

TOTE ORCA CLASS TRAILERSHIP FACT SHEET

Principal characteristics

Length Overall	839'-0"
Beam	118'-0"
Depth (at Spar Deck, amidships).....	90'-0"
Maximum Draft	29'-0"
Speed at 90% MCR	24 kts.
Trailer Capacity	600 F.E.U.
Auto Capacity	200
Cargo Deck Area	360,000 sq. ft.
Design Displacement	45,472 LT
Lightship Weight.....	22,675 LT

Trade

Transports trucks, cars, trailers, trailer-borne products and equipment, military equipment, military equipment, and project cargo between the ports of Tacoma, Washington and Anchorage, Alaska.

Hull Arrangement

- Raised fo'c's'le deck, with turtleback; transom stern; bulbous bow; deckhouse aft
- Six decks with fixed ramps fore and aft
- Ice belt strengthening
- Twin gondolas
- Semi-balanced Mariner type rudders
- Quarters for 35 persons, including crew of 22

Cargo System

- Enhanced integration of ship design for shore-based ramp structure
- Open deck cargo protection with covered fo'c's'le
- Increased deck strengthening
- 200 refer receptacles
- Electric ramp de-icing system
- List compensation system

Propulsion Plant

- Twin-screw diesel-electric with total installed power of 52.2 mW
- Main engines: 4 (each) MAN B&W 9L 58/64 and 2 (each) MAN B&W 9L 27/38 medium speed diesels at 400 and 720 rpm respectively
- The diesel engines are designed to operate on both Heavy Fuel Oil, ISO 8217 Grade RMHSS or Marine Diesel Oil, ISO 8217 Grade DMC
- The electric propulsion plant is an Alstom 6.6 kV system; each motor is synchronous, variable speed, reversible, brushless, double-wound and rated at 19.75 mW at 125 rpm
- Synchro converters to facilitate starting and speed control of main propulsion motors

Hull Machinery

- 8 self-contained electro-hydraulic mooring winches
- 2 anchor windlass/mooring winch combinations
- 2 steel, high-holding-type anchors
- 6 side port openings without doors
- 7 internal cargo hold doors, hydraulically operated
- 24 winches for shore-side ramp handling
- 2 electro-hydraulic ram type steering gears
- 2 ice-strengthened five-bladed propellers

Navigation and Communications

- Ship Route Planning computer system
- GMDSS Radio System
- 2 radar systems, one 10 cm and two 3 cm systems, all with CAS
- Dual adaptive gyro-pilot steering systems

Shipboard Automation

- Power Management System for automatic control of electrical power generation and distribution
- Machinery Centralized Control System including plant control, alarm and monitoring



Design and Construction for
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by

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