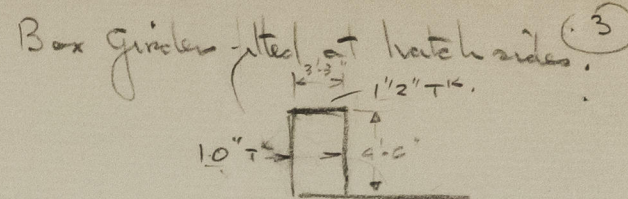


# MODULUS OF SECTION

NAME:— EUROPE

Particulars of Vessel

Height of Assumed Axis above Keel



| BELOW ASSUMED AXIS.       |            |       |    |     |                   |    |                   | ABOVE ASSUMED AXIS.        |            |         |       |         |                   |     |                   |
|---------------------------|------------|-------|----|-----|-------------------|----|-------------------|----------------------------|------------|---------|-------|---------|-------------------|-----|-------------------|
| ITEM.                     | SCANTLING. | AREA. | h. | Ah. | Ah <sup>2</sup> . | d. | Ad <sup>2</sup> . | ITEM.                      | SCANTLING. | AREA.   | h.    | Ah.     | Ah <sup>2</sup> . | d.  | Ad <sup>2</sup> . |
| FLAT KEEL ...             |            |       |    |     |                   |    |                   | VERT. TOP DECK STRINGER    | 2x54x1.0   | 108.00  | 21.50 | 2322.0  | 49920             | 4.5 | 2210              |
| " " " "                   |            |       |    |     |                   |    |                   | " " "                      | 39x1.5     | 58.50   | 23.75 | 1389.5  | 33000             | ✓   |                   |
| CENTRE GIRDER PLATE ...   |            |       |    |     |                   |    |                   | " " ANGLE ...              |            |         |       |         |                   |     |                   |
| " " BOTTOM ANGLES         |            |       |    |     |                   |    |                   | " " PLATING...             |            |         |       |         |                   |     |                   |
| " " TOP ANGLES            |            |       |    |     |                   |    |                   | 2ND DECK STRINGER          |            |         |       |         |                   |     |                   |
| CENTRE STRAKE TANK TOP... |            |       |    |     |                   |    |                   | " " ANGLE ...              |            |         |       |         |                   |     |                   |
| MARGIN PLATE ...          |            |       |    |     |                   |    |                   | " " PLATING                |            |         |       |         |                   |     |                   |
| " ANGLES ...              |            |       |    |     |                   |    |                   | 3RD DECK STRINGER          |            |         |       |         |                   |     |                   |
| BOTTOM PLATING ...        |            |       |    |     |                   |    |                   | " " ANGLE ...              |            |         |       |         |                   |     |                   |
| BILGE PLATING ...         |            |       |    |     |                   |    |                   | " " PLATING                |            |         |       |         |                   |     |                   |
| SIDE PLATING ...          |            |       |    |     |                   |    |                   | 4TH DECK STRINGER          |            |         |       |         |                   |     |                   |
| TANK TOP PLATING...       |            |       |    |     |                   |    |                   | " " ANGLE ...              |            |         |       |         |                   |     |                   |
| No. 1 SIDE STRINGER PLATE |            |       |    |     |                   |    |                   | " " PLATING                |            |         |       |         |                   |     |                   |
| " " " ANGLES              |            |       |    |     |                   |    |                   | SHEERSTRAKE                |            |         |       |         |                   |     |                   |
| No. 2 " " PLATE           |            |       |    |     |                   |    |                   | " "                        |            |         |       |         |                   |     |                   |
| " " " ANGLES              |            |       |    |     |                   |    |                   | STRAKE BELOW SHEERSTRAKE   |            |         |       |         |                   |     |                   |
| No. 3 " " PLATE           |            |       |    |     |                   |    |                   | SHELL PLATING ...          |            |         |       |         |                   |     |                   |
| " " " ANGLES              |            |       |    |     |                   |    |                   | SIDE STRINGER PLATE        |            |         |       |         |                   |     |                   |
| SIDE KEELSON PLATE ...    |            |       |    |     |                   |    |                   | " " ANGLES                 |            |         |       |         |                   |     |                   |
| " " TOP ANGLES            |            |       |    |     |                   |    |                   |                            |            |         |       |         |                   |     |                   |
| " " BOTTOM "              |            |       |    |     |                   |    |                   |                            |            |         |       |         |                   |     |                   |
|                           |            |       |    |     |                   |    |                   | As Before. (1)             |            | 139.47  |       | 5770.2  | 87555             |     | 65106             |
|                           |            |       |    |     |                   |    |                   | TOTALS ABOVE ASSUMED AXIS. |            | 605.97  |       | 9481.7  | 170475            |     | 67316             |
|                           |            |       |    |     |                   |    |                   | " BELOW ASSUMED AXIS.      |            | 889.50  |       | 10519.8 | 137547            |     | 26076             |
|                           |            |       |    |     |                   |    |                   | SUM OR DIFFERENCE          |            | 1495.47 | .694  | 1038.1  | 308022            |     | 93392             |
|                           |            |       |    |     |                   |    |                   | Ad <sup>2</sup> /12        |            |         |       |         | 7782              |     | 7782              |
|                           |            |       |    |     |                   |    |                   |                            |            |         |       |         | 315804            |     |                   |

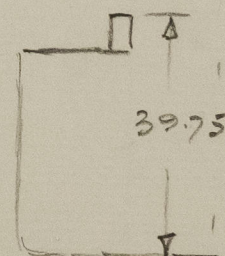
Standard  $I_y = 27415$

| SUMMARY.  |             |
|---|-------------|
| MOMENT OF INERTIA ABOUT ASSUMED AXIS ...          | (1.) 315804 |
| NEUTRAL AXIS ABOVE BELOW ASSUMED AXIS (x) ...     | (2.) .694   |
| TOTAL AREA $\times x^2$ ...                       | (3.) 720    |
| CORRECTED INERTIA (ONE SIDE ONLY) = (1.)-(3.) ... | (4.) 315084 |
| CORRECTED INERTIA (BOTH SIDES) ...                | 630168      |
| VALUE OF "Y" AT TOP OF GUNWALE BAR Box Girder ... | 24.414      |
| MODULUS OF SECTION AT GUNWALE ...                 | 25780       |
| VALUE OF "Y" AT KEEL ...                          | 15.306      |
| MODULUS OF SECTION AT KEEL ...                    |             |

N.B.—The assumed axis is to be taken below lowest deck. The Top Deck is the uppermost strength deck, and other decks are to be numbered from that deck.

Initials \_\_\_\_\_

Date \_\_\_\_\_



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MOTOR TANKER

EUROPE



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