

Rpt. 4.

No. 16882

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Date of writing Report 3/8/40

When handed in at Local Office 3/8/40

Received at London Office

AUG 12 1940

No. in Survey held at South Bank Mdb.

Date, First Survey 22-9-40

Last Survey 2/8/1940

Reg. Book.

85258 on the

S.S.

TUDOR PRINCE

(Number of Visits 29)

MIDDLESBROUGH

Built at South Bank

By whom built

Smith's Dock Co Ltd

Yard No. 1068

Engines made at South Bank

By whom made

Smith's Dock Co Ltd

Engine No. 530

When built 1940

Boilers made at Hapthepool

By whom made

Richardson's Westgate

Boiler No. D530

when made 1940

Registered Horse Power

Owners

Prime Line Ltd

Port belonging to

London

Nom. Horse Power as per Rule 394.5

Is Refrigerating Machinery fitted for cargo purposes

No.

Is Electric Light fitted

Yes

Trade for which Vessel is intended

ENGINES, &c.—Description of Engines

Triple Expansion

Dia. of Cylinders 21" 35" 60"

Length of Stroke 42"

No. of Cylinders 3

Revs. per minute 85

Crank shaft, dia. of journals as per Rule 12.075

Crank pin dia. 12 1/2"

Crank webs Mid. length breadth 19 1/4"

No. of Cranks 3

Intermediate Shafts, diameter as per Rule 11.50"

as fitted 11 7/8"

Mid. length thickness 7 13/16"

Thickness parallel to axis 7 13/16"

Tube Shafts, diameter as per Rule 12.075

as fitted 12 1/2"

Thrust shaft, diameter at collars as per Rule 12.075

as fitted 12 1/2"

Tube Shafts, diameter as per Rule 12.075

as fitted 12 1/2"

Screw Shaft, diameter as per Rule 12.075

as fitted 12 1/2"

Bronze Liners, thickness in way of bushes as per Rule 11/16"

as fitted 23/32"

Thickness between bushes as per Rule 33/64"

as fitted 17/32"

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

Yes

Is the after end of the liner made watertight in the

propeller boss

one length

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

Yes

Is an approved Oil Gland or other appliance fitted at the after

end of the tube shaft

Yes

If two liners are fitted, is the shaft lapped or protected between the liners

Yes

Length of Bearing in Stern Bush next to and supporting propeller

4'-11 1/2"

Propeller, dia. 15'-3"

Pitch 16'-6"

No. of Blades 4

Material Bronze

whether Moveable solid

Feed Pumps worked from the Main Engines, No. 2

Diameter 4"

Stroke 21"

Can one be overhauled while the other is at work

Yes

Bilge Pumps worked from the Main Engines, No. 2

Diameter 4"

Stroke 21"

Can one be overhauled while the other is at work

Yes

Feed Pumps { No. and size 2-9 1/2" x 7 x 21" Simplex

How driven Steam

Pumps connected to the Main Bilge Line

No. and size Ballast Pump

How driven Steam

Ballast Pumps, No. and size 1-9" x 11" x 10" Duplex

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

Suctions, connected to both Main Bilge Pumps and Auxiliary

In Holds, &c. No 1, 2-2 1/2"; No 2, 2-2 1/2"; No 3, 2-2 1/2"; No 4, 4-2 1/2"

Tunnel well 1-2 1/2"

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1-9"

No. and size 1-4"

Independent Power Pump Direct Suctions to the Engine Room Bilges,

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes

Yes

Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Yes

Are they fitted with Valves or Cocks

Both

Are the Overboard Discharges above or below the deep water line

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

Yes

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

Yes

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

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

Yes

How are they protected

Strong Steel basings

Have they been tested as per Rule

What Pipes pass through the bunkers

Bilge Pipes

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

compartment to another

Yes

Is the Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from upper platform

MAIN BOILERS, &c.—(Letter for record S)

Total Heating Surface of Boilers 5968#

Is Forced Draft fitted

Yes

No. and Description of Boilers 2-S.B.

Working Pressure 220 lb/sq"

IS A REPORT ON MAIN BOILERS NOW FORWARDED?

See Hpl Report.

IS A DONKEY BOILER FITTED?

No.

If so, is a report now forwarded?

Yes

PLANS. Are approved plans forwarded herewith for Shafting

13/7/39

Main Boilers

Auxiliary Boilers

Donkey Boilers

Superheaters 13/7/39

General Pumping Arrangements 13/6/39

Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:—

1 connecting rod bottom end bearing nuts.

1 connecting rod top end bearing nuts.

1 set of coupling bolts.

1 set of bilge pump valves & seals.

1 set of air pump

for the liquid end of each independent pump.

1 set of valves of each size used

in main feed check valve.

1 impeller shaft for main circulating

pump.

1 set of pads of each hand for 1 face of Micallet thrust

1 set of metallic packing complete for each size of main

piston rod.

1 set of H.P. Piston rings.

12 boiler tube stoppers.

1 set of fine bars for 1 furnace.

2 main bearing bolts.

steel

base plates of various sizes.

The foregoing is a correct description,

Manufacturer.



© 2021

Lloyd's Register Foundation

011294-011303-0199

PILL

Ce

STR
Up

So

FLAT

BOTT

BILG

SIDE

UPP

UPP

STR

STR

POO

BRI

FOR

To

To

To

To

To

To

To

To

To

To

To

To

To

To

To

To

To

1939 Sept. 22. Oct. 20. Nov. 29. 1940 May 1. 2. 15.

Dates of Survey while building

During erection on board vessel - - -

Total No. of visits 29.

May. 21. 22. 23. 24. 27. 28. 29. 30. June. 3. 7. 10. 20. 26. July. 4. 5. 10. 12. 15. 17. 19. 23. 25. Aug. 2

Dates of Examination of principal parts—Cylinders 27/28/5/40 Slides 28/5/40 Covers 28/5/40
Pistons 3/5/40 Piston Rods 3/5/40 Connecting rods 22/5/40
Crank shaft 3/5/5/7/40 Thrust shaft 5/7/40 Intermediate shafts 5/7/40
Tube shaft ✓ Screw shaft 27/5/40 Propeller 27/5/40
Stern tube 24/5/40 Engine and boiler seatings 22/5/40 Engines holding down bolts 5/7/40
Completion of fitting sea connections 23/5/40
Completion of pumping arrangements 24/7/40 Boilers fixed 20/6/40 Engines tried under steam 23/7/40
Main boiler safety valves adjusted 23/7/40 Thickness of adjusting washers P 3/8" S 1/2" P 5/16" S 3/4"
Crank shaft material SM Steel Identification Mark 12/12/39 JFC Thrust shaft material SM Steel Identification Mark 12/12/39 JFC
Intermediate shafts, material SM Steel Identification Marks 12/12/39 JFC Tube shaft, material ✓ Identification Mark ✓
Screw shaft, material SM Steel Identification Mark 12/12/39 JFC Steam Pipes, material SD Steel Test pressure 660 lbs Date of Test 5/40-7/4
Is an installation fitted for burning oil fuel No Is the flash point of the oil to be used over 150°F. ✓
Have the requirements of the Rules for carrying and burning oil fuel been complied with ✓
Is this machinery duplicate of a previous case Yes If so, state name of vessel "Lancastrian Prince"

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel has been constructed under Special Survey in accordance with the approved plans, & Rule Regts. The workmanship & materials are good. The machinery found satisfactory under working conditions, & eligible in my opinion to have a record of + LMC 8,40 notation of Tail shaft (CL) 8,40, Forced Draught, & Superheated.

The amount of Entry Fee ... £ 5 : : When applied for, 3-10-1940
Less Boiler Special ... £ 51 : 15 : : When received, 3-10-1940
Donkey Boiler Fee ... £ : : :
Travelling Expenses (if any) £ : : : 3-10-1940

Committee's Minute

Assigned,

+ LMC 8.40

FD CL

R. J. Easthope
Engineer Surveyor to Lloyd's Register of Shipping.

TUE. 13 AUG 1940



© 2021

Lloyd's Register Foundation

Rpt. 5a.

Date of writing

No. in Survey Reg. Book.

5258 on the

Master

Engines made

Boilers made

Nominal Horse

MULTITU

Manufacturer

Total Heating

No. and Desc

Tested by hyd

Area of Fire

Area of each

In case of don

Smallest dist

Smallest dist

Largest inter

Thickness

long, seams

Percentage

Percentage

Thickness of

Material

Length of p

Dimensions

End plates

How are st

Tube plate

Mean pitch

Girders to

at centre

in each

Tensile str

Pitch of st

Working p

Thickness

Pitch of s

Working

Diameter

Working

Diameter