Industrial Maintenance & Plant Operation

Epoxy coating provides cure for flooring woes

After the concrete floors were poured at the Orval Kent Food Company's Wheeling, IL plant back in the late 1970s, they received no attention except daily cleaning for almost 20 years.

But a major portion of the badly worn floor was fully restored in 1995 when ConCare Inc., a local contractor specializing in concrete restoration, applied a unique protective epoxy coating manufactured by International Coatings, Inc., Franklin Park, IL.

"The bare concrete floor in our 7,000sq. ft. potato and cabbage produce cooler was severely deteriorated from years of forklift traffic, water, and vegetable by-products," says Mark Klein, director of engineering at Orval Kent. "There were a lot of cracks and many areas of exposed aggregate, which we needed to fix to stay in USDA compliance."

Meeting the challenge

"The extent of floor deterioration combined with the need for a fast weekend installation ruled out many floor coating products that required multiple coats and lengthy curing times," recalls ConCare's Ron Puszynski. "That's why we recommended ICO-GuardTM51, a 100% solids epoxy resurfacer that can be trowel-applied in almost any thickness, in just one pass, with no top sealer coat."

In previous projects, ConCare had discovered some of

the benefits of the resin-rich ICO product compared to other epoxy floor coatings:

- It contains virtually no odors, so it cannot contaminate food products.
- It has excellent bonding characteristics, even on damp surfaces.
- It cures quickly, even in temperatures as cold as 32°F.
- It works with antislip additives like aluminum oxide.

The USDAapproved ICO-Guard 51 is designed especially for food and

dairy environments, where its resilience and toughness offer extra protection against heavy wear, CIP cleaners, and thermal shock.

Because ICO-Guard 51 is odorless and cures quickly in cold conditions, the installation crew was able to resur-

face the floor without moving the food or turning off the refrigeration system.

To get the job done with minimal production interruption, the contractor approached the work in two phases. In the first phase, which was scheduled the weekend before the coating was applied, ConCare performed a meticulous seven-step floor preparation that included washing with a citrus-based solvent, shot blasting, "chasing" all of the cracks with impact hammers, cleaning, vacuuming, and priming. In the second phase, a ¼ in. coating of ICO-Guard 51 was applied and allowed to cure over a weekend, using both power trowel and hand trowel techniques.

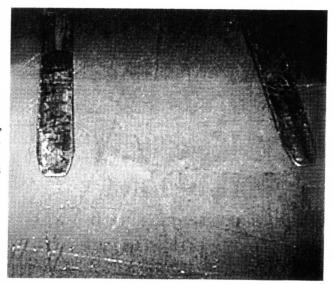
Solid performance

Almost three years after completion, the customer and contractor consider the job a complete success.

In the produce cooler, there is almost always water on the floor from the potato washing system located in the room. In addition, because the cold floor is washed several times a day with hot water, there is a lot of thermal shock for the floor.

"The floor coating has performed exceptionally well," says Klein. "It shows a bit of wear, as you'd expect, but the textured surface has dramatically improved safety, and the resilient coating has maintained its integrity."

International Coatings, Inc., 2925 Lucy Lane, Franklin Park, IL 60131; 800-624-8919.



Even after three years of heavy fork lift traffic, cold temperatures, and daily washing with hot water, the ICO-Guard™51 textured epoxy floor coating is still providing trouble-free protection for Orval Kent Food Co.

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