



Port of Liverpool



Towage Guidelines

Peel Ports Group

TOWAGE GUIDELINES

These guidelines have been jointly produced by The Mersey Docks & Harbour Company (The Competent Harbour Authority – CHA) and Liverpool Pilotage Services Ltd (The Pilot Service Company – LPSL). The Port Marine Safety Code requires towage guidelines to be developed based on an objective assessment of safety and take account of the conditions normally prevailing in the port and the basic maneuvering characteristics of various vessels using it. Where risk assessment has indicated particular terminals with identified risks have separate plans and mandatory minimum levels of towage. These guidelines should be read in conjunction with the general towage information contained in the Port of Liverpool Navigation Guidelines.

It is important to recognize that the advice given within these guidelines is based on the following:-

- A “standard vessel” with an air start engine having a maximum number of eight consecutive starts, with a normal spade rudder, no thrusters and a normal dead slow speed of 6.5 knots.
- A minimum bollard pull of 30 tonnes for each tug. Please refer to the following Towage Information for the Port of Liverpool:
<http://www.merseydocks.co.uk/assets/pdf/Towage-Information.pdf>
- Vessels of the relevant length are operating up to the normal maximum permitted beam at each of the River Entrances.

Vessel Length metres	Gladstone	Langton	Alfred	12 Quays	LCT	Camel Lairds Drydocks and Wet basin	Bromborough Wall	Tranmere Oil Stages	Eastham canal entrance	QEII dock	Garston
< 95	-	-	-	1	As per Cruise Terminal Guidelines	1	-	As per Tranmere Document	-	-	-
95 – 120	1	1	1	2		1	1		1	1	
120 -140	2	2	2	2		2	2		2	2	
140 – 160	2	2	3	2		2	2		2	2	
160 – 180	2	2	3	2		3			2	2	
180 – 210	2	2	3	2		3				2	
>210	3	3				3					

As a result the Towage Matrix detailed above can be described under normal conditions as the lowest common denominator with respect to The Port of Liverpool's Towage requirements and is a baseline guide.

It is however recognized that due to the considerable variations in vessel size, shape, condition and degree of maneuvering capability the recommended number of tugs from the matrix given may be in excess of what is the safe minimum number of tugs for a particular vessel. As a consequence the master of any visiting ship may order the recommended number of tugs as per the towage matrix contained within this document or opt to consult with an authorised Liverpool Pilot where both marine professionals may agree to deviate from the Tug Matrix contained within this document by use of their own professional judgment to set a safe and appropriate level of tug provision for a particular vessel. Likewise that tug provision may exceed the guidelines in exceptional circumstances, or when directed by the Harbour Master under his statutory powers.

Such consultation can be arranged by the master of any vessel through his agent who will then contact the vessels allocated or appropriated pilot to give due consideration to the masters request. In assessing any variation from the Towage Matrix the following points will be taken into consideration namely:-

- The draught of the vessel.
 - The minimum under keel clearance during the planned passage of the River Mersey and enclosed dock system.
 - Range of the Tide on the date in question – Spring or Neap.
 - Expected sea and swell conditions off the lock entrance or berth.
 - Whether the berthing operation is going to take place on the flood or ebb of the tide.
 - The forecast weather conditions, including visibility.
 - Maneuvering aids – Thrusters, size and number.
 - Type of propulsion system – Controllable Pitch, Fixed Pitch, Water jet or Azipod.
 - Type of Steering system – Single, twin or triple rudders, and whether high-lift or not.
 - The windage area of the vessel.
 - The Gross registered Tonnage in relation to the vessels principal dimensions.
 - Unusual design of vessel.
 - Any reported defects to the vessel required under the Port of Liverpool's General Directions (No 4 – 2000)
 - Type of main Engine – Air start, Gas Turbine, Diesel Electric, Gearbox.
 - Any Lock restrictions in force.
 - Availability of Gig Boats and Boatmen.
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