Wärtsilä Marine Business

We are on a mission to create a Smart Marine Ecosystem – one in which the maritime industry uses only the cleanest available fuels. One where on-board power production is optimised, and routes are precision-planned to avoid navigational hazards, traffic congestion, and unexpected waiting times. Through our know-how, integrated product portfolio, and full lifecycle solutions – all supported by the market's most extensive service network – we are committed to being the main driving force in sustainable shipping.

Wärtsilä has a strong position in the maritime industry. Today, more than 50,000 vessels operate with one or more installed Wärtsilä products. Wärtsilä also provides maintenance services to one out of every three vessels navigating our oceans.

Responding to the challenge of decarbonisation

The biggest challenge facing the maritime industry is to move towards decarbonisation. Over the coming decades, industry players must work together to produce economically viable options that meet the International Maritime Organisation's (IMO) greenhouse gas (GHG) reduction targets. Owners of individual vessels and entire fleets must embrace changes in three areas to enable a transition towards decarbonisation. These areas include the use of technologies that improve energy efficiency, the use of data to optimise voyage and operational factors, and the shift of energy sources and fuels towards green alternatives.

Wärtsilä has a broad offering in all these three areas, and we are committed to supporting our customers in their decarbonisation efforts and to collaborating with industry stakeholders, such as regulators, energy companies, and classification societies, to bring decarbonisation to reality.

This commitment is based on our deep understanding of our customers’ businesses, our technological leadership, and having the industry’s broadest portfolio of hardware and software solutions as well as the most extensive service network.

Serving various customer groups during the entire lifecycle of their vessels

Wärtsilä’s marine customer base covers all the main segments, including traditional merchant vessels, gas carriers, cruise ships & ferries, as well as naval and special vessels. In the oil and gas industry, we are active in serving offshore installations and related industry vessels.

During the shipbuilding process, tight cooperation with the shipyard and ship owners is required in order to design and build the vessel according to the specifics of each business operation. It is also important to have a newbuild plan that allows the flexibility to accommodate adaptations during the life of the vessel, in order to achieve the transition towards decarbonisation.

Our customers at various stages during the lifecycle of the vessel include ship owners, ship operators, ship management companies, charterers, and port authorities. Such customers have a stake in:

- Planning and execution of voyage and operations, securing safety and competitiveness in operating costs
- Planning and execution of maintenance to maximize the uptime of their assets
- Maximising asset utilisation
- Upgrading and retrofitting vessels to comply with regulations and GHG emission targets

Shipowners’ decision-making is impacted by freight rates, interest rates, and the capital and operating costs of the ship. Other factors, such as environmental compliance and fuel flexibility, including the transition towards green fuels, are also important. The decision-making process is increasingly influenced by cargo owners and charterers, who are keen on securing the safety of operations, enhancing environmental performance, and lowering fuel consumption. Ports have also become increasingly active in addressing congestion, emissions, and safety. Wärtsilä’s offering in ship-to-shore connecting software includes applications that address the needs of port authorities, such as just-in-time ship arrivals.
Wärtsilä is committed to continue serving a broad customer base. Moreover, we are committed to collaborating with different stakeholders to address the industry's biggest challenges and to making a step change in the sustainability aspects of maritime operations.

Our offering is the broadest in the industry
Wärtsilä's market presence, combined with having the broadest offering in the industry, enables us to understand the needs and requirements related to each of these segments – from initial vessel design choices to everyday operations, in each voyage and throughout the vessel's lifecycle. We provide innovative and competitive hardware and software solutions, delivered efficiently and with high quality.

Our offering comprises engines, propulsion, exhaust gas cleaning systems, electrical solutions, seals and bearings, water and waste treatment, gas solutions, as well as automation, navigation, and communication systems, fleet operations solutions, ship traffic control, simulators and training, and lifecycle solutions.

Our unique value proposition is present throughout three value pillars:

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<tr>
<th>Energy management</th>
<th>Voyage management</th>
<th>Asset and fleet management</th>
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<tbody>
<tr>
<td>Within a single vessel, new or existing, we provide technologies and services to:</td>
<td>From port to port for both existing and new vessels</td>
<td>Identify, plan and perform all maintenance and upgrades for a vessel and a fleet, while safeguarding:</td>
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<td>Optimise the use of fuels and fuel choices in order to produce energy in an economical and sustainable way throughout the vessel's lifecycle</td>
<td>Towards autonomy: Planning and executing a safe route with just-in-time arrival, including departure and docking in potentially highly congested port areas</td>
<td>Minimised emissions to air and water</td>
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<td>Minimise emissions to air with a solid path towards the decarbonisation of the maritime industry</td>
<td>Optimisation: Providing guidance and, for certain applications, automatically adjusting operations to increase efficiency and reduce waste, e.g. excess fuel consumption per single voyage and at fleet level</td>
<td>Minimised downtime and savings in operating expense items, such as fuel, manning, and maintenance</td>
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<td>Manage energy demand and distribution</td>
<td>Maximum utilisation rate</td>
<td>Reliable and safe operations</td>
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<td>Minimise energy losses</td>
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Wärtsilä has a solid record in guaranteeing the performance of the customers’ assets. Our recent investments in technology developments – from equipment to data collection, connectivity, analytics, and insights generation – give us the unique ability not only to detect anomalies in equipment performance but to address such anomalies with needed actions. In short, we enable more sustainable, safe, and profitable operations for ship owners and operators around the world.
Market drivers

The global demand for new vessels is mainly driven by developments within the global economy, and the resulting impact on trade and transportation capacity requirements. Other factors, such as shipyard capacity, newbuild prices, decommissioning and scrapping, fuel prices and availability, as well as interest and freight rates, also affect decisions related to the building of new vessels. The commitment that the industry has taken towards decarbonisation via the IMO’s GHG targets is the main driver affecting choices being made for newbuilds and all aspects related to operations, including needs for retrofits and upgrades.

The main driver for Wärtsilä’s service business within the maritime industry is the size and age profile of the installed base, paired with the running hours of such equipment.

Competitive landscape and market position

As a result of the broad offering portfolio and global market presence, Wärtsilä’s field of competitors is extensive. These contain several Original Equipment Manufacturers (OEM), including engine companies such as MAN Energy Solutions, Caterpillar and HiMSEN, propeller makers such as Schottel and Thrustmaster, and environmental and auxiliary equipment providers like Alfa Laval. Our competitors also include electrical and automation houses, notably Siemens, GE and ABB, gas system providers, such as TGE Marine, and companies with a broad range of offerings such as Kongsberg. The main source of competition for maintenance services is independent service companies operating globally, and local players with a limited offering scope, such as parts traders, repair yards, local workshops, component suppliers for spare parts (non-OEM), and field service businesses.

Wärtsilä is recognised as a proven supplier of innovative and sustainable technologies and software across its portfolio serving the maritime industry. Wärtsilä has a unique opportunity to comprehensively address the challenge of emissions from shipping by providing financially attractive solutions, and by supporting the move towards decarbonisation.

Wärtsilä’s strengths are:

- Strong knowledge and presence in all major maritime segments
- The broadest portfolio of reliable and high performing equipment and software in the industry
- Ability to support our customers on the journey towards decarbonisation, with solutions in all needed areas to reach GHG targets, i.e. the use of data, energy efficiency, and fuels
- A unique software platform solution (Fleet Operations Solution) to connect ship-to-shore and to use data to optimise voyage planning, fleet use, and operations
- A complete lifecycle service offering supported by an unmatched global service network and technical support
- The capability to lower operational risks for our customers and guarantee asset performance