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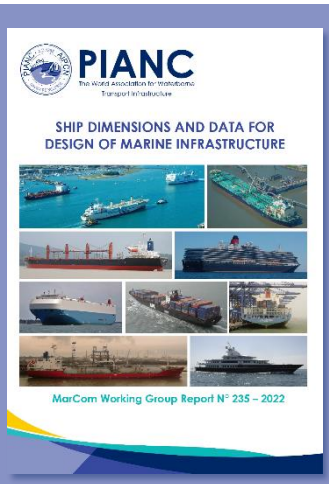
The World Association for Waterborne Transport Infrastructure



PRESS RELEASE
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Ship Dimensions and Data for Design of Marine Infrastructure

MarCom Working Group 235
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https://www.pianc.org/publications/marcom/wg235

This report provides information on the dimensions and characteristics of ocean-going vessels by type and size, including selected data relevant to planning and design of marine infrastructure for those vessels. Vessel dimensions and other details are provided as Appendix A in a separate Excel workbook for representative vessel sizes. This table can be accessed via the following PIANC link: **https://www.pianc.org/publications/marcom/wg235appendixa**. Please refer to Appendix C for the glossary, abbreviations and symbols used in this text.

Vessels operating in inland seas (e.g. Black Sea, Caspian Sea), lakes (e.g. 'Lakers' operating on the Great Lakes of North America), rivers, canals and the like are not covered by this document. Information on inland waterways vessels can be found in PIANC InCom WG 16 (1996) – 'Standardisation of Ships and Inland Waterways for River/Sea Navigation' and PIANC InCom WG 141 (2019) – 'Design Guidelines for Inland Waterway Dimensions'.

The range of vessels covered includes: Container vessels, Dry bulk carriers, Mixed use bulk carriers, Cruise vessels, Oil tankers, Product and chemical tankers, Gas carriers (LPG & LNG), General cargo, Refrigerated cargo, Livestock carriers, Car carriers, RoRo, RoPax, Ferries and Fishing vessels. Descriptions of the characteristics of different vessel types and data on the world's fleet distribution by size and type, are outlined in Chapter 2.

Chapter 3 describes the typical dimensions, capacities, and displacements for a range of vessel types by size. Other important details such as wind area, manifold locations, typical numbers of mooring winches, etc. are also provided. The upper limit values of each dimension do not represent a real vessel, as the maximums do not occur together unless the sample group is small and there is essentially only one design in the sample. The upper limit values are useful for planning purposes to determine, for example, the length of berth required, maximum draught for a particular size, or the reach required for cranes, ship-loaders, etc. However for detailed design it is recommended that specific ships are also used, and these should be selected using information from the facility operator.

Users of this report should take care to carefully read the key definitions in Section 3.2 and the notes to the tables in Section 3.4 that define the context and basis of the data.

For more specialised vessels, where variability can make tabulated data unreliable, charts of draught, Length Overall (LOA) and beam are provided.

Notes to Editor

PIANC is the global organisation providing guidance and technical advice for a sustainable waterborne transport infrastructure to ports and waterways. Established in 1885, PIANC unites the international experts for technical, economic, and environmental topics related to waterborne transport. Our members include national governments and public authorities, corporations, industry and academic experts and young and experienced professionals.

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