

# Wärtsilä in France





Photo: Gabriela F

## WÄRTSILÄ'S KEY FIGURES IN 2015

- **Net sales**  
EUR 5,029 million
- **Operating result before non-recurring items**  
EUR 612 million
- **Profit before taxes**  
EUR 553 million
- **Marine Solutions market segments**
  - Merchant
  - Offshore
  - Cruise & Ferry
  - Navy
  - Special vessels
- **Energy Solutions market segments**
  - Flexible baseload
  - Industrial self-generation
  - Grid stability and peaking
  - Solutions for the oil and gas industry
  - LNG terminals and distribution systems

Wärtsilä is a company with over 180 years of experience in serving customers on land and at sea.

Wärtsilä has three businesses: Marine Solutions, Energy Solutions and Services – united by the same values and vision.

- Founded in 1834
- Headquarters in Helsinki, Finland
- Wärtsilä employs 18,900 professionals manning over 200 locations in nearly 70 countries around the world
- Wärtsilä is listed on the NASDAQ OMX Helsinki, Finland

Wärtsilä operates globally. Markets are in Europe, Asia, the Americas and Africa. Today 1% of the world's energy is produced by Wärtsilä power plants. Every third ship sailing the oceans is powered by Wärtsilä. Every second ship is serviced by us.

### BUSINESSES IN BRIEF

**Wärtsilä Energy Solutions** is a leading global supplier of flexible baseload power plants of up to 600 MW operating on various gaseous and liquid fuels. Our portfolio includes unique solutions for peaking, reserve and load-following power generation, as well as for balancing intermittent power production. Wärtsilä Energy Solutions also provides LNG terminals and distribution systems. In addition to the technical advantages, our fast track deliveries of complete power plants, together with long-term

operation and maintenance agreements, provide our customers with complete solutions– in urban areas as well as in the most demanding remote environments. As of 2015, Wärtsilä has 58 GW of installed power plant capacity in 175 countries around the world.

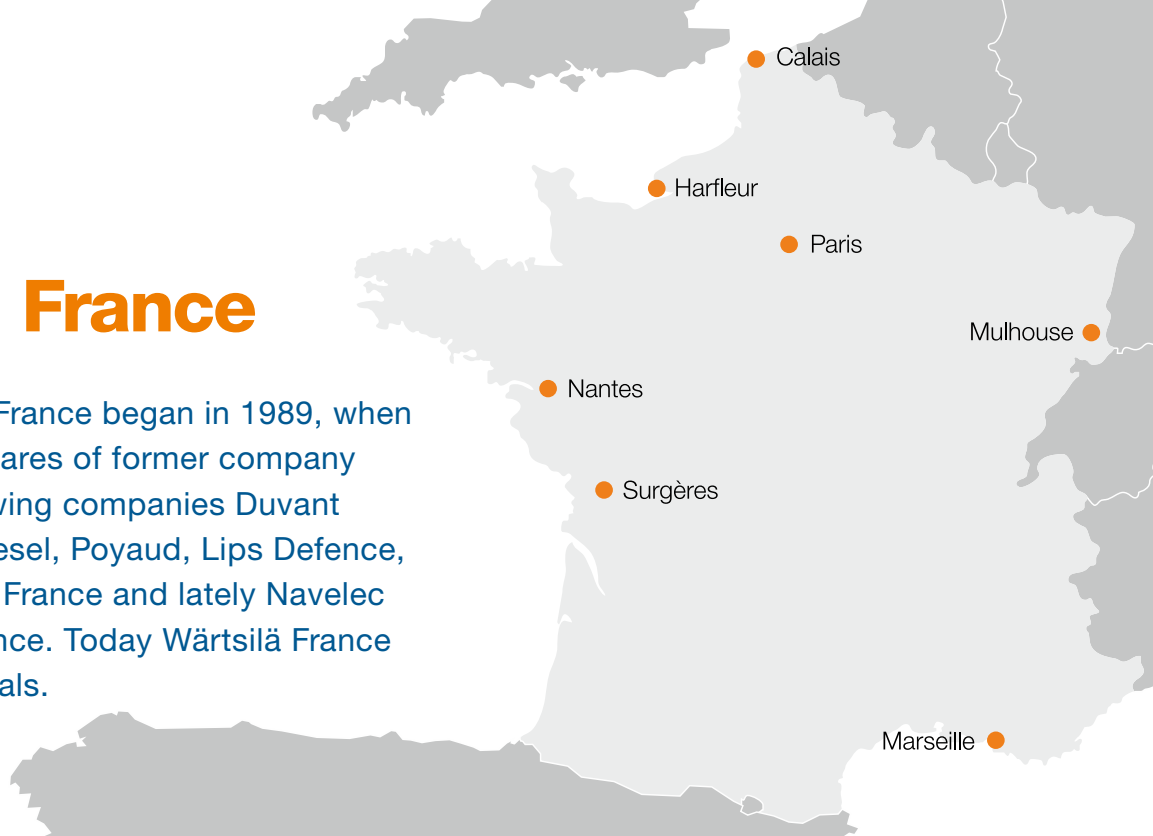
### Wärtsilä Marine Solutions

enhances the business of its marine and oil & gas industry customers by providing innovative products and integrated solutions that are safe, environmentally sustainable, efficient, flexible, and economically sound. Our solutions are developed based on our customers' needs and include products, systems and services. Being a technology leader, and through the experience, know-how and dedication of our personnel, we are able to customise optimised solutions for the benefit of our clients around the world

**Wärtsilä Services** supports its customers throughout the lifecycle of their installations by optimising efficiency and performance. We provide the most comprehensive portfolio of services and the broadest service network in the industry, for both the energy and marine markets. We are committed to providing high quality, expert support, and the availability of services in the most environmentally sound way possible, wherever our customers are.

# Wärtsilä in France

The story of Wärtsilä in France began in 1989, when Wärtsilä acquired the shares of former company SACM Diesel. The following companies Duvant Crepelle, New Sulzer Diesel, Poyaud, Lips Defence, Deutz Marine, Whessoe France and lately Navelec then joined Wärtsilä France. Today Wärtsilä France has over 400 professionals.



## 24/7 Customer service: +33 9 69 39 95 00

### Mulhouse (Headquarters)

Wärtsilä France S.A.S.  
100 quai d'Alger  
CS 91210  
F - 68054 Mulhouse cedex  
Tel. +33 3 89 66 68 68  
Fax +33 3 89 66 68 30

### Calais

Tank Control Systems (Whessoe)  
Wärtsilä France S.A.S.  
135, rue de Bitche  
F - 62100 Calais  
Tel. +33 321 96 49 93  
Fax +33 321 34 36 12

### Harfleur

Electrical & Automation  
Wärtsilä France S.A.S.  
Ets de Harfleur  
Avenue du Camp Dolen  
tParc de l'Estuaire  
F - 76700 Harfleur  
Tel. +33 2 35 24 09 05  
Fax: +33 2 35 25 35 59

### Marseille

Services Workshop  
Wärtsilä France S.A.S.  
Enceinte Portuaire, porte 4, CIMM  
F - 13344 Marseille  
Tel. +33 491 03 99 20  
Fax +33 491 03 99 21

### Nantes

Marine Solutions  
Navy & coastguard segment  
Wärtsilä France S.A.S.  
3 boulevard de la Loire  
BP 97511  
F - 44275 Nantes Cedex 2  
Tel. +33 240 41 16 02  
Fax +33 240 41 16 00

### Paris (La Défense)

Energy Solutions  
Wärtsilä France S.A.S.  
Les Collines de l'Arche  
Imm. Opera E, 76, Route de la Demi-Lune  
F - 92057 Paris  
Tel. +33 147 76 89 20  
Fax +33 147 76 89 21

### Surgères

Services Workshop  
Wärtsilä France S.A.S.  
La Combe  
BP 113  
F - 17700 Surgères  
Tel. + 33 546 30 31 32  
Fax + 33 546 07 35 37  
Wärtsilä Services  
in France

# Wärtsilä Services in France



Our offering is primarily based on equipment (engines, propulsion systems, associated equipment) designed and sold by Wärtsilä, but also extends to other brands. Our deep knowledge of customer's activities and operational challenges, combined with our technical expertise, provides us with the necessary competences to offer any level of support:

- Spare parts for equipment, where the focus is on reliability, availability of a wide range of parts and the ability to deliver them to customers in a timely manner.
- Full maintenance and performance monitoring, including equipment (spare parts) and services (on-site field service, preventive or predictive maintenance)
- Optimisation of customer operations through analysis allowing us to make proactive recommendations to improve the efficiency (for example: reducing fuel consumption, means savings on the operating costs), and adopting common goals together with the customer concerning the operation and maintenance of their equipment.

## **SYSTEMATIC PREVENTIVE MAINTENANCE**

We perform preventive maintenance with field service support carried out regularly according to a schedule established according to your needs. The period of time is determined either from the project commissioning date or after a full or partial revision of the equipment. We bring back your equipment into conformity in accordance with the requalification tests. These tests intend to verify that all criteria of operation and safety are met and ensure that the safety functions of your equipment are working properly.



## PREVENTIVE CONDITIONAL MAINTENANCE

With the condition-based maintenance (CBM) planning scheme developed by Wärtsilä, we set up sensors on your equipment to monitor its condition. The parameters are sent to our data center to be evaluated by our experts and to allow for the early detection of performance issues. Actual inspections may still be required, but the CBM concept enables maintenance to be carried out when it's actually needed, rather than being based solely on time intervals. In this light, the systematic maintenance checks remain but their periodicity can be extended. Such flexibility leads to benefits for our customers such as optimised availability, increased lifecycle efficiency, and reduced maintenance costs.

## UNIT ASSEMBLY & ENGINES ON TEST BED AT THE FACTORY:

Our solutions extend to all generating sets and engine brands.

## COMPLETE ENGINE REQUALIFICATION AT THE FACTORY:

Our solutions cover Wärtsilä engines and generating sets:

- UD150, UD23, UD25, UD30, UD33 & UD45
- Wärtsilä 200 & Wärtsilä 220SG

## COMPLETE ENGINE COMPONENT & SUBSYSTEMS REQUALIFICATION AT THE FACTORY:

Our solutions extend to all generating sets and engines brands, including:

- UD150, UD18, UD23, UD25, UD30, UD33 & UD45
- SULZER Z40
- GMT
- Vaasa 22, Vaasa 32
- Wärtsilä 20, Wärtsilä 26, Wärtsilä Nohab 28, Wärtsilä 31, Wärtsilä 32 & Wärtsilä 34 Wärtsilä 50
- Wärtsilä 46, Wärtsilä 46
- Wärtsilä 200 & Wärtsilä 220SG

## SURGERES (17)

Our workshop of 8000 m<sup>2</sup>, near La Rochelle, is dedicated to complete engine requalifications, including trials on test-bed, and requalification of subsystems.

**Area: 8000 m<sup>2</sup>**

**Team: 130 people including 70 at the workshop & 20 in Field Service**

### Specific equipment:

- complete manufacturer toolkit (engines & subsystems)
- 4 engine test benches (0.2 to 9 MW)
- 1 generator test bed 5.5 MW
- lifting capability 70 T
- non-destructive testing - NDT (penetrant inspection, magnetic particle examination, ultrasonic testing...)

### Activities: Requalification

- complete 4-stroke engines
- engine block
- crankshaft /camshaft
- pistons /liners /rods
- cylinder heads
- injection components
- regulators
- pumps and exchangers
- machining /recharging /break-in phase
- piping & welding
- wiring and painting
- test bench

## MARSEILLE (13)

Situated on the Mediterranean coast inside the Port of Marseille, our workshop of 4000 m<sup>2</sup> is dedicated to engine and subsystem requalification.

**Area: 4000 m<sup>2</sup>**

**Team: 80 people including 10 at the workshop & 30 in field service**

### Specific equipment:

- complete manufacturer toolkit (subsystems)
- lifting capability 10 T
- non-destructive testing NDT (penetrant inspection, magnetic particle examination...)
- activities: Requalification
- pistons /liners /rods
- cylinder heads
- injection components
- regulators
- pumps and exchangers
- machining /break-in phase



## ELECTRICAL & AUTOMATION APPLICATIONS

Our upgrade and modernisation solutions improve the performance of your infrastructures and of your vessels.

We conduct audits, studies, maintenance and implementation of solutions using our products in various areas:

- Electricity: energy efficiency improvement solutions
- Communication: radio solutions and sound systems
- Automation: programming, control systems, networks
- Navigation: beacons, radar, ECDIS & satellite communication

Wärtsilä is a global leader in advanced technologies and complete lifecycle solutions for the marine and energy markets. By emphasising sustainable innovation and total efficiency, Wärtsilä maximises the environmental and economic performance of the vessels and power plants of its customers.

## OUR EXPERTISE AT YOUR SERVICE

Wärtsilä's expertise is the product of decades of experience working alongside shipowners and industrials. This is what gives us the ability to work on all types of installations.

## ENSURING DAILY PERFORMANCE AND AVAILABILITY OF YOUR EQUIPMENT

For a ship owner, ensuring an optimum level of reliability and availability of its fleet is essential to profitability. Industrial sites, subject to security requirements, must safeguard against equipment failures that could lead to accidents. The control of various operational, financial and technical constraints is also necessary. Wärtsilä's workshops, dedicated to the maintenance and requalification of engines and subsystems, provide you with the necessary peace of mind when it comes to the condition of your equipment, so that your focus can be placed where it truly matters for your business.



**OUR PASSION: QUALITY**

We participate by your side to the smooth running and effectiveness of operations inside your business, hence contributing to the continuous optimisation of your operations. Our structured approach is accredited by the certifications of our workshops according to international standards:

- **ISO 9001 Quality Commitment:** Wärtsilä has established a continuous improvement program to strengthen the “zero non-quality” policy of the company
- **ISO 14000 Environmental Commitment:** As part of its environmental policy, Wärtsilä measures and controls the impact of its activities on the environment and acts to prevent and reduce pollution.

● **OHS 18001 Safety**

**Commitment:** Wärtsilä has a “Zero Injury” health and safety management to obtain a reduction in the number of accidents and an improvement of our company’s performance.

**OUR CUSTOMERS: AT THE HEART OF OUR PROCESSES**

Whatever your needs and installations, Wärtsilä provides customised service relying on three fundamentals:

- availability of competent resources,
- continuous innovation to perform conditional based maintenance (CBM),

● experience in international standards:

- Maritime industry: Bureau Veritas (BV), Lloyd’s Register (LR), Det Norske Veritas (DNV), Germanischer Lloyd (GL) and American Bureau of Shipping (ABS)...
- Nuclear industry: French, Swiss, German, Spanish, Belgian, Chinese, American, Korean, Finnish Swedish Nuclear power plants qualifications according to 10CFR50 App B, KTA 1401, KAT 3702, EDF and IAEA 50-CSG-Q standards.

Wärtsilä is a global leader in complete lifecycle power solutions for the marine and energy markets. By emphasising technological innovation and total efficiency, Wärtsilä maximises the environmental and economic performance of the vessels and power plants of its customers.

[www.wartsila.com](http://www.wartsila.com)