



Floor Solutions

Stonhard Protective Floors and Linings Proved to be a Cut Above the Competition for a Potato Processing Facility in Idaho

J. R. Simplot's clarifier with Stonchem 441: chemical-resistant, high-performance lining protection.



Products used at J.R. Simplot:

- Stonclad Xpress • Stonclad UR • Stonclad HT
- Stonchem 441

The J.R. Simplot Company began in Idaho, more than 70 years ago, as a one-man potato processing operation. Today, the company has flourished into one of the largest privately-held food and agribusiness companies in the world.

After many years of wear on floors at Simplot's Caldwell, Idaho potato processing plant, management decided that new floors were imperative in order for Simplot to maintain a safe and efficient production environment. The two main areas of concern were the potato clarifier and the processing area. The concrete floor in the clarifier was deteriorated beyond repair and the protective lining on the walls had been eaten away, resulting in carbon-steel exposure. In the processing area, thermal shock had caused a complete floor failure of the existing epoxy system.

Replacement systems in these areas would need to be extremely durable, chemical resistant, able to withstand thermal shock, safe and easy to maintain. Additionally, it was imperative to Simplot

that the processing area only be out of service for no more than 24 hours.

Simplot originally chose another company to install the floors in the processing area, based on the company's claims for a quick turn-around. However, that company backed out of the deal, uncertain if their product would be able to deliver as promised. That's when Stonhard presented Stonclad Xpress, an extremely durable floor system that uses a quick-curing methyl methacrylate chemistry that can be installed and fully functional within 24 hours.

In April 2010, the first phase of installation began in the Simplot plant. Stonhard's installation crew began by scarifying the surface of the existing epoxy overlay and then treated the 4,800 sq. ft. potato processing area floor with a degreasing cleaner. The Stonclad Xpress was then trowel-applied to the floor. During this phase, Stonclad UR was also installed in the blancher area, to pro-



“Before” photo of J. R. Simplot’s clarifier.

vide a long lasting floor that withstands thermal shock. Additional areas within the plant were outfitted with Stonclad HT and incorporated textured aggregates into the top coat, resulting in a safe, slip resistant floor. The job was completed within the given time frame, and the newly installed Stonclad Xpress allowed for heavy forklift traffic the very next day.

The next month, Stonhard began installing additional flooring and lining products in Simplot’s Caldwell facility. But before the installation could begin, the crew had the daunting task of preparing the clarifier base and walls for application. A Blastrac was used to remove the existing epoxy coating and Stonhard’s Stonset TG6 grout was used to fill hollow areas in the base substrate. The carbon-steel walls had to be sand-blasted and then coated with a rust-bind primer before further installation could proceed. Once prep work was complete, the crew troweled down Stonclad UR, a durable, highly resistant mortar system that can withstand thermal shock and cycling, to the base of the clarifier. Stonchem441, a protective lining that can withstand impact, abrasion, chemicals and acid attack, was then applied to the vertical surfaces of the clarifier.

The Stonhard Difference

Stonhard is the unprecedented world leader in manufacturing and installing high-performance polymer floor, wall and lining systems. Stonhard maintains 300 Territory Managers and 175 application crews worldwide who will work with you on design specification, project management, final walk through and service after the sale. Stonhard’s single-source warranty covers both products and installation.

As promised, Stonhard delivered, and J.R. Simplot couldn’t be happier with the results. Their new floors and linings allowed them to resume to full operation and they experienced minimal shut-down time. The decision makers gained peace of mind, knowing that their floors will last and are safe for their workers, while remaining easy to clean. Simplot management was so thrilled with the results in the processing areas and clarifier, that they have signed with Stonhard to install lining systems in clarifiers in three more Simplot locations in Idaho and Washington.