## PROTECTIVE COATINGS



## **DOVER HARBOUR WESTERN DOCKS**

The lighting masts at Dover's Western Docks range in height from 18 to 30 metres. Located on the quays which project into the harbour, they are exposed to wind, rain and salt water spray almost every day of the year.

As a result, some years after installation, the masts were in need of attention. On the side facing the prevailing weather, the zinc galvanised coating was showing signs of failure. When we carried out a comprehensive survey, areas of light rusting were found on exposed faces.

Aside from the safety measures required when operating at such heights, we worked closely with our paint supplier (Ameron PPG) – and drew on more than 20 years of our own in-house expertise – to formulate the correct sequence of specialist coatings to ensure long-lasting durability. Thorough preparation of the mast surface was also critical.

Attention to detail

The masts were first cleaned by the application of Amercoat 57, an emulsion-based oil and degreasing agent. This was then washed off with hot water at high pressure (2800psi), with particular emphasis being placed on removing all traces of salt contamination. Frequent salt tests were carried out at all stages to ensure surfaces were kept free of contamination.

Rust stains and loose zinc coating were carefully removed by hand using wire brushes, then patch-primed with Amercoat 4180 anti-corrosion primer. When dry, this was followed with two coats of Amercoat 2136 Micaceous Iron Oxide paint (MiO) at approximately 75 microns per coat. A third and final coat of Amercoat 2143, a modified vinyl in BS-00-A-05 pale grey, was then applied at 70-80 microns.

The end result was a 200-225 micron coating, with expected durability of more than 12 years.

Protecting lighting masts from the effects of the weather and salt spray required specialist coatings – and all our expertise.





"AN EXCELLENT JOB. THE COMPANY WERE SO CONSCIENTIOUS IN THEIR WORK METHODS AND SAFETY PROCEDURES. I'D HAVE NO PROBLEM IN USING THEM AGAIN, ALTHOUGH WITH A 12-YEAR GUARANTEE, I'D HOPE TO BE RETIRED THE NEXT TIME THESE POLES NEED REPAINTING."

**GEORGE KING, ELECTRICAL & MECHANICAL MANAGER, DOVER HARBOUR BOARD**