

Coatings for Biogas Applications:

Extensive renewal of 2 hygienisation tanks

www.ceramic-polymer.de

Since 1980 company Reinken is an experienced partner for blasting and coating techniques. Beside different blasting methods Reinken is specialized on demanding coating applications for renewals and new built tanks. Approved coating systems for drinking water and food applications according to German Water Resources Law with temperature resistance up to 150°C as well as chemically resistant internal coatings for aggressive liquids or gases are applied reliably and competently.

Our joint project

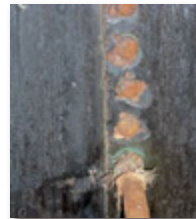
Renewal of 2 hygienisation tanks of EWE biogas plant in Werlte/Germany

- Year of construction: 2002
- Structure: Concrete floor, walls made of metal sheets, enamel coated
- Reason of maintenance: severe corrosion on wall elements, severe erosion on floor area



Structural condition of tanks before renewal

- **Heavy corrosion** on surfaces, edges and rivets of metal sheets, enamel coating extensively delaminated or vanished due to chemical attack
- **Extremely deep concrete erosion** on the floor area caused by the aggressivity of the biomass (after only 9 years operating time)



Way of proceeding

- The floor was cleaned and troweled with our primer **CP-Synthofloor 8010** smoothly. Afterwards it was coated with **Proguard CN 200**.
- The remains of enamel were blasted off the metal sheets. Then existing salts were washed off before the complete walls were blasted once more to prepare the substrate for coating application.
- Thereafter, pre-coating of edges, rivets and joints between floor and wall with **Proguard CN 200-thix** was necessary to provide ideal protection. Last step was the 2-layer application of whole wall areas with our product **Proguard CN 200** by conventional airless spray method.



Advantages of Proguard CN 200

- Due to excellent chemical resistance at high operating temperatures up to 130°C **Proguard CN 200** is the ideal coating product for the specific demands in hygienisation tanks.

Contact:

Company Norbert Reinken · Sandstrahl & Beschichtungstechnik · DE-49681 Garrel/Germany
Phone: +49 (0) 4474-947400 · Email: info@reinken.net · Web: www.reinken.net