

REPORT ON MACHINERY

No. 15353
THU. 12 APR. 1917

Received at London Office

Writing Report

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When handed in at Local Office

11/4/17 Port of West Hartlepool

Survey held at W. Hartlepool

Date, First Survey 15th Oct/15 Last Survey 25th March 1917

Book.

on the Steel Twin Screw Steamer "Gypol" now named "Pearleaf"

(Number of Vents 290)

By E. G. Wright - 17 Built at W. Hartlepool

By whom built W. Gray & Co., Ltd.

Gross 5911.20

Net 2710.65

When built 3-1917

Machinery made at W. Hartlepool

By whom made Central Marine Engine Works

when made 1917

Machinery made at W. Hartlepool

By whom made Central Marine Engine Works

when made 1917

Registered Horse Power 1089

Owners Lane & Macandrew

Port belonging to London

Horse Power as per Section 28 1089

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

MACHINES, &c.—Description of Engines Twin Screw Triple Expansion

No. of Cylinders six (6) No. of Cranks six (6)

Diameter of Cylinders 26", 42", 70" Length of Stroke 45" Revs. per minute 100 Dia. of Screw shafts as per rule 14.1" as fitted 15.3" Material of screw shafts Scrap iron

Are the screw shafts fitted with a continuous liners the whole length of the stern tubes Yes Is the after end of the liner made water tight

Is the propeller boss Yes If the liner is in more than one length are the joints burned Yes 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 If two

are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 4'-8" outer 6'-0"

Diameter of Tunnel shaft as per rule 13.18" as fitted 13.5" Dia. of Crank shaft journals as per rule 13.84" as fitted 14.3/8" Dia. of Crank pin 14 3/8" Size of Crank webs 2 1/2 x 8 1/2" Dia. of thrust shaft under

crank 14 3/8" Dia. of screw 15'-6" Pitch of Screw 18'-0" No. of Blades 3 State whether moveable No Total surface 72 sq. ft.

Feed pumps 2 Diameter of ditto 4 1/2" Stroke 28" Can one be overhauled while the other is at work Yes 2 independent feed pumps 13 1/2" x 10" x 24"

Bilge pumps 2 Diameter of ditto 4 1/2" Stroke 28" Can one be overhauled while the other is at work Yes 2 auxiliary feed pumps 10 1/2" x 8" x 18"

Donkey Engines 5 Sizes of Pumps 2 bert. d.a. 13 1/2", 10", 24" No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room 8, 3 1/2" 1 bert. d.a. 10 1/2", 8", 8" In Hold, &c. tunnels & tunnel recesses 2 3" to Engine room donkey

also 4, 3" - 2 being to Steam ejector in after pump room & 2 to donkey pump in tunnel recess; Steam ejector fitted in each pump

Bilge Injections 4 sizes 2, 14" in Engine room Connected to condenser, or to circulating pumps pumps Is a separate Donkey Suction fitted in Engine room & size Yes, 3 1/2"

all the bilge suction pipes fitted with roses Yes Are the roses in Engine room always accessible Yes Are the sluices on Engine room bulkheads always accessible No

all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both

Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Yes Are the Discharge Pipes above or below the deep water line Below

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 To special requirements of Admiralty - see plan

How are they protected

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

Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges Yes

Dates of examination of completion of fitting of Sea Connections 16/2/17 of Stern Tube 16/2/17 Screw shaft and Propeller 16/2/17

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door No worked from

MILLERS, &c.—(Letter for record S) Manufacturers of Steel John Spencer & Sons, Ltd.

Total Heating Surface of Boilers 16932 sq. ft. Is Forced Draft fitted Yes No. and Description of Boilers six (6) Single-ended

Working Pressure 200 lbs. Tested by hydraulic pressure to 400 lbs. Dates of test 24/5/16 Nos of Certificates 3428, 3438

Can each boiler be worked separately Yes Area of fire grate in each boiler oil fuel - no plates fitted No. and Description of Safety Valves to

each boiler 2, double spring Area of each valve 12.56 sq. ft. Pressure to which they are adjusted 205 lbs. Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 48" Mean dia. of boilers 15'-9" Length 11'-9" Material of shell plates Steel

Thickness 1 1/2" Range of tensile strength 27/30 tons Are the shell plates welded or flanged both Descrip. of riveting: cir. seams 3/16, lapped

3/16, 3/16, 3/16 Diameter of rivet holes in long. seams 1 1/2" Pitch of rivets 10 1/4" Lap of plates or width of butt straps 22"

Percentages of strength of longitudinal joint rivets 85.3 Working pressure of shell by rules 210 lbs. Size of manhole in shell 16" x 12"

Size of compensating ring 36 1/2" x 32 1/2" x 1 7/16" No. and Description of Furnaces in each boiler 3, Dighton Material Steel Outside diameter 49 1/8"

Length of plain part top Thickness of plates crown 10 1/16" Description of longitudinal joint welded No. of strengthening rings Corrugated

Working pressure of furnace by the rules 205 lbs. Combustion chamber plates: Material Steel Thickness: Sides 11/16" Back 11/16" Top 11/16" Bottom 1"

Pitch of stays to ditto: Sides 8 3/4" x 9" Back 10" x 7 3/4" Top 8 3/4" x 8 1/2" If stays are fitted with nuts or riveted heads nuts Working pressure by rules 204 lbs.

Material of stays Steel Diameter at smallest part 1.633" Area supported by each stay 8 3/4" x 9" Working pressure by rules 239 lbs. End plates in steam space:

Material Steel Thickness 1 5/16" Pitch of stays 21" x 19" How are stays secured double nuts Working pressure by rules 203 lbs. Material of stays Steel

Diameter at smallest part 3.161" Area supported by each stay 21" x 19" Working pressure by rules 204 lbs. Material of Front plates at bottom Steel

Thickness 1" Material of Lower back plate Steel Thickness 1" Greatest pitch of stays 16 1/2" x 7 3/4" Working pressure of plate by rules 208 lbs.

Diameter of tubes 2 1/2" Pitch of tubes 3 3/4" Material of tube plates Steel Thickness: Front 1" Back 13/16" Mean pitch of stays 7 1/2"

Pitch across wide water spaces 13 1/2" Working pressures by rules 210 lbs. Girders to Chamber tops: Material Steel Depth and

Thickness of girder at centre 10" x 1 1/2" Length as per rule 34 1/2" Distance apart 8 3/4" Number and pitch of stays in each 3, 8 1/2"

Working pressure by rules 203 lbs. Superheater or Steam chest: how connected to boiler Can the superheater be shut off and the boiler worked

separately Diameter Length Thickness of shell plates Material Description of longitudinal joint Diam. of rivet

Pitch of rivets Working pressure of shell by rules Diameter of flue Material of flue plates Thickness

Stiffened with rings Distance between rings Working pressure by rules End plates: Thickness How stayed

Working pressure of end plates Area of safety valves to superheater Are they fitted with easing gear

Lloyd's Register
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