

Case Study: Reliable Plating Corporation

Reliable Plating Corporation is a family owned business with more than six decades of experience serving the industrial community. They provide the highest quality plating and metal finishing serving the aerospace, automotive, communications, electronic, marine, military, and commercial manufacturing markets.

In October 2006 they had a fire that destroyed one of their buildings containing a portion of their production lines. They decided to transform a 100 year old warehouse that they were currently using for parking, into a state-of-the-art plating facility from the floor up. They wanted the old, dark structure to be a bright, safe work environment for their employees.

The first step in the rebuild was to repair and coat the existing concrete floor to provide a bright, tough, chemical resistant, seamless surface that would be easy to maintain and provide a safe walking surface for their employees. The floor system had to be able to withstand the plating solutions containing strong acids, strong bases, metals and cyanide salts. After meeting with several floor coating manufacturers they chose a system recommended by Milamar Coatings and certified contractor **ConCare**. The recommended system consisted of one coat **Primer LV FC** followed by **ICO Primer SL Slurry** applied at 1/8" thickness to fill low spots, spalled areas and other irregularities. Finally 30 mils of **ICO Hi Guard Guard Coating**, a novolac epoxy for optimal corrosion protection completed the system.

The installation started with ConCare preparing the concrete by blasting and hand-grinding to provide a clean sound substrate for the epoxy to bond to. All cracks and larger holes were spot repaired and a coat of **ICO Primer LV FC** was applied to create an integral bond between the concrete and the coating system. Next they applied the **ICO Primer SL Slurry system** at a 1/8" thickness using a notched squeegee. The chemical resistant topcoat, **ICO-Hi Guard Coating** in Royal Blue, was applied in two 15 mil coats to achieve the total 30 mil desired thickness.

The floor was finished in the fall of 2007. They also installed a brand new skylight to provide natural light as well as new lighting. The wooden rafters and walls were painted with a white corrosion resistant paint to further brighten the room. A second floor addition for additional office space is also planned. Production started in the building spring of 2008 and Reliable Plating has been pleased with the performance of the floor to date.

