

Coatings Crew Talks Turkey

By Jen Kramer

White meat or dark meat is usually the question when it comes to turkey, but it could have been no meat if the facility up-grade at the Colorado processing plant didn't run smoothly. The ConAgra plant in Longmont, Colorado not only processes turkeys, but also packages them for direct retail consumption. A booming business meant that they needed to modernize their facility — in particular a much utilized 5,000 square foot (464.52m²) cooler/food processing room. But the booming business also meant that the plant could not close during construction. It was time to "talk turkey," as it were, and figure out a plan.

"We've had an on-going relationship with ConAgra for over 15 years," explains Tom Behunin, owner of Tom J. Behunin Construction, LLC. "So when Ted Johnson, the plant engineer in charge of the modernization program, contacted us and explained the situation, we were ready and able to go."

And what was the situation? The floor in the 5,000 square foot (464.52m²) cooler/ processing room had multiple layers of previously applied polymer floors that had been repeatedly patched. It also had an uncoated concrete T-panel ceiling that was proving to be difficult to sanitize.

"Right away we knew we'd be using International Coatings Inc.'s products. We've worked with them for the past 23 years and have been consistently pleased with the results," Behunin says.

Processing The Processing Room

Behunin and his 12-man crew arrived on site and "encapsulated the room using Visqueen." Although

Vendor Team

**Tom J. Behunin
Construction, LLC**
Arvada, Colorado
(303) 427-2018

Biochem Systems
Surface prep
PO Box 8098
The Woodlands, TX 77387
(880) 777-7870
www.biochemsystems.com

Graco
Spray equipment
PO Box 1441
Minneapolis, MN 55413
(877) 844-7226
www.graco.com

Ingersoll Rand
Surface prep equipment
www.ingersollrand.com

International Coatings, Inc.
Coatings
2925 Lucy Lane
Franklin Park, IL 60131
(800) 624-8919
www.internationalcoatings.com

the plant would remain open, the jobsite area was cordoned off. Next, the Behunin crew built a scaffold to begin work on the ceiling.

"We attacked the ceiling first," Behunin remembers. The uncoated T-panel concrete was extensively damaged. "We had to mechanically grind and sandblast the concrete to achieve a clean, abraded surface profile. We basically brought the concrete to the NACE No. 3/SSPC-SP 6 Commercial Blast standard using Black Beauty slag."



Once the concrete ceiling was uniform, the crew "killed any bio-hazards by spraying Bio-T sanitizer using Hudson sprayers and allowing it to sit for two hours. Then we washed the Bio-T off with hot water and acid-etched the concrete panels," says Behunin. To acid-etch the concrete, a crew member in full personal protective equipment (PPE) including face shield, gloves, and steel toed boots, applied a weakened mixture of hydrochloric acid onto the ceiling.

With the bio-hazards removed, the crew used trowels to apply International Coatings' epoxy filler, ICO Gel, into the many bugholes throughout the ceiling. Behunin states: "After the ICO Gel had cured, we used our Graco Bulldog to spray two coats of ICO Glaze Base Coat at 12 to 14 wet mils (0.30mm-0.36mm) each, backrolling to ensure coverage. This was followed by one, 10 to 15 wet mil (0.25mm-0.38mm) top coat of ICO Glaze Top Coat." The ICO Glaze Top Coat is a high gloss, 100% solids, epoxy that is designed to provide a complete vapor barrier able to withstand the cooling room's constant damp and sanitizing chemicals.



Swarming Like Angry Bees

The ceiling protected, Behunin and crew dismantled the scaffold and turned their attention to the floor. "We had to remove several layers of previously applied polymer floors that had been constantly patched and were poorly bonded to the concrete. Some areas were 3" to 4" (7.62cm-10.16cm) thick," Behunin explains. They used pneumatic chipping tools, including Ingersoll Rand hammers, to remove coatings and scarify the substrate. "We looked like mad bees out there," Behunin says with a laugh. "But we didn't stop until we took the floor down to the substrate. We remove the bio-hazards and prevent future delamination by exposing and cleaning the substrate."

Once exposed, the concrete was pressure washed with hot water run through a 1500 psi pressure washer. Then, as with the ceiling, the crew spray-applied Bio-T sanitizer, allowing it to sit for the required two hours for complete disinfection. After another hot water wash, the floor was "acid-etched to create a clean, sound and abraded surface," explains Behunin.

He continues, "Any open cracks were routed to 1" (2.54cm) wide and 1" (2.54cm) deep and filled with the ICO Guard 51 epoxy. We also filled any holes—such as old drains or anything over 2" (5.08cm) deep with epoxy prior to coating the floor, so that when we install the coating, it doesn't collapse into the holes." They also cut and filled keyways around all drain plates and at the entryway to the room. When the epoxy had cured, the floor was washed with hot water.



Dry and prepped, the floor was ready to be coated. Behunin and his crew first warmed the International Coatings' ICO Guard 51 epoxy to 85°F to 95°F (29°C-35°C), mixing the three-part epoxy in a mortar mixer. Then armed with trowels, they began applying the resin-rich, 100% solids epoxy in a single 3" to 4" (7.62cm-10.16cm) application, sloping some areas to drain. "We hand-broadcast 20-grit sand to excess into the wet material to create a non-skid surface," Behunin says. "No topcoats were necessary because we broadcast the aggregate directly into the coating."

"While the floor was being installed, we also installed new trench drains, using the epoxy to fill in between the new floor and the drain to create a permanent, watertight bond."



The crew also coated the room's concrete curbs with the ICO Guard 51. "We then caulked the curbs with International Coatings' ICO Lastic Gun Grade to protect against moisture penetration between the concrete and the new stainless steel panels," describes Behunin. ICO Lastic Gun Grade is a two-part, 100% solids, epoxy-modified urethane designed as a moisture barrier for use in interior situations where moderate movement is expected—such as expansion joints.

The fast-curing nature of the ICO Guard 51 meant that after one day of prep and one day of coating, 5,000 square feet (464.52m²)

of floor was finished. In fact, the entire project took just two weeks, from beginning to completion—and the transformation of the room was so complete that it now looks more like a clean room than a cooler/food processing room.

"The coatings are all USDA-approved, everything is sanitary," says Behunin. Pleased with their new processing room, Ted Johnson and the ConAgra plant personnel now have a seamless, durable, state-of-the-coatings-art match for their plant up-grade. This means that as consumers, we will continue to enjoy white meat or dark meat—or both—thanks in part to Tom Behunin and his hard-working crew.