

STEEL STEAMER or MOTORSHIP.

16 OCT 1929

State if Report has been sent on the Freeboard of the Vessel *yes.*State if Report is sent on the Machinery of the Vessel *yes.*Date of completion of report *12th October, 1929*Port of *Hamburg*No. *18968*Survey held at *Kiel*Date First Survey *8th March, 1929*Last Survey *9th October*

1929.

On the (State if Machinery fitted Aft and if Single, Twin or Triple Screw) *Steel single Sc. "DELAWARE" No 19003 in Reg. Book. Reconstruction*State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings) *70% Full Scantling without Tonnage-opening* State Type of Erections *Forecastle*TONNAGE under Tonnage Deck... *5160.95*CLASS *100 A1*State if with freeboard as condition of Class *yes*Built at *Kiel / Haverham Hilltop Tees.*Do. of space or spaces between Tonnage Dk. and Upper Dk. *x*Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a) *L 121.918*Breadth (greatest moulded) *B 15.849*Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c) *D 10.211*Total *x*Gross Tonnage *5452.86*Register Tonnage *3286.94*Launched *1st August, 29* Yard No. *R.51.*Builders *Fore-end: Howaldtswerke, Kiel A.G. After-end: Furness, S.B. Co. Ltd. Havart. Har.*Owners *Norddeutscher Lloyd*Managers *See Name below*
(Where necessary to be entered in Reg. Book.) *Kiel 30/10/29*

Residence

Port of Registry

If surveyed while building, afloat, or in dry dock

yes white building, stocks, afloat, dry-dock.

REGISTERED DIMENSIONS.

m. FEET.

Length = *122.37 = 401.48*Breadth = *15.92 = 52.23*Depth = *9.45 = 30.99*

FRAMES, DOUBLE BOTTOM AND BEAMS.

	INCHES IN SHIP.			Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.			Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships	838			<i>x</i>	Bracket Floors, Frame	180	90	10	<i>x</i>
" " from $\frac{3}{4}$ length to Collision bulkhead	685			<i>x</i>	" " Reversed Frame	180	75	9	<i>x</i>
" " in peaks	610			<i>x</i>	" " Vertical Struts	260	90	10/14	<i>x</i>
SIDE FRAMING.					Centre Girder, depth and thickness amidships	1057	x	13.5	<i>x</i>
Frame Amidships, Angle, E or C	300	90	13	<i>x</i>	" " top Angles	90	90	13	<i>x</i>
" " Extends up to	2 nd deck			<i>x</i>	" " bottom Angles	100	100	14.5	<i>x</i>
Reversed Frame Amidships, Angle <i>FORWARD</i>	110	90	9	<i>x</i>	Side Girders, No. each side and thickness	1041	x	10	<i>x</i>
" " Extends up to	<i>x</i>			<i>x</i>	Margin Plate depth (excl. of flange) and thickness	952	x	13.5	<i>x</i>
Depth of Framing Girder	300			<i>x</i>	" " Vertical Angle to Tank side	90	90	13	<i>x</i>
Frames in Uppermost Continuous 'tween Decks, Angle, E or C	200	75	9	<i>x</i>	Bracket abaft $\frac{1}{2}$ len. from stem	90	90	13	<i>x</i>
" " Second 'tween Decks, Angle, E or C	<i>x</i>			<i>x</i>	" " Vertical Angle to Tank side	90	90	13	<i>x</i>
" " Third " " " "	<i>x</i>			<i>x</i>	Bracket forward $\frac{1}{2}$ len. from stem	180	90	14.5	<i>8 Ribs</i>
Framing in Peaks, Angle or C	200	90	9	<i>x</i>	Gussets, spacing and scantling abaft $\frac{1}{2}$ len. from stem	90	90	10	<i>5 Riv.</i>
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	22	x	150	<i>x</i>	" " Gussets, spacing and scantling forward $\frac{1}{2}$ len. from stem	180	90	14.5	<i>6 Riv.</i>
State if Frame Joggled	<i>Ordinary</i>			<i>x</i>	Tank Side Brackets, height above base line at toe of Frame and thickness	90	90	10	<i>every Frame</i>
PANTING ARRANGEMENTS (Sec. 7), state system and particulars	3a 180 11 170 75 10.5			<i>Side Stringers</i>	INNER BOTTOM PLATING.				
Forward strengthened for Navigation in Ice as per Rule.	110 90 9			<i>Rev. Frames.</i>	Breadth and thickness of Middle Line Strake	1275	x	12.5	<i>x</i>
STRENGTHENING OF BOTTOM FORWARD. State Particulars	200 90 9			<i>Ice Frames.</i>	Thickness of remainder in Holds	11			<i>x</i>
SINGLE BOTTOM.				<i>Bottom Frames double. Extra Intercostals. Shell strengthened.</i>	Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room?	<i>x/15</i>			<i>x</i>
Floors, Depth and thickness at mid-line in Holds	<i>x</i>			<i>x</i>	BEAMS.				
Height of Brackets at side above base line at toe of frame	<i>x</i>			<i>x</i>	Uppermost Continuous Deck, amidships in Wells, Angle, E or C	250	90	11.5	<i>x</i>
Middle Line Keelson, on Floors, Angles, E or C	<i>x</i>			<i>x</i>	" " in way of Bridge, Angle, E or C	250	90	13	<i>x</i>
" " Through Plate or Intercostal Plate	<i>x</i>			<i>x</i>	Spacing	838			<i>x</i>
" " Foundation Plate on Floors	<i>x</i>			<i>x</i>	Second Deck, amidships, Angle, E or C	280	90	13	<i>x</i>
" " Flat Plate Keel Angles	<i>x</i>			<i>x</i>	Spacing	838			<i>x</i>
Side Keelsons, No. each side	<i>x</i>			<i>x</i>	Third Deck, amidships, Angle, E or C	<i>x</i>			<i>x</i>
" " thickness of Intercostal Plate	<i>x</i>			<i>x</i>	Spacing	<i>x</i>			<i>x</i>
" " Angles	<i>x</i>			<i>x</i>	Fourth Deck, amidships, Angle, E or C	<i>x</i>			<i>x</i>
DOUBLE BOTTOM.					Spacing	<i>x</i>			<i>x</i>
Solid Floors, thickness and spacing	10.5 or 3 rd fr.			<i>x</i>	Poop Deck, Angle, E or C	<i>x</i>			<i>x</i>
" " Are Frame and Reversed Frame joggled?	no			<i>x</i>	Spacing	<i>x</i>			<i>x</i>
Bracket Floors, breadth and thickness at middle line	830 x 10.5			<i>x</i>	Bridge Deck, Angle, E or C	<i>x</i>			<i>x</i>
" " breadth and thickness at margin plate	830 x 10.5			<i>x</i>	Spacing	<i>x</i>			<i>x</i>
					Forecastle Deck, Angle, E or C	200	90	11	<i>x</i>
					Spacing	685 - 610			<i>x</i>

PILLARS AND DECKS.									
PILLARS, No. of Rows.....	INCHES IN SHIP.			Any Departure from Approved Plans to be Noted.	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.	PILLARS, No. of Rows.....	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
	Centreline	Side	Every Frame						
Stringer Plate, breadth and thickness in way of Bridge	1200 x 10								
Thickness of Plating abreast Deck openings in way of Wells	9.0								
Thickness of Plating abreast Deck openings in way of Bridge	9.0								
Thickness of Plating within line of openings.....	8.5								
If Sheathed, material and thickness	Not sheathed.								
Third Deck.									
Stringer Plate, breadth and thickness.....									
If Plated, state thickness.....									
Fourth Deck.									
Stringer Plate, breadth and thickness.....									
If Plated, state thickness									
Poop Deck.									
Stringer Plate, breadth and thickness									
Plating, Sheathing, material and thickness									
Bridge Deck.									
Stringer Plate, breadth and thickness.....									
Plating, Sheathing, material and thickness									
Forecastle Deck.									
Stringer Plate, breadth and thickness.....	865 x 8.5								
Plating, Sheathing, material and thickness	Not sheathed.								

SHELL PLATING.												
SCANTLINGS.					RIVETING.							
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES. State if jogged?			BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.		No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.			Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.	
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.		Inches.	Inches.	
FLAT PLATE KEEL	1275	20.5	18.0	✓	✓	Double	25	100	4	25	100	Lapped
„ DBLG. (if any)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BOTTOM PLATING, No. of Strakes4.....	1800	16.5	16 1/2	✓	✓	Double	22	88	4	22	88	Lapped
BILGE PLATING, No. of Strakes2.....	1500	16.5	12	✓	✓	do.	22	88	4	22	88	do.
SIDE PLATING, No. of Strakes4.....	1600	16.5	23 1/2	✓	✓	do.	22	88	3	22	88	do.
UPPER DECK, Sheer-strake in Wells.....	1500	19.0	11.5	✓	✓	do.	25	100	4	25	100	do.
UPPER DECK, Sheer-strake in Bridge ...)	1500	19.0	✓	✓	✓	do.	25	100	4	25	100	do.
STRAKE BELOW Sheer-strake in Wells.....)	1680	17.5	11.5	✓	✓	do.	22	88	4	22	88	do.
STRAKE BELOW Sheer-strake in Bridge ...)	1680	17.5	✓	✓	✓	do.	22	88	4	22	88	do.
POOP SIDE PLATING	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
BRIDGE SIDE PLATING ...	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
FORECASTLE SIDE PLATING	✓	✓	10	✓	✓	single	19	75	2	19	66	Lapped.

WATERTIGHT BULKHEADS.						FORGINGS and CASTINGS.				
Total No. of W.T. BULKHEADS in Vessel— 7 Bulkheads.						Casting or Forging.		Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
						Extending to Upper Deck (Sec. 3 c) 4				
" Deck next below 3										Test: 49050 kg/mm.
As per Rule. yes, as approved.—										32% Elongat.
						STIFFENERS.				
						VERTICAL.				
						Scantlings, Spacing.		Scantlings, Spacing.		
MIDSHIP BULKHEAD, Upper tween decks 7 5115-65-8 770						✓	✓			
" " Second " 4 4 4 4 4						✓	✓			
" " Third " 4 4 4 4 4						✓	✓			
" " Holds 115-75 5300-90 13 770						✓	✓			
COLLISION " (in Hold) 13-85 5250-90 11 610						✓	✓			
AFTER PEAK " " 4 4 4 4 4						✓	✓			
STEEL.						Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) S.M. open hearth Process, of approved Works: Plates, Bars, Tubes: Gutehoffnungshütte, Borsigwerk A.G., Stahl-Walzwerk Weber, Henrichshütte, Bremerhütte, Aug. Thyssen-Hütte, Wilkowitz, Roeder-Verein, Niederheinische Hütte, David Colville & Sons Ltd Glasgow.				
						Has the Steel been tested as required by the Rules? yes, by the Society's Surveyors.—				

EQUIPMENT No. 2									
LETTER 3273									
ANCHORS.									
Number of Certificate.	Anchor.	Weight, Ex. Stock.	Weight of Stock.	Test, Per Certificate.	Weight Required by Table 53.	Description of Anchor.	Makers.	Where and when tested and Superintendent.	
20472	1st Bower	74 2 3	56 2 0	56 2 0	56 2 0	Gruson-Stockless.	Gruson & Co	Magdeburg 22.10.27 Hues.	
35250	2nd "	56 1 14	46 4 2	46 4 2	46 4 2	Patent-Stockless.	Rich. Sykes & Son	Grady-Hearth 22.9.20 Paul.	
35247	3rd "	54 3 20	48 5 3	48 5 3	48 5 3	Patent-Stockless.	Rich. Sykes & Son	Grady-Hearth 22.9.20 Paul.	
35440	Stream	15 1 0	16 14 1	16 14 1	16 14 1	Stock-Anchor	Rich. Sykes & Son	Grady-Hearth 18.10.20 Paul.	
CHAIN CABLES.									
Number of Certificate.	Length and size supplied.	Test per Certificate.	Weight of Chain Cable.	Length and size per Table 53.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and size supplied.
12851	270 2 1/8	8 1/2	626 1 21	682 1/4	270 2 1/8	Stadlink	Sunderland 1.10.20 Hues.	TOWLINE	220 127 73
574	31 1/2 2 1/8	8 1/2	79 1 21	705 3 14	31 1/2 2 1/8	Stadlink	Hansa Kette Duis. 16.9.29. Paul.	HAWSEERS & WARPS	165 70 22
						fabr. Dortmund			165 70 22
									165 70 22
									330 178
									Manila 330 178
STEERING GEAR, Steam Wilson Perry Type, good.									
Boats 30' 24' 0" x 7' 9" x 3' 1 1/2" good.									
Steering Chains, Size and Test No Chains.									
Windlass Steam, good.									
Ceiling in Holds, thickness and material 65 Pine, good.									
Cargo Battens, thickness, material and spacing 150 x 50 Pine, 230 space.									
Cargo Hatchways, (Upper Deck) Plates & Angles ordin. built									
Thickness of Hatches Pine 65; Not = 70 Pine.									
Size of No. 1 Hatchway (Forward) 29' 20" x 18' 0" No. 2 38' 50" x 18' 0" No. 3 24' 75" x 18' 0" No. 4 33' 0" x 18' 0" No. 5 24' 75" x 18' 0" No. 6									
Number of Shifting Beams and/or Fore and Afters. Not = 4; No 2 = 6; No 3 = 4; No 4 = 7; No 5 = 5 shifting beams, no Fore & Afters.									
Howaldtswerke A.-G.									
Builder's Signature C. J. H. K. K. K.									

GENERAL DECLARATION. It should be stated (a) whether the vessel is fitted for the carriage and burning of oil used as fuel <u>yes</u> (b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo <u>no Cargo</u> The positions in which oil is carried as fuel or cargo should be indicated, together with the flash point.									
Fuel Oil F.P. above 150° in double bottom tanks only. -									
This vessel stranded recently off the coast of Sweden. The saved after end with Engine & Boilers were towed to Kiel. Engines & Boilers removed, and the Hull placed on Stocks. - All damaged parts of the after end removed, the Hull rebuild increased in length, and after end strengthened in proportion to the length. - This vessel has now been rebuilt in accordance with the approved and amended plans, the requirements embodied in the Secretary's letters, and in all other respects in conformity with the Rules and Society's Requirements. - The workmanship is throughout of the best description for this type of vessels, all parts conforming well with each other, without use of any packing, and efficiently riveted together. - The peak tanks and all double bottom tanks have been filled and tested as required by the Rules, also Bulkheads and weather decks and were found perfectly tight. - All sounding pipes comply with the Rules. -									
The amount of Entry Fee £ 0 : 0 : 0					Fees applied for, 20 Sept. 1929				
Special Survey Fee.... £ 115 : 0 : 0					Received by me, 20 Sept. 1929				
Travelling Expenses, if any £ 17 : 0 : 0					I am of opinion the Vessel should be Classed * 100A1				
Freeboard £ 10 : 0 : 0					Shelter deck with Freeboard				
State whether the Vessel has been built under Special Survey <u>yes, Special Survey.</u>					Signature <u>A. Chisholm</u>				
Certificate to be sent to <u>Ham. Office.</u>					Date of issue <u>1.11.29</u>				
Committee's Minute					TRUE 6 NOV 1929				
Character assigned					Reinstated + 100A1 Shelter Deck with Freeboard				
					ss No 3 - 10.29				
					+ LMC 10.29				
					Lloyd's Acc't				
					Letter for Oil Fuel 12.20 F. Above 15				
					Ren. and new fore end 1929				
					Cr. F.D.				
					5.10.29				
					M				

GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

The painting arrangements and strengthening of bottom forward, as well as forward strengthening for Navigation in Ice have been carried out as approved, to Rules and to our satisfaction. - All Steel material used in the construction of this vessel have been made at Works approved and tested by the Society's Surveyors in accordance with the Rules. - The Anchors and Cables have been compared with certificates and were found in order. - The Freeboard approved by the Committee have been marked on the vessel sides verified and cut in. The draft corresponding to the assigned Summer freeboard is 24'-11 1/2" as given in the Builders Dead weight and Displacement Scale. -

General Equipment were found satisfactory in all respects. -

Repairs and Alterations to the after end of vessel:

One Keel plate renewed. On port side 3 and on starb. 2 bilge stake plates renewed, and 9 shell plates on different places both sides removed, paired and replaced. - All scantlings, plating & framing, from frame 64 to 73 in way of vessel was broken off, removed and the mayor part renewed including the floors & intercostals in way of, and the doublings and girders to chiller-deck fitted as required on approved plans. - All bulwark plates with staunches removed repaired and replaced and after ends both sides renewed. - About 500 started shell rivets on different places renewed. Hatchways and shifting beams repaired and hatches renewed. - Main-mast removed and repaired, all fittings and the rigging entirely renewed. - The winches removed and repaired and all steam pipes on deck including covering renewed. - All double bottom tanks, after peak, tank tops and bilges cleaned, tested and recoated and ceiling and cargo battens in holds entirely renewed. - Steel deck house and Engine & Boiler casing repaired, cleaned and recoated. - All cleadings and arrangements in way of deck house entirely gutted out and renewed. - All minor necessary repairs now carried out and the hull entirely freed from rust and coated 3 times with paint. -

In view of the fact, the mayor part of the vessel has now been renewed, the after end of the vessel also satisfactorily repaired and strengthened in accordance to the new length. I beg to recommend for the favourable consideration of the Committee, whether the wish of the Owners could be met with and the remarks "Retuilt 1929" be entered in the Society's Register Book, as already done by the Germanischer Lloyd. -

Certificate should not be issued before the vessel is sold, and the remaining particulars are given by letter from the Hamburg Office. -

Attached:

The approved plans; Section as built; Cargo-plan; Freeboard verification & Test sheet for stem. -

J. H. H. H.

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

1st Bower 20472: Head weight = 49.1.18 - 12 Feet - 7692 - 7.10.1927 Hures. (New)
2nd " 35250: Head weight = 34.3.4 - 12 Feet - LR 3669 - 20.7.20. Williamson (Old)
3rd " 35247: Head weight = 34.2.21 - 12 Feet - LR 3710 - 27.7.20. Williamson (Old)

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ☒ ft., R.Q.D. ☒ ft., Bridge ☒ ft., Forecastle 79.3 ft.
(in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated ☒ ☒ ☒ ☒ ☒

No. and Material of Decks (this information is to be given as it should appear in the Register Book) Two Steel decks

Official No. ; Signal Letters Is bottom of Vessel coated with cement no if not give

particulars of composition Double bottoms not coated. - Peak Tanks cement. Otherwise Paint. -

PARTICULARS OF WATER BALLAST.—

Where Fitted.	*Length.	Water Capacity.	Where Fitted.	*Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft,	93.5	472	Fore peak tank,	20.75	140
Double bottom, under Engines and Boilers,	49.5	209	After peak tank,	16.0	42
Double bottom, if under Engines only,	✓	✓	Deep tank, aft,	✓	✓
Double bottom, if under Boilers only,			Deep tank, forward,	✓	✓
Double bottom, forward,	209.0	751	Other tanks, if fitted,	✓	✓
Total capacity of double bottom		1432	(If necessary, furnish further information by sketch.)		Tons = 182
* The wells are not to be included in the lengths of the tanks.					

Order for Special Survey No. ✓

London Letter

Date 29th Nov. 1928.

Dates of Surveys held while building

1929: March 8.25 - April 2.10.24 - May 8.15.29 - June 14.17.24.26.28 -
July 3.9.11.16.19.24 - August 12.16.21.23.26.30 - Sept. 2.4.9.27 -
Oct. 9th

Total No. of Visits 30.