



## TECHNICAL SPECIFICATIONS

|  |                  |
|--|------------------|
| Built  | 2009             |
| Classification   | Lloyd's Register |
| Length Overall (m)   | 197.10           |
| Length Between Perps (m)                                     | 188.40           |
| Breadth Moulded (m)  | 32.20            |
| Depth Moulded (m)  | 17.75            |
| Total Hold Capacity (m <sup>3</sup> )<br>(including hatches) | 45,708.50        |
| Deadweight (t)   | 47,556           |
| Draught Summer (m)   | 11.517           |
| Gross Tonnage  | 33,047           |
| Net Tonnage  | 11,140           |
| Bow Thruster (kW)  | 1,119            |
| Length of Boom (m)   | 76.20            |
| Discharge Rate: Coal,<br>Gypsum, Aggregates (mt/hr)          | 2,500            |
| Discharge Rate: Iron Ore<br>(mt/hr)                          | 3,000            |

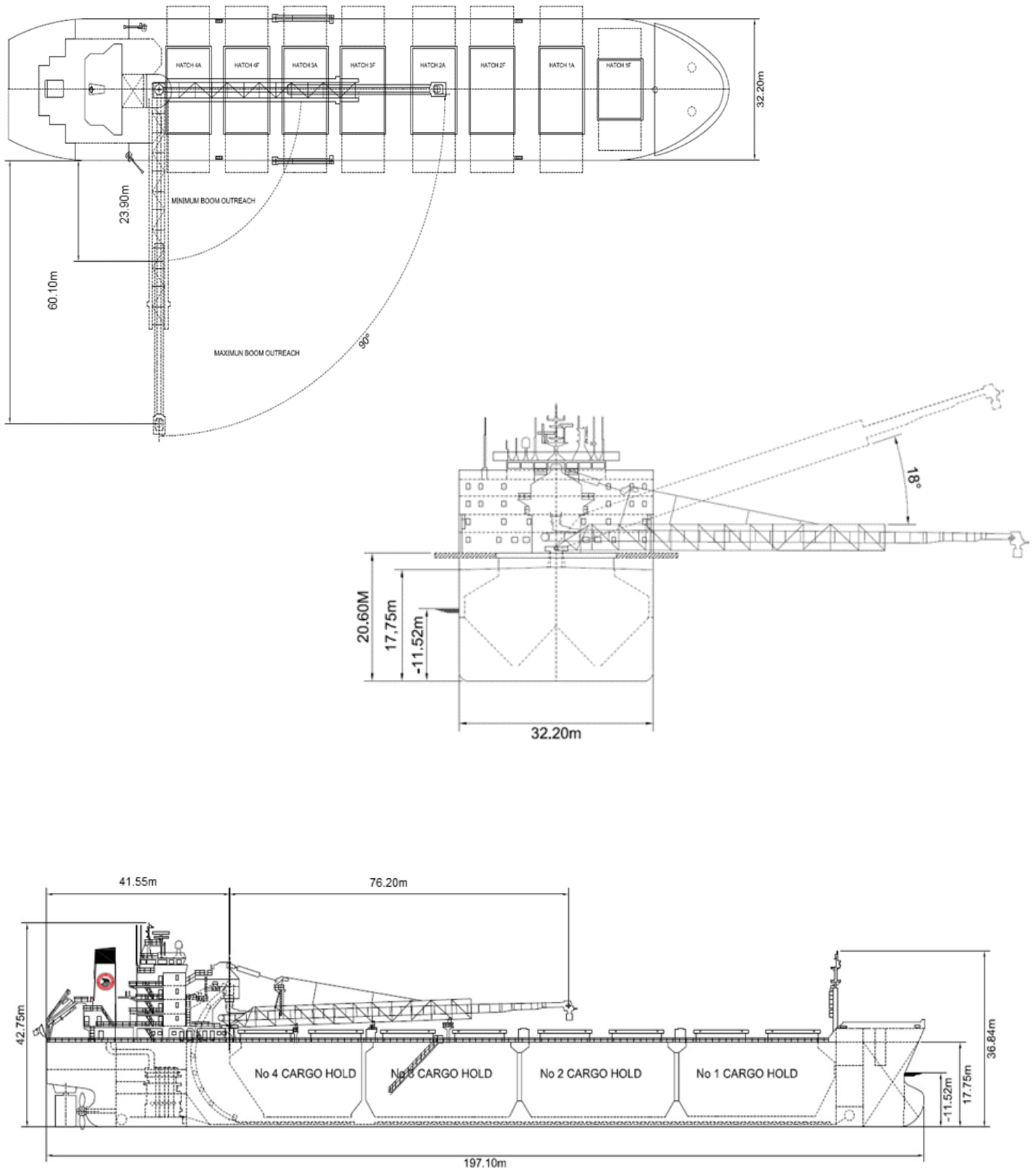
*Algoma Integrity* is a self-unloading bulk carrier with four cargo holds, strengthened for heavy cargoes, loaded through eight hatches.

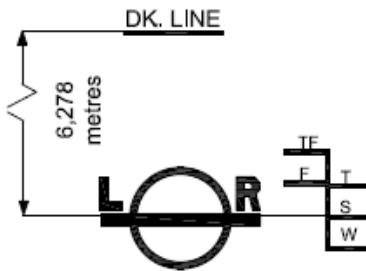
The discharge is gravity fed through the gate system via two longitudinal conveyor belts feeding to a central C-Loop that lifts the cargo onto the telescopic boom conveyor and ashore.

Discharge rate is variable to the maximum of 3,000 metric tonnes and 2500 cubic metres per hour for volumetric cargoes.

Using the flexible boom and precise control of the discharge rate makes the vessel suitable for discharge to almost any receiving facility including enclosed hoppers, barges and trucks. The vessel is double hulled, including bunker tanks, and utilizes a bow thruster and high-lift rudder to give excellent handling characteristics.

# ALGOMA INTEGRITY





| DEADWEIGHT SCALE - M/V Algoma Integrity |        |             |        |                          |                 |                        |           |          |  |
|---|--------|-------------|--------|--------------------------|-----------------|------------------------|-----------|----------|--|
| DRAFT                                   |        |             |        | DISPLACEMENT<br>(tonnes) | TPC<br>(tonnes) | DEADWEIGHT<br>(tonnes) | DRAFT     |          |  |
| Sea Water                               |        | Fresh Water |        |                          |                 |                        | Sea Water |          |  |
| (metres)                                | (feet) | (metres)    | (feet) |                          |                 |                        | (feet)    | (metres) |  |
|   | 42     |             | 42     |                          |                 |                        | 42        |          |  |
| 12                                      | 40     |             | 40     |                          |                 | 50,000                 | 40        | 12       |  |
|   | 38     | 12          | 40     | 60,000                   |                 |                        | 38        |          |  |
| 11                                      | 36     |             | 38     | 55,000                   | 59              | 45,000                 | 36        | 11       |  |
|   | 34     | 11          | 36     |                          |                 | 40,000                 | 34        |          |  |
| 10                                      | 32     |             | 34     | 50,000                   | 58              |                        | 32        | 10       |  |
|   | 30     | 10          | 32     |                          |                 | 35,000                 | 30        |          |  |
| 9                                       | 28     |             | 30     | 45,000                   | 56              |                        | 28        | 9        |  |
|   | 26     | 9           | 28     |                          |                 | 30,000                 | 26        |          |  |
| 8                                       | 24     |             | 26     | 40,000                   | 54              |                        | 24        | 8        |  |
|   | 22     | 8           | 24     |                          |                 | 25,000                 | 22        |          |  |
| 7                                       | 20     |             | 22     | 35,000                   | 53              |                        | 20        | 7        |  |
|   | 18     | 7           | 20     |                          |                 | 20,000                 | 18        |          |  |
| 6                                       | 16     |             | 18     | 30,000                   | 52              |                        | 16        | 6        |  |
|   | 14     | 6           | 16     |                          |                 | 15,000                 | 14        |          |  |
| 5                                       | 12     |             | 14     | 25,000                   | 51              |                        | 12        | 5        |  |
|   | 10     | 5           | 12     |                          |                 | 10,000                 | 10        |          |  |
| 4                                       | 8      |             | 10     | 20,000                   | 50              |                        | 8         | 4        |  |
|   | 6      | 4           | 8      |                          |                 | 5,000                  | 6         |          |  |
| 3                                       |        |             | 6      | 15,000                   | 49              |                        |           | 3        |  |
|   |        | 3           |        |                          |                 | 0                      |           |          |  |
| 2                                       |        |             |        | 10,000                   |                 |                        |           | 2        |  |
|   |        | 2           |        |                          |                 |                        |           |          |  |
|   |        |             |        |                          |                 |                        |           |          |  |

LIGHTSHIP  
12,606 tonnes

## HATCH AND HOLD SPECIFICATIONS

### HOLD VOLUMES (CUBIC METRES)

| HOLD NUMBER     | 1         | 2         | 3         | 4        | TOTAL     |
|-----------------|-----------|-----------|-----------|----------|-----------|
| Cubic (Maximum) | 11,905.70 | 12,382.80 | 12,382.80 | 9,037.20 | 45,708.50 |

### HOLD OPENINGS IN METRES

| NUMBER OF OPENINGS        | 1F    | 1A    | 2F    | 2A    | 3F    | 3A    | 4F    | 4A    |
|---------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Opening Length            | 11.20 | 11.20 | 11.20 | 11.20 | 11.20 | 11.20 | 11.20 | 11.20 |
| Opening Width             | 13.40 | 19.20 | 19.20 | 19.20 | 19.20 | 19.20 | 19.20 | 19.20 |
| Coaming Height Above Keel | 19.85 | 19.85 | 19.85 | 19.85 | 19.85 | 19.85 | 19.85 | 19.85 |

### HATCH INFORMATION (METRES)

| DESCRIPTION                 | Side-Rolling Panels |       |       |       |       |       |       |       |
|-----------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|
| Operation                   | Hydraulic           |       |       |       |       |       |       |       |
| Hatch Length                | 11.52               | 11.52 | 11.52 | 11.52 | 11.52 | 11.52 | 11.52 | 11.52 |
| Hatch Width                 | 13.78               | 19.58 | 19.58 | 19.58 | 19.58 | 19.58 | 16.15 | 19.58 |
| Hatch Top Height Above Keel | 20.48               | 18.70 | 18.70 | 18.70 | 18.70 | 18.70 | 18.70 | 18.70 |

## CARGO HANDLING EQUIPMENT

Two Hold Conveyors

Two Transfer Conveyors

One Boom Conveyor

One "C" Loop Conveyor

All conveyors are driven by variable speed motors, gears and couplings

Discharging is done through hydraulically operated gates fitted to outlet hoppers in the bottom of cargo holds

Boom Belt - Wide: 1,600 mm

Tunnel Belts - Wide: 2,000 mm

Transfer Belts - Wide: 2,000 mm

"C" Loop Belt - Wide: 2,750/2,600 mm

Dust Suppression: Water spray systems on the hold, transfer, C-Loop Chutes and on the Boom end

Discharge rate 2,500 m<sup>3</sup>/hr or 3000 mt/hr whichever is first reached

Maximum Boom outreach: 76.20 m (telescopic shuttle conveyor)

## SPEED | CONSUMPTION

|           | SPEED  |         | CONSUMPTION |         |      |
|-----------|--------|---------|-------------|---------|------|
|           | Loaded | Ballast | Loaded      | Ballast | Port |
| At Sea    | 11.75  | 12.50   | 25.75       | 24.75   | N/A  |
| Loading   |        |         |             |         | 2.70 |
| Discharge |        |         |             |         | 5.00 |

## ASSIGNED DRAFT

| Season | Draft (Tonnes) | Displ. (Tonnes) | DWT (Tonnes) |
|--------|----------------|-----------------|--------------|
| TF     | -              | -               | -            |
| F      | 11.771         | 60,098          | 47,492       |
| T      | 11.757         | 61,582          | 48,977       |
| S      | 11.517         | 60,162          | 47,556       |
| W      | 11.277         | 58,762          | 46,138       |

All specifications given in good faith but without guarantee.