High-quality spare parts for reliable operations

BUSINESS WHITE PAPER

Players in both the marine and the power sector are looking for solutions to optimise their operations by increasing productivity and reducing maintenance costs in these increasingly competitive markets. On one hand this has resulted in a tendency to look for short-term cost savings. On the other hand it also means that owners and operators are increasingly looking beyond the initial outlay and searching for longer-lasting, safer and more reliable performance, compliance with environmental legislation, as well as lifecycle cost efficiency. High-quality spare parts from an original equipment manufacturer can help make sure that these needs are met.

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Lifecycle optimisation

The resulting savings in fuel costs can quickly compensate for the cost of proper maintenance.

Taking a lifecycle view makes it apparent that maintenance and fuel costs are key factors in the total economics of an installation. Combining the use of quality spare parts from an original equipment manufacturer with continuous monitoring and smart maintenance planning can bring considerable benefits, like lower fuel consumption, for an installation throughout its lifecycle. As fuel costs account for 50-60% of operating costs, the cost of proper maintenance can quickly be compensated for through the resulting savings in fuel costs.

Expert services help optimise operations

The knowledge and expertise of the original equipment manufacturer is of utmost importance when looking for ways to ensure optimised operations.

Knowing which parts to use and how the installation has been modified over time is essential. Along with the physical spare parts, an original equipment manufacturer can ensure compliance with regulations and the compatibility of parts with current product specifications and future upgrades, as well as provide services such as efficient troubleshooting, technical assistance, performance analysis, root cause analysis and component traceability in breakdown cases.

In many cases, remanufacturing and reconditioning solutions are a cost-efficient choice, with the added benefit of re-using materials for a reduced environmental footprint. Through combined use of remanufactured and new parts it is in some cases possible to achieve 20% cumulative savings in maintenance costs over a 10 year time span. Besides cost savings, remanufactured parts can offer time savings if the manufacturer keeps a stock of reconditioned components and even complete engines to speed up the delivery.

Spare parts and lifecycle cost optimisation – key benefits

Over the following pages we will discuss the lifecycle benefits that can be achieved by sourcing spare parts from the original equipment manufacturer.

- **Safety** – Original equipment manufacturer parts ensure the safe and predictable performance of critical systems.
- **Reliability** – Original equipment manufacturer parts are always of the latest revision, and built to tight tolerances and high standards to offer reliable performance.
- **Availability** – Ensured availability of spare parts as well as easier identification and purchasing of the correct parts can mean considerable savings in time and money.
- **Durability** – A quality spare part from an original equipment manufacturer can have a considerably longer lifetime compared to non-original parts.
- **Cost efficiency in the long run** – A cost-efficient spare parts agreement with the original engine manufacturer can offer considerable savings in fuel costs and overall lifecycle costs of the equipment.

SAFETY AND EMISSION COMPLIANCE

Original spare parts have passed through extensive laboratory and field tests in order to ensure that they comply with the required specifications, and are in accordance with emission regulations and legislation (EIAPP).

Safety is a sum of many factors
Even if only the best original components are used, unexpected failures can occur. These could pose a severe risk to the operation of a vessel or a power plant – a cruise ship could lose its maneuverability in a critical situation, or power plant personnel could be injured. It is therefore essential to have the necessary safety systems, including fire and gas detection and fire suppression as well as emergency shutdown solutions in place. Ultimately, it is the knowledge and skills of the crew that are the keys to correct decisions and form the basis for safe operations. Ensuring that the people taking care of operations are skilled and trained for safe operations according to regulatory requirements should be a priority.

Original Wärtsilä spare parts meet strict demands

- Several quality certificates such as ISO and Bureau Veritas.
- Quality certificates are provided on demand. For parts with classification, the quality certificate is provided automatically.
- Quality management systems regularly audited by internal and external auditors.
- Components influencing NOx emissions qualified for Engine International Air Pollution Prevention (EIAPP).
- Class approval for the marine and naval business.

RELIABILITY

Often all it takes for a major breakdown or a malfunction to happen is the failure of a single part. The risk for such breakdowns grows if non-original parts, or parts that are not of the latest revision, are used.

A longer lifecycle with the latest technology
An installation should continue to deliver optimum performance throughout its entire lifecycle, running without problems day in and day out. That's why new and old installations should all be managed using parts that are of the latest applicable standards and specifications.

Original Wärtsilä spare parts comply with the latest specifications and prolong the lifecycle of the installation. Continuous research and development, as well as professional support from Wärtsilä's global network, ensure that customers always get the latest applicable parts and ensured reliability. Tests have consistently proven that original Wärtsilä parts improve engine performance and reliability, and reduce overall ownership and operating costs.

AVAILABILITY

Acquiring spare parts for complex installations can be a time consuming and frustrating task, as correct parts for different equipment need to be identified and delivery schedules coordinated in order to minimise downtime and unnecessary delays during maintenance breaks. Good planning is essential for both the spare parts supplier and the customer. Coping with unexpected situations sets extra demands on the spare parts supplier's logistics process, but even with planned maintenance, the spare parts have to be promptly delivered to the right location, be it a big harbour, an offshore location, or a remote power plant in the jungle.

An original equipment manufacturer can offer one stop shopping for spare parts whenever they are needed, and provide reliable deliveries wherever needed. This considerably enhances routine maintenance processes and also eases coping with unexpected situations that require fast responses.

One-stop shop serving more than just the engine
Wärtsilä offers its customers one contact point for the full range of OEM spare parts, tools and consumables for all Wärtsilä brands: Bolnes, Cedervall, Crepelle, Deep Sea Seals (DSS), DEUTZ marine engines, Deutz MWM, Dolphin, Eureka, GMT, Hamworthy, Japan Marine Technology (JMT), John Mills Valves, Kvaerner, LIPS, Moss, Nohab Diesel, Poyaud, Robert Cort, SACM, Shipham Valves, Stork SW Diesel, Sulzer, Super trident, Svanehoj, Whessoe, Wichmann, Wärtsilä and Wärtsilä Diesel. This improves the efficiency of spare parts purchasing in terms of time and money spent. It also lets customers benefit from services and support for better planning and overall operational efficiency of the installation.

Shopping made easy
Wärtsilä's Online Services provides 24/7 access to technical information on installations and equipment. The Parts Online section includes parts identification and ordering, availability and pricing information, delivery track and trace, creating RFQ's (request for quotation), registering and following warranty claims, as well as order history information. To simplify transactional ordering, there are pre-defined spare part kits and sets available for a wide range of needs. Tailored packages for specific needs can also be put together.
A Technical Services expert can be contacted directly via Wärtsilä Online Services.

Global logistics management for fast responses and cost-effective on-time delivery
The transparency enabled by Wärtsilä's Global Logistics Services ensures fast response times and cost-effective on-time delivery of spare parts to customers around the globe. Original spare parts can be ordered 24/7 through Wärtsilä's global service network or using Wärtsilä's Online services which also allows customers to check the latest valid service bulletins and technical manuals. To identify the correct parts for the particular installation, Wärtsilä utilises an identification system based on unique serial numbers.

DURABILITY

A quality spare part from an original equipment manufacturer can have a considerably longer lifetime compared to non-original equipment manufacturer parts. This makes original parts the most competitive choice in the long run.

Spare parts from the original equipment manufacturer are thoroughly checked and tested to comply with major quality standards and authority regulations. They are also made of high-quality materials according to the correct design specifications and tolerances to ensure proper fit and performance. Strict quality management ensures that all parts meet high quality standards and can therefore be delivered with full warranty.

COST EFFICIENCY IN THE LONG RUN

All in all, spare part costs account for a relatively small part of the total operational expenditure of an installation. In the marine sector, for example, the average share of spare parts is approximately 3-6%. However, from a lifecycle cost perspective, the use of original parts offers value that goes far beyond the spare part costs.

— Spare parts account for just 3-6% of an installation's total operating expenditure.

The shorter service life and possible unreliability of non-original spare parts may lead to high repair costs over the installation's lifecycle, far exceeding the cost of spare parts. Due to possible revenue losses, the extra interruptions to operations quickly become extremely expensive. Also, using inferior spare parts instead of original parts may result in higher lube oil or fuel oil consumption, leading to a dramatic increase in total operating costs.

Summary

FIVE REASONS TO CHOOSE ORIGINAL SPARE PARTS

When choosing a spare parts supplier, it is important to ensure the **availability** of a full range of original equipment manufacturer parts, tools and consumables, as well as expert advice, whenever and wherever needed. This enables planning for optimised performance and **cost efficiency** throughout the lifecycle of an installation. The high-quality design and materials of parts from the original equipment manufacturer ensure **durability** and **reliability**, resulting in optimised uptime and profitability. Original spare parts are also thoroughly checked and tested to comply with major quality and emission standards and authority regulations to ensure **safe operations**.

Ensuring your lifecycle operations

Wärtsilä Services creates lifecycle services for its customers, enhancing their business – whenever, wherever. We provide industry's broadest range of services for both shipping and power generation. Our solutions range from spare parts and basic support to ensuring maximised lifetime, increased efficiency and guaranteed performance of customer's equipment or installation – in a safe, reliable, and environmentally sustainable way.

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