



## ATLANTIC KINGFISHER SPECIFICATION

**REGISTRATION**

- Built: Halifax Shipyard 2002
- Flag: Canadian
- Official Number: 824770
- IMO Number: 9255892
- Call Sign: CFH 8948
- Vessel Type: UT722-L Anchor Handling Tug Supply Vessel
- Classification: DNV
- Main Class: +1A1 Tug Supply Vessel SF
- Additional Class: FiFi I/II, EO, ICE-1C, TMON, DYNPOS-AUTR

**DIMENSIONS**

- Length overall: 80.00 m
- Length BP: 69.30 m
- Breadth, moulded: 8.00 m
- Depth, moulded: 8.00 m
- Design draft: 6.00 m
- Maximum draft: 6.54 m
- Gross Tonnage: 3453 t
- Net Tonnage: 1147 t
- Deadweight: 2750 mt

**MACHINERY**

- Main Engines: 4 x 4023 = Total 16,092 BHP (12,000KW) Bergen diesel engines Type B32:40L6P
- Propellers: 2 x 3900mm Ulstein CPP propellers in Kortnozzles
- Rudders: 2 x Ulstein High Lift flap rudders
- Steering Gear: 2 x independent Ulstein Tenfjord electric-hydraulic steering gear. Max Angle 45, Max Flap Angle 55
- Thrusters: 1 x 1200 BHP (833 KW) Forward swing-up azimuth thruster with CPP  
1 x 1200 BHP (833 KW) Forward tunnel thruster with CPP  
2 x 800 BHP (590 KW) Aft tunnel thrusters with CPP
- Generators: 2 x Shaft, 2240 KW, 450V, 60/50hz, each  
1 x Auxiliary, 1070KW, 450V/230V, 3-phase, 60hz  
1 x Auxiliary, 370KW, 450V/230V, 3-phase, 60hz  
1 x Emergency, 99 KW, 450V/230V, 3-phase, 60hz

**CONTROL SYSTEMS**

- Consoles: Full navigation console forward and full navigation & main winch control console aft, providing full 360° view from bridge plus an 8 camera system providing views of decks fore & aft, all winch drums, thruster rooms, etc, with monitors located at for & aft consoles
- Joystick: 2 x Ulstein Poscon, independent from DP joysticks with 4 plug in stations
- DP System: Kongsberg SDP 21, Class 2 fully redundant system
- Reference Systems: 2 X DGPS Simrad DPS 100 HIPAP / HPR Simrad 410, with (1) 3,000 m depth transponder  
Fanbeam Laser - MDL MK III
- Sensors: 2 x MRU(s) - Seatek MRU 5  
2 x wind sensors  
2 x C.Plath Navigat X MK1

*Note: DP system utilizes azimuth thruster, both tunnel thrusters, both main engines, with full integration of rudders.*

**PERFORMANCE**

- Maximum Speed: 16.0 knots
- Economic Speed: 2 knots @ 60hz
- Super Economic Speed: 8 knots in combinator mode (50hz)

**FUEL CONSUMPTION**

- Steaming maximum (towing): 58 m<sup>3</sup>/ day
- Steaming maximum: 47 m<sup>3</sup>/day
- Economic Speed: 20 m<sup>3</sup>/day
- Steaming super economic: 15 m<sup>3</sup>/day
- Standby: 6-9 m<sup>3</sup>/day
- Gen. at anchor or in port: 0.5 m<sup>3</sup>/day

**TOWING AND ANCHOR HANDLING**

- Bollard Pull: DNV certified  
170.9 tonnes Continuous Bollard Pull  
173.7 tonnes Maximum Bollard pull  
186.1 tonnes Continuous Bollard Pull with Forward Azimuth Thruster running
- Winch: Ulstein Brattvaag
- Towing/AH:  
1 x Ulstein Brattvaag (500)T SWL declutchable Tow/AH drum, with hydraulic spooling gear

## Drum Size Main/Socket:

Socket Portion: (2800)mm diameter x (4050)mm depth x (900)mm width

Main Portion: (2800)mm diameter x (4050)mm depth x (4250)mm width

Wire Capacity: (4250)m length x (83) mm diameter  
Dividing Flange opening: (300)mm

## Low Gear:

1st layer: (500) tonnes @ 0-18 m/min,

lowering 0-18 m/min,

Mid layer: (440) tonnes @ 0-21.5 m/min,  
lowering 0-21.5 m/min

Top Layer: (350) tonnes @ 0-25 m/min,  
lowering 0-25 m/min

## Dynamic Braking:

1st layer: (125-625) tonnes @ 0-24 m/min

Mid layer: (110-550) tonnes @ 0-28 m/min

Top layer: (090-440) tonnes @ 0-33 m/min



- High Gear:  
 1st layer: (250) tonnes @ 0-35.5 m/min,  
 lowering 0-35.5 m/min,  
 Mid layer: (205) tonnes @ 0-43 m/min,  
 lowering 0-43 m/min  
 Top Layer: (175) tonnes @ 0-50 m/min,  
 lowering 0-50 m/min  
 Dynamic Braking :  
 1st layer: (62-312) tonnes @ 0-48 m/min  
 Mid layer: (50-255) tonnes @ 0-56 m/min  
 Top layer: (45-220) tonnes @ 0-66 m/min
- Work:  
 1 x Ulstein Bratvaag (400)T SWL declutchable work drum,  
 with hydraulic spooling gear.  
 Drum Size Main/Socket:  
 Socket Portion: (1500)mm diameter x (3750)mm  
 depth x (900)mm width  
 Main Portion: (1500)mm diameter x (3750)mm depth  
 x (4100)mm width Wire Capacity - (5800)m length x  
 (83) mm diameter  
 Dividing Flange opening: 300 mm  
 Low Gear:  
 1st layer: (400) tonnes @ 0-15 m/min,  
 lowering 0-15 m/min  
 Mid layer: (235) tonnes @ 0-25 m/min,  
 lowering 0-25 m/min  
 Top Layer: (170) tonnes @ 0-35 m/min,  
 lowering 0-35 m/min  
 Dynamic Braking :  
 1st layer: (100-500) tonnes @ 0-30 m/min  
 Mid layer: (60-300) tonnes @ 0-50 m/min  
 Top layer: (45-210) tonnes @ 0-70 m/min  
 High Gear:  
 1st layer: (200) tonnes @ 0-30 m/min,  
 lowering 0-30 m/min  
 Mid layer: (115) tonnes @ 0-50 m/min,  
 lowering 0-50 m/min  
 Top Layer: (85) tonnes @ 0-70 m/min,  
 lowering 0-70 m/min  
 Dynamic Braking:  
 1st layer: (50-250) tonnes @ 0-60 m/min  
 Mid layer: (30-150) tonnes @ 0-100 m/min  
 Top layer: (22-105) tonnes @ 0-140 m/min
  - Secondary Winches:  
 2 x Ulstein Bratvaag (138)T SWL winches, with hydraulic  
 spooling gear  
 Drum Size Main/Socket:  
 Socket Portion: (1500)mm diameter x (4500)mm  
 depth x (900)mm width  
 Main Portion: (1500)mm diameter x (4500)mm depth  
 x (4500)mm width  
 Wire/Rope Capacity: (4000)m x (76)mm wire or  
 (1600)m x (8) inch synthetic rope.  
 Work Duty:  
 1st Layer 38 tonnes line pull @ 0-22m/min,  
 170 tonnes dynamic braking at max. 44 m/min'  
 Last Layer 56 tonnes pull @ 0-54 m/min,  
 70 tonnes dynamic braking at max 106 m/min
  - Spare Tow Wire: 1 x Spare Drum 1000 mm x 2600 mm x  
 2200mm below main deck  
 Capacity 1400 m of 81 mm wire
  - Cable Lifters: 2 x non-declutchable cable lifters, two for  
 76mm chain and two for 84 mm chain, fitted outside of  
 the Towing drum
  - Chain Lockers: 4 x chain lockers each 136.25 m<sup>3</sup> ,  
 total 545 m<sup>3</sup>  
 Locker Capacities each at 30% broken stowage  
 2.5" = 6841', 3.0" = 4396, 3.25" = 3800', 3.5" = 3238,  
 4.0" = 2608' 4.5" = 2200'
  - Karmforks: 2 x 750T SWL. Remote control from Bridge  
 and aft deck
  - Towpins: 4 x 240T SWL. Remote control from Bridge and  
 aft deck
  - Stern Roller: 1 x Twin Stern Roller 550T SWL,  
 2996 mm width x 3.5m diameter
  - Grapnel: 1 x 250 T SWL, Ansel Jones Forgings
  - J-Hook: 1 x 250 T SWL, Ansel Jones Forgings
- DECK MACHINERY**
- Tuggers: 2 x hydraulic, Port and Stbd Main Deck  
 1st Layer: 20 tonnes @ 0-22m/min,  
 2nd Layer: 10 tonnes @ 0-33m/Min,  
 Light line: 0- 70m/min, hydraulic  
 Capacity: 600m x 76mm wire
  - Capstans: 2 x hydraulic, Port and Stbd Main Deck Aft.  
 10 tonnes @ 0-22m/min combined with drum for 45m X  
 20mm wire
  - Windlass/Mooring Winch: 1 x 15 tonnes 0-16.5m/min,  
 hydraulic
  - Anchors: 2 x Stockless anchors, 2850 kg each
  - Crane: 2 x Hydramaskin, 5 tonnes, 10 hinged arm
  - FRC Davit: 2 x Hydramaskin heave compensated davit
- DISCHARGE RATES**
- Potable Water: 250 m<sup>3</sup>/hr - 9.0 bar Pressure Relief @ 9.7 bar
  - Drill Water: 250 m<sup>3</sup>/hr - 9.0 bar Pressure Relief @ 9.7 bar
  - Fuel: 250 m<sup>3</sup>/hr - 9.0 bar Pressure Relief @ 9.7 bar
  - Mud: 2 x 75 m<sup>3</sup>/hr - 18.0 bar Pressure Relief @ 19 bar
  - Brine: 2 x 75 m<sup>3</sup>/hr - 18.0 bar Pressure Relief @ 18.7 bar
  - Base Oil: 125 m<sup>3</sup>/hr - 9.0 bar Pressure Relief @ 9.7 bar
  - Dry Bulk: 80 ton/hr - 5.6 bar, 4 aeration jets per tank  
 2 Tamrotor compressors, 22.8 m<sup>3</sup>/min each, pressure 5.6 bar  
 Pressure Relief @ 6.1 bar
- Note: Discharge rates for dry bulk will differ with product,  
 ie; Gel discharge rates will be much faster. All pumping ar-  
 rangements are totally redundant with equivalent backup/  
 standby pump.*
- CAPACITIES/TANKAGE**
- Clear Deck Space: 550 m<sup>2</sup>
  - Deck Cargo: 1100 tonnes
  - Deck Loading: Cargo deck - 5 tonnes/m<sup>2</sup>
  - Anchor handling deck - 10 tonnes/m<sup>2</sup>
  - Fuel: 1100 m<sup>3</sup>
  - Potable Water: 500 m<sup>3</sup> @ 100%



- Ballast Water: 1600 m<sup>3</sup> @ 100 %
- Drill Water: 1600 m<sup>3</sup> @ 100 %
- Brine/Glycol: 272 m<sup>3</sup> @ 100 %
- Liquid Mud: 430 m<sup>3</sup>
- Base Oil: 200 m<sup>3</sup>
- Dry Bulk: 4 tanks totaling 10,000 ft<sup>3</sup>. (283 m<sup>3</sup>)
- Tank Washing: 4 x Butterworth, hot and cold water mud tank washing
- Tank Recirculation: All tanks are capable of recirculation.
- Tank Agitators: 4 x hydraulic agitators in mud tanks. Also capable of individual recirculation

*Note: Vessel tankage and piping arrangements are extremely flexible, allowing for reconfiguration to the Charterer's operational requirements.*

#### EXTERNAL FIRE FIGHTING (Fi Fi I/II)

- Pumps: 2 x Unitor Z22-500/400-80, 4122 m<sup>3</sup>/hr (Total: 8,244 m<sup>3</sup>/hr)
- Monitors: 2 x Unitor FIRECHIEF FC3600, 3,600 m<sup>3</sup>/hr, (Total 7,200 m<sup>3</sup>/hr) Bridge remote controlled

System complies with DNV FiFi II specifications for operational throw distances and is complete with external drenching system, foam generator portable Turbex MKII producing 200 m<sup>3</sup>/min consumption 4.5 L/min, (6) additional fireman's suits (8 total)/breathing apparatus, spare BA bottles, and recharging compressor.

#### LIFESAIVING

All equipment as per SOLAS, CCG, and Standby Vessel Letter of Compliance.

- Survivor Capacity: 330 persons
- Rescue Craft: 2 x Springer MP 741, 20 person capacity, diesel jet FRC
- Liferafts: 6 x RFD, total capacity: 120 persons
- Rescue Frame: 1 x Dacon Scoop
- EPIRB: 1 x Hydrostatic Release
- SARTS: 2 x Tron
- GMDSSVHF: 3 x SKANTI with rechargeable and extra batteries
- Recovery Winch: 1 X powered winch port side SWL 300 Kg

#### ELECTRONICS

- Radars: 1 x Furuno (X-Band)  
1 x Furuno (S-Band)
- Auto Pilot: 1 x Robertson AP 9. Fully integrated with ECDIS & Radars
- Electronic Chart: 1 x Norcontrol SeaMap 1021 Integrated with autopilot, radar, and DGPS
- Gyro(s): 2 x C.Plath Navigat X MK1. Integrated with DP system
- Depth Sounder: 1 x Skipper GDS 101
- DGPS: 1 x Shipmate GN 30 – 2 X Kongsberg DPS 100 – 1 X FURUNO GPS GP-37
- Speed Log: 1 x Consilium
- VHF DF: 1 x Taiyo TD-L1550 A

- Weather Fax: 1 x Furuno Fax-207
- Navtex: 1 X JRC NCR-330

#### EXTERNAL COMMUNICATIONS EQUIPMENT

- GMDSS: Sailor, compliant for areas A1, A2, and A3
- Telex/Email: 2 X Sailor Sat "C" with Telex and Email
- Aeronautical Radio: 1 x Jotron TR-601
- Portable UHF: 5 x Motorola
- Portable VHF: 3 x Icon
- Aeronautical Radio: 1 x Jotron PSU-7001
- Cell phone/fax: 2 x Motorola JCGDL-1000,  
1 x Portable Cell Phone
- Iridium: 1 x Bridge
- Fleet 77: 1 x Bridge

#### INTERNAL COMMUNICATIONS EQUIPMENT

- Internal phone/TEC PBX system throughout with phones in all cabins and areas with complete access to each other and all external communications.
- P.A. system covering all areas of the vessel both inside and outside including all sleeping areas if required.

#### ACCOMMODATION

- 11 x (1) berth cabins
- 7 x (2) berth cabins
- 2 x (4) berth cabins
- Total: 33 berths. All cabins with ensuite washrooms.
- Additional Spaces:
  - 1 x Ship's Office, complete with computer system (networked to Wheelhouse and Engine Control room) and photocopier.
  - 2 x Lounges
  - 1 x Messroom
  - 1 x Hospital, complete with separate berth, examination table, and all associated medical equipment required by SOLAS and CCG stand-by regulations.
  - Freezer 8 m<sup>3</sup>
  - Cooler 8 m<sup>3</sup>
  - Dry Stores 22 m<sup>3</sup>

#### MISCELLANEOUS

1. Design complies to latest rules and regulations from SOLAS 74, with amendments in force and IMO 469 (XII) "Guidelines for the Design and Construction of Offshore Supply Vessels"
2. Fitted with two passive roll reducing tanks below the main deck
3. ISM certificate issued from Lloyds and Transport Canada
4. Approved for the Carriage of Noxious liquids (DNV)
5. Approved for the Carriage of Dangerous Goods (DNV)
6. Fitted with 6 remote cameras in winch-house for anchor-handling/towing operations with monitors located forward and aft in wheelhouse
7. Fitted with 1 X 2000W-searchlight forward and 1 X 2000W-searchlights stbd. aft one white light capable of being fitted with ultra-violet light all remotely controlled from wheelhouse