

Coatings for Concrete Protection:

## Refurbishment of a buffer tank in a sewage plant with Ceramic Polymer concrete protection systems

Ceramic Polymer GmbH  
Daimlerring 9  
DE-32289 Roedinghausen

[www.ceramic-polymer.de](http://www.ceramic-polymer.de)



The sewage treatment plant of the German city Radeberg owns a huge equalization tank with a length of 70 m. Due to extreme concrete damages the basin was refurbished extensively.

Our long-time partner „ISDW GmbH“ conducted the repair of the concrete substrate with our products.

Because of chemical influences concrete structures in wastewater treatment plants show heavy damages after a few years of operation. The area between low and high water level is particularly affected. Furthermore, the top edge is exposed to high mechanical loads by movement and weight of the scraper bridge. Breaking, cracking and sanding of the concrete occur, also through weather conditions and temperature fluctuation.



### Project: Refurbishment of buffer tank, sewage plant Radeberg

**Object:** Buffer tank, 70 m long, 8 m wide,  
2.5 m deep + additional installations

**Area:** ca. 500 sqm

**Coating products:**

CP-SYNTHOFLOOR BETA 8016 + PROGUARD CN 200

**Application of the coating**

ISDW GmbH – Industrieservice, Mittenwalde/Germany



Buffer tank before refurbishment



Grit blasted area, loose concrete was removed



Rebuilt top edge, application of the primer

First of all, the whole area was grit blasted to clean the substrate. The buffer tank was heavy damaged. By the grit blasting loose and crumbling concrete parts were removed, partially to the steel reinforcement.

The walls and the top edge were rebuilt with a high-quality repair grout. Afterwards the area was primed and saturated with our base coat CP-SYNTHOFLOOR BETA 8016. For cavities and unevenness the primer could be mixed with quartz sand for the utilization as a mortar. After the curing the walls were grinded to prepare the concrete for the application of the protective coating.

The high-grade chemical and temperature resistant coating PROGUARD CN 200 was applied by airless spraying method. In combination with the primer this premium coating provides durable protection for concrete areas against aggressive chemical influences and heavy abrasion effects.

PROGUARD CN 200 can be directly applied on steel surfaces, without the previous use of a primer. The simple handling by airless spraying facilitates a fast and cost-saving application.

## Would you like to protect concrete against chemicals, abrasion and weathering?

## We support you with A1 concrete protection systems!



**Our partner for competent surface protection:**

ISDW GmbH

Am Kanal, Gebaeude 23

DE-15749 Mittenwalde/Germany

Phone.: +49 (0)3 37 64 / 2 45 85

Email: isdw-gmbh@t-online.de

Web: www.isdw-gmbh.de

**Contact Ceramic Polymer GmbH:**

**David Garcia Simao** (Director)

+49-5223-96276-15 | dgs@ceramic-polymer.de

**Jan Robert Schroeder** (Sales Manager)

+49-5223-96276-16 | jrs@ceramic-polymer.de

**Our Products:**

- CP-SYNTHOFLOOR BETA 8016

- PROGUARD CN 200



Grinded wall area



Application of the coating PROGUARD CN 200