



LNG VESSEL

5000 M³ LNG BUNKER ATB

The 5000m³ LNG Bunker Articulated Tug/Barge Unit (ATB) has been designed with process-based LNG handling systems capable of loading and bunkering to and from ship or shore at full flow vapor return and manage boil off gas pressure through pressure accumulation, sub-cooling, and gas combustion unit. The system is specifically designed to condition cargo to deep cryogenic temperatures, provide N₂ inerting plus gas up (NG) and cool down specialty services to C-type and membrane atmospheric LNG tanks.

Overall Dimensions

Length - Tug & Barge..... 372'
 Draft (Max Loaded)..... 16'
 Breadth 64'
 Liquefied Natural Gas...5000 m³
 Design Draft 13'4"
 Regulatory:..... ABS LNG Tank
 Barge, IMO, SOLAS
 IGC Code, OCIMF,
 SIGTTOI, AMS, UWILD,
 IHM, USCG Policy Letters

Specialized Equipment

LNG Storage Tanks..... 2 x 2550 m³ Class C Type Cylindrical
 LNG Tanks – 4 bar max pressure
 Transfer Pumps 4 x LNG cargo pumps (500 m³ / hr)
 Gas Combustion Unit... SAAKE horizontal GCU (0.5 tons / hr)
 Sub-Cooler Air Liquide TBF-350 (0.5 tons / hr)

Specialty Services

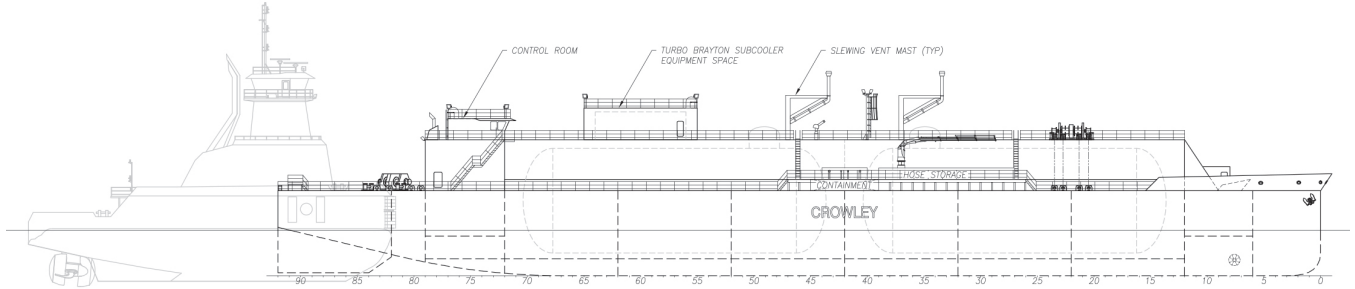
- Gas- up Services (Vaporizer & GCU)
- Cool Down Service @ full flow Vapor Return (Type C & Atmospheric Tanks)
- N₂ Inerting Service (750m³/hr)

Tug Specification Highlights

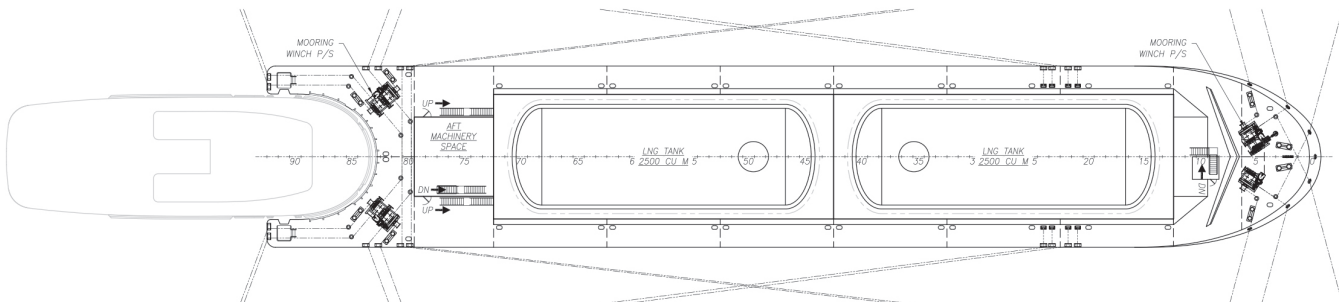
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|-----------------------------|---|
| Length Overall..... | 128' |
| Beam | 40' |
| Design Draft | 16' |
| Air Draft | 81' |
| Displacement | 984 tons |
| Gross Tonnage (IRC) | <1000 tons |
| US Reg. Tonnage (GRT) | <300 |
| Fuel Oil (98%)..... | 122,050 gal. |
| Lube Oil (98%) | 5,190 gal. |
| Potable Water | 11,320 gal. |
| Ballast Water..... | 78,300 gal. |
| Main Engines | 2 x GE Tier IV (no after treatment) rated at 3350 hp each. |
| Thrusters | 2 x Schottel (4 blade / fixed pitch) Azimuthing Thrusters |
| Aux. Generators | 3 x Diesel, EPA Tier III (no after treatment) - 99 kW / 480V |
| EDG | 1 x Diesel, EPA Tier III (no after treatment) - 88 kW / 480V |

Barge Specification Highlights

- LNG Bunker/Loading Rate -1000 m³ per hour @ full flow vapor return
- Designed to B/5 for operational safety.
- Insulation Performance – BOG rate of 0.20% /24 hrs
- Process Based Automation
- Slewing Vent Mast for adjustable Hazardous Zones
- Designed for cruise ship and cargo vessel compatibility.



ELEVATION 2-A
OUTBOARD PROFILE
SCALE: 1/32"=1'-0"



PLAN 2-B
MAIN DECK
SCALE: 1/32"=1'-0"