

RELIANCE / 650 - CLASS ARTICULATED TUG BARGE



The Reliance / 650 Class Articulated Tug Barges (ATBs) incorporate the latest advances in environmental safety along with improvements in hull design to deliver the most advanced and efficient tug barge combinations currently available. Making use of an articulated connection system, the tug mates into a specially designed notch in the stern of the barge. The sophisticated connection allows the tug and barge to move fluidly as one unit in the most adverse seas thereby providing increased service reliability not achievable with a conventional tug and barge. With the barge's advanced hull shape and articulated connection system, the unit is able to achieve a service speed of 12 kts.

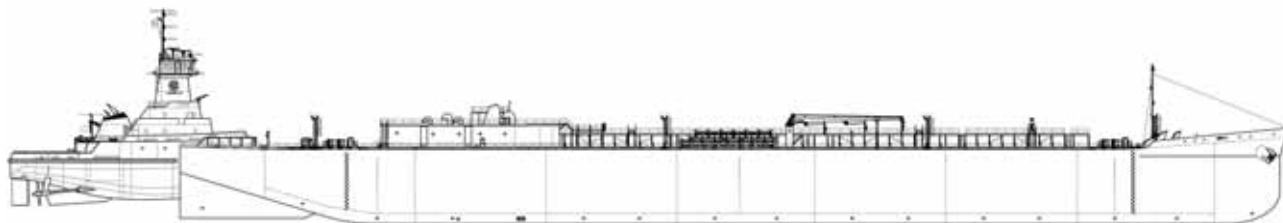
Barges are double hulled and tugs double sided for maximum protection and safety. The barges were built, documented and maintained to the stringent requirements of American Bureau of Shipping (ABS) SafeHull. They have sophisticated inert gas generating systems, vapor recovery systems, fully redundant ballast systems, flexible and highly efficient cargo systems, closed radar tank gauging systems, and advanced mooring systems.

Tugs meet all SOLAS (Safety Of Life At Sea) and ABS criteria, and have foam capable fire monitors; twin fuel efficient, low emission electronic diesel engines; noise reduction packages as well as other upgrades to increase performance and ensure safe, reliable operation. The tugs and barges carry communication and navigation equipment that is among the most technologically advanced in the industry today.

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RELIANCE / 650 CLASS SPECIFICATIONS:

Tug Specifications:

LOA: 126' 9"
Beam: 42'
Depth: 22' 1"
Draft: 19'
Gross Tons: Under 300
Fuel Capacity: 160,000 gallons

- Twin Screw low emission Caterpillar 3612 B electronically controlled engines generate a total of 9280 Horsepower.
- Proven design for full ocean service - The robust Intercon notch connection system enables US Gulf to West Coast, U.S. Gulf to East Coast and Inter-West Coast trading capability.
- 12 knot guaranteed speed up to and including a Beaufort 5 sea condition.
- Double sided tug for added environmental protection.
- Redundant steering system with oversized rudders for maximum handling capability.
- Foam Fire-fighting system and monitor mounted on tug for enhanced firefighting ability.
- Tug meets full SOLAS criteria, for enhanced safety of the crew.

Barge Specifications:

LOA (barge): 587' 4-1/2"
LOA (coupled): 680'
Beam: 74'
Depth: 40'
Summer Load Line: 30' 4"
DWT: 27, 023 LT

- Unit is designed to carry Clean Petroleum Products, Heated Cargoes and EZ chemicals to provide a customer with maximum cargo flexibility
- Cargo pump in each of the 14 cargo tanks to assure maximum cargo integrity and segregation flexibility
- Vacuum System with three retention tanks to easily handle cargo changes
- Two anchor windlasses each equipped with 10 shots of chain for offshore mooring operation
- Barge built under the ABS SafeHull program for maximum environmental protection. This program puts the vessel design through exhaustive review to identify and strengthen the vessel structure.
- Dual mode Inert Gas system and vapor collection system for maximum safety. A layer of inert gas covers the product in the tank to make the tank atmosphere too lean for combustion.
- Remote radar gauging in all cargo and ballast tanks.
- Enhanced mooring system featuring 1,000 foot Spectra type lines on split drums with a high speed recovery rate of 100 feet per minute.
- Remote operated ballast system to enable the vessel to exchange ballast at sea while underway.
- Enhanced fire fighting system including fixed CO2 for all machinery spaces and foam coverage system for the cargo manifold area

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