Intermediate shafts, Material *✓* Identification Marks *✓*
Tube shaft, Material *✓* Identification Mark *✓* Screw shaft, Material *S* Identification Mark *LR 3705 WGM*

Is the flash point of the oil to be used over 150° F. *Yes*

Is this machinery duplicate of a previous case *No* If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c. *These Guignol boilers have been built under special survey in accordance with the approved plans & the workmanship on a general one of good quality. They are now securely fitted on board, tried under working conditions and found satisfactory. The machinery is eligible in my opinion for the record of L.M. 12-30 (Notation of Donkey boilers 186th²)*

Certificate (if required) to be sent to...
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Entry Fee ... £ 6 : - : When applied for,
Special ... £ 104 : 13 : 9th DECEMBER 1930.
Boiler Fee ... £ 28 : - : When received,
Anti-Rust ... £ 8 : 8 : 11th DECEMBER 1930.

Committee's Minute **GLASGOW 16 DEC 1930**

Assigned *T.L.M.C. 12.30*

W. Gordon Macleod
Engineer Surveyor to Lloyd's Register of Shipping.



Lloyd's Register Foundation