

REPORT ON OIL ENGINE MACHINERY.

No. 88385

Received at London Office 15 APR 1932
NEWCASTLE-ON-TYNE

Report 19 When handed in at Local Office 13th April 1932 Port of Newcastle-on-Tyne
Survey held at Newcastle-on-Tyne Date, First Survey 30 April 1930 Last Survey 13th April 1932
Number of Visits 125

Single the Twin Triple Quadruple Screw vessel M.V. "ASHMORE" Tons Gross 5817 Net 3449

Willington Quay. By whom built S.W.G. Armstrong Whitworth & Co (Ship) Ltd. Yard No. 1069 When built 1931
at Scotswood By whom made S.W.G. Armstrong Whitworth & Co (Ship) Ltd. Engine No. 95 When made 1931
Boilers made at Scotswood By whom made S.W.G. Armstrong Whitworth & Co (Ship) Ltd. Boiler No. 95 When made 1931
Power 2250 Owners A.G. ALLEN Port belonging to LONDON
Power as per Rule 583 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Each vessel is intended Ocean Going 23 1/8 4 1/4

VES, &c.—Type of Engines Armstrong Sulzer 2 or 4 stroke cycle 2 Single or double acting Single
in cylinders 500 16/16 Diameter of cylinders 600 7/16 Length of stroke 1060 7/16 No. of cylinders 6 No. of cranks 6
adjacent to the Crank, measured from inner edge to inner edge 850 7/16 Is there a bearing between each crank Yes
Flywheel dia. 2100 7/16 Weight 8.25 tons Means of ignition Compensia Kind of fuel used Crude oil
as per Rule 388 7/16 as fitted 410 7/16 Crank pin dia. 405 7/16 Crank Webs Mid. length breadth 550 7/16 Thickness parallel to axis Solid
as per Rule 295 7/16 as fitted 295 7/16 Intermediate Shafts, diameter as per Rule 11.6 7/16 as fitted 11.75 7/16 Thrust Shaft, diameter at collars as per Rule 388 7/16 as fitted 405 7/16
Screw Shaft, diameter as per Rule 12.75 7/16 as fitted 13 7/16 Is the shaft fitted with a continuous liner Yes
Thickness in way of bushes as per Rule 687 7/16 as fitted 718 7/16 Thickness between bushes as per rule 515 7/16 as fitted 625 7/16 Is the after end of the liner made watertight in the
If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Continuous
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 Yes
fitted, is the shaft lapped or protected between the liners No Is an approved Oil Gland or other appliance fitted at the after
Length of Bearing in Stern Bush next to and supporting propeller 4'-7"

Pitch 10'-10" No. of blades 4 Material Bronze whether Moveable Solid Total Developed Surface 70 sq. feet
sing Engines Servo Motor Is a governor or other arrangement fitted to prevent racing of the engine when detached Yes Means of lubrication
ckness of cylinder liners 20 7/16 Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with
If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine in funnel
Pumps, No. Three Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
ted from the Main Engines, No. one Diameter 150 7/16 Stroke 300 7/16 Can one be overhauled while the other is at work Yes
the Main Bilge Line No. and Size 2 one @ 8"x10"x10" and one @ 6"x6" How driven Steam Electric Motor

No. and size one @ 8"x10"x10" Lubricating Oil Pumps, including Spare Pump, No. and size 2 one @ 5 1/2"x10 1/2"x5 1/2" and one @ 5"x5"
means arranged for circulating water through the Oil Cooler None fitted Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
In Machinery Spaces 2 @ 3" dia 2 @ 2 1/2" dia one @ 4" dia 2 @ 4 1/2" dia independent Suctions
Fore Hold 2 @ 2 1/2" dia Fore Cofferdam 4" dia After Cofferdam 4" dia Fore Peak 3" dia After Peak 3" dia
Pump Direct Suctions to the Engine Room Bilges, No. and size Two @ 4 1/2" dia (1 @ 4" + 1 @ 4 1/2")

suction pipes in Holds and Tunnel Well fitted with strum-boxes Yes Are the Bilge Suctions in the Machinery Spaces
possible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes
ptions fitted direct on the skin of the ship Yes Are they fitted with Valves or Cocks Both
lly 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 Above
th 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
ugh the bunkers None How are they protected
ugh the deep tanks Have they been tested as per Rule Yes

Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
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
Is the Shaft Tunnel watertight Yes Is it fitted with a watertight door worked from Yes
means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork
sors, No. One No. of stages 3 Diameters 5 1/2"x4 1/2"x5 1/2" Stroke 400 7/16 Driven by Main Engine
pressors, No. one 120 c.ft. No. of stages 3 Diameters 1 1/2"x9 1/4"x2 1/4" Stroke 7" Driven by Electric Motor
Compressors, No. one 80 c.ft. No. of stages 3 Diameters 10 1/2"x8 1/4"x2 1/2" Stroke 6" Driven by Steam
mps, No. One Tandem Diameter 1400 7/16 Stroke 510 7/16 Driven by Main Engine

crank shafts, diameter as per Rule 164 7/16 as fitted 165 7/16
ERS: Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
ces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Manhole
ngement fitted at the lowest part of each receiver Yes
Receivers, No. 3 @ 1000 c.ft. Cubic capacity of each 8.5 c.ft. Internal diameter 47 1/2" thickness 25 7/16
riveted longitudinal joint Material Steel Range of tensile strength 26-32 cwt Working pressure by Rules 1430 cwt
ers, No. 1 @ 140 c.ft. Total cubic capacity 47 c.ft. Internal diameter 26" thickness 9 1/4" 1 1/4"
riveted longitudinal joint Material Steel Range of tensile strength 26-32 cwt Working pressure by Rules 430 cwt

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DONKEY BOILERS FITTED?

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval)

Donkey Boilers

General Pumping Arrangements

Receivers

Separate Tanks

Oil Fuel Burning Arrangements

SPARE GEAR 1 cyl cover complete with all valves etc. & one complete set of valves for one cylinder of needle valves for half the number of cylinders, 1 piston complete with all piston rings, studs of piston rings for 1 piston, 2 telescopic cooling pipes for one piston, 1 set of skew wheels for drive, 1 set of studs & nuts for one cylinder cover, 2 x head bearing bolts & nuts, 2 crank pin bolts, 1 set of bolts for crank shaft coupling, 1 set of bolts for intermediate shaft coupling, 2 x head, skirt & rod, 1/2 of main bearing brasses. Main & Aux Compressors & Pumps. 1 set of piston compressor piston, 1 half set of suet & del valves for each stage, 2 bottom end bolts for main 10% of suet & del valves & 2 bot end & 2 top end bolts for Sump air pump, 1 set of piston & seats etc for each stage of aux compressor, all working parts for one fuel pump, 1 suet & one del valve for oil fuel transfer pump, 1 suet & 1 del valve for a quantity of assorted bolts & nuts, a length of pipe for each size used for del & ingestion air pipes & the air delivery from main & aux compressors & with unions & flanges suitable for each. Screw shaft & propeller & other

The foregoing is a correct description,

FOR
SIR W. G. ARMSTRONG WHITWORTH & COMPANY (ENGINEERS) LIMITED.

Manufacturer.

Dates of Survey while building
During progress of work in shops-- 1930 Apr 30, May 12, 20, 21, 28, 30, June 25, 11, 19, July 7, 10, 15, 24, 25, 28, 29, 30 Aug 1, 5, 8, 14
During erection on board vessel-- Sep 1, 3, 4, 12, 15, 18, 22, 25, 29, Oct 1, 2, 8, 16, 17, 20, 21, 22, 23, 26, 28, 29, Nov 3, 4, 6, 13, 14, 19, 25, 27, 28, 11, 12, 15, 16, 17, 19, 22, 24, 28, 31, 1931 Jan 5, 6, 7, 8, 9, 12, 13, 14, 15, 16, 19, 21, 22, 23, 27, 28, 29, 30, Feb 2, 3, 19, 20, 24, 25, Mar 2, 3, 4, 5, 6, 9, 10, 11, 17, 19, 20, 23, 25, 26, Apr 2, 9, Oct 23, 1932 Apr 13.

Dates of Examination of principal parts--Cylinders 17.1.31 Covers 21.1.31 Pistons 8.1.31 Rods 14.1.31 Connecting rods 13.1.31
Crank shaft 13.1.31 COMPRESSOR 13.1.31 FLYWHEEL 29.9.30 Thrust shaft 29.9.30 Intermediate shafts 29.9.30 Tube sheet 14.1.31
Screw shaft 14.1.31 Propeller 7.1.31 Stern tube 16.12.30 Engine seatings 2.2.31 Engines holding down 2.2.31
Completion of fitting sea connections 2.2.31 Completion of pumping arrangements 26.3.31 Engines tried under working conditions 2.2.31
Crank shaft, Material Steel Identification Mark 7747 & 7842 COMPRESSOR 29.9.30 FLYWHEEL 29.9.30 Thrust shaft, Material Steel Identification Mark 88 Intermediate shafts, Material Steel Identification Mark 29.9.30
Tube shaft, Material Steel Identification Mark 29.9.30 Screw shaft, Material Steel Identification Mark 29.9.30

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

Is this machinery duplicate of a previous case

General Remarks (State quality of workmanship, opinions as to class, &c.) The machinery has been built in accordance with the Society's Rules & approved materials & workmanship are sound & good. The machinery was efficient on board, tested & manoeuvred on completion under working conditions found satisfactory. The machinery of this vessel is eligible in my opinion to be classed and to have the notation of "oil engine" and records and TS CL.

The amount of Entry Fee ... £ 6 : - : When applied for, 17.6.31
Special ... £ 104 : 3 :
Donkey Boiler Fee ... £ 13 : 13 :
AIR RECEIVERS ... £ 6 : 6 :
Travelling Expenses (if any) ... £ 7.7.1931

Committee's Minute TUE. 19 APR 1932

Assigned

+ N. M. 4.32

2 D.B. 180 lb.

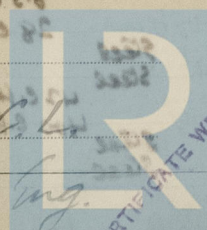
Oil Eng.

L. J. Pickett.

Engineer Surveyor to Lloyd's Register

Newcastle-on-Tyne

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



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