

Rpt. 1.

STEEL STEAMER or MOTORSHIP.

Received at London Office 10 JAN 1936

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

8th January, 1936

Port of

Malmö

No. 1421.

Survey held at

Malmö

Date First Survey 31st January, 1935

Last Survey

2nd January, 1936.

On the

Single Screw Motor Tanker

"ORION"

(Machinery)

State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings)

Single Screw Motor Tanker

State Type of Erections Prop, Bridge & Sls.

TONNAGE under Tonnage Deck...

7422.68

CLASS 100 A1

State if with freeboard as condition of Class

No

Built at

Malmö

Do. of space or spaces between Tonnage Dk. and Upper Dk.

Total

Gross Tonnage

8063.64

Register Tonnage

4750.80

REGISTERED DIMENSIONS.

FEET.

Length

461.6

Breadth

59.8

Depth

34.6

Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a)

L 460.0

Breadth (greatest moulded)

B 59.5

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

D 34.58

1st Longitudinal Number (L x D)

= 15640.0

2nd Numeral L x (B + D)

= 43010.0

Framing Depth "d" at middle of length. See Sec. 3 (1d)

13.3

Proportions—Depth to Length—Uppermost continuous deck to top of keel

Do. Long Bridge to top of keel

27'-2 9/8"

Draught Moulded

Launched 17th Aug, 1935 Yard No. 184

Builders

Kockums Mekan. V. AB

Owners

Smiths Lönnermans Tankrederi AS

Managers

J. H. Smiths Lönnermans

Residence

Årstadal

Port of Registry

Årstadal

If surveyed while building, afloat, or in dry dock

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. |
|--|--------------------------|--|---|--|
| FRAMES, Spacing amidships | <i>Longitudinal</i> | | Bracket Floors, Frame | |
| " " from 1/3 length to Collision bulkhead | <i>framing</i> | | " " Reversed Frame | |
| " " in peaks | 24 | | " " Vertical Struts | |
| " " DB. under motor room | 30 | | Centre Girder, depth and thickness amidships | <i>in motor space</i> 60 54 46 |
| " " Deep tank fwd. | 27 | | " " top Angles | <i>Double</i> 90 90 12.5 |
| SIDE FRAMING. | <i>See Rpt. 1*</i> | | " " bottom Angles | 150 150 14 |
| Frame Amidships, Angle, [or] | | | " " bottom Angles | 130 130 14 |
| " " Extends up to | | | Side Girders, No. each side and thickness | 3 42 |
| Reversed Frame Amidships, Angle | | | " " + 1/2 height in ang. | |
| " " Extends up to | | | Margin Plate depth (excl. of flange) and thickness | <i>Tank top level</i> 54 |
| Depth of Framing Girder | | | " " Vertical Angle to Tank side Bracket abaft 1/4 len. from stem | |
| Frames in Uppermost Continuous Decks, Angle, [or] | | | " " Vertical Angle to Tank side Bracket forward 1/4 len. from stem | |
| " " Second 'tween Decks, Angle, [or] | | | " " Gussets, spacing and scantling abaft 1/4 len. from stem | |
| " " Third " " " | 150 150 12.5 | | " " Gussets, spacing and scantling forward 1/4 len. from stem | |
| <i>after</i> Framing in Peaks, Angle [or] | 200 90 12.5 | | Tank Side Brackets, height above base line at toe of Frame and thickness | |
| Diameter and Spacing of Rivets through Frame and Shell Plating amidships | <i>See Rpt. 1*</i> | | INNER BOTTOM PLATING, Motor space | |
| State if Frame Joggled | <i>Yes</i> | | Breadth and thickness of Middle Line Strake | 69 1/2 52 |
| PANTING ARRANGEMENTS (Sec. 7), state system and particulars | <i>As per Appr. plan</i> | | Thickness of remainder in Hold | <i>Motor space</i> 52 |
| STRENGTHENING OF BOTTOM FORWARD. State Particulars | <i>As per Appr. plan</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>Yes</i> |
| SINGLE BOTTOM. | | | BEAMS. | |
| Floors, Depth and thickness at mid-line in Holds | | | Uppermost Continuous Deck, amidships in Wells, Angle, [or] | <i>See Rpt. 1*</i> |
| Height of Brackets at side above base line at toe of frame | | | " " in way of Bridge, Angle, [or] | <i>See Rpt. 1*</i> |
| Middle Line Keelson, on Floors, Angles, [or] | | | Spacing | 200 75 10 |
| " " Through Plate or Intercoastal Plate | | | Second Deck, amidships, Angle, [or] | 230 90 12 |
| " " Foundation Plate on Floors | | | Spacing | 280 90 13.5 |
| " " Flat Plate Keel Angles | | | Third Deck, amidships, Angle, [or] | <i>See Rpt. 1*</i> |
| Side Keelsons, No. each side | | | Spacing | <i>See Rpt. 1*</i> |
| " " thickness of Intercoastal Plate | | | Fourth Deck, amidships, Angle, [or] | |
| " " Angles | | | Spacing | |
| DOUBLE BOTTOM <i>in motor space</i> | | | Poop Deck, Angle, [or] | |
| Solid Floors, thickness and spacing | 42 30 | | Spacing | |
| " " Are Frame and Reversed Frame joggled? | <i>Yes</i> | | Bridge Deck, Angle, [or] | <i>See Rpt. 1*</i> |
| Bracket Floors, breadth and thickness at middle line | | | Spacing | |
| " " breadth and thickness at margin plate | | | Forecastle Deck, Angle, [or] | |
| | | | Spacing | |

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PILLARS AND DECKS.

| | 8 mm. | | | Any Departure from Approved Plans to be Noted. | | | Inches in Ship. | | | Any Departure from Approved Plans to be Noted. | | |
|---|-----------|--|--|--|--|--|-----------------|--|--|--|--|--|
| | Angr plan | | | | | | | | | | | |
| PILLARS, No. of Rows..... | | | | | | | | | | | | |
| " " | | | | | | | | | | | | |

SHELL PLATING.

| SCANTLINGS. | | | | | | RIVETING. | | | | | | |
|---|---------------|------------|------------|------------|--|-------------------------------|---------|-----------------------|---------------------------|---------|-----------------------|------------------------|
| STRAKES. | AS IN VESSEL. | | | | ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED. | EDGES. ✓ State if joggled? | | | 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. | | | | | | | | |
| FLAT PLATE KEEL | 50 1/2 | 1.01 | 94-80 | 94-80 | ✓ | Double | 2 1/8 | 115 | Three | 2 1/8 | 115 | Straps |
| " DBLG. (if any) | | | | | | | | | | | | |
| BOTTOM PLATING, No. of Strakes ... | 76 1/4 | .60 | 76-52 | 50-67 | ✓ | } | 2 1/2 | 90 | Four | 2 1/2 | 90 | Lapped |
| BILGE PLATING, No. of Strakes ... | 75 1/2 | .66 | .54 | | ✓ | | 2 1/2 | 90 | " | 2 1/2 | 90 | " |
| SIDE PLATING, No. of Strakes ... | 51-81 1/2 | .62 | .48 | 47-67 | ✓ | | 2 1/2 | 80 | " | 2 1/2 | 90 | " |
| UPPER DECK, Sheer-strake in Wells | 66 1/2-71 | .92 | 52-68 | 56-48 | ✓ | | 2 1/2 | 90 | Three | 2 1/2 | 100 | Straps |
| UPPER DECK, Sheer-strake in Bridge ... | 70 1/2 | 1.09 | | | ✓ | " | 2 1/2 | 90 | " | 2 1/2 | 115 | " " |
| POOP PLATING, No. of Strakes ... | 69 | .78 | 56-68 | 50-48 | ✓ | " | 2 1/2 | 90 | Four | 2 1/2 | 100 | Lapped |
| POOP SIDE PLATING | | | | 40-44-48 | ✓ | Straps | 1 1/2 | 75 | Two | 1 1/2 | 65 | " |
| BRIDGE SIDE PLATING ... | 43-51 | | | | ✓ | " | 2 1/2 | 90 | Two | 2 1/2 | 80 | " |
| FORECASTLE SIDE PLATING | | | 43 | | ✓ | " | 1 1/2 | 75 | One | 1 1/2 | 65 | " |

WATERTIGHT BULKHEADS.

Total No. of **W.T. BULKHEADS** in Vessel— 16
 Extending to Upper Deck (Sec. 3 c) 10 (at ship's sides)
 „ Deck next below 6 („ „ „)
 As per Rule ✓

| | | Plating Thickness. | STIFFENERS. | | | |
|------------------|-------------------|--------------------|-------------|----------|-------------|----------|
| | | | VERTICAL. | | HORIZONTAL. | |
| | | | Scantlings. | Spacing. | Scantlings. | Spacing. |
| MIDSHIP BULKH'D. | Summer tanks | 34-36 | One web | | 165x75x10.5 | 5 |
| | Upper tween decks | | | | 180x75x9.5 | 5 |
| | Mid. cofferdam | 37-55 | Two webs | | 180x75x10.5 | 5 |
| " | Second | | | | 300x90x14.5 | 5 |
| " | Third | 49-44-41 | " | " | 180x75x10.5 | 5 |
| " | Holds | 38-36-37 | | | 15x41x4x62 | 5 |
| COLLISION | (in Hold) | 29-.51 | 130x65x75 | 5 865 | 280x90x12.5 | 5 |
| | | 43-.64 | 180x75x10 | 5 760 | 230x90x11.5 | 5 |
| AFTER PEAK | | 33-.30 | 165x75x8.5 | 5 610 | | |

FORGINGS and CASTINGS.

| | Casting or Forging. | Scanilings. | Maker's Name. | Any departure from approved plans to be noted |
|--|----------------------|-------------|---------------------------|---|
| KEEL, Bar | | | | |
| STEM | Rolled | 254x70-60 | | ✓ |
| STERN FRAME { | Propeller Post | Cast. | As per app ⁿ . | |
| | Rudder " | Steel | plans | ✓ |
| RUDDER —A × D × 100 | | 2020 | | |
| Speed of Vessel | 12 knots. | | | ✓ |
| RUDDER main piece at head ... | Forg. | 235 mm | | ✓ |
| " " heel ... | Cast steel | 2020. | | |
| " how constructed | 2 plate | welded. | | |
| " double or single plate | | 13 mm. | | |
| " 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) *Open hearth process,
Lütchhoff's process (Wabauwerk Oberhausen), Mannesmann's process. Werke, Ag. Hünckelange,
Vereinigte Stahlwerke. Werke Floride.*

Has the Steel been tested as required by the Rules? *yes.*

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.)

Plans of the vessel as built, 2 in number is a Midship section, Profile & Plans also the following approved plans are forwarded under separate cover:

- ✓ Midship section and O.T. transverse bulkheads.
- ✓ Profile and deck plans.
- ✓ Fore and sections.
- ✓ After end sections. ✓ section in way of bridge.
- ✓ Oil fuel bunker.
- ✓ Transverse in pump room.
- ✓ Forward cofferdam bulkheads.
- ✓ Riveting of doublings at transverse O.T. bulkheads.

Plans common for 7/182, 183 and 184:-

- ✓ Shell expansion.
- ✓ After end sections.
- ✓ Double bottom with girders, floors and tank top.
- ✓ Seatings for main - auxiliary engines and thrust bearing.
- ✓ Stits through double bottom tank for cooling water inlet.
- ✓ Sketch showing welding of boundary angles.
- ✓ Stern frame and rudder.
- ✓ Plans of steering gear, main and aux. quadrants and pinions.

Certificates:-

- ✓ Stern frame.
- ✓ Rudder steel castings.
- ✓ Rudder head, pinions and mits.
- ✓ Main and auxiliary rudder quadrants, pinions and shaft.

| | | | | | | |
|---|-----------|---------|------|-----|---------|---|
| Particulars of Drop Test of Cast Steel Anchors, viz.:— Weight, Surveyor's Initials, Number of Certificate, Date of Test. | 1st Bower | 51:3.5 | F.S. | 14. | 20-8-35 | Shanks: { 29:0:26 F.S. 1593 20-8-35 29:1:20 F.S. 1594 20-8-35 29:3:3:17 F.S. 1595 20-8-35 |
| | 2nd " | 51:1:24 | F.S. | 15. | 20-8-35 | |
| | 3rd " | 43:3:21 | F.S. | 16 | 20-8-35 | |
| | Stream | 22:2:7 | F.S. | 17 | 20-8-35 | |

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop 102 ft., R.Q.D. ft., Bridge 37 ft., Forecastle 41 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 Skes.

Official No. : Signal Letters LJBS

Is bottom of Vessel coated with cement ✓ if not give

particulars of composition Cement in grates, fuel water tank and in the well at after end of the motor space.

PARTICULARS OF WATER BALLAST.—

| Where Fitted. | Length. Feet. | Water Capacity. Tons. | Where Fitted. | Length. Feet. | Water Capacity. Tons. |
|---|------------------|--------------------------|--|------------------|--------------------------|
| | | | | | |
| Double bottom, aft, | 69 | 68 | Fore peak tank, | 24 | 147 |
| Double bottom, under Engines and Boilers, <i>Send in tanks</i> | | 26 | After peak tank, | 21 | 168 |
| Double bottom, if under Engines <i>only</i> , <i>Under oil tanks</i> | | 92 | Deep tank, aft, <i>Cross bunker & wing tanks</i> | 10 | 453 |
| Double bottom, if under Boilers <i>only</i> , <i>Oil fuel tanks</i> | | | Deep tank, forward, | 36 | 535 |
| Double bottom, forward, | | | Other tanks, if fitted, | | |
| Total capacity of double bottom 186 | | | (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. 68

Date

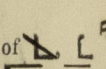















12th Jan. 1934.

Dates of Surveys held while building

31/1, 12/2, 14/2, 16/2, 18/2, 19/2, 20/2, 23/2, 24/2, 27/2, 28/2, 29/2, 3/3, 4/3, 7/3, 8/3, 9/3, 12/3, 13/3, 14/3, 15/3, 20/3, 21/3, 26/3, 1/4, 2/4, 5/4, 8/4, 9/4, 13/4, 15/4, 16/4, 18/4, 20/4, 24/4, 25/4, 26/4, 27/4, 29/4, 3/5, 4/5, 7/5, 9/5, 14/5, 15/5, 17/5, 20/5, 21/5, 24/5, 27/5, 28/5, 29/5, 31/5, 1/6, 4/6, 5/6, 6/6, 7/6, 11/6, 12/6, 13/6, 14/6, 15/6, 17/6, 18/6, 19/6, 20/6, 21/6, 22/6, 23/6, 24/6, 25/6, 26/6, 27/6, 28/6, 29/6, 30/6, 31/6, 1/7, 2/7, 3/7, 4/7, 6/7, 8/7, 10/7, 12/7, 13/7, 17/7, 18/7, 19/7, 20/7, 22/7, 23/7, 25/7, 26/7, 27/7, 30/7, 31/7, 3/8, 4/8, 5/8, 6/8, 7/8, 8/8, 9/8, 10/8, 11/8, 12/8, 13/8, 14/8, 15/8, 17/8, 18/8, 20/8, 19/9, 23/9, 9/10, 16/11, 21/11, 27/11, 29/11, 4/12, 19/12, 20/12, 27/12, 30/12, 1935, 2/1-1936.

Total No. of Visits 123

Kochers Yard No. 184 "ORION"
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 Bulkheads. | |
| | | Inch. | Inch. | Inch. | Inch. | Inch. | Inch. | Inch. | Inch. | Inch. | Inch. | Inch. | Diam. | Spang. | At Transverse. | At Bulkheads. | Number. | At Bulkheads. | |
| Framing of  | | mm. for L. mm. for C | | | mm. for L. mm. for C | | | mm. for L. mm. for C | | | mm. for L. mm. for C | | | mm. mm. | | mm. mm. | | mm. mm. | |
| Frames in Bridge 'tween Decks ... | | 165 | 75 | 95 | 165 | 75 | 95 | 165 | 75 | 95 | 165 | 75 | 95 | 19 | 115 | | | | |
| Frames from Uppermost Continuous Deck | | 230 | 90 | 11 | 230 | 90 | 11 | 230 | 90 | 11 | 230 | 90 | 11 | 25 | 150 | | | 7 | 88 |
|  32" | | 230 | 90 | 11 | 230 | 90 | 11 | 230 | 90 | 11 | 230 | 90 | 11 | 22 | 135 | | | 7 | 88 |
|  30" | | 250 | 90 | 12 | 250 | 90 | 12 | 250 | 90 | 12 | 250 | 90 | 12 | 22 | 135 | | | 7 | 88 |
|  30" | | 280 | 90 | 12 | 280 | 90 | 12 | 280 | 90 | 12 | 280 | 90 | 12 | 22 | 135 | | | 7 | 88 |
|  30" | | 280 | 90 | 12 | 280 | 90 | 12 | 280 | 90 | 12 | 280 | 90 | 12 | 22 | 135 | 10 | 100 | 9 | 88 |
|  30" | | 280 | 90 | 14 | 280 | 90 | 14 | 280 | 90 | 14 | 280 | 90 | 14 | 22 | 135 | 10 | 100 | 9 | 88 |
|  30" | | 300 | 90 | 13 | 300 | 90 | 13 | 300 | 90 | 13 | 300 | 90 | 13 | 22 | 135 | 10 | 100 | 9 | 88 |
|  30" | | 300 | 90 | 13.5 | 300 | 90 | 13.5 | 300 | 90 | 13.5 | 300 | 90 | 13.5 | 22 | 135 | 10 | 100 | 9 | 88 |
|  30" | | 300 | 90 | 15.5 | 300 | 90 | 15.5 | 300 | 90 | 15.5 | 300 | 90 | 15.5 | 22 | 135 | 10 | 80 | 9 | 88 |
|  30" | | 12x50x4-4x62 | | | 12x50x4-4x62 | | | 12x50x4-4x62 | | | 12x50x4-4x62 | | | 22 | 135 | 10 | 80 | 9 | 88 |
|  30" | | 15x41x4-4x62 | | | 15x41x4-4x62 | | | 15x41x4-4x62 | | | 15x41x4-4x62 | | | 22 | 135 | 10 | 80 | 9 | 88 |
|  30" | | 17x48x4-4x68 | | | 17x48x4-4x68 | | | 17x48x4-4x68 | | | 17x48x4-4x68 | | | 22 | 135 | 10 | 80 | 11 | 89 |
|  30" | | 17x57x4-4x68 | | | 17x57x4-4x68 | | | 17x57x4-4x68 | | | 17x57x4-4x68 | | | 22 | 135 | 10 | 80 | 11 | 89 |
|  30" | | 17x48x4-4x68 | | | 17x48x4-4x68 | | | 17x48x4-4x68 | | | 17x48x4-4x68 | | | 22 | 135 | 10 | 80 | 11 | 89 |
|  30" | | 15x57x4-4x62 | | | 15x57x4-4x62 | | | 15x57x4-4x62 | | | 15x57x4-4x62 | | | 22 | 135 | 10 | 80 | 11 | 89 |
|  30" | | 15x48x4-4x62 | | | 15x48x4-4x62 | | | 15x48x4-4x62 | | | 15x48x4-4x62 | | | 22 | 135 | 10 | 80 | 11 | 89 |
| Spacing of Longitudinal Frames | | Amidships | | | At Ends | | | Amidships | | | At Ends | | | | | | | | |
| | | See above | | | Same as amidsh. | | | | | | | | | | | | | | |
| DEEP | | | | | | | | | | | | | | | | | | | |
| Double Bottom | | | | | | | | | | | | | | | | | | | |
| Tank Top Longitudinals | | | | | | | | | | | | | | | | | | | |
| FPT | | | | | | | | | | | | | | | | | | | |
| Bottom | | | | | | | | | | | | | | | | | | | |
| Spacing of Longitudinals | | Amidships | | | At Ends | | | Amidships | | | At Ends | | | | | | | | |
| | | | | | 30" | | | | | | 30" | | | | | | | | |
| Transverses. | | mm. for PL. mm. for F | | | mm. for PL. mm. for F | | | mm. for PL. mm. for F | | | mm. for PL. mm. for F | | | Rivets in Lugs to Shell | | | | | |
| In Bridge | | 24"-30"x38" | | | 24"-30"x38" | | | 24"-30"x38" | | | 24"-30"x38" | | | mm. mm. | | | | | |
| POOP & FCLE | | 18x38 POOP | | | 18x38 POOP | | | 18x38 POOP | | | 18x38 POOP | | | | | | | | |
| 'tween Decks | | 21x38 FCLE | | | 21x38 FCLE | | | 21x38 FCLE | | | 21x38 FCLE | | | | | | | | |
| Face Angles | | 18x38 POOP | | | 18x38 POOP | | | 18x38 POOP | | | 18x38 POOP | | | | | | | | |
| Lugs to Shell* | | 75x75x9.5 | | | 75x75x9.5 | | | 75x75x9.5 | | | 75x75x9.5 | | | 22 | | 100 B | | | |
| Depth and Thickness | | 90x90x9.5 | | | 90x90x9.5 | | | 90x90x9.5 | | | 90x90x9.5 | | | 19 | | 90 P.F. | | | |
| In Upper 'tween Decks. | | 30"x40 | | | 30"x40 | | | 30"x40 | | | 30"x40 | | | | | | | | |
| Face Angles | | 24x40 F | | | 24x40 F | | | 24x40 F | | | 24x40 F | | | | | | | | |
| Lugs to Shell* | | 90x90x10 | | | 90x90x10 | | | 90x90x10 | | | 90x90x10 | | | | | | | | |
| Depth and Thickness | | 90x90x10 | | | 90x90x10 | | | 90x90x10 | | | 90x90x10 | | | 22 | | 100 | | | |
| Face Angles | | BOTT. 76"x48 | | | BOTT. 76"x48 | | | BOTT. 76"x48 | | | BOTT. 76"x48 | | | | | | | | |
| Lugs to Shell* | | SIDES. 48-66x48 | | | SIDES. 48-66x48 | | | SIDES. 48-66x48 | | | SIDES. 48-66x48 | | | | | | | | |
| In Hold. | | BOTT. 150x90x11 | | | BOTT. 150x90x11 | | | BOTT. 150x90x11 | | | BOTT. 150x90x11 | | | | | | | | |
| Face Angles | | SIDES. 150x90x10 | | | SIDES. 150x90x10 | | | SIDES. 150x90x10 | | | SIDES. 150x90x10 | | | | | | | | |
| Lugs to Shell* | | 150x150x12 | | | 150x150x12 | | | 150x150x12 | | | 150x150x12 | | | 22 | | 100 | | | |
| Back Bars | | 90x90x12 | | | 90x90x12 | | | 90x90x12 | | | 90x90x12 | | | | | | | | |
| Brackets | | 150x150x12.5 | | | 150x150x12.5 | | | 150x150x12.5 | | | 150x150x12.5 | | | | | | | | |
| Spacing of Transverse Frames | | 9'-13'-9' | | | 7'-6" TO 10'-0" A | | | 9'-13'-9' | | | 7'-6" TO 10'-0" A | | | | | | | | |
| | | | | | 6'-9" " 11'-3" F | | | | | | 6'-9" " 11'-3" F | | | | | | | | |
| Longitudinal Beams of L, C or C | | 150 75 8 | | | 150 75 8 | | | 150 75 8 | | | 150 75 8 | | | 34-38 | | | | | |
| Bridge Deck | | 230 90 11 | | | 165x75x8 A | | | 230 90 11 | | | 165x75x8 A | | | 29 3/4-34 | | | | | |
| Upper | | 250 90 11 | | | 165x75x9 F | | | 250 90 11 | | | 165x75x9 F | | | 31 1/2-34 | | | | | |
| Second POOP & FCLE | | 230 90 11.5 | | | 165x75x9.5 A | | | 230 90 11.5 | | | 165x75x9.5 A | | | 24 1/2-37 | | | | | |
| | | | | | 150x75x8 | | | | | | 150x75x8 | | | 28-36 | | | | | |
| | | | | | 150x75x8 | | | | | | 150x75x8 | | | | | | | | |
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