

PolyArmor® Warrior™ 240

FAST CURE SPRAY ELASTOMER SYSTEM *(patent pending)*

CASE STUDY 1: Warrior™

PROJECT: NISSAN Motor Manufacturing Corp, Canton, MS

PROJECT COORDINATOR: Malouf Construction Corporation
Mansfield Industrial, Kenny Industrial Services Company

POLYUREA APPLICATOR: Fast Set Coatings, Inc., Austin, Texas
Inspection / Project Monitoring by Primeaux Associates LLC

SYSTEM: WARRIOR™ 240, Visuron Technologies, Inc.
Chemical Containment Systems, Inc. / V-tac Group

AREA: Concrete Wastewater Tank / Pump Room, approx 7,000



DISCUSSION: NISSAN is building a new assembly plant in Canton, MS. Part of the plant required their own waste water treating facility. In order to protect the concrete CIP pits and pump room floor from this highly corrosive environment, WARRIOR™ 240 polyurea system was chosen over a conventional polyurea spray elastomer system. The prepared concrete surface was to first receive 8 to 10 mils of the ProntoPrime (2-part urethane) priming system followed by 80 mils of the WARRIOR™ 240 polyurea system.

The specification called for abrasive blasting of the Cast-In-Place concrete structure followed by a re-surfacer to fill opened bugholes. Unfortunately, a re-surfacing material had not been applied and the WARRIOR™ 240 system had to be installed at a much higher film thickness over the ProntoPrime priming system in order to complete filling of the minor bugholes. The narrow size of the 40 foot deep processing pits also presented a challenge for spray application. Scissor lifts were inserted into the larger of the pits while a Spider Lift was used for access in the smaller pits.



The WARRIOR™ 240 system was applied at an average film thickness of 100 to 120 mils. Within the same day of applying the WARRIOR 240 system, several large mechanical pieces of equipment were installed in the pits. This caused some damage to the applied coating, which was then easily treated and repaired using the WARRIOR 240™ spray system. The application was completed in a timely manner and will give excellent service and corrosion protection for the concrete. The pump room floor was installed with a stipple / non-slip texture.