

STEEL STEAMER or MOTORSHIP.

Received at *May 9 1929*State if Report has been sent on the Freeboard of the Vessel *No*State if Report is sent on the Machinery of the Vessel *Yes*

Date of completion of report

*21st May 1929*Port of *Danrig*No. *700*Survey held at *Danrig*Date First Survey *June 15th 1928*

Last Survey

May 21st 1929

On the

(State if Machinery fitted Aft and
if Single, Twin or Triple Screw)*Single Screw Steamer 'SØRVANGEN'*

State Type

(Full Scantling, Complete Superstructure
with or without Tonnage Openings)*Full Scantling, without Tonnage Openings*State Type of Erections *Prop, Bridge & Forecastle*TONNAGE under
Tonnage Deck...*1998.56*CLASS *+100A1*State if with freeboard
as condition of Class*Freeboard*Built at *Danrig*Do. of space or spaces
between Tonnage Dk.
and Upper Dk.*12204*Length from fore part of stem to after part of stern
post on summer L.W.L. See Sec. 3 (1a)*287 METRES*
L 88.240

Breadth (greatest moulded)

*B 13.870*Depth, at middle of length from top of keel to top
of beam at side of uppermost continuous
deck. See Sec. 3 (1c)*D 6.250*

Total

1998.56

Gross Tonnage

2400.28

Register Tonnage

1363.15

1st Longitudinal Number (L x D).....=551.500

2nd Numeral L x (B + D).....=1775.388

Framing Depth "d," at middle of length. See
Sec. 3 (1d)*5.36*Proportions—Depth to Length—Uppermost con-
tinuous deck to top of keel*14.12*Do. Long Bridge to top
of keel*10.35*

Draught Moulded

*5.444*Launched *21st March* Yard No. *54*Builders *The International Shipbuilding Engineering & Ltd.*Owners *Skibakkerselskapet Karabrien*Managers *Görrissen & Co.*

(Where necessary to be entered in Reg. Book.)

Residence *Oslo*Port of Registry *Oslo*

If surveyed while building, afloat, or in dry dock

While building, afloat and in dry dock

FRAMES, DOUBLE BOTTOM AND BEAMS.

	mm INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		mm INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
FRAMES, Spacing amidships	610		Bracket Floors, Frame	190x 85x 11	
" " from $\frac{3}{8}$ length to Collision bulkhead	"		" " Reversed Frame	180x 75x 10 12.5 in B. Sp.	
" " in peaks	"		" " Vertical Struts	180x 75x 10 12.5 in B. Sp.	
IDE FRAMING.			Centre Girder, depth and thickness amidships	890x 11, 13.5, 8.5 Sp.	
Frame Amidships, Angle, E or C	200x 85x 11.5 i. Bunkers B. Sp. 13 Bridge Dk. To		" " top Angles	75x 75x 10.5 12.5 in B. Sp.	
" " Extends up to	Upper Dk. in Wells		" " bottom Angles	90x 90x 11.5	
Reversed Frame Amidships, Angle	Frame 200x 90x 13 Rev. 100x 100x 13		Side Girders, No. each side and thickness	One. 8.5, 11 in B. Sp.	
" " Extends up to	Upper Dk.		Margin Plate depth (excl. of flange) and thickness	730x 10, 12.5, 8.5 Sp.	
Depth of Framing Girder	200		" " Vertical Angle to Tank side Bracket abaft $\frac{1}{4}$ len. from stem	75x 75x 9.5, 12.5 Sp.	
Frames in Uppermost Continuous 'tween Decks, Angle, C or E	✓		" " Vertical Angle to Tank side Bracket forward $\frac{1}{4}$ len. from stem	120x 120x 10	
" " Second 'tween Decks, Angle, C or E	✓		" " Gussets, spacing and scantling abaft $\frac{1}{4}$ len. from stem	Plates at ev. 2nd fl. 300 x 8.5	
" " Third " " "	✓		" " Gussets, spacing and scantling forward $\frac{1}{4}$ len. from stem	Continuous plate 400 x 8.5	
Framing in Peaks, Angle or C	150x 75x 8.5 Dia. 19 x 22		Tank Side Brackets, height above base line at toe of Frame and thickness	1060x 9.5, 12.5 Sp.	
Diameter and Spacing of Rivets through Frame and Shell Plating amid- ships	spaced 7 dia		INNER BOTTOM PLATING.		
State if Frame Joggled	No		Breadth and thickness of Middle Line Strake	1145x 10, 13, 8.5 Sp.	
FRAMING ARRANGEMENTS (Sec. 7), state system and particulars	B Dep frame angmt as approved		Thickness of remainder in Holds	8.5, 10, 12.5, 13, 8.5 Sp.	
STRENGTHENING OF BOTTOM FOR- WARD. State Particulars	Strakes A, B, C midship thickn. maint. beyond coll. Bkd. Double frames from 116 to 135. Solid floors from 116 forward. Add. int. girders on each side and as per Rule.		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?	Yes	
INGLE BOTTOM.			BEAMS.		
Floors, Depth and thickness at mid-line in Holds	✓		* Uppermost Continuous Deck, amidships in Wells, Angle, E or C	230x 90x 11 half beams abt. cargo hatchways 150x 75x 8	
Height of Brackets at side above base line at toe of frame	✓		" " in way of Bridge, Angle, E or C	230x 90x 11 280x 90x 12 200x 90x 10.5	
Middle Line Keelson, on Floors, Angles, C or E	✓		* Hatch end beams C 300x 100x 16/17 and built up beams.	610	
" " Through Plate or Intercostal Plate	✓		Second Deck, amidships, Angle, C or E	✓	
" " Foundation Plate on Floors	✓		Spacing	✓	
" " Flat Plate Keel Angles	✓		Third Deck, amidships, Angle, C or E	✓	
Side Keelsons, No. each side	✓		Spacing	✓	
" " thickness of Intercostal Plate	✓		Fourth Deck, amidships, Angle, C or E	✓	
" " Angles	✓		Spacing	✓	
DOUBLE BOTTOM.			Poop Deck, Angle, E or C	150x 75x 8	
Solid Floors, thickness and spacing	8.5, 11, 13 Sp. 1830		Spacing	610	
" " Are Frame and Reversed Frame joggled?	No		Bridge Deck, Angle, E or C	180x 75x 8	
Bracket Floors, breadth and thickness at middle line	665x 8.5, 11, 13 Sp.		Spacing	610	
" " breadth and thickness at margin plate	630x 8.5, 11, 13 Sp.		Forecastle Deck, Angle, C or E	180x 75x 8	
			Spacing	610	

PILLARS AND DECKS.									
PILLARS		IN POOP		IN FORECASTLE		IN BOW		IN BULKHEAD	
No. of Rows	Size and Spacing	Size and Spacing	Size and Spacing	Size and Spacing	Size and Spacing	Size and Spacing	Size and Spacing	Size and Spacing	Size and Spacing
1226	1st Bower	41 0 5	36 11 2	36 8 0	31 6 3	12 2 0	21	10	0 5
1227	2nd "	40 3 5	"	"	"	"	"	"	"
1228	3rd "	33 2 14	"	"	"	"	"	"	"
1230	Stream	10 0 5	2 2 13	12 2 0	21	"	"	"	"
CHAIN CABLES.									
No. of Certificate	Length and size supplied	Test per Certificate	Weight of Chain Cable	Length and size supplied	Test per Certificate	Weight of Chain Cable	Length and size supplied	Test per Certificate	Weight of Chain Cable
422	239.72	176	578	82 3/4	415.0	21	394 3/4	240	176
423 (SHACKLES)	66	Chain	578	82 3/4	11.1	19	"	"	"
Stream	135	108	35560	"	"	"	"	"	"

SHELL PLATING.									
SCANTLINGS.					RIVETING.				
AS IN VESSEL.					EDGES.				
STRAKES.					BUTTS.				
ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.					State if Joggled?				
Breadth, Thickness, Thickness, Thickness.					SINGLE OR DOUBLE.				
1/160 1/15 1/14 1/14					22 22 22 22 22				
FLAT PLATE KEEL	1150	15	14	14	double	22	22	22	Lapped
DBLG. (if any)	✓	✓	✓	✓	✓	✓	✓	✓	✓
BOTTOM PLATING, No. of Strakes	1845	12	12	10	double	19	64	3	Lapped
BILGE PLATING, No. of Strakes	1445	12	10	10	"	19	64	"	"
SIDE PLATING, No. of Strakes	1618	12	10	10	"	19	64	"	"
UPPER DECK, Sheer-strake in Wells	1230	20, 30	10	10	"	25	100	4	"
UPPER DECK, Sheer-strake in Bridge	1230	12, 30	10	10	"	19	64	3	"
STRAKE BELOW SHEER-strake in Wells	1500	16	10	10	"	22	88	4	"
STRAKE BELOW SHEER-strake in Bridge	1500	12	"	"	"	19	64	3	"
POOP SIDE PLATING	"	"	8.5	"	single	16	64	1	"
BRIDGE SIDE PLATING	12	"	"	"	double	19	64	3	"
FORECASTLE SIDE PLATING	9	"	"	"	single	16	64	1	"
WATERTIGHT BULKHEADS.									
FORGINGS and CASTINGS.									
Total No. of W.T. BULKHEADS in Vessel—									
Extending to Upper Deck (Sec. 3 c)	4	"	"	"	"	"	"	"	"
Deck next below	✓	"	"	"	"	"	"	"	"
As per Rule 5 (Please See 'General Declaration')	"	"	"	"	"	"	"	"	"
STIFFENERS.									
VERTICAL HORIZONTAL.									
Scantlings, Spacing, Scantlings, Spacing.									
MIDSHIP BULKHEAD, Upper tween decks	"	"	"	"	"	"	"	"	"
" " Second "	"	"	"	"	"	"	"	"	"
" " Third "	"	"	"	"	"	"	"	"	"
" " Holds	"	"	"	"	"	"	"	"	"
COLLISION (in Hold)	11 6 7.5	12 5 12.5	12 5 12.5	610	"	"	"	"	"
AFTER PEAK	15 10 15	15 10 15	610	1500 15 10 15	"	"	"	"	"
STEEL.									
Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)									
POLAND: Bismarckhütte, Laurahütte, Société Anonyme des Usines etc. de Sosnowice, Friedlandhütte, Huta Bankowa.									
GERMANY: Gute Hoffnungshütte, Mannesmannröhrenwerke, F. Schichau.									
Has the Steel been tested as required by the Rules?									
Yes									

EQUIPMENT No. 1915										LETTER S		ANCHORS.			
Number of Certificate.	Anchors.	WEIGHT, EX. STOCK			WEIGHT OF STOCK			TEST, PER CERTIFICATE.			WEIGHT REQUIRED BY TABLE 53.		Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	Cwts.			
1226	1st Bower	41	0	5	Stockless			36	11	2	4	38 3/4	"Union Type," cast steel	Dortmund Union	Dortmund 1.9.28 LAGGEN
1227	2nd "	40	3	5	"			36	8	0	14	38 3/4	" " " "	" " " "	" " " "
1228	3rd "	33	2	14	"			31	6	3	14	32 1/2	" " " "	" " " "	" " " "
	Collective weight.	115	1	24								110			
1230	Stream	10	0	5		2	2	13	12	2	0	21	Admiralty, " "	" " " "	" " " "

CHAIN CABLES.										HAWSERS AND WARPS.									
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.		Breaking Test of Steel Wire.	Length and size per Table 53.	
	Length.	Diam.	Stations.	Break-ing.	Supplied.	Per Rule.	Length.	Diam.	Length.	Cir.					Length.	Cir.		Length.	Cir.
422	239.72	1 1/8	57 1/8	82 3/4	415.0	21	394 3/4	240	1 1/8	Slad Link 20 JOINING HEND	CARL SCHLIEPER of GRÜNE	GRÜNE, 13.10.28, QUAST	TOWLINE...	165	102	33530	165	102	
423 (SHACKLES)	66	chain	57 1/8	82 3/4	11.1	19				SHACKLES	J.D. THEILE of SCHWERTE	" " " "	HAWSERS & WARPS	165	64	12400	165	64	
														165	64	12400	165	64	
Stream	135	108	35560					135	108		A. DEICHSEL	HINDENBURG, 19.9.28, DAVIE		165	54	9650	165	54	
Steel Wire														165	54	9650	165	54	

Steering Gear, Steam made by Deutsche Werke A.G., Kiel

Boats 2 Lifeboats, 1 Working boat (Polish Str.) Steering Chains, Size and Test 28 mm dia: Stat. 14529 kg, Brk. 29058 kg

Ceiling in Holds, thickness and material 75 mm Fir

Cargo Hatchways.—(Upper Deck) Height of coam. at side above steel deck 1100 mm, thick 12 mm Thickness of Hatches On Nos. 1, 2, 4 & 5: 75 mm. On No 3: 80 mm

Size of No. 1 Hatchway (Forward) 10.3' x 6.10 m. No. 2 10.3' x 6.10 m. No. 3 2.1 x 3.4 m No. 4 10.3' x 6.10 m No. 5 10.3' x 6.10 m No. 6

Number of Shifting Beams and Hatchways Nos. 1, 2, 4 & 5: Six in each. Hatchway No 3: One

* Suspended from "Columbus" davits. Copy of certificate attached.

Steering Gear, Hand made by Deutsche Werke A.G., Kiel

Windlass Steam, made by Builders, No 33

Cargo Battens, thickness, material and spacing not fitted

Builder's Signature (Wanziger Werft und Eisenbahnwerkstätten A.-G.)

THE INTERNATIONAL SHIPBUILDING AND ENGINEERING CO. LTD.

GENERAL DECLARATION. It should be stated (a) whether the vessel is fitted for the carriage and burning of oil used as fuel in D.B. tanks (b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo

Oil fuel is being carried in the double bottom tanks except in the tank under the engine. The flash point of the oil fuel to be above 150°F.

The workmanship is of good quality. The vessel has been constructed in accordance with the approved plans (14 in number as detailed on the back of this report form) and Rule requirements. The intermediate bulkhead in the fore hold between the collision and boiler space bulkheads has been omitted. The Owners have given their consent to this arrangement as per their letter addressed to the Builders dated 9th March 1928 a copy of which was forwarded with the first entry report on the duplicate vessel 'NORDVANGEN', yard No 53 constructed by the same Builders (Please see Daurig Report No 641 dated 12th April 1929). The notation "Intermediate BH in fore hold dispensed with, 4 BH." should therefore be made in the Register Book in accordance with the Secretary's letter of the 24th February 1928. The compartments intended for cargo oil fuel and water ballast have been tested as required by the Rules. The decks, watertight bulkheads with doors and the tunnel have been hose tested. The watertight door, hand pump to drain the spaces forward have been examined and tried. The vessel was examined

P.T.O.

The amount of Entry Fee £ 6 : 0 : 0

Special Survey Fee.... £ 195 : 0 : 0

Travelling Expenses, if any £ 9 : 0 : 0

Fees applied for, 21.5. 1929

Received by me, 18.6.29

I am of opinion the Vessel should be Classed +100A1 with date of build 1929 4/11th month.

State whether the Vessel has been built under Special Survey Built under Special Survey

Certificate to be sent to The Daurig Office Date of issue 4/6/29

Committee's Minute/ TUE. 4 JUN 1929

Character assigned -1- 100 Pts

Lloyd's at 29

thine S. 29

J.D. CL

Signature James C. Dykes

Surveyor to Lloyd's Register of Shipping.

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.)

in dry dock on the 13th May 1929 when the bottom was recoated.
The notations 'Carrying oil fuel F.P. above 150° F in DB'; 'Cargo battens not fitted'; 'Lloyd's A & C.P.' to be assigned.
The vessel left the Builders' yard on the 14th May 1929 and is now being loaded with a cargo of coal for Copenhagen
Copy of Interim Certificate attached.

— LIST OF APPROVED PLANS —
(Forwarded under separate cover)

1	Midship Section	Approved: 24.2.28
2	Profile & Decks	" : 24.2.28
3	Riveting of Shell plating in way of overlapped butts	" : 12.3.28
4	Collision Bulkhead & Fore Peak.	" : 20.4.28
5	After Peak Bulkhead.	" : 2.5.28
6	Expansion of Shell plating.	" : 15.5.28
7	Stern frame & Rudder.	" : 19.6.28
8	Engine Seating.	" : 22.6.28
9	Columbia Propeller & attachments to Stern post	" : 3.7.28
10	Amended arrangement of after end of Rudder Frame	" : 3.7.28
11	" " " Engine Seating	" : 2.10.28
12	Bridge Front Bulkhead	" : 31.10.28
13	Watertight Doors in Bridge Bulkheads.	" : 31.10.28
14	General Plan of Steering Arrangements	" : 12.11.28
15	Rudder Brake	" : 12.11.28
16	Quadrant & Tiller	" : 27.11.28
17	Auxiliary Cross Bunker Hatchway	" : 27.2.29

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

1st Bower HEAD : 27.1.15 J.Q. 333 9.8.28 SHANK : 13.2.18 J.Q. 438 9.8.28 (With Anchor Cert: 1226)
2nd " : 27.0.8 J.Q. 334 9.8.28 " : 13.2.25 J.Q. 436 9.8.28 (" " " 1227)
3rd " : 22.2.16 J.Q. 335 9.8.28 " : 10.3.26 J.Q. 441 9.8.28 (" " " 1228)
STREAM ANCHOR: 10.0.5 J.Q. 338 9.8.28 (With Anchor Cert: 1230)

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 28 ft., R.Q.D. ✓ ft., Bridge 80 ft., Forecastle 32 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) 1Dk (Stl)

Official No. ✓ ; Signal Letters L H F N

Is bottom of Vessel coated with cement in Eng. tank only if not give particulars of composition Clear of engine room tank bottom coated internally with mazout.

PARTICULARS OF WATER BALLAST.—

Where Fitted.	Length. Feet.	Water Capacity. Tons.	Where Fitted.	Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	98	214	Fore peak tank,	16	61
Double bottom, under Engines and Boilers,	40	124	After peak tank,	18	63
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward,	108	266	Other tanks, if fitted,		
Total capacity of double bottom		610	(If necessary, furnish further information by sketch.)		

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

Order for Special Survey No. 4

Date 11th February 1928.

Dates of Surveys held while building

1928 June 15, 26 July 3, 9, 24, 27, 28 August 9, 16, 29 Sept. 5, 6, 13, 17, 24, 25, 29 October 1, 2, 6, 15, 24, 25 Nov. 8, 14, 26, 29 Dec. 1, 5, 7, 11, 21, 28.
1929 Jan. 15, 22, 26, 31 Feb. 18, 19 March 9, 11, 12, 13, 18, 21 April 5, 12, 23, 29, 30 May 6, 6, 9, 11, 13, 15, 21.

Total No. of Visits 54