

Wärtsilä Shaft Line Repair Services

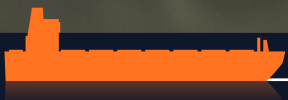
Any shaft line, any where



Wärtsilä Shaft Line Repair Services

The only team of experts you'll need

At Wärtsilä we understand the importance of resolving shaft line problems as quickly as possible. That's why we developed Wärtsilä Shaft Line Repair Services, a rapid response service for shaft lines of any manufacturer showing common symptoms of equipment failure (noise, vibration, high temperatures, premature wear, leaking seals, etc) or damaged by a major marine incident (fire, flooding, breakdown, collision and grounding, etc).



Wärtsilä Shaft Line Repair Services

An overview of Wärtsilä Shaft Line Repair Services

Wärtsilä Shaft Line Repair Services offers fully project managed investigations and repair services for your vessel's shaft line. With teams of technical experts and a wide-ranging portfolio, we can upgrade and overhaul any part of your shaft line, wherever you are in the world.



Wärtsilä Shaft Line Repair Services

An overview of Wärtsilä Shaft Line Repair Services



Find out how
we can help

Wärtsilä's
global
expertise

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Wärtsilä Shaft Line Repair Services draws on expertise from across the whole of the Wärtsilä business. With decades of engineering experience, we are recognised across the globe for our technical knowledge and the professional service we provide.

Wärtsilä has resolved shaft line problems for some of the biggest fleets in the world. Whether it's in dry dock or at sea, we can perform thorough investigations of your vessel's shaft line and prevent symptoms from becoming bigger problems.



An overview of Wärtsilä Shaft Line Repair Services



Find out how
we can help

Project management

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The project manager is the driving force behind our service. Within Wärtsilä Shaft Line Repair Services, every job has a dedicated project manager responsible for communicating with clients, driving production, coordinating engineers, overseeing logistics and preparing documentation in line with insurance and classification society requirements. Supporting these tasks to a high standard allows customers to focus on maintaining their daily operations.



Wärtsilä Shaft Line Repair Services

An overview of Wärtsilä Shaft Line Repair Services



Find out how
we can help

Our Investigations

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Behind every project there is a team of experts. Our on-site superintendents and multi-skilled engineers are continuously supported by teams of product, material and production experts from all over the world.

We combine their industry leading expertise in the analysis and measurement of alignment, vibrations and rotating machinery to perform precise investigations and determine the required corrective actions quickly and accurately.



An overview of Wärtsilä Shaft Line Repair Services



Find out how
we can help

Parts and repair

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When you need replacement parts, we prioritise this with urgency.

Our factories are designed to support a demanding marine market, and with manufacturing facilities located around the world, Wärtsilä has the capabilities to produce almost any shaft line component in-house.

That way we bypass processing problems and external parties (unless required) and get parts and services to you sooner.

Straightforward solutions for difficult situations

“Every step of the way is dealt with by specialists in their field.”

Wärtsilä Shaft Line Repair Services is all about how we bring people together. With proven processes and efficient lines of communication, we can resolve and address problems quickly.

This means we prioritise production orders, manage logistics, mobilise engineers and provide technical support on demand.



Helping with **common symptoms**

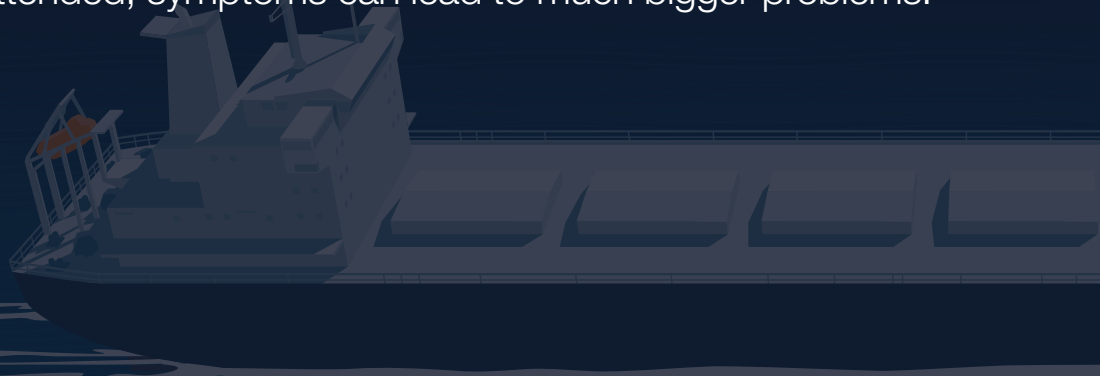
Symptoms can present at any time.
That's why Wärtsilä Shaft Line Repair
Services offers preventative and reactive
measures to ensure symptoms don't
become bigger problems.



Helping with **common symptoms**

What's a symptom?

It could be anything from the odd noise and out-of-the-ordinary vibration to extensive component wear and tear or failure. Left unattended, symptoms can lead to much bigger problems.



Helping with **common symptoms**

Common symptoms to be aware of

- High temperatures
- Noise and vibration
- Leaking seals
- Bearing wear and failure



Helping with **common symptoms**



Common causes

A common cause can be down to error in design, manufacturing, installation, maintenance or operation, including:

- outdated design criteria, calculation methods and industry standards;
- material and manufacturing flaws;
- bad practice during installation and initial alignment;
- failure to follow equipment maintenance procedure;
- changes to operating profile, engine rating, propeller design and/or loading conditions; and
- dimensional changes in foundations and surrounding hull structure.

A vessel's structure and machinery are always moving, so initial alignment seldom remains the same. To avoid compromising the performance of your vessel's shaft line, we recommend checking and maintaining alignment periodically.



Dealing with major incidents

When major incidents strike, they can have significant, sometimes surprising, effects on propulsion shaft lines and associated equipment.

In the event of a fire, flooding, grounding or collision, Wärtsilä Shaft Line Repair Services can offer the support you need to get your vessel's shaft line back to peak operational performance.

Click **incidents** to find out more:



Dealing with major incidents

Fire

A fire has the potential to cause considerable damage to a vessel's shaft line and associated equipment. Shaft line problems created by a vessel fire include, but are not limited to:

- deformation of hull, struts and foundations;
- damaged seals, especially the rubber and soft-metal components;
- a misaligned shaft;
- deformation of bearings or melting of white metal inside the bearings; and
- compromised integrity of shrink-fitted parts.



Dealing with major incidents

Flooding

A flooding can seriously weaken the structural integrity and stability of a vessel, which in turn can impact on shaft line alignment.

In severe cases, when the engine room compartment has been breached, shaft line components may also suffer from issues related to corruptions.

To determine the impact of a flooding on your vessel's shaft line, it is important to consider:

- the scale of the flooding;
- whether the shaft line was still running during water ingress; and
- whether the structural integrity of the hull has been compromised.



Dealing with major incidents

Grounding

Often a vessel runs aground as a result of poor navigation and planning; engine failure; bad weather and rough seas; or a lack of knowledge about the marine environment and/or water depth.

A vessel grounding can put the whole ship structure and shaft line at risk and impinge on operational performance.



Dealing with major incidents

Collision

A major vessel collision not only affects the point of contact, but it can shift, bend and break other vessel parts and destabilise the foundations – even at the other end of the ship.



Dealing with marine incidents



Here are some of the services we offer when a vessel's shaft line has been damaged:

- technical support, advice and consultancy;
- complete condition and failure investigations;
- measurement, calculation and analysis of alignment, torsional vibration and whirling;
- specialist, patented alignment tools and software including 4D gyro laser, strain gauge measurement, digital jack-up, etc;
- realignment and modifications to shaft line systems and associated equipment;
- dynamic alignment and vibration services;
- monitoring and alarm solutions;
- diver and underwater drone inspections;
- shaft line and stern tube equipment replacement, upgrades and overhauls (seals, bearings, couplings, line shaft bearings, liners, propeller repair, replacement or upgrade etc);
- specialist in-situ machining and welding services and supervision;
- shaft replacement, straightening and repair;
- rudder and nozzle repair and replacement; and
- project management, consultancy and support in handling class and insurance cases.



Why Wärtsilä

“We prioritise availability in the investigations and project managed repair services, and then combine it all – anything that saves a day.”

With approximately 90% of the world's trade being transported by international shipping, a marine incident can be catastrophic to shipping operations.

Having expertise in managing marine incidents means Wärtsilä Shaft Line Repair Services understands the need to act quickly and professionally in such situations.

We offer:

- quick response and supply
- high level expertise (inc alignment and measurement, analytics)
- one point of contact
- onsite support
- experience handling insurance cases
- minimum downtime
- wide product portfolio, in-house manufacturing and production methods.

Whatever the shaft line problem, we can manage it for you – whether we supply products and services from within Wärtsilä Seals & Bearings or work with the wider Wärtsilä network group and selected partners.



Wärtsilä is here to help

Wärtsilä Shaft Line Repair Services is a complete end-to-end service, managed by our expert project managers. One single point of contact for all upgrade and overhaul work means you get the support you need for solving shaft line problems and implementing preventative measures.

Contact us

Make sure your vessel is prepared for its next sailing. Get in touch to see how we can help bring your vessel's shaft line back into operation.

