

STEEL STEAMER OR MOTORSHIP.

Received at London Office 15 JUL 1931

40957

Date of completion of report *July 12 1931* Port of *Belfast* No. *10654*

Survey held at *Belfast* Date First Survey *May 30 1930* Last Survey *July 7 1931*

On the *Steel Twin Screw Steamer KOSMOS II (Machinery aft) (Oil Tanker)*

State Type *Steel hull with tonnage opening aft transverse draft* State Type of Erection *W. & A. Fairbank*

TONNAGE under 12231.20 CLASS *+100A1* State of hull condition *Yes* Built at *Belfast*

Tonnage Deck *2404.39* Length *550* Launched *May 19 1931* Yard No. *522*

Do. of space or spaces between Tonnage Dk. and Upper Dk. *14635.58* Breadth (greatest moulded) *77* Builder *Workman, Clark & Co. Ltd.*

Total *14635.58* Depth *53* Owners *Hvalfangersekskabet "KOSMOS II" A/S.*

Gross Tonnage *10966.02* 1st Longitudinal Number *4* Managers *A. Jankre*

Register Tonnage *9794.38* 2nd Number *L 67419* (Where necessary to be entered in Reg. Book.)

REGISTERED DIMENSIONS. FEET. Residence *Sandefjord*

Length *553.4* Proportions Depth to Length Uppermost continuous deck to top of keel *10.38* Port of Registry *Sandefjord*

Breadth *77.2* Do. Long Bridge to top of keel *✓* If surveyed while building, afloat, or in dry dock

Depth *37.6* Draught Moulded *34'-3 1/2"* *yes.*

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.
Longitudinal framing in inner casings	above 2nd deck. See Rpt 1* (Sheet 4)		Bracket Floors, Frame	✓	
FRAMES, Spacing amidships	30		Reversed Frame	✓	
" " in Pumprooms	32		Vertical Struts	✓	
" " from 1/2 length to Collision bulkhead	30 27 24		Centre Girder, depth and thickness	60 to 84	Eng. Rm. 68-54 ✓
" " in peaks	24		" " top Angles	3 1/2 x 3 1/2 x 66-60	76 Blr sp. ✓
SIDE FRAMING.			" " bottom Angles	5 x 5 x 64	72 Blr sp. ✓
Frame Amidships, Angle	12 3 1/2 45	✓	Side Girders, No. each side and thickness	2 50 56	Blr sp. ✓
do. do. in Pumprooms	12 3 1/2 51	✓	Margin Plate (excl. of flange) and thickness	level 66	70 Blr sp. ✓
Extends up to	Second deck		Vertical Angle to Tank side Bracket abaft 1/2 len. from stem	6 1/2 6 1/2 55	62 BS. Tbar. ✓
Side Stringers			Vertical Angle to Tank side Bracket forward 1/2 len. from stem	✓	
Amidships, Angle	42 x 44	✓	Gussets, spacing and scantling abaft 1/2 len. from stem	✓	
Face Angle	4 3 1/2 44	✓	Gussets, spacing and scantling forward 1/2 len. from stem	See plan	
Extends up to	6 6 44	✓	Tank Side Brackets, height above base line	54 64 Blr sp	✓
Shell connection	12	✓	INNER BOTTOM PLATING, Mehy Space.		
Depth of Framing Girder			Breadth and thickness of Middle Line Strake	64 64 54	66 Blr sp ✓
Frames in Uppermost Continuous 'tween Decks, Angle	Longitudinal		Thickness of remainder	64 65 50 66 Blr sp	Increased under Engine ✓
Second 'tween Decks, Angle	30 44	✓	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.	
Starts in each side tank (Two to each stringer)	7 3 1/2 x 44 5 NBS ✓		BEAMS.		
Fore Peak	11 3 1/2 50 NBS ✓		Uppermost Continuous Deck, amidships	Longitudinal	
After Peak	11 3 1/2 50 NBS ✓		in Wells, Angle	9 3 1/2 38 42	✓
Diameter and Spacing of Rivets through Frame and Shell Plating	5 x 4 5 1/2 2 1/2		in way of Poop	8 3 1/2 44	Approved 44 x 41 ✓
ships	7 5 1/2 2 1/2		NBS = Forecastle	Forward 24 x 27	✓
State if Frame Joggled	Amidships only		Spacing	23 1/2 to 36	✓
PANTING ARRANGEMENTS (Sec. 7), state (Strengthened for 100) system and particulars	Intermediate frames spaced 4'-6" 15'-3" (double 6 x 6 x 5 1/2 shell frames rivetted 3 shakes bottom shell - 86)		in Side Tanks	10 3 1/2 44	✓
STRENGTHENING OF BOTTOM FORWARD. State Particulars			Second Deck, amidships, Angle	10 3 1/2 44	✓
SINGLE BOTTOM.			Spacing	30	✓
Floors, Depth and thickness	in Side Cargo Tanks 36 x 46	✓	Second Deck, aft	9 3 1/2 x 36 x 38	✓
do. do. in Fore Peak Tanks	72 x 50	✓	Third Deck, amidships, Angle	8 3 1/2 44	✓
Height of Brackets at side above base line at toe of frame in Side Tanks	78	75" approved	Spacing	23 1/2 to 36	✓
Middle Line Keelson, on Floor, Angle	Centre line Bulkhead	✓	Cabin forward	8 3 1/2 x 44 x 38	✓
" " " Through	Through		Fourth Deck, amidships, Angle	8 3 1/2 44 x 38	✓
" " " Foundation Plate on Floors	home		Spacing	27 x 24	✓
" " " Flat Plate Keel Angles	4 x 4 x 63-57 (5 x 5 x 72-64 in Dble bottom)	✓	Poop Deck, Angle	9 3 1/2 x 38 x 42	✓
Side Keelsons, No. each side	One.		Spacing	23 1/2 to 36	✓
" " thickness of Intercoastal Plate	46	✓	O.T. Flat forward	11 3 1/2 44	Approved 46 OBS. ✓
" " Bulb Angle on face NBS	8 3 1/2 46	✓	Bridge Deck, Angle	11 3 1/2 44	✓
DOUBLE BOTTOM. in Engine & Boiler Space. Eng. Sp.	50	✓	Spacing	24 x 27	✓
Solid Floors, thickness and spacing	56	36	Forecastle Deck, Angle	8 3 1/2 44	✓
Are Frame and Reversed Frame joggled?	✓		Spacing	30 27 24	✓
Bracket Floors, breadth and thickness at middle line	✓				
breadth and thickness at margin plate	✓				

PILLARS AND DECKS.

		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.....		Three longitudinal bulkheads			Stringer Plate, breadth and thickness in way of Bridge		✓		
,, in 'tween Decks, Size and Spacing.....		{ Three rows wide spaced pillars & girders with cross bracing above oil tanks as approved.			Thickness of Plating abreast Deck openings in way of Wells		.46		✓
,, " " " " " "					Thickness of Plating abreast Deck openings in way of Bridge		✓		
,, in Holds		✓			Thickness of Plating within line of openings...		.46		✓
3 "Longitudinal" " " " "		2 Vertical Webs		✓	If Sheathed, material and thickness		✓		
5 "Centre Line Bulkheads		Face Angle		✓	Cabin				
Stiffeners and Spacing		L.N.B. Horizontal		✓	Third Deck, Forward				
Plating, thickness of		{ 7 3 33 1/2 11 3 1/2 48 Spaced 30" 1/2 34"		✓	Stringer Plate, breadth and thickness		Tapered .34		✓
		.40 1/2 .54			If Plated, state thickness		.30 x .34		✓
STRINGERS AND DECKS.					Second				
Uppermost Continuous Deck.					Fourth Deck, Aft				
Stringer Plate, breadth and thickness in Wells		8 1/2 .87		✓	Stringer Plate, breadth and thickness		Tapered .46 - .38		✓
,, " " " " " "		✓			If Plated, state thickness		.40 x .34		✓
,, Angle in Wells		7 7 .87		✓	Poop Deck.				
Thickness of Plating abreast Deck openings in way of Wells		✓ .76		✓	Stringer Plate, breadth and thickness		Tapered .42		✓
Thickness of Plating abreast Deck openings in way of Bridge		✓			Plating, Sheathing, material and thickness		{ .30 x .26 Or Pine 5 x 2 1/2		✓
Thickness of Plating within line of openings		One strake each side .60		✓	O.T. Flat				
If Sheathed, material and thickness		3" On Pine for wheeling service			Bridge Deck, Forward				
Second Deck.					Stringer Plate, breadth and thickness		Tapered .38		
Stringer Plate, breadth and thickness in Wells		8 1/4 .48		✓	Plating, Sheathing, material and thickness		.38		
					Forecastle Deck.				
					Stringer Plate, breadth and thickness		Tapered .42		✓
					Plating, Sheathing, material and thickness		{ .38 .42 .50 Or Pine 5 x 2 1/2 over accommodation		✓

SHELL PLATING.

SCANTLINGS.					RIVETING.						
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.		BUTTS.			
	AMIDSHIPS.		FORWARD.	AFT.		SINGLE OR DOUBLE.	RIVETS.	NO. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.					Diam.	Spacing or to cr.	
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.	Inches.	Inches.	
FLAT PLATE KEEL	6 1/2	1.26	1.08	1.08		Double	1 1/8 4 1/2	3 ✓	1 1/4	5 1/2	Double straps.
,, DBLG. (if any)	✓					do	1 4 ✓	5 ✓	1	4 1/2	tapped.
BOTTOM PLATING, No. of Strakes	4	87 1/2 .82 93 1/2 .82 93 1/2 .86 92 .86	.60 .64 .60 .64 .65 .72	.60 .64 .64 .72		do	1 3 3/4	5 ✓	1	4 1/2	do.
BILGE PLATING, No. of Strakes	2	67 1/2 .86 75 .86	.74 .80 .80 .86	.80 .86		do	1 3 3/4	5 ✓	1	4 1/2	do.
SIDE PLATING, No. of Strakes	5	10 53 3 1/2 94 1 1/2 91 1/2	.76	10 73 10 64 4 1/2 10 4 1/2 75		4 @ Treble 1 @ Double	1 3 3/4 3 3/4 3 3/4 1 4	4	1 ✓	4	do
UPPER DECK, Sheer-strake in Wells	82	.98	.56	.56		Double	1 4	5 ✓	1 1/8	5	do.
UPPER DECK, Sheer-strake in Bridge	✓										
STRAKE BELOW SHEER-strake in Wells	90	.88	.56	.56	✓	Double	1 4	5	1	4 1/4	do
STRAKE BELOW SHEER-strake in Bridge	✓										
POOP SIDE PLATING	88			.46		Single	7/8 3 1/2	2	7/8	3 1/6	do.
BRIDGE SIDE PLATING	✓										
FORECASTLE SIDE PLATING	49 55		.48			Single	7/8 3 1/2	1	7/8	3 1/6	do.

WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—

Extending to Upper Deck (Sec. 3 c)

One

,, Deck next below

18

As per Rule

9

FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
KEEL, Bar	Flat plate			
STEM	Bottom Rolled. 10" x 4" Cast Steel Middle Cast Steel Top Steel Plate		Marshall Steel Co. Ltd.	
STERN FRAME	Propeller Post Rudder		Cast Steel	Fried Krupp AG.
RUDDER—A x D		1495	✓	of Gossen.
Speed of Vessel		11 knots	✓	
RUDDER mainpiece at head	Forging	19" dia	✓	do.
,, " heel		12 1/2"	✓	
,, how constructed	Built Shunk arms		✓	
,, double or single plate	Single			
,, coupling, vertical or horizontal	Horizontal			

STEEL.

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)

British Iron Steel Co. Ltd. Port Talbot. Furness Shipbuilding Co. Ltd.
D. Colville Sons Ltd. Consett Iron Co. Ltd.

Has the Steel been tested as required by the Rules? Yes.

PARTICULARS OF LONGITUDINAL FRAMING.

FRAMING.		AMIDSHIPS.			ENDS.			AMIDSHIPS.			ENDS.			RIVETING.			
		In Ship.			In Ship.			Per Rule or as approved.			Per Rule or as approved.			Rivets in Longitudinal Frames.		Spacing of Rivets on each side of Transverses and Bulkheads.	Rivets in Brackets to Bulkheads.
		Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Diam.	Spang.	Inches.	Number.
Framing of Σ , Σ AND Σ																	
Frames in Bridge 'tween Decks ...		✓															
Frames from Uppermost Continuous Deck		No. 1	As approved		✓		✓	Butt angle N.B.S.	8	3 1/2	.44	✓		1	6	✓	✓
" 2			do		✓		✓	— do —				✓		1	6	✓	✓
Above Second Deck.		" 3	do		✓		✓	— do —				✓		1	6	✓	✓
" 4			do		✓		✓	— do —				✓		1	6	✓	✓
" 5			do		✓		✓	— do —				✓		1	6	✓	✓
Bottom framing in Centre Tanks		" 6	do		✓			Seven longitudinals				✓					
" 7			do		✓			each side of C.L.				✓					
" 8			do		✓		✓	17" x 4" x 5/16 channels				✓					
" 9			do		✓			Back angle to				✓		1" as approved	3 1/2	10 rivets	20 7/8
" 10			do		✓			shell 3 1/2" x 3 1/2" x .44				✓					
" 11			do		✓			for 3'-6" each side of				✓					
" 12			do		✓			trans. bulkheads.				✓					
" 13																	
" 14																	
" 15																	
" 16																	
Spacing of Longitudinal Frames		Amidships	As approved.					30"	28 1/2"	34 1/2"							
At Ends			✓					✓									
Double Bottoms Σ , Σ or Σ		Tank Top Longitudinals	✓														
Bottom		"	✓														
Spacing of Longitudinals		Amidships	✓														
At Ends...			✓														
Transverses.																	
In Bridge 'tween Decks		Depth and Thickness	✓														
Face Angles		.....	✓													
Lugs to Shell*		.....	✓													
In Upper 'tween Decks.		Depth and Thickness	As approved.	✓				24" x 32" x .44	✓	✓							
at side		Face Angle N.B.S.	do	✓				7 3 1/2 .50	✓	✓							
Lugs to Shell*		.....	do	✓				6 6 .44	✓	✓			1"	4 1/4"			
In Centre Tanks		Depth and Thickness	do	✓				45 .46	✓	✓							
In Hold.		Face Angle N.B.S.	do	✓				6 3 1/2 .50	✓	✓							
at bottom		Lugs to Shell*	do	✓				6 6 .46	✓	✓			1"	5"			
" " Back Bars		.....	do	✓				3 1/2 3 1/2 .46	✓	✓							
Brackets		.....						✓								
Spacing of Transverse Frames		.....						10'	7'-6"	10'		✓					
			* State if joggled or liners.														
Longitudinal Beams of Σ , Σ or Σ N.B.S.	Bridge Deck	✓															
	Upper	As approved.	✓		✓		8"	3 1/2"	.44"	✓		✓	33" x 36"				
	Second (in centre)	do	✓		✓		8"	3 1/2"	.36"	✓		✓	30"				
	Third	✓															
Transverse Beams.																	
In Ships.		Plate.															
Angles.																	
As approved.		Plate.															
Angles.																	
E																	
ENBS																	
12 x 3 1/2 x 3/4 x .50																	
7 x 3 1/2 x .56																	
ENBS.																	
33 x .44																	
7 x 3 1/2 x .50																	

The particulars of framing in peaks (if ordinary), Floors, Centre Girder, Side Girders and Margin Plate and their angle attachments, etc., to be entered in their respective places provided for on the Report Forms.

Double bottom, aft,
Double bottom, under Engines and Boilers,
Double bottom, if under Engines and Boilers,

96

512

Fore peak tank,
After peak tank,

28

393

20.04

189.

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 approved plans (37 in number) are forwarded herewith
Midships Section (modified as built), Profile, Decks, Shaft Brackets,
Stern frame (2), Rudder, Double bottom scantlings & frame brackets, Equipment (2)
Tonnage opening after end, Oil fuel bunker, Trans. O.T. Bulkhead, Fore end framing
Re strengthening, Amended upper & lower transverse, Bottom transverse connection
at C.L., Framing in Oil fuel bunker, C.L. Bulkhead in Deep Tank, Machinery space
Sections, Skiffing of C.L. & Wing Bunks in Pump Room, After end framing
& Skidway, Pumping, Airtight, Shell plan, 2nd Dk O.T. hatchways,
Scantling of structure at break of poop, Stringers in Machinery space,
Portable plates in way of Pump Room, Shell side at poop break,
Under deck girders forward, Pillars & girders hatchways at fore
end, Welded plate shoes at W.T. flats, Wing floors forward $\frac{3}{5}$ length,
Amended shell side girders, Cargo doors & Tonnage opening in shell,
Amended side transverse in tween decks forward, Amended
pillars & girders in tween decks.

The forging and casting certificates are forwarded herewith also
shell invoices

Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test.	1st Bower	76 1 0 ind. pins.	A.B.	6385.	February 5 th 1931.
	2nd "	75. 0. 4. do.	D.C.B.	3324.	January 24 th 1931.
	3rd "	64. 2. 0. do.	K.H.	10129.	November 2 nd 1929.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 133.75 ft., R.Q.D. ☒ ft., Bridge ☒ ft., Forecastle 114.75 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) 2 Dks (SH)

Official No. ☒ Signal Letters L J V K.

Is bottom of Vessel coated with cement Yes. in cofferdams if not give

particulars of composition pump rooms, peaks, & double bottom. cement filllets at seams & butts in oil compartments

PARTICULARS OF WATER BALLAST.—

Where Fitted.	*Length.	Water Capacity.	Where Fitted.	*Length.	Water Capacity.
	Feet.	Tons.		Feet.	Tons.
Double bottom, aft,	✓	✓	Fore peak tank,	28	393
Double bottom, under Engines and Boilers,	96	512	After peak tank,	20.04	189
Double bottom, if under Engines only,	✓	✓	Trimming Deep tanks aft,	36.5	362
Double bottom, if under Boilers only,	✓	✓	Deep tanks forward,	52.5	932
Double bottom, forward,	✓	✓	Other tanks, if fitted, <i>Wing tanks in fore hold</i>	52.5	702
			<i>" " " Engine Rm</i>	89.0	416
			(If necessary, furnish further information by sketch.)		
	Total capacity of double bottom	512			

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

Order for Special Survey No. 827.

Date June 26th 1930

Dates of Surveys held while building

1930. May 30. June 23, 24, 25, 29. Aug 6, 8, 11, 12, 15, 27, 29, Sept 2, 4, 12, 15, 16, 23, Oct 8, 15, 16, 17,
20, 21, 23, 24, 27, 30. Nov 3, 5, 7, 11, 13, 14, 18, 19, 20, 21, 24, 25, 26, 27, 28, Dec 3, 4, 5, 8, 9, 10, 11, 12, 13, 15, 16,
17, 18, 19. 1931 Feb 11, 12, 13, 16, 17, 18, 19, 20, 23, 24, 25, 26, 27. March 2, 3, 4, 5, 9, 11, 16, 17, 18, 19, 20, 23,
24, 25, 27, 31. April 8, 9, 10, 13, 14, 15, 17, 20, 21, 22, 24, 27, 28, 29, 30. May 1, 5, 6, 7, 8, 13, 15, 19, 20, 29,
June 5, 9, 11, 12, 15, 18, 23, 24, 25, 30. July 2, 3, 7.

Total No. of Visits 124