

REPORT ON MACHINERY.

No. 57

REC'D NEW YORK *S. L. 13-1919*

Received at London Office.....

When handed in at Local Office

Port of *Pittsburgh Pa*

Survey held at *Ford City Pa* Date, First Survey _____ Last Survey *19*
 on the *New Steel S.S. War Column of Coughlan & Sons No. 9* Number of Visits _____
Double Reduction Gear, made by Ferguson Machine Co. Ford City Pa. Tons { Gross *5752.48*
 Net *4247.28*
D. Gillies Built at *Vancouver B.C.* By whom built *John Coughlan & Sons* When built *1918*
 made at *Spokane Wash.* By whom made *The Hollidie Co.* when made *1918*
 made at *Vancouver B.C.* By whom made *Vulcan Iron Works Co.* when made *1919*
 Indicated Horse Power *577* Owners *Imperial Moundline Board* Port belonging to *London*
 Horse Power at Full Power *2800* Is Refrigerating Machinery fitted for cargo purposes *No* Is Electric Light fitted *Yes*

MAIN ENGINES, &c.—Description of Engines *Double Reduction Gear Turbines* No. of Turbines *2* { *one H.P.*
one L.P.
 of Rotor Shaft Journals, H.P. _____ L.P. _____ Diameter of Pinion Shaft *1st Red. 4 7/8" 2nd Red. 10"*
 of Journals *1st R. 5" 2nd R. 10"* Distance between Centres of Bearings *1st Red. 2 1/2" 2nd Red. 7 1/2" (31 teeth)*
 of Wheel Shaft *13 1/2"* Distance between Centres of Bearings *5 1/2"* Diameter of Pitch Circle *2nd - 13.20 (33 teeth)*
 Face *2nd R. 28"* Diameter of Thrust Shaft under Collars *21 Kingsbury thrust at forward end of cargo shaft.* Diameter of Pitch Circle of Wheels *1st R. 46.00 (184 teeth)*
 Diameter of Tunnel Shaft _____ as per rule _____ as fitted _____
 Diameter of same _____ as per rule _____ 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*

DETAILS 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									
"									
"									
"									
"									
"									
"									
"									

Size of Feed pumps _____
 Size of Bilge pumps _____
 Size of Bilge suction in Engine Room _____
 In Holds, &c. _____
 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 _____
 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 _____
 Screw Shaft Tunnel watertight _____ Is it fitted with a watertight door _____ worked from _____

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

FAWCUS MACHINE CO.

Manufacturer.

H. B. Hunter
 Works Manager

Dates of Survey while building { During progress of work in shops -- } *1918 Nov. 23, Dec. 4, 9, 23, 24, 27, 30* } *Trials at Ford City Pa.*
 { During erection on board vessel --- }
 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 fired _____ Engines tried under steam _____

Main boiler safety valves adjusted _____ Thickness of adjusting washers _____

Material and tensile strength of Rotor shaft *1 1/2" N. Chrome Nickel Steel 2" N. O.K. Forge Steel* Identification Mark on Do. *PT N° 125-N*
 Material and tensile strength of Pinion shaft *1 1/2" N. PORT STAR 2 1/2" 119,000 lbs.* Identification Mark on Do. *2" N. { PT N° 125-N*
 Material of Wheel shaft *1 1/2" N. Steel* Identification Mark on Do. *N° 125-N* Material of Thrust shaft *Kingpin* Identification Mark on Do. *2" N. { 5" N. 125-N*
 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 Surveyors there have been notified

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

Credit to Fee to applied for by Portland Office.

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

J. Hodge
 Engineer Surveyor to Lloyd's Register of Shipping.

applied for by Vancouver Office July 23rd 1919.

Committee's Minute *FRI. AUG. 29, 1919*

Assigned *See Minute on Ver. Rpt 746*



© 2020

Lloyd's Register Foundation