

## High-Performance Epoxy Coatings Solve Floor and Wall Problems

**T**hey didn't know it at the time, but when the management team at ConAgra Beef Cos., Greeley, Colo., found Tom Behunin and resin-rich epoxy coatings manufactured by International Coatings Inc. (ICO), they also found a solution to the problem of protecting concrete floors and walls.

"We were pretty skeptical when we met Tom, a flooring contractor from Arvada (Colo.), and Norm Klapper, ICO's local sales rep," says Doug Kayl, a Greeley plant manager. "We had tried almost every resurfacing product on the market without success, so we didn't get too excited at first."

The plant in Greeley, a 700,000-square-foot facility, has separate processing areas for slaughter, fabrication, ground beef, and trim. As in any meat processing operation, the daily activities are not kind to concrete. The floors and walls are constantly exposed to the natural by-products of processing such as blood and the daily rigors of high-pressure hot water cleaning with detergents. If unprotected, concrete surfaces will deteriorate quickly in these conditions, causing constant repair and safety problems. Unfortunately, there are few coating materials that

can withstand this kind of environment.

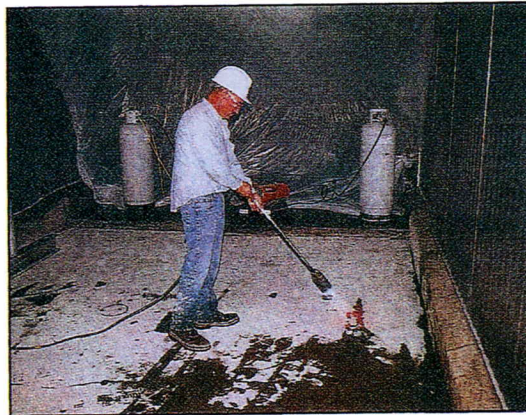
To evaluate ICO's epoxy coating, Behunin was allowed to do some small patchwork projects in the most hostile area of the plant, the kill room floor. After comparing the results side-by-side with other products, managers at ConAgra became true believers. One reason the ICO epoxy coating works so well is because of its ability to expand and contract in temperatures ranging from 30-180°F without cracking.

"Since the overwhelming success of the trials five years ago, Behunin has resurfaced about 100,000 square feet of concrete floors, plus another 20,000 square feet of wall and ceiling surfaces in the Greeley plant, and we have not experienced any failure of the product," says Kayl.

For floors, Behunin used ICO-Guard 51, a 100-percent solid one-quarter-inch epoxy that is trowelled on in a single-step application. The fast cure version allows four-12-hour full cure time even in damp freezers, and its resin-rich formulation provides excellent bonding characteristics, thermal and mechanical shock resistance, and durability for high-pressure cleaning.

For walls and ceilings, Behunin used ICO-Glaze, which is applied by rollers to provide seamless, high gloss protective coating that is impervious to liquid transmission and bacterial growth. For vertical and overhead surfaces that require an ultra smooth appearance, Behunin uses ICO-Gel prior to applying a coating.

"All of ICO's high-performance epoxy products are odor-free and offer long lasting protection in the tough world of food processing," says



**Safety First:** In refrigerated areas where cold temperatures would inhibit curing, Tom Behunin uses a torch to dry the floor, heat the surface to 80°F, and kill bacteria prior to resurfacing the area with ICO's epoxy coating.

Klapper. "In fact, work often proceeds on the epoxy application directly next to food processing operations with no danger of meat contamination."

Installation normally takes two days, one day for meticulous prep and one day for the quarter-inch trowelled application. On the first day, the old flooring is removed by hand using air-powered chipping hammers. "To guarantee long lasting results with the new coating, it is essential to get down to the concrete substrate," says Behunin. On the second day the epoxy is applied. The floor is ready for use four-12 hours after application, depending on the ambient temperature of the floor and the surrounding area. During the application, copper slag or specially graded silica quartz aggregate can be added to the coating for anti-slip safety.

**Protecting concrete floors** and making them safe is only one small aspect of running a processing plant, but it can be a monumental and costly headache without the right coating solution. **International Coatings Inc.** Tel: (800) 624-8919; Fax: (847) 451-0379; [www.internationalcoatings.com](http://www.internationalcoatings.com)



**Proper Application:** Tom Behunin (center) supervises hand-trowelling of ICO's epoxy coating applied at ConAgra's beef facility in Greeley, Colo. Preparation for this 2,200-square-foot job started at 7:00 a.m. The floor was back in use by 10:00 p.m. the same day.