

## REPORT ON MACHINERY

No. 58

JUL 27 1919

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Date of writing Report 10 When handed in at Local Office 10

Port of Pittsburgh, Pa

Survey held at Ford City, Pa Date, First Survey Last Survey 19  
on the New Steel S.S. War Company of Coughlan & Sons No. of Visits  
Double Reduction Gear, made by Parsons Machine Co. Ford City Pa Tons Gross 5754.05  
Net 4247.40  
Built at Vancouver B.C. By whom built John Coughlan & Sons When built 1918  
Engines made at Spokane Wash. By whom made The Hallidie Co. when made 1918  
Milers made at Vancouver B.C. By whom made Vulcan Iron Works, when made 1919  
Registered Horse Power 577 Owners Imperial Munitions Board Port belonging to London  
Shaft Horse Power at Full Power 2500 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

TURBINE ENGINES, &c.—Description of Engines Double Reduction Gear turbines No. of Turbines 2  
Diameter of Rotor Shaft Journals, H.P. L.P. Diameter of Pinion Shaft 1st Red. 4 7/8 2nd Red. 10  
Diameter of Journals 1st Red. 5 2/8 10 Distance between Centres of Bearings 2nd Red. 2 6/8 1st Red. 7 7/8 (31 1/2 in.)  
Diameter of Wheel Shaft 13 1/2 Distance between Centres of Bearings 5 1/2 Diameter of Pitch Circle 2nd Red. 13.20 (33 1/2 in.)  
Diameter of Thrust Shaft 21 Kingsbury Thrust at forward end of Large shaft Diameter of Pitch Circle of Wheels 2nd Red. 78.80 (197 1/2 in.)  
Diameter of Tunnel Shaft as per rule  
Diameter of same as fitted  
Diameter of Propeller Pitch of Propeller  
State whether Moveable Total Surface Diameter of Rotor Drum, H.P. L.P. Astern  
Revs. per Minute at Full Power, Turbine 3200 Propeller 90

## PARTICULARS OF BLADING.

	H.P.			L.P.			ASTERN.		
	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.	HEIGHT OF BLADES.	DIAMETER AT TIP.	NO. OF ROWS.
EXPANSION .....									
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and size of Feed pumps  
and size of Bilge pumps  
and size of Bilge suction in Engine Room

In Holds, &amp;c.

of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine Room & size  
all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible  
all connections with the sea direct on the skin of the ship Are they Valves or Cocks  
they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes above or below the deep water line  
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  
at pipes are carried through the bunkers How are they protected  
all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times  
the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges  
the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

ILLERS, &c.—(Letter for record) Manufacturers of Steel  
Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers  
Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate  
in each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to  
h boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear  
allest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates  
ickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams  
g. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps  
r centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell  
plates  
ze of compensating ring No. and Description of Furnaces in each Boiler Material Outside diameter  
ngth of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings  
bottom  
orking pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom  
itch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules  
aterial of stays Diameter at smallest part Area supported by each stay Working pressure by rules End plates in steam space  
aterial Thickness Pitch of stays How are stays secured Working pressure by rules Material of stays  
iameter at smallest part Area supported by each stay Working pressure by rules Material of Front plates at bottom  
ickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules  
iameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays  
itch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and  
ickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each  
orking pressure by rules Steam dome: description of joint to shell % of strength of joint Diameter  
ickness of shell plates Material Description of longitudinal joint Diameter of rivet holes Pitch of rivets  
orking pressure of shell by rules Crown plates: Thickness How stayed



SUPERHEATER. Type \_\_\_\_\_ Date of Approval of Plan \_\_\_\_\_ Tested by Hydraulic Pressure to \_\_\_\_\_  
Date of Test \_\_\_\_\_ Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler  
Diameter of Safety Valve \_\_\_\_\_ Pressure to which each is adjusted \_\_\_\_\_ Is Easing Gear fitted \_\_\_\_\_

IS A DONKEY BOILER FITTED? \_\_\_\_\_ If so, is a report now forwarded? \_\_\_\_\_

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

FAWCOS ENGINE CO.

Manufacturer.

Works Manager

1918  
Dates of Survey while building { During progress of work in shops - - Nov. 23, Dec. 4, 9, 23, 24, 27, 30.  
During erection on board vessel - - Jan 7 1919 } 8 visits at Ford City Pa.  
Total No. of visits \_\_\_\_\_

Is the approved plan of main boiler forwarded herewith \_\_\_\_\_

" " " donkey " " " \_\_\_\_\_

Dates of Examination of principal parts—Casings \_\_\_\_\_ Rotors \_\_\_\_\_ Blading \_\_\_\_\_ Gearing \_\_\_\_\_  
Rotor shaft \_\_\_\_\_ Thrust shaft \_\_\_\_\_ Tunnel shafts \_\_\_\_\_ Screw shaft \_\_\_\_\_ Propeller \_\_\_\_\_  
Stern tube \_\_\_\_\_ Steam pipes tested \_\_\_\_\_ Engine and boiler seatings \_\_\_\_\_ Engines holding down bolts \_\_\_\_\_  
Completion of pumping arrangements \_\_\_\_\_ Boilers fixed \_\_\_\_\_ Engines tried under steam \_\_\_\_\_  
Main boiler safety valves adjusted \_\_\_\_\_ Thickness of adjusting washers \_\_\_\_\_

Material and tensile strength of Rotor shaft

1" R. Chrome Nickel Steel 2" R. O.N. Forge Steel

Material and tensile strength of Pinion shaft 1" Red. Cast Iron 119,000 lbs

Material of Wheel shaft Lug Steel

Material of Tunnel shafts

Identification Marks on Do.

Material of Screw shafts

Identification Marks on Do.

Material of Steam Pipes

Test pressure

Is an installation fitted for burning oil fuel

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

Have the requirements of Section 49 of the Rules been complied with

Is this machinery a duplicate of a previous case \_\_\_\_\_ If so, state name of vessel \_\_\_\_\_

General Remarks (State quality of workmanship, opinions as to class, &c.) This Reduction Gear has been built under special

survey. The materials & workmanship are of good quality. The shop running trials proved satisfactory. The gear has been shipped to Vancouver B.C. The Survey there have been notified

Credit 1/6 Fee to Pittsburgh Pa

The amount of Entry Fee	£	:	:	When applied for,
Special	£	:	:	19
Donkey Boiler Fee	£	:	:	When received,
Travelling Expenses (if any)	\$ 8 : 00	:	:	19

Committee's Minute TUE. 14 OCT. 1919

Assigned

Rpt. 13.

REPOR

Port of Vanc

No. in on the Reg. Book

Owners Imperial

Yard No. 10

DESCRIPTION OF DYN

Two of 12 H.P.

Compound

Capacity of Dynamo

Where is Dynamo fixed

Position of Main Switch

Positions of auxiliary s

Quarters, 6 Sec

Officers Qu

If fuses are fitted on m

circuits Yes.

If vessel is wired on the

Are the fuses of non-ori

Are all fuses fitted in ea

are permanent instr

Are all switches and fuse

Total number of lights pr

A 60

B 15

C 14

D 14

E 51

2 Mast head light

2 Side light

5

If arc lights, what protect

Where are the switches c

DESCRIPTION OF CAB

Main cable carrying 7

Branch cables carrying 4

Branch cables carrying 3

Leads to lamps carrying 1

Cargo light cables carrying 1

DESCRIPTION OF INSU

All Cable

Water-tight

Covered.

Joints in cables, how made,

O. Rubber La

An insula

Are all the joints of cables

positions, none being

Are there any joints in or

How are the cables led thr



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