

## REPORT ON MACHINERY.

No. 8218

Received at London Office

Date of writing Report 25<sup>th</sup> Sep 1919 When handed in at Local Office

Port of Belfast

No. in Survey held at Belfast

Date, First Survey 17<sup>th</sup> Sep 1918 Last Survey 17<sup>th</sup> Sep 1919

Reg. Book.

(Number of Visits 39)

on the S.S. New Texas

Gross 6567

Master

Built at Belfast

By whom built Harland & Wolff L<sup>d</sup>

Tons

Net

When built 1919

Engines made at Belfast

By whom made

when made

Boilers made at

By whom made

when made

Registered Horse Power

Owners Elder Dempster & Co L<sup>d</sup>

Port belonging to Liverpool

Nom. Horse Power as per Section 28 518 517

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

ENGINES, &amp;c.—Description of Engine Single Screw Triple Expansion of Cylinders 3 No. of Cranks 3

Dia. of Cylinders 27"-44"-73" Length of Stroke 48" Revs. per minute 79 Dia. of Screw shaft as per rule 14.76 Material of J. Steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube Yes Is the after end of the liner made water tight

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

liners are fitted, is the shaft lapped or protected between the liners Length of stern bush 63"

Dia. of Tunnel shaft as per rule 13.3 Dia. of Crank shaft journals as per rule 13.9 Dia. of Crank pin 14 3/4 Size of Crank webs 28 x 9 Dia. of thrust shaft under

collars 16" Dia. of screw 17'-9" Pitch of Screw 16'-6" No. of Blades 4 State whether moveable No Total surface 100 sq ft

No. of Feed pumps 2 Diameter of ditto 4 1/2" Stroke 24" Can one be overhauled while the other is at work Yes

No. of Bilge pumps 2 Diameter of ditto 4 1/2" Stroke 24" Can one be overhauled while the other is at work Yes

No. of Donkey Engines See Sizes of Pumps Sheet No. and size of Suctions connected to both Bilge and Donkey pumps

In Engine Room 4-3 1/2" In Holds, &amp;c. 8-3 1/2" 2-4 1/2" 1-3" 6-2 1/2"

No. of Bilge Injections / sizes 13 Connected to condenser, or to circulating pump Pumps a separate Donkey Suction fitted in Engine room &amp; size Yes-3 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-Except Main &amp; Tank Injections 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 Yes

What pipes are carried through the bunkers Fore hold suction How are they protected Iron Casing

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

Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Upper deck

BOILERS, &c.—(Letter for record 3) Manufacturers of Steel D. Colville & Sons L<sup>d</sup>

Total Heating Surface of Boilers 7668 sq ft Forced Draft fitted Yes No. and Description of Boilers 3 Single End Cylind.

Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 1-9-19 No. of Certificate 531

Can each boiler be worked separately Yes Area of fire grate in each boiler 63 1/2 sq ft No. and Description of Safety Valves to

each boiler 2 Direct Spring Area of each valve 9.62 sq Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes

Smallest distance between boilers or uptakes and bunkers or woodwork 14" dia. of boilers 15'-6" Length 11'-6" Material of shell plates Steel

Thickness 1 1/4" Range of tensile strength 28-32 tons Are the shell plates welded or flanged No Descrip. of riveting: cir. second lap double

long. seams Butt Lap Diameter of rivet holes in long. seams 1 1/8" Pitch of rivets 9 1/2" Lap of plates or width of butt straps 19 1/2"

Per centages of strength of longitudinal joint rivets 88.1 plate 85.6 Working pressure of shell by rules 182 lbs Size of manhole in shell 16" x 12"

Size of compensating ring Plate flange and Description of Furnaces in each boiler 3-Right turn Material Steel Outside diameter 50 3/16"

Length of plain part top 5" bottom 8" Thickness of plates crown 7 1/2" bottom 7 3/2" Description of longitudinal joint Weld No. of strengthening rings

Working pressure of furnace by the rules 188 lbs Combustion chamber plates: Material Steel Thickness: Sides 23/32" Back 11/16" Top 23/32" Bottom 23/32"

Pitch of stays to ditto: Sides 10 5/8" x 9 1/4" Back 9 1/2" x 8 3/4" Top 10 5/8" x 9 1/4" stays are fitted with nuts or riveted heads Nuts Working pressure by rules 180 lbs

Material of stays Steel Area at smallest part 2.59 sq ft supported by each stay 98 1/4 sq Working pressure by rules 186 lbs End plates in steam space:

Material Steel Thickness 1 1/2" Pitch of stays 2 1/2" x 2 1/2" How are stays secured Nuts Working pressure by rules 180 lbs Material of stays Steel

Area at smallest part 8.29 sq Area supported by each stay 4.59 sq Working pressure by rules 187 lbs Material of Front plates at bottom Steel

Thickness 3/4" Material of Lower back plate Steel Thickness 27/32" Greatest pitch of stays 13 5/8" Working pressure of plate by rules 189 lbs

Diameter of tubes 2 1/2" Pitch of tubes 4" x 3 1/2" Material of tube plate Steel Thickness: Front 3/32" Back 3/4" Mean pitch of stays 12" x 7 3/4"

Pitch across wide water spaces 13 5/8" Working pressures by rules 181 lbs Girders to Chamber tops: Material Steel Depth and

thickness of girder at centre 10" x (8" x 2) Length as per rule 35 9/16" Distance apart 10 5/8" Number and pitch of stays in each 3-9 1/4"

Working pressure by rules 182 lbs Steam dome: description of joint to shell % of strength of joint

Diameter Thickness of shell plates Material Description of longitudinal joint Diam. 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

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