

Shelter Deck,
or Pl. Awning Deck.

STEEL STEAMER.

No. 28144

State if Report is also sent on the Machinery of the Vessel *Yes*

Port of *SUNDERLAND* Date of completion of Report *31st August 1921* Received at London Office *THU. SEP. 1 1921*
Survey held at *SUNDERLAND* Date, First Survey *5th August 1920* Last Survey *30th August 1921*
On the (State if Single, Twin, or Triple Screw) *STEEL SINGLE SCREW S.S. "TILTHORN"* Rig *SCHOONER*

TONNAGE under
Tonnage Deck... *6273.20*
Do. between Tonnage Dk. and
3rd, 4th, or Awning Dk.
Total under Upper Dk.
Do. of Poop
Do. of R. Qr. Dk.
Do. of Bridge House
Do. of Forecastle
Do. of Houses on Deck *44.46*
Do. of excess of Hatchways *66.82*
Do. above Crown of
Engine Room... *23.87*
Gross Tonnage *6408.35*
Less Crew Space
Less above Crown of
Engine Room...
TONNAGE FOR FEES...
Less Engine Room *2050.67*
Less Navigation Spaces *119.84*

CLASS *100 A.I.*
Breadth (greatest moulded) *53.75*
Depth, at middle of length from top of keel to top of
beams at side of uppermost Continuous Deck *37.00*
Deduct height of 'tween deck when this does not exceed 8ft. *8.00*
Transverse Number *82.75*
Length on deck from fore part of stem to after part of
sternpost *420.0*
Longitudinal Number *34755*
Depth "d" at middle of length. See Secs. 2 & 13... *25.62*
Proportions, Depths to Length, Uppermost Continuous
Deck at side to top of keel *11.35*
" " " Upper Deck at side
to top of keel *14.48*

Master
Year of Appointment
Built at *SUNDERLAND*
When built *1920.21* Launched *21.5.21*
By whom built *Messrs W. Danks & Sons Ltd.*
Owners *D.S.A.S. "BRITANNIA"*
Managers *- Do.*
(Where necessary to be entered in Reg. Book.)
Residence *BERGEN*
Port belonging to *BERGEN*

Register Tonnage *4237.84*
as cut on Beam...

Destined Voyage *Tyne*

Surveyed while Building *Afloat, in Dry Dock UNDER SPECIAL SURVEY*

LENGTH on	Ft.	Ins.	BREADTH	Ft.	Ins.	DEPTH, ACTUAL	Top of Floor to top of	Shelter Dk. Beams	Ft.	Ins.	No. of Decks with flat laid	ONE = SHELTER
Deck as per Rule	420	0	Moulded	53	9	Do.	do.	Upper Deck Beams	34	4 1/2	No. of Tiers of Beams	ONE = SHELTER
Dimensions of Ship per Register,												
Length <i>420.0</i> breadth <i>54.0</i> depth <i>-</i>												
34.35 Ann. of Shelter Dk. Moulded depth, ft. <i>37</i> ins. <i>0</i> To Awning Shelter Dk. Round up of Uppermost <i>13</i> ins.												
Upper Deck. Moulded depth, ft. <i>29</i> ins. <i>0</i> To Upper Dk. Dk. Beam, Actual												

FRAMING.						PILLARS.					
Inches in Ship.						Inches in Ship.					
FRAME, Angles, or Bars, amidships						PILLARS, In 'tween Deck, size and spacing					
Do. in peaks						" Hold					
Do. in way of Double Bottoms at Solid Floors						" Quarter, 'tween Dks.,					
" " at intermdt. Bkts.						" in Hold					
Spacing of Frames from centre to centre amidships						KEELSONS AND STRINGERS.					
" length to collision bulkhead						CENTRE LINE KEELSON, Vertical Plate above					
" of Frames from centre to centre in peaks						" Rider Plate					
REVERSED FRAME, Angles						" Flat Keel Plate Angles					
Do. in way of Double bottoms at Solid Floors						" Horizontal Plates on Floors					
" " at intermdt. Bkts.						" Angles or Bulb Angles					
FRAMING, depth of girder						SIDE KEELSONS, Number					
FLOORS, depth and thickness of Floor Plate						" Angles or Bulb Angles					
" at mid-line for 1/2 length amidships						" Plate above floors, for length					
" in way of Engine and Boiler spaces						" Intercoastal Plate, for length					
" thickness at the ends of vessel						" Attached to outside plating with Angle					
" depth at 1/2 the half-bdth. as per Rule						BILGE KEELSON, Angles					
" height extended at the Bilges						" Intercoastal Plate, for 154.0 length					
FLOORS, in Cell Double Bottoms						" Attached to outside plating with Angle					
" state if flanged (top and bottom)						SIDE STRINGERS, Number					
" spacing of Solid						" Angle					
CENTRE GIRDER, in Dbl. bottom, dpth. & thkness						" Intercoastal Plate, for lng.					
" Angles, Top						" Attached to outside plating with Angle					
" " Bottom						Awning or Shelter Deck Stringer Plates,					
" " to Floors						" breadth and thickness					
" Brackets at intermdt. frmg., wdth & thkness						" Angle on ditto					
SIDE GIRDERS, number and thickness						" Tie Plates, fore and aft, outside Hatchways					
" state if flanged (top & bottom)						" Deck * Iron or Steel, for FULL lng.					
" Angles						" Wood Deck. Material & thickness					
MARGIN PLATE, depth (exclusive of flange)						" Upper Deck Stringer Plate, breadth and					
" and thickness						" thickness					
" Angles to outside plating						" Angles on ditto, No. TWO					
" " to floors						" Tie Plates, outside Hatchways					
" Brackets at intermdt. frmg., wdth & thkness						" Deck * Iron or Steel, for FULL lng.					
" Height of Brackets above at bilge						" Wood Deck. Material & thickness					
INNER BOTTOM PLATING, breadth and						" Second Deck Stringer Plates, br'dth & thkness					
" thickness of Middle Line Strake						" Angles on ditto, No.					
" thickness in Engine and Boiler space						" Tie Plates, outside Hatchways					
" " Remainder in Holds						" Deck * Material and thickness					
BEAMS, Awning or Shlter Dk, Single Angle,						" Third, Fourth & Fifth Deck Stringer Plate,					
" Bulb Angle, Plate, Tee Bulb or Channel						" breadth and thickness					
" Spacing						" Angles on ditto, No.					
BEAMS, Upper Deck, Single Angle, Bulb Angle,						" Tie Plates, outside Hatchways					
" Plate, Tee Bulb or Channel						" Deck. Material and thickness					
" Spacing						" Poop Deck Stringer Plate, breadth & thickness					
BEAMS, Second, Third & Fourth Deck, Single						" Angles on ditto					
" Angle, Bulb Angle, Plate, Tee Bulb or Channel						" Tie Plates					
" Angles on upper edge						" Deck. Material and thickness					
" Spacing						" Bridge Deck Stringer Plate, br'dth & thickness					
BEAMS, Poop Deck, Angle, Bulb Angle, Plate,						" Angle on ditto					
" Tee Bulb or Channel						" Tie Plates					
" Angles on upper edge						" Deck. Material and thickness					
" Spacing						" Forecastle Deck Stringer Plate, br'dth & th'kness					
BEAMS, Bridge Deck, Angle, Bulb Angle, Plate,						" Angle on ditto					
" Tee Bulb or Channel						" Tie Plates					
" Angles on upper edge						" Deck. Material and thickness					
" Spacing						" If Iron or Steel Deck, state if whole or part, and if wood deck is laid thereon.					
BEAMS, Forecastle Deck, Angle, Bulb Angle,											
" Plate, Tee Bulb or Channel											
" Angles on upper edge											
" Spacing											

Form No. 1B

WEB FRAMES. In Fore Body, No. and spacing
brdth. & thickness
No. of Side Stringers

WEB FRAMES, In E. & B. Space, No. & spacing
brdth. & thickness
No. of Side Stringers

WEB FRAMES, In After Body, No. and spacing
brdth. & thickness
No. of Side Stringers

Size of Face Angles to Web-Frames
BLACK-PLATE PLATES to Stringers between
Web-Frames, depth and thickness

BULKHEADS. Number. Thickness. STIFFENERS. Single or Double Frames. Height up state deck.

W.T. BULKHEADS. 6 7

" COLLISION "

LONGITUDINAL, IN CENTRE

Are the outside Plates doubled two spaces of Frames in length? *NO*

Are the Side Valves and Watertight Doors in efficient working order? *YES*

PLATING. AS IN SHIP. PER RULE OR AS APPROVED. EDGES. BUTTS.

STRAKES. AMIDSHIP. FORWARD. AFT.

FLAT PLATE KEEL

GARBOARD OF A Strake

State actual thickness in way of Double Bottom

Upper Strake

Lower Strake

THICKNESS OF STRAKE

CLEAR OF LONG BRIDGE

DO. OF STRAKE BELOW

DBL. of Flat Plate Keel

Sheerstrakes

Length and thickness

POOP SIDES

SHORT BRIDGE SIDES

FORECASTLE SIDES

Awning or Shelter Deck

Stringer Plate

Upper Deck

Stringer Plate

FRAMES extend in one length from

REVERSED FRAMES on floors and frames extend from

MASTS, SPARS, &c.

LOWER MASTS

Topmasts, Yards and Remainder of Spars

Rigging, Material and Size, Shrouds

Sails.

FORGINGS or CASTINGS. Inches in Ship. Inches in Rule.

KEEL, Bar, depth and thickness

STEM, moulding and thickness

STERN-POST for Rudder do. do.

for Propeller

RUDDER-A x D Table 22. Speed

Main-Piece, diameter at head

at heel

RUDDER, how constructed

Thickness of Plates or Single Plate

Can the Rudder be unshipped afloat?

Manufacturer's name or trade mark of the Iron or Steel (state process of manufacture of Steel) used for Frames, Floors, Beams, Keelsons, Tie and Stringer Plates, Plating, &c.

STEEL PLATING: SOUTH DUNDEE, CONCERT, DUNDEE LONG, BOLESON, HUGHMAN

STEEL ANGLES: CONCERT, DUNDEE LONG, SOUTH DUNDEE

Has the Steel been tested as required by the Rules?

RIVETING. EDGES. BUTTS.

Single or Double. Rivets. Straps. IF LAPPED.

Double or Triple and for what length.

Rivets. Straps.

IF LAPPED.

Butts.

Butts of Side Stringers

Tie Plates

Inner Bottom Plating, riveting of Edges

Centre Girder Butts.

Keelson Butts.

Frames, riveted through Plates with

Rivets, state whether Iron or Steel

EQUIPMENT No. 37587 LETTER 2 ANCHORS.

Number of Certificate. Anchors. Weight, Ex. Stock. Weight of Stock. Test, per Certificate. Weight Req. by Table 31. Description of Anchor. Makers. Where and when tested and Superintendent.

26792 1st Bower 65 2 0 57 5 0 0 163 3 0 21/2 PATENT NOT STATED SLD-28-7-21 - L. HUGHMAN

26793 2nd 64 2 21 50 17 2 0 163 3 0 21/2 SLD-29-7-21 - L. HUGHMAN

26788 3rd 56 0 0 46 0 0 0 184 2 0 21/2 SLD-27-7-21 - L. HUGHMAN

84896 Stream 18 0 0 17 2 0 0 17 2 0 21/2 IRON STEEL

34934 Kedg 7 2 2 19 15 3 21 7 2 0 21/2

Particulars of Drop Test of Cast Steel Anchors, viz.:- Weight, Surveyor's Initials, Number of Certificate, Date of Test.

1st Bower 39.2.0 - E.N.C. - 4454 - 8.4.21

2nd 39.1.21 - E.N.C. - 4465 - 22.4.21

3rd 38.0.0 - D.D.W. - 4467 - 12.4.21

CHAIN CABLES. HAWSERS AND WARPS.

Number of Certificate. Length and size supplied. Test per Certificate. Weight of Chain Cable. Length and size supplied. Description. Makers of Cables. Where and when tested, and Superintendent. Material. Length and size supplied. Breaking Test of Steel Wire. Length and size per Table 31.

72174 135 3/4 9 1/2 127 1/2 344 3/4 341 0 1/2 135 2 1/2 SLD Lark N. HUGHMAN + SLD N. HUGHMAN 7-4-21 - L. HUGHMAN

72166 135 2 1/4 9 1/2 127 1/2 340 2 3/4 341 0 1/2 135 2 1/4 SLD Lark N. HUGHMAN + SLD N. HUGHMAN 7-4-21 - L. HUGHMAN

Boats 2 LIFEBOATS 28'0". ONE CUTTER 22'0". ONE MOTOR BOAT 22'0". Steering Gear, Steam N. HUGHMAN + SLD L. Steering Gear, Hand J. HUGHMAN + SLD L.

Pumps, Number ONE 5 DOWN PUMP AND ONE 5 HAND PUMP TO PUMP AHEAD TANK

Windlass is EMERSON WALKER + THOMPSON BRASS L. Capstan

Engine Room Skylights. How constructed? ON STEEL What arrangements for deadlights in bad weather? STEEL GLASS + BULBUL

Coal Bunker Openings. How constructed? ON STEEL How are lids secured? CLIPS + BATTENS Height above deck? 30"

Number of Scuppers, and numbers and dimensions of Freeing Ports, &c. 8 1/2 INCHES ON SIDE - NO FREEING PORT

Ceiling in Holds, thickness and material 2 1/2 IN. WOOD UNDER HATCHES AND OTHER LUGGERS AND CARGO BATTENS, thickness and material 6 IN. WOOD IN HEADS + HATCHES

Cargo Hatchways. How formed? ON STEEL - WELD CONSTRUCTION Hatches, If strong and efficient? YES

State size No. 1 Hatch (Forward) 26'0" x 22'0" No. 2 Hatch 30'4" x 22'0" No. 3 Hatch 23'0" x 22'0" No. 4 Hatches 26'0" x 22'0"

Number of Web Plates, Shifting Beams and Fore and Afters to each Hatch 6 HATCHES TO NO. 2 HATCH - 4 HATCHES TO NO. 3 HATCH AND 5 HATCHES TO NO. 4 HATCHES

REMAINING HATCHES No. of Breasthooks 7 AND DECK No. of Crutches 12

Bulwarks, height above deck and description 42 INCHES ABOVE DECK AND 4 INCHES ABOVE DECK

The foregoing is a correct description. WILLIAM DOUGLAS & SONS, Limited Surveyor's Signature L. S. RICHARD

Builder's Signature (here only) W. G. GALLAGHER

Correspondence. State dates and initials of letters respecting this case (reference should be made in any correspondence connected with the case)

My 6.8.20

Workmanship. Are the butts of plating planed or otherwise fitted? PLANED AND OVEPLAPPED

Is the riveted work properly closed? YES

Are the liners between the frames and plates solid single pieces? YES Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? YES Are the rivet holes well and sufficiently countersunk in the plate and punched from the facing surfaces? YES

Are the butts of plating, stringers, &c., properly shifted and strapped? YES Do any rivets break into or through the seams or butts of the plating? A FEW

Have all the upper and weather decks been tested as required by the Rules (Sec. 26, par. 20)? YES State results of tests SATISFACTORY

Have all the gutterways been tested as required by the Rules (Sec. 26, par. 20)? YES State results of tests SATISFACTORY

General Remarks (State quality of workmanship, &c.)

THIS VESSEL HAS BEEN BUILT IN ACCORDANCE WITH THE APPROVED PLANS, THE SECRETARY'S LETTER DATED AS STATED ABOVE AND OTHERWISE IN ACCORDANCE WITH THE RULES FOR THE CLASST CONTINGENT. THE MATERIALS AND WORKMANSHIP ARE GOOD.

A MIDSHIP SECTION AND PROFILE AS BUILT AND APPROVED PLANS AND FORGING REPORTS ARE ENCLOSED WHICH KIMBY RETURN FOR DUPLICATE VESSELS. OTHER APPROVED PLANS ARE IN THE LONDON OFFICE FORWARDED WITH DUPLICATE VESSELS WHEN HAVE NOT BEEN RETURNED.

THIS VESSEL IS A DUPLICATE VESSEL TO THE R.S. "POMERANIAN" SLD. REPORT NO. 23130

The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans to be forwarded with F.E. Report showing vessel as built.

The amount of Entry Fee £ 10 : 0 : 0 30 AUG 1921

Special Survey Fee £ 360 : 4 : 0 Received by me, 31 AUG 1921

Travelling Expenses, if any £ 12 paid 31/8/21 Yes

State whether the Vessel has been built under Special Survey YES

I am of opinion this Vessel should be Classed + 100 A.1. "STEEL" "SHUTTER DECK" WITH FREEDOM L.A.C.P. L. S. RICHARD

With, or without Freeboard, as condition of Class WITH

Committee's Minute

Character assigned

100A1

Shells dk with flbr

Lloyd arb. P

29/9/21

Lloyd's Register Foundation

W1334-00262

Date of writing

No. in Survey
Reg. Book.
on the

Master

Engines made

Boilers made

Registered

Nom. Horse Power

ENGINES,

Dia. of Cylinders

Is the screw shaft

in the propeller

between the bearings

liners are fitted

Dia. of Tunnel shaft

collars 14 3/4

No. of Feed pumps

No. of Bilge pumps

No. of Donkey pumps

In Engine Room

No. 4. 1

No. of Bilge Injectors

Are all the bilge screws

Are all connections

Are they fixed supports

Are they each fitted

What pipes are

Are all Pipes, Cast

Are the Bilge Screws

Is the Screw Shaft

BOILERS, &

Total Heating Surface

Working Pressure

Can each boiler be

each boiler 2 1/2

Smallest distance between

Thickness 1 5/8

long. seams 4 1/2

Per centages of strength

Size of compensating

Length of plain pipes

Working pressure of

Pitch of stays to drums

Material of stays

Material 5

Area at smallest

Thickness 29/32

Diameter of tubes

Pitch across width

thickness of girders

Working pressure

Diameter

Pitch of rivets

SUPERHEATED

Date of Test

Diameter of Safety

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ☒ ft., R.Q.D. ☒ ft., Bridge ☒ ft., Forecastle ☒ ft.
(in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated.

No. and Material of Decks (if Iron or Steel) and whether wholly or partially covered with wood, and No. of tiers of Beams (this information is to be given as should appear in the Register Book) *ONE ON STEEL & SHELTER ON STEEL. 2 TIER BEAMS*

Official No. ☒ ; Signal Letters ☒ State if Machinery is fitted aft *No*

How are the surfaces preserved from oxidation? Inside *PORTLAND CEMENT AND PAINT* Outside *PAINT*

PARTICULARS OF WATER BALLAST.—State whether the Double bottom is constructed on the cellular system ☒ or with girders on floors ☒

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	132.16	362	Fore peak tank,	—	106
Double bottom, under Engines and Boilers,	—	—	After peak tank,	—	127
Double bottom, if under Engines only,	23.33	100	Deep tank, aft,	—	—
Double bottom, if under Boilers only,	21.66	92.3	Deep tank, forward,	—	—
Double bottom, forward,	186.33	626	Other tanks, if fitted,	—	—
Total capacity of double bottom	1186	—	(If necessary, furnish further information by sketch.)	—	—

* The wells are not to be included in the lengths of the tanks. *263.98*

State whether the above have been tested as required by the Rules. *Yes*

Order for Special Survey No. *5483*

Date *16.6.20*

No. *554* in builder's yard.

DATES of Surveys held while building

1920. Aug 5.9.12.17.18.20.23.25.31. Sep. 6.13.17.21.24.28.30. Oct. 1.6.13.27.22. Nov. 1.4.8.17. 24.30. Dec. 8.16.20.23.1921. Jan. 6.11.19.20.24.28.31. Feb. 3.10.11.15.17.19.27.22.25.17. 7.9.11.14.16.23.23.31. April. 5.7.8.12.14.20.29. May 6.9.30. June 14.16.30. July 1.12.14.24.27. Aug. 8.16.17.19.23.25.30

Total No. of Visits *82*

Surveyor's Signature

L. S. Ainsworth

Lloyd's Register
Foundation