

Problem areas – Marine & Coastal



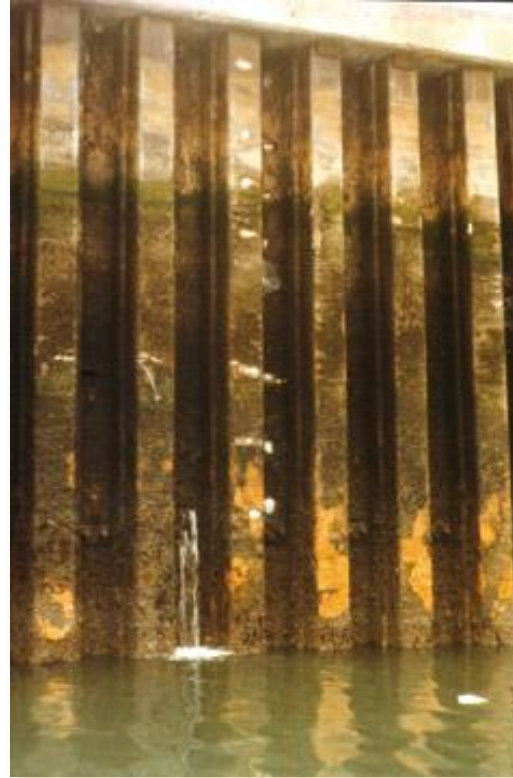
Areas
Subject to
Extreme
Corrosion

Problem areas – Marine & Coastal

Splash Zone

Tidal Zone

Low Water Zone



SPLASH ZONE

Up to 0.09mm per annum
Structural loss

TIDAL ZONE

Up to 0.05mm per annum
Structural loss

LOW WATER ZONE
Up to 0.09mm per
Annum Structural loss

IMMERSION ZONE
0.05mm loss per annum

UNDERGROUND
0.03mm per
annum

6 5 4 3 2 1

STEEL LOSS (mm) OVER 10 YEAR PERIOD



The Solution – 208 Ceramic UW

- Two pack solvent free epoxy
- Flexibilised – expands and contracts with the substrate
- Designed to be applied underwater and above the waterline
- Will cure at 5°C and above
- Ceramic enhanced fillers to give better erosion resistance
- Excellent adhesion to wet surfaces
- Thixotropic ensuring little wastage on underwater applications
- Resistant to sea water, chemicals, sewage, oils, buried conditions



The Solution – 208 Ceramic UW



SIMPLE SOLUTION

Aqua blast
Mechanically prep
Manual prep using scrapers

*Take away as much corrosion
from the surface above and
below the waterline*



LONG TERM PROTECTION

Apply in a single coat
High Build
Seamless finish

*Cures to give an erosion resistant
finish
Flexiblised system – expands
and contracts with surface*

The Solution – 208 Ceramic UW

Recommended preparation of the substrate:

- Aqua-blasting using entrained garnet
- Environmentally friendly
- Provides a good profile and cleanliness



Recommendation Coating Application:

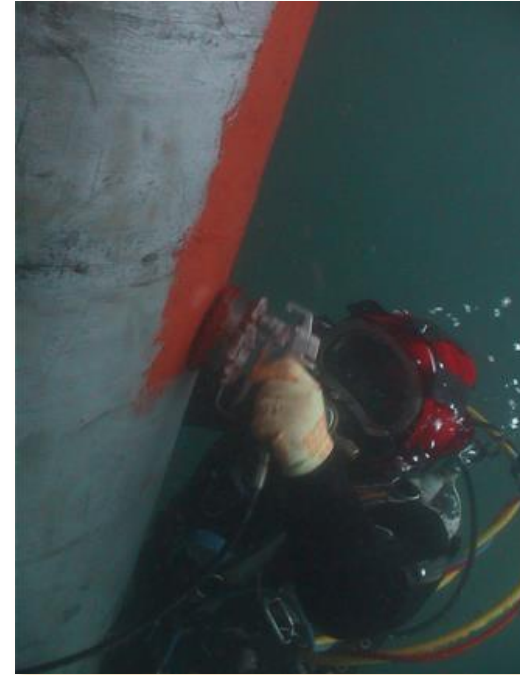
Displacement of water from the substrate by using the correct coating application

Correct thickness of coating:
1 x 750microns -1000microns

- Apply by hand using applicator tools
- Apply by GRACO pump to brush head



Project Profile – 208 Ceramic UW



Underwater Pipeline - UK

- Surface was aqua blasted
- 208 Ceramic UW applied at 1mm WFT
- Product applied using GRACO Extreme 45:1 pump
- Special brush attachment was used to assist diver application

Project Profile – 208 Ceramic UW



Jetty Structure - UK

- Surface was hydro-blasted
- 208 Ceramic UW applied at 1mm WFT
- Product was applied using applicator tools
- Single coat application

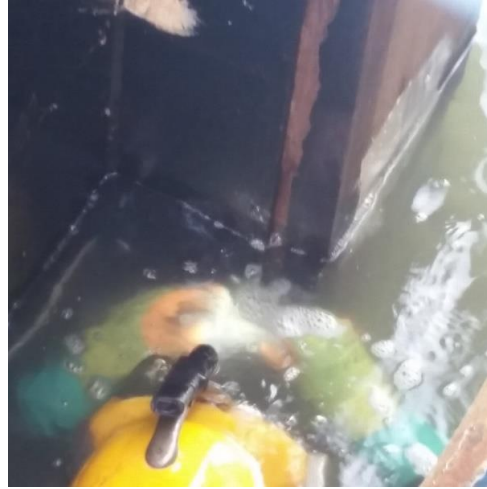
Project Profile – 208 Ceramic UW



Dock Gate Injection Contract- UK

- 208 Ceramic UW injected behind dock gates timbers
- Injected using GRACO Extreme 45:1 pump
- Fill voids ranging from 5mm – 45mm
- Chosen due to flexibility and surface tolerance

Project Profile – 208 Ceramic UW



Dock Gate Injection Contract- UK

- Contract awarded to refurb 18 dock gates
- 208 Ceramic UW was injected behind the timbers
- Used to fill voids ranging from 5mm – 45mm
- All work carried out underwater with divers
- Product pumped from topside to below the water line using GRACO Extreme 45:1 pump