Casing:
pl. 6.5 m/m with 7.5 coamings
stiff. 75 × 65 × 7 4
or flanged 90 m/m
spaced 760

Hatchways: № 1. l = 1,340 beams № 40 I 400 × 155 × 14½/21.6
2. l = 1,340 " -
3. l = 1,285 " - } № 38 I 380 × 149 × 13.7/20.5
4. l = 1,340 " -
5. l = 1,340 " -

End coamings to be stiffd with
horiz. ⊏ 180 × 75 × 10
or 2 kneepl. 8.5

50×8 flat welded to alter'n beams
Hatch covers 60 m/m
guide for hatch beam to be welded
2 kneepl. on each side of hatch.

130×75×7.5 ⊏
180×70×8×11
Coamings 11
75×75×11
130×130×11 — 75×75×7.5
~75×75×7 dobb.
75×75×7 single
130×65×8.5 ⊏
beams knees as per rules
Angles of flanges to be arranged to permit of efficient welding
Camber 275
Half breadth hatch no. 1 = 2750
" " " 2.3.4 & 5 = 3200

Alternate frames to shelterdeck #
Frames cut to 165 at every frame # 12-17, & #90-127
" " " 165 " altern " # 18-22
" " " 150 " " " # 23-89
full section to shelterdeck where hatch end beams

Half breadth hatch no. 1 2750
Riderpl. 280×21.5
Hatchways: № 5 l = 1,340 } beams № 45 I 450×170×16.3/24.3
№ 2, 3 & 4 l = 1,452 }
№ 1 l = 1,340 beams № 42½ I 425×163×15.3/23.0

Half breadth hatch no. 2.3.4 & 5 = 3200
50×8 flat welded to alter'n beams
Hatch covers 60 m/m
guide for hatch beam to be welded
Special attention is to be paid to the welding

brackets 10 on alt beams
Hatch no. 5 = 455 Riderpl. 300×24 hatch 2
" 2.3.4 = 505 " 300×21.0 " 3
" 280×21.5 " 4
" 280×20.5 " 5

Beam knees
3 × rule beam depth for frames which are not cut at second deck.
For frames which are cut at second deck, the knees to be 3 × rule beam depth or as per table sect. 15. para. 3(e) whichever is the greater.

Frames
Spaced 670, in peaks 610 d = 4.915
Frames 200×75×11 ⊏
Frames forward of ×67. 200×75×12.5 ⊏
Frames in peaks 150×75×8.5 ⊏ to superstructure deck
Intermediate frames # 113½ to coll. bh'd. 150×75×8.5 ⊏ } all extending from floors to 2nd deck
" " in fore peak 100×75×11 ⊏ }

Cargo battens

Center girder: 905 × 11.5 - 9.5
Inner bottom: midle line strake 2440 × 10 - 9 } in E.R. 10.75
in holds 9.25 - 8.5
Solid floors in E.R. and forward of 3/5 L 8.75
elsewhere on every 4 frame
W.T. floors: 10.75. stiff. by 90×75×10 spaced 760
Marginplate: 660 × 10.5. angles 90×90×11 or flange to shell

Gusset pl. continuous in way of tank no. 1.
T.R.
Tank no 1. fr. 111-128.
Gussets 9.
Every 3rd fr. # 13-102 5 R.
" 3rd " # 103-109 5 R.

Section through engine room.

brackets 9.
75 ⊏
680
Ceiling 2½"
50
90×90×9 single
11.75
165×75×9 ⊏
Span not exceeding 2.19
180×75×9 ⊏
75×75×10-9.5
680
Double rev. frames below engine seating and thrustblock
90×90×9
double in E.R.
75×75×8.5
200
90×90×9 single
8 R # 17-102
10 R # 103-115.
13 R # 116-127
9 R # 116-127
250×10 welded to shell

130×130×11 double riveted below engine seating and thrustblock
No flanging in way of strengthening forward or under pillars
Flat part of bottom plating 13 from ½ L to coll. bulkh'd.
No flanging under engines see Sec. 10 para. 10 of the Rules

75×75×8.5
75×75×8.5
90×90×9
pl. 8.25
Sidegirder in E.R. I. and forward 3/5 L
450×350
pl. 9.25
Sidegirder
pl. 9.25
Sidegirder in E.R. II & III

Sections are new German standards

6700
1385
5820
2440
1000
240
150
2440
1385
5820
E 11.75 - 10.25
D 11.75 - 10.25
C
B 11.75 - 10.5
A 11.75 - 10.5
O 14 - 13.25
F 13 - 10.75
Welding round frame
90×90×9 - 8.5
140×65×8 ⊏
6705
75×75×8.5
90×90×9

Numerals:

L×D	= 91.44 × (5.82 + 2.30)	=	742,49
L(B+D)	= 91.44 (13,41 + 8,12)	=	1968,70
L/D	= 91.44/8,26	=	11,07

Equipment number.

L(B+D)	= 91.44 (13.41 + 8,26)	=	1981.50
Casing, Houses	25,7 × 2,25 × 0,5	=	28.91
Forecastle	7 × 1 × 0,75		5.25
			2015,66

Equipment (letter „t")

3 stockless bower anchors	6070 kilogs.	coll.
1 stream anchor	560 "	excl. stock
440 metres chain cable	47.5 m/m dia.	stud link
135 -"- flex. steel wire	95 circ	6×24 wires
185 -"- —"—	89 -	
165×2 -"- —"—	57 -	
165×2 -"- —"—	51 -	

End laps. Riveling

Keel plate butt straps treble throughout
End laps of center girder -"- —"-
" " " bottom plates -"- —"-
" " " Side -"- treble to double
" " " Sheer strake Quadruple to double

End laps and seams in inner bottom plating and margin plates to be electrically welded.

The current of the Generators to be obtained per Sec 1 para 1 of the Rules for Electric Arc Welding

6p°
seam and end lap
1.5 m/m
3
seams to margin plate

Detail of welding.

With a freeboard corresponding to a draught not exceeding that contemplated by the Rules for a C.S.S vessel

Class: Lloyds 100.A.1 ✠.

strengthened for navigation in ice.

Dimensions.

Length between PP.	91.44	metres
Breadth moulded	13.41	"
Depth -"- to 2nd deck	5.82	"
Height of superstruct.	2.44	"

Frans Gorthon

S/S [redacted],283.	DATO	TEGN. KFR.
	2½-36	H.H. K
	FORANDRET	
MIDSHIP SECTION	9/12-36	T.J.
SKALA: 1/25	ERST. FOR	S. 10820
A/S FREDRIKSSTAD MEK. VERKSTED	ERST. AV	

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