WÄRTSILÄ 14
LIGHTER, SMARTER, GREENER

The Wärtsilä 14 is the most compact engine in its power range in the marine market, and serves propulsion, auxiliary and emergency genset applications in the global marine and offshore markets. The engine is an integral element within Wärtsilä's Smart Marine vision for the future of shipping, whereby optimal efficiency, safety, and environmental sustainability will be the key pillars in achieving and maintaining profitable operations for ship owners and operators around the world.

The Wärtsilä 14 high-speed engine is produced in 12- and 16-cylinder configurations, having a power output between 749 and 1340 kWm in mechanical propulsion, and between 675 and 1155 kWe in auxiliary generating set and diesel-electric propulsion applications.

The compact package of the Wärtsilä 14 meets the customer, segment and vessel requirements where operating power, fuel type and power to weight ratio are critical.

The Wärtsilä 14 is equipped with UNIC automation modules for monitoring and safety purposes.

Propulsion packages

Together with the Wärtsilä 14 engine, Wärtsilä offers a broad range of products, systems and integrated solutions, including ship machinery, propulsion equipment – gears, propellers, thrusters and waterjets – and control systems for different types of marine vessel applications.

The benefits of integrated packages include:

- In-house design, manufacturing, and project management
- Matching components and an integrated design to ensure functionality and efficiency
- Easy installation and commissioning
- Simple mechanical and automation interfaces to shipyard systems.

IMO Tier III certification

The Wärtsilä 14 is supplied with the Wärtsilä NO_X reducer (Wärtsilä NOR®), an emissions after-treatment system based on selective catalytic reduction (SCR) technology for reducing nitrogen oxide (NO_X) emissions.

The Wärtsilä NOR:

- is optimised for the Wärtsilä 14 engine in terms of reliability, flexibility, and size while supporting easy installation and maintenance.
- maximises overall performance of the engine and exhaust gas cleaning system in terms of emissions reduction, noise abatement, and engine efficiency.
- is provided together with IMO Tier III EIAPP certificates for a complete engine and SCR package.

The Wärtsilä – Liebherr relationship

The engine has been developed in collaboration with Liebherr, a leading global manufacturer of machinery and components. Liebherr engines have been developed for heavy duty applications and for operation under harsh environmental conditions. They are, therefore, a perfect fit for marine and offshore applications.

2 X Wärtsilä 12V14 gensets are scheduled for delivery in June 2022 for the new Pelagic Trawler newbuilding "Artemis" by Karstensen Shipyard.

Lifecycle support

Wärtsilä Services will support you throughout the lifecycle of your high-speed engine installation. We offer:

- A global network of approximately 11,000 professionals in 160 locations delivering services to more than 12,000 customers every year.
- The broadest portfolio of solutions and services in the industry, ranging from supplying spare parts to optimising customer operations and providing performance guarantees.
- A commitment to provide high quality, expert support, and to make our services available in the most environmentally sound way possible, whenever and wherever needed.

Main data

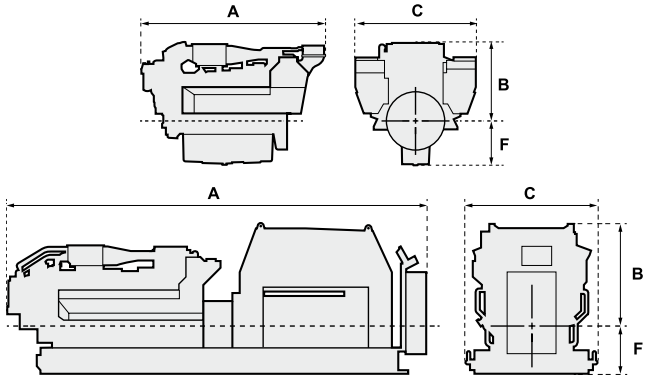
Wärtsilä 14		IMO Tier II or III	
Cylinder bore	135 mm	Fuel specification: Light fuel oil, maximum sulphur content 0.5% ISO 8217, category ISO-F-DMX, DMA,DMZ SFOC 205,0 g/kWh at ISO condition	
Piston stroke	157 mm		
Cylinder configuration		12V	16V
Nominal power (kWm)		749–1005	1005–1340
Nominall power (kWe)		675–865	900–1155
Nominal speed (rpm)		1500–1900	1500–1900

Engine dimensions (mm) and weights (tonnes)					
Engine type	A	C	B	F	Weight
12V14	2 342	1 470	926	542	2.8
16V14	2 601	1 451	1 019	525	3.8

Without air filter, engine dry weight

Genset dimensions (mm) and weights (tonnes)*					
Engine type	A	C	B	F	Weight
12V14	4 577	1 487	1 163	598	7.8
16V14	5 061	1 461	1 163	598	9.1

Without air filter, engine dry weight
* Dependent on generator type and size



A newly developed configurator for selecting the right engine is available on Wärtsilä's webpages. This will help customers to find the product they need, while at the same time making it easy to be in direct contact with Wärtsilä's sales organisation through the tool.

wartsila.com

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