



KEEPING EVERYONE MOVING WITH ANTI-CORROSION COATINGS IN THE HARSHTEST CONDITIONS

Arnside Viaduct is a 51 span bridge that was originally built in 1856 and consisted of a single track rail line that connects Arnside with Cumbria over the Kent estuary near Morecambe Bay. Subsequently this was widened to accommodate a second line and has undergone further maintenance over the years to strengthen the supports.

The steelwork had deteriorated over the years to such an extent that the superstructure was in need of a complete replacement and had to be carried out during a 16 week closure to the line in the spring/summer of 2011.

SHERWIN-WILLIAMS WAS ASKED TO SUPPLY AN ANTI-CORROSION COATING SYSTEM THAT WOULD PROTECT THE PROJECT FOR A MINIMUM OF 25 YEARS IN A SALINE ENVIRONMENT (THE PROJECT WAS ONLY 7.9M ABOVE WATER LEVEL) SHERWIN-WILLIAMS ALSO PROVIDED AN ANTI-SLIP DECK COATING FOR THE SUPERSTRUCTURE MODULES WHICH HAVE PROVEN TRACK RECORDS IN THE NORTH SEA OFFSHORE INDUSTRY.

CLIENT:
UK Department for Transport

APPLICATOR:
Mabey Bridge

MAIN CONTRACTOR:
May Gurney

FROM SPEC TO PROTECT
protectiveemea.sherwin-williams.com

**SHERWIN
WILLIAMS®**

ARNSIDE VIADUCT, CUMBRIA

The 477m long bridge is constructed of tubular cast iron piles which were subsequently encased in brickwork and concrete for additional protection and a superstructure that supported the Carnforth & Whitehaven line.

To help with the limited time frame in which the project had to be completed, the superstructure was replaced with prefabricated deck girder units which were fabricated and painted at the Mabey Bridge facilities in Chepstow, South Wales and then transported to site in Cumbria for erection and installation. Minor transport and erection damage was repaired on site using the shop applied system.

SUBSTRATE

Steelwork blast cleaned to Sa2½.

REQUIREMENTS

25 years external corrosion protection.

SPECIFICATIONS

Macropoxy™ L574, Macropoxy M922, Acrolon™ C137V2.
Decks – Macropoxy C425V2, Epidek™ M153.

AREA COATED

Approximately 1,200 tonnes of prefabricated deck girder units.

SOLUTION

Sherwin-Williams worked with Mabey Bridge to provide a paint system that could be applied in-shop to help maintain productivity whilst providing the long-term anti-corrosive properties that are essential for this type of project.

Sherwin-Williams offered full specification/technical and practical advice from the early project stages and carried out regular site visits for the two-year duration of the project. This helped to ensure that the work was completed on time to the satisfaction of all interested parties.

SYSTEMS

Coatings used for the corrosion protection

	NR Item no.	Product type
Macropoxy L574	7.1.2	Blast primer
Macropoxy M922	7.2.3	Glass flake epoxy
Acrolon C137V2	7.3.1	Special finish

Coatings used for the anti-slip decks

	NR Item no.	Product type
Macropoxy C425V2	7.1.4	Zinc phosphate primer/build coat
Epidek M153	5.12.1	Extra heavy duty deck coating
Epidek M153 anti-slip aggregate	5.12.3	Anti-slip aggregate

THE SHERWIN-WILLIAMS DIFFERENCE

Sherwin-Williams Protective & Marine delivers world-class industry subject matter expertise, unparalleled technical and specification service, and unmatched regional commercial team support to our customers around the globe. Our broad portfolio of high-performance coatings and systems that excel at combating corrosion helps customers achieve smarter, time-tested asset protection. We serve a wide array of markets across our rapidly growing international distribution footprint, including oil and gas, water and wastewater, bridge and highway, steel fabrication, flooring, food and beverage, rail and power, marine and passive fire protection.

SHERWIN-WILLIAMS®

protectiveemea.sherwin-williams.com
07/21 EMEA10070/V03/PC

United Kingdom:

+44 (0)1204 556420
sales.uk@sherwin.com

Europe and Africa:

+44 (0)1204 556454
sales.uk@sherwin.com

Middle East:

+971 4 8840200
sales.me@sherwin.com

India:

+91 9871900878
pmsales.india@sherwin.com