

REPORT ON OIL ENGINE MACHINERY.

No. 18864

-4 APR 1928

Date of writing Report

When handed in at Local Office

Port of

Received at London Office

No. in Survey held at
Reg. Book.

Date, First Survey

Last Survey

19

10033

Single

Screw vessel

British Courage

Number of Visits

Tons

Gross

Net

Built at

By whom built

Yard No.

When built

Engines made at

By whom made

Engine No.

When made

Donkey Boilers made at

By whom made

Boiler No.

When made

Brake Horse Power

Owners

Port belonging to

Nom. Horse Power as per Rule

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

Trade for which vessel is intended

IL ENGINES, &c.—Type of Engines

Burner & Steam

Maximum pressure in cylinders

Diameter of cylinders

Length of stroke

No. of cylinders

No. of cranks

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge

Weight

Means of ignition

Kind of fuel used

Revolutions per minute

Crank pin dia.

Crank Webs

Mid. length breadth

Thrust Shaft, diameter at collars

Crank Shaft, dia. of journals

as per Rule

as fitted

as per Rule

as fitted

Flywheel Shaft, diameter

as per Rule

as fitted

as per Rule

as fitted

Tube Shaft, diameter

as per Rule

as fitted

as per Rule

as fitted

Screw Shaft, diameter

as per Rule

as fitted

as per Rule

as fitted

Bronze Liners, thickness in way of bushes

as per Rule

as fitted

as per Rule

as fitted

propeller boss

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

If 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

If 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

end of the tube shaft

Propeller, dia.

Pitch

No. of blades

Material

whether Moveable

Method of reversing Engines

Is a governor or other arrangement fitted to prevent racing of the engine when disengaged

Thickness of cylinder liners

Are the cylinders fitted with safety valves

Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material

Cooling Water Pumps, No.

Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No.

Diameter

Stroke

Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line

No. and Size

How driven

Ballast Pumps, No. and size

Lubricating Oil Pumps, including Spare Pump, No. and size

Are two independent means arranged for circulating water through the Oil Cooler

Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge

Pumps, No. and size:—In Machinery Spaces

In Holds, &c.

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

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

Are the Bilge Suctions in the Machinery Spaces

Are all Sea Connections fitted direct on the skin of the ship

Are they fitted with Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates

Are the Overboard Discharges above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

Are the Blow Off Cocks fitted with a spigot and brass covering plate

What pipes pass through the bunkers

How are they protected

What pipes pass through the deep tanks

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

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

Is the Shaft Tunnel watertight

Is it fitted with a watertight door

If the vessel is 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.

No. of stages

Diameters

Stroke

Driven by

Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Small Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Exhausting Air Pumps, No.

Diameter

Stroke

Driven by

Auxiliary Engines crank shafts, diameter

as per Rule

as fitted

as per Rule

as fitted

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

Are the internal surfaces of the receivers be examined

What means are provided for cleaning their inner surfaces

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

High Pressure Air Receivers, No.

Cubic capacity of each

Internal diameter

Thickness

Working pressure by Rules

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

Starting Air Receivers, No.

Total cubic capacity

Internal diameter

Thickness

Working pressure by Rules

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

Lloyd's Register

Foundation

W1645-0126

88

Approved
IS *Plans*
PLANS. Are approved
Boilers
SPARE GEAR

BRITISH COMMERCE

see list attached

The foregoing is a correct description,
FOR JOHN G. KINCAID & COY. LIMITED

J. G. Kincaid

Manufacturer.

DIRECTOR

Dates of Survey while building
During progress of work in shops - (1924) Feb 15, Mar 1, 3, 4, 8, 29, 31, Apr 1, 4, 18, 22, May 13, 23, 24, June 3, 10, July 12, 22, 25, 26, Aug 1, 3, 12, 14, Sept 5, 6, 14, 16, 20, 23, 25, 26, Oct 11, 14, 14, 25, 26, 24, Nov 1, 4, 8, 9, 16, 21, 22, 24, 25, 26
During erection on board vessel - Dec 5, 6, 4, 8, 9, 13, 15, 16, 19, 20, 22, 26, 30 (1928) Jan 6, 9, 11, 16, 23, 24, 25, 31, Feb 2, 3, 6, 8, 9, 10, 14, 16, 17, 22, 28, Mar 1, 2, 4, 8, 9, 13, 22, 26, 27, 29
Total No. of visits 90

Dates of Examination of principal parts - Cylinders 31- 3- 24, Covers 26- 10- 24, Pistons 8- 12- 24, Rods 8- 12- 24, Connecting rods 25- 10- 24, Crank shaft 25- 10- 24, Flywheel shaft 5- 9- 24, Thrust shaft 5- 9- 24, Intermediate shafts 26- 12- 24, Tube shaft 15- 12- 24, Propeller 5- 12- 24, Stern tube 21- 11- 24, Engine seatings 22- 12- 24, Engines holding down bolts 8- 3- 24, Completion of fitting sea connections 22- 12- 24, Completion of pumping arrangements 27- 3- 28, Engines tried under working conditions 29- 3- 28
Crank shaft, Material S Identification Mark LR 1120. WGM Flywheel shaft, Material 5- 9- 24 Identification Mark LR 4554 WGM
Thrust shaft, Material S Identification Mark LR 4554 WGM Intermediate shafts, Material S Identification Marks LR 2281. WGM
Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material S Identification Mark LR 326 WGM

Is the flash point of the oil to be used over 150° F. *yes*
Is this machinery duplicate of a previous case *yes* If so, state name of vessel *"British Valour" (Enk. Rpt. 180 188)*

General Remarks (State quality of workmanship, opinions as to class, &c.) *These engines have been built under special survey in accordance with the approved plans & the workmanship & material are of good quality, they are now securely fitted on board, tried under working conditions & found satisfactory. The Machinery is eligible in my opinion for the record.*
LMC 3-28 (Notation of Dekeby Bolson 150 lbs)

Note The Builder request the classification Certificate in duplicate. Damage caused by the running of the Main Compressor Head. The Ahead side, a crack developed for about 6" in a vertical direction, when on the official trial on 27 March 1928. Now done. New Compressor (Main) Pistons (complete) fitted & a satisfactory trial carried out on completion of same (for further details see Damage Rept. attached)

The amount of Entry Fee ... £ 6 : : When applied for, 29th MARCH 1928
Special ... £ 104 : 13 : :
Boiler Fee ... £ 23 : 2 : :
Surveying Expenses (if any) £ 12 : 12 : : 31st MARCH 1928
Damage 3-3
Committee's Minute GLASGOW 3 - APL 1928
Assigned + LMC 3, 28

Gordon-Mitchell
Engineer Surveyor to Lloyd's Register of Shipping.