

Fast-cure epoxy reduces treatment plant downtime

Hydroplate® 6500 speeds emergency lining repair



Location: Lake City, Florida

Owner: The City of Lake City

Contractor: Crystal Coatings

Application date: July 2024

Project size: 600 ft² (60 gallons)

Lining system: Hydroplate 6500

Coal tar epoxy failure spurs emergency repair

Owing to their role in the early stages of the wastewater treatment process, splitter boxes are subject to significant abrasive force and exposure to highly corrosive influent.

At this wastewater treatment plant, the splitter box's prior coal tar epoxy lining system failed, resulting in widespread pitting of the underlying steel. An emergency repair was initiated, consisting of the removal of the existing coal tar epoxy followed by direct-to-metal spray application of **Hydroplate 6500**.

System selection and execution

Because projects like these can potentially involve temporary service outages, quick-cure products designed for a rapid return to service are critical. While plant authorities were able to reline different chambers of the splitter box at different times and avoid a total shutdown of operation, it is still essential to keep reductions to treatment capacity to a minimum.

Hydroplate 6500 is a premium-grade, ultra-durable epoxy lining suited for use on both concrete and steel surfaces in aggressive, hydrogen-sulfide rich municipal and industrial wastewater environments. Two features of Hydroplate 6500 were crucial to this project:

First, its rapid-cure formula minimized the length of time plant operators needed to partially shut down the splitter box. No competing manufacturer has an epoxy that can return to service as quickly.

Second, it achieves film builds as high as 250 mils on a single pass at comparatively low pump pressures—around 3,000 psi, and often less than that. This significantly reduces operator fatigue and wear on pumps, tips, and other equipment.