

Case Study

CB[®] 300

In synergy
with paint
system



Deploying Corrosion Protection at the Grand Harbour

Valletta Port, also known as the Grand Harbour, is Malta's primary deep-water port and a strategic hub for fuel storage and maritime operations in the Mediterranean.

Within this bustling harbor, a high-priority project was in progress – the repair and protection of three storage mud tanks, each with a capacity of approximately 200 square meters.

Client: Port of Valletta
Location: Malta

Contractor: Local certified coating contractor
Supervision: Coreteel Technologies

A Smarter Way to Maintain Shore-Based Mud Tanks

Mud tanks are large steel containers used to store, mix, and manage drilling fluids (mud). They play an essential role in supporting offshore operations.

Managing this important task was a global leader in integrated logistics and engineering services. The company provides drill fluid toll manufacturing services and offers a range of bulk storage solutions, including mud tank management and maintenance. Operating in 12 countries across 4 continents, it prioritizes sustainability, safety, and operational excellence.

Overcoming Environmental and Operational Barriers

Under normal circumstances, these mud tanks require maintenance approximately every five years. Situated in a coastal zone, they are constantly exposed to harsh environmental conditions - including high humidity, salty environment, fluctuating temperatures, and chemical exposure - leading to the accumulation of substantial, tenacious rust over the years.

The traditional treatment methods involve abrasive blasting as surface preparation. However, due to port regulations prohibiting abrasive blasting on-site, the tanks must be lifted and transported outside the port area for treatment. This process involves high transportation costs and significantly extends project timelines, eliminating the operational availability of this critical infrastructure.

Given their essential role in storage and logistics, along with their extensive surface area, a durable, efficient, and sustainable protective solution was clearly needed.



Coreteel's Solution: Advanced Corrosion Protection with Coreteel Base 300



In response to these challenges, Coreteel's technology was selected to deliver an advanced protective solution. This innovative approach, which works in synergy with various paint systems, eliminates the need for abrasive surface preparation, reducing both cost and project duration while delivering long-lasting protection.

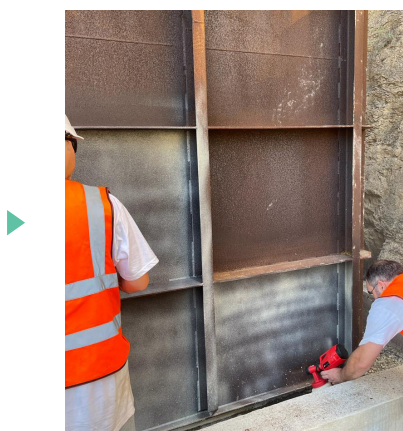
How it Works:



1

Water Jet Surface Preparation

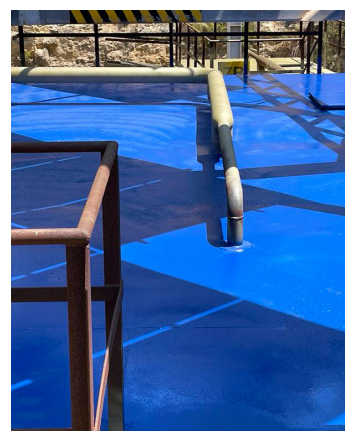
High-pressure water jetting removes old paint and loosens rust safely and efficiently.



2

CB300 Application

The liquid solution is applied by spraying, chemically bonding to the metal surface to form a protective oxide layer, preventing corrosion and blistering.



3

Coating System

A mid-coat and topcoat are applied to achieve protection that meets ISO 12944 C5 standards.

Proven Results: Efficiency, Savings, and Durability:

- **Extended Protection Lifespan** - The CB300 solution offers long-term durability, extending the expected service life by over 30% and significantly increasing the intervals between maintenance cycles.
- **Operational Efficiency** - The project was completed on schedule, enabling a faster return to service and continuous operations by eliminating the need to transport the tanks outside the port for treatment.
- **Cost Savings** - Reduced maintenance frequency, simplified logistics, and tolerant surface preparation and application resulted in significant cost savings.
- **Reduced Environmental Impact** - By eliminating abrasive surface preparation and using a water-based, low-VOC solution with long-lasting protection, the project minimized environmental impact and aligned with the company's sustainability goals.
- **Improved Safety and Compliance** - Eliminating abrasive blasting improved workplace safety while ensuring full compliance with industry regulations. Eliminating abrasive blasting enhanced workplace safety, reduced worker exposure to harsh conditions, and simplified logistics. This approach made the overall process more efficient and worker-friendly.

On-Site Success: Eight Days to Project Completion

In just eight working days – 50% less time compared to traditional methods – the team successfully completed the project. It was completed entirely within the port premises, a task that would not have been possible without the use of CB300.

By eliminating the need to relocate the tanks off-site for surface preparation and avoiding reliance on external service providers, operational efficiency was increased, logistical risks were reduced, and overall project costs were lowered – all while meeting the requirements of ISO 12944 C5-H, ensuring long-term protection in harsh environments without compromising on standards.

Additionally, the company gained greater control over its operations, demonstrating that sustainable practices, operational efficiency, and high-quality results can successfully coexist.

Join us in adopting
a more cost-effective,
eco-friendly,
and efficient solution.



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