

REPORT ON MACHINERY

No. 69445
THU. 21 DEC. 1916

Received at London Office

of writing Report

When handed in at Local Office

20 DEC 1916

Port of Newcastle-on-Tyne

in Survey held at Newcastle-on-Tyne

Date, First Survey 17th Dec 1916

Last Survey 19th Dec 1916

Book.

(Number of Visits 87)

Gross 2432

Net 891

on the TRIPLE SCREW STEAMER "KNIAZ POJARSKY"

Tons

ater

Built at Wallsend

By whom built Swan Hunter & Wigham Richardson When built 1916

Machines made at Walker on Tyne

By whom made Swan Hunter & Wigham Richardson When made 1916

Machinery made at Walker on Tyne

By whom made Swan Hunter & Wigham Richardson When made 1916

Registered Horse Power

Owners Russian Imperial Govt

Port belonging to

Horse Power as per Section 28

902 1/2

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

GINES, &c.—Description of Engines

Triple Expansion

No. of Cylinders Three

No. of Cranks Three

No. of Cylinders

18 1/2 - 30 1/2 - 50

Length of Stroke 36"

Revs. per minute 115

Dia. of Screw shaft

as per rule 10 1/2"

Material of

Steel

the screw shaft fitted with a continuous liner the whole length of the stern tube

No liner

Is the after end of the liner made water tight

the propeller boss

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

If two

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

Length of stern bush 4' 9"

No. of Tunnel shaft

as per rule 2 1/4"

Dia. of Crank shaft journals

as per rule 9 1/2"

Dia. of Crank pin

11"

Size of Crank webs

18" x 18"

Dia. of thrust shaft under

No. of Blades

4

State whether moveable

Yes

Total surface

3859 sq ft

No. of Feed pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Bilge pumps

Diameter of ditto

Stroke

Can one be overhauled while the other is at work

No. of Donkey Engines

Sizes of Pumps

No. and size of Suctions connected to both Bilge and Donkey pumps

Engine Room

22' x 22' dia.

In Holds, &c.

No. of Bilge Injections

1 size 7

Connected to condenser, or to circulating pump

Is a separate Donkey Suction fitted in Engine room & size 4' x 2 1/2'

Are 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

Are 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

Above

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

Yes

That pipes are carried through the bunkers

How are they protected

Are 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

of Stern Tube

Screw shaft and Propeller

the Screw Shaft

Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from TWELVE DECK LEVEL

MILERS, &c.—(Letter for record)

Manufacturers of Steel

For particulars not filled in, see accompanying Sheet

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

Can each boiler be worked separately

Area of fire grate in each boiler

No. and Description of Safety Valves to

each boiler

Area of each valve

Pressure to which they are adjusted

Are they fitted with easing gear

Smallest distance between boilers or uptakes and bunkers or woodwork

Thickness

Range of tensile strength

Are the shell plates welded or flanged

Descrip. of riveting: cir. seams

Long. seams

Diameter of rivet holes in long. seams

Pitch of rivets

Lap of plates or width of butt straps

Per centages of strength of longitudinal joint

Working pressure of shell by rules

Size of manhole in shell

Size 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

Pitch of stays to ditto: Sides

Back

Top

If stays are fitted with nuts or riveted heads

Working pressure by rules

End plates in steam space:

Material of stays

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of stays

Material

Thickness

Pitch of stays

How are stays secured

Working pressure by rules

Material of Front plates at bottom

Diameter at smallest part

Area supported by each stay

Working pressure by rules

Material of plate by rules

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

Pitch 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

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

holes

Pitch of rivets

Working pressure of shell by rules

Diameter of flue

Material of flue plates

Thickness

If 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

Foundation

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR.

State the articles supplied:-

2 sets of Coupling Bolts, 12 Studs for Stuffing Boxes, 100 Bolts & nuts assorted sizes for Hand Chases, 100 Brass Journals for Condenser, 12 fourth Ring Bolts and Brass nuts, 1 Evaporator Coil, 100 Gaskets, 100 Valve Springs, 3 Check Valves, 2 sets of Dead Pump valves (seats), 1 set of Belge pump valves & seats, 1 set of valves & seats for General Service pumps, 1 Piston & Pump rod for Belge & G.E. pumps, 2 Air pump Piston Rods & Bushes, 4 Eccentric Rods, 2 Slide valve Spindles, 2 1/2 Condenser tubes, 6 sets of piston Rod Packing, 24 Bolts for main engine Columns, 2 sets of air pump valves, 100 Gaskets, 100 Valve Springs, 3 Check valves, 2 sets of Dead pump valves (seats), 150 lb White Metal, 2 Cwt of Sheet Tin, 5 Escape valve springs, additional Spare gear 24 screws, 9 Piston Rings for H.P. & M.P. pistons 16 Blades for after engine Propellers.

The foregoing is a correct description,

FOR SWAN, HUNTER & WIGHAM RICHARDSON, LTD.

G. J. Dwyer

Manufacturer.

Dates of Survey while building
During progress of work in shops - -
During erection on board vessel - - -
Total No. of visits

Is the approved plan of main boiler forwarded herewith

Dates of Examination of principal parts:- Cylinders, Shafts, Covers, Pistons, Rods
Connecting rods, Crank 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 of Crank shaft, Identification Mark on Do., Material of Thrust shaft, Identification Mark on Do.
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 duplicate of a previous case, If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)

For recommendations see accompanying sheet

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

Committee's Minute FRI. 22 DEC. 1916

Assigned

Wm. R. Austin

Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



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