

Keeping busy ports and ships on course

Specialist surfacing services to minimise risk and operational delays for the maritime sector





The need for speed, safety and efficiency

Effective surface maintenance in the maritime industry is essential.

Timely resurfacing prevents accidents, ensures compliance, and avoids costly rework. Applying specialist paints and coatings to critical steel structures - such as jetties, pontoons, and decks - protects against corrosion and wear, keeping operations running smoothly. And, to boost safety during activities like loading and unloading where high levels of traction are required, anti-slip coatings are critical.

You know all this, right? The problem is finding the time to carry out these essential maintenance tasks without causing operational delays. Ports are busy, ships are constantly on the move, and downtime costs money. Maintenance often has to be squeezed into tight windows, and any overruns can disrupt schedules, impact capacity, or worse, compromise safety.

But here's the good news: with the right expertise and innovative approaches, resurfacing projects can be completed faster and with minimal disruption.

Let's see how.



Juggling competing priorities

The aim of maritime surface maintenance is to extend asset life and reduce downtime.

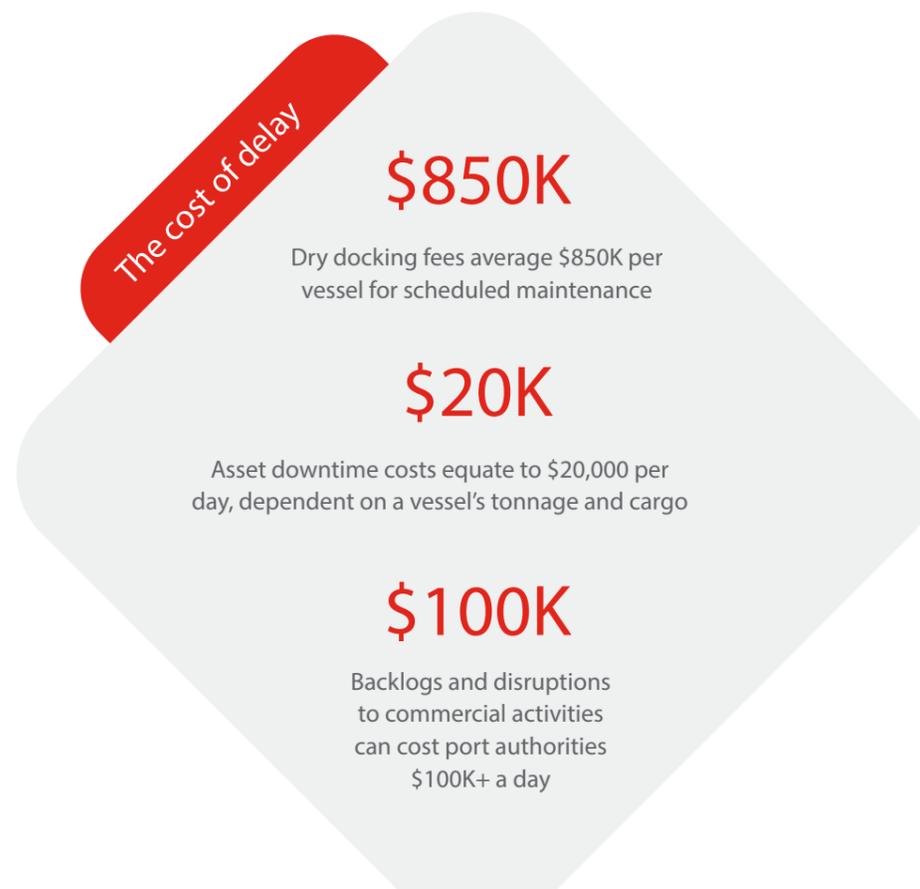
Protective coatings and anti-skid systems help mitigate risks like:

				
Workplace accidents	Non-compliance with health & safety regulations	Fines and legal issues	Operational disruptions	Structural failures

But balancing maintenance with operations requires precise planning. For port authorities, delays can disrupt schedules and incur heavy costs. Vessel operators face dry-docking fees and a loss of revenue if ships remain docked longer than necessary.

Juggling all these competing priorities is just part of the challenge for harbour masters and shipping superintendents alike.

In an ideal world, activities such as surfacing can be planned and scheduled months in advance. All too often however, the reality is very different. Maintenance windows are rarely predictable. When the opportunity arises, teams must act swiftly, mobilising specialist crews to ensure projects are completed quickly and with minimal disruption.



Getting it right, first time

In marine surfacing, speed isn't the only factor. Quality is critical. Poor preparation, subpar materials, and incorrect application can lead to costly mistakes.

Preparation

Inadequate surface preparation is a leading cause of coating failures so it's important not to cut corners. Following surface condition assessments, this multi-step process typically begins with removing the old coating (if not soundly bonded to the substrate) to minimise potential water ingress. Thorough blast cleaning avoids further delamination of the defective coating and costly steel repairs. Contaminant removal, surface profiling and drying are then carried out to support optimal adhesion.

Materials quality

Inferior and poor quality coatings and materials offer mediocre protection and will deteriorate quickly. As a result, assets will require constant reapplications.

Environmental factors

Factors such as ambient and surface temperatures, humidity and dew-point temperature can influence curing. Applying coatings in unsuitable conditions can lead to improper adhesion, uneven finishes, or longer drying times, which compromise the surface's durability.

Application techniques

Failing to follow manufacturer's instructions or use the right formula will result in underperforming coatings. Some products have a specific 'sweat-in' time between mixing and applying or need to be mixed to a specific blend.

By considering all the factors outlined, port authorities and vessel operators can achieve long-lasting, durable surfaces that keep operations running smoothly. Many have found that it also pays to partner with experienced specialists who understand the unique challenges of marine environments. Indeed, with the right expertise and approach, it's possible to protect assets, reduce

downtime, and maintain compliance, all while keeping vessels and operations on course.

But expertise alone isn't enough - leveraging the latest technologies in surface preparation and coating application is becoming increasingly vital for staying ahead.

Embracing innovation and change in surface preparation

New technologies are transforming how complex marine resurfacing and coating projects are undertaken.

Alongside enhancing the durability and longevity of anti-skid systems, these advanced surface preparation techniques and coating methods maximise efficiency and cut project completion times by up to a third. These include:

Captive shot blasting

Saving time and money, captive shot blasting achieves a high level of surface cleanliness and roughness that improves the adhesion of future coatings and prolongs the life of the substrate. Ideal for removing contaminants such as rust, paint or scale, this rapid cleaning and surface preparation process ensures new coatings can be applied soon after.

The process can be delivered using a variety of machines - from pedestrian push-along blasters to mobile ride-on and lorry-mounted units that feature extra-wide automated blast heads. These are ideal for preparing assets like jetties, linkspans, ramps and deck surfaces. To support the fast process of complex assets, specialists like JMS have developed specific machine modifications that can handle chevrons, ribs, raised lashing points and more.

Jet drying

Using jet aircraft technology, these systems can dry up to 1,500m² in just one hour with a drying path of two metres. This ensures rapid dry times and helps multi-phase resurfacing projects progress no matter the weather. JMS is the only company to offer this kind of vehicle-mounted jet surface drying service in Europe.

Specialist resin trucks

Designed and built in house using large capacity hoppers, JMS' resin vehicles have triple the mixing capacity of standard equipment, these trucks cut resin application times in half, making them invaluable for high-volume projects requiring rapid cure times.

Marine-specific products

Today's advanced coatings, sealers, and epoxy fairing compounds are engineered to withstand extreme temperatures - from -30°C in winter to 30°C+ in summer. These products ensure that port assets and commercial vessels can operate 24/7, 365 days a year, in any conditions.



Best practice in action



Molslinjen Port

Providing fast connections between Jutland and Zealand, Molslinjen Port needed a long-lasting coating solution that would withstand the port's high-speed crossings for the next decade. All works needed to be completed with zero disruption to daily passenger services.

In partnership with Beegrip, JMS coordinated with port authorities to ensure the removal of existing surfaces was undertaken between sailings and during night time layover periods to ensure normal operations could be maintained throughout the process.

- Captive blasting to industry standard SA2.5
- Application of a protective anti-corrosive polyurethane primer
- Application of a heavy duty anti-skid resin system in sections



Primula Seaways

DFDS Torline chose JMS to deliver a turnkey anti-skid and protective paint surfacing project for Primula Seaways, on its roll-on-roll-off vessel built in 2004. The project, completed during an 8-day layover in Gothenburg, was designed to maximise efficiency and minimise disruption to port operations. Key deliverables included surface preparation, including disassembly, cleaning and blasting, installation of new high friction surfacing system (Bimagrip) on decks and ramps.

- Over 20 areas renovated
- Over 560m² of renewed anti-skid surface
- Surfaces prepared to SA2.5 standard
- Application of 4-coat protective paint system on 2,500m² of weather and car decks



Calais Port

When an existing anti-skid system failed, the operations team at Calais port turned to JMS to undertake the resurfacing of three linkspans and eliminate traction loss issues. Leveraging Beegrip advanced surface coatings, JMS utilised specialist vehicle-mounted jet dryers to ensure project momentum, whatever the weather, and ensured the port's live operations were maintained throughout.

- 4,000m² resurfaced
- Surface preparation undertaken using lorry-mounted captive blaster
- Application of a combined waterproofing and anti-skid system featuring Emery 3-5mm aggregate



Dover Port Berth 7

When Dover Port needed to refurbish and install a new heavy-duty anti-slip surface in Berth 7, it tasked JMS with the removal of the old defective coating and the application of a robust new anti-slip road surface. The entire project had to be completed in just four days.

- Utilisation of abrasive-adapted bobcats and JMS jet dryer to effectively remove old coatings
- Surface preparation included captive blasting and the application of an anti-corrosive primer
- Installation of Bimagrip LS system to provide a long lasting and robust anti-slip surface over an area of 880m²



Managing complex maritime projects with expertise

With over 30 years of experience in marine surface preparation, JMS is dedicated to delivering solutions that are both efficient and reliable.

As a full-service turnkey contractor, it is well-versed in handling complex projects with minimal impact on day-to-day operations through:

- A deep understanding of surface preparation technology for all substrates, in all environments – from standard services to highly regulated and complex operations.
- A comprehensive suite of surface preparation services - scarifying, grinding, open and captive shot blasting, abrasive grit blasting, jet drying and demolition.
- Full European coverage - operating in 16 countries - and a fleet of over 30 specialist vehicles that can be shipped to site.
- End-to-end services covering removal, preparation and application with no need to source external contractors or equipment.
- Experienced at providing protective paint systems and high-friction services for new surfaces or the refurbishment of existing substrates.
- Partnerships with globally recognised resin system leaders - including Beegrip, using the Bimagrip LS system - to deliver lightweight and heavy-duty anti-skid systems for ramps and ship decks.
- Utilising specialist paints that provide a durable barrier to moisture and UV radiation and reduce maintenance costs over time.





Over the years, we've become the first port of call for a number of high-profile maritime firms including DFDS, Stena Line, P&O, Brittany Ferries, Rosslare Europort, Port of Dover, Irish Ferries and more.

To discover how JMS could enhance your operational safety and throughput, get in touch.

