

Project:

Clarifier refurbishment

Location:

Northumbria

Owner/s:

Northumbrian Water

Applicator/Contractor:

Stonbury

Market sector:

Clean Water Industry

Products used:

MasterSeal S 420

MasterSeal 600

MasterSeal M 808

MasterSeal 586

MasterSeal 930 bandage with

MasterSeal 933 adhesive

Sales Contact:

Darren.priddle@mbcc-group.com

Technical Contact:

christopher.gallivan@mbcc-group.com

Clarifier Refurbishment, Northumbria

Repair / waterproofing of concrete walls & protection of steel pipework



Our reference in Northumbria (United Kingdom): Clarifier refurbishment

The background

The clarifiers comprise of six separate above ground chambers covering a hexagonal footprint. The objective of the works was to prolong the asset life of the structure.

The challenge

The contract required the removal of all contamination back to sound concrete. To which a rapid setting mortar was needed to build the surface back to level.

A moisture tolerant adhesive and joint bandage was also needed to seal the leaking joints with a cementitious levelling mortar to re-profile the concrete surface.

Finally, a coating to protect the concrete surfaces and steel pipework from the effects of water was required.

All materials to be Regulation 31 approved for use in contact with potable water with a fast return-to-service time to minimise the down time of the asset.

Head Office:

Master Builders Solutions UK Ltd
Swinton Hall Road
Swinton Manchester
M27 4EU, United Kingdom

T: +44 (0)161 727 6300

Redditch Office:

Master Builders Solutions UK Ltd
19 Broad Ground Road, Lakeside,
Redditch, Worcestershire,
B98 8YP, United Kingdom

T +44 (0)1527 512 255

Clarifier Refurbishment, Northumbria

Repair / waterproofing of concrete walls & protection of steel pipework



Our reference in Northumbria (United Kingdom): Clarifier refurbishment

Our solution

The concrete surface was treated with high pressure water to remove all contaminants. The concrete surface was built up using MasterEmaco S 420 incorporating MasterSeal 600 polymer emulsion to build the concrete surface back to the original profile.

Joints were sealed with MasterSeal 930 bandage applied on top of the MasterSeal 933 adhesive. MasterSeal 586 was then applied in one layer of 3mm to re-profile the concrete walls.

MasterSeal M 808 was applied in 3 coats to protect the repaired concrete surface. Steel pipework and channels were grit blasted to remove all corrosion products. MasterSeal M 808 was applied in two coats by roller and brush onto the steel surfaces.

All materials applied in accordance with the IFU.

The customer's benefit

- The rapid set time of MasterEmaco S 420 enabled the surface profile to be reinstated quickly.
- MasterSeal 586 applied at 3mm provided a rapid return to service time of three days at 3°C ensuring a fast follow on time for coating.
- MasterSeal M 808 has a rapid return service time of seven days at 7°C, enabling the reservoir to be recommissioned on schedule.
- All products are Regulation 31 approved for use in contact with potable water.

Projects facts at a glance

- Clarifier refurbishment Northumbria
- Preparation of the concrete and steel surfaces
- Regulation 31 approved materials applied

Master Builders Solutions by MBCC Group

The Master Builders Solutions brand expresses MBCC Group's expertise in providing customized chemical solutions for new construction, maintenance, repair and restoration of structures.

Master Builders Solutions is built on the experience gained from more than a century in the construction industry. At the core of the Master Builders Solutions brand is the combined know-how and experience of a global community of construction experts, who connect with you to solve all of your construction challenges.

Further information is available at:
www.master-builders-solutions.com