

Challenges

One of the leading automotive companies in the US was dissatisfied with how often they needed to repaint the line striping, cross hatching and stop signs on their floor.

The issues were:

- Each time these areas were repainted, traffic needed to be rerouted while waiting for the paint to dry. This caused a large inconvenience.
- They had locker rooms they wanted to coat and to return to service immediately.
- The plant's Environmental Engineer had been given directive to reduce VOCs and using the current floor product made it difficult to attain this goal.
- The Safety Manager was concerned with the potential of a trip hazard resulting from the layers of coats of paint that had built up over the years.

Quaker wanted to show that by using RapidShield™ the plant would gain the following benefits over conventional floor paints:

- Instant curing
- Improved wear and durability
- Excellent chemical resistance
- One-component formulation
- Low or no VOCs and low odor
- Reduced floor maintenance costs
- Reduced application downtime
- Increased safety
- Minimization of any dirt/contaminates entering the surface

References Use of UV Technology

- Laminate flooring
- Plastic and other composite automotive parts
- CDs, DVDs, and other media
- Wood Furniture
- Electronic circuit boards
- Teeth and women's nails

Providing Solutions

The manufacturer agreed to apply RapidShield™ to its floors. The use of RapidShield™ floor coating resulted in:

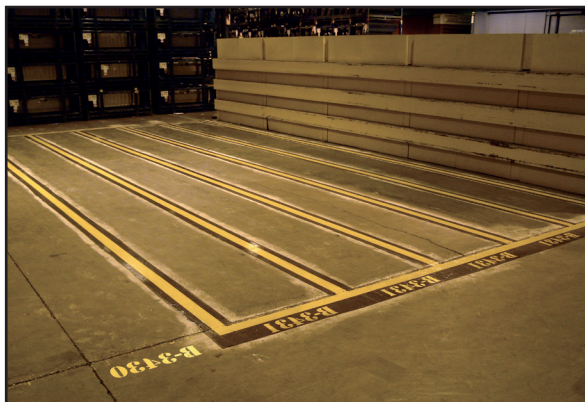
- Substantial application and down-time savings
- Major improved visibility of the safety lines
- Fork truck drivers moving within the long life lines
- The requirements of the environmental impact policy were fulfilled.

The reduction in application and curing time allowed the plant to carry on production in a timely schedule and reduced the amount of traffic re-routing needed. Because of the quick turn-around needed, the plant was able to coat a 120 m² locker room and put it back into use in 25% of the time needed for a traditional process. Due to the rapid application and curing time, the plant was able to apply multiple RapidShield™ Colors adjacent to one another to produce the line striping they required in hours instead of days. Over time, the coating maintains its highly reflective finish and is easy to clean. The performance of the RapidShield™ products to date has exceeded the customer's expectations regarding longevity.

Product and Process Expertise

Quaker's RapidShield™ floor coating products are unique in the industry. These revolutionary products utilize state of the art UV-light technology in order to dry nearly instantaneously, providing a surface with superior gloss, hardness and chemical resistance. Special photo initiators present in the floor coating cause it to harden so rapidly the "wet look" of the coating is locked in place, and allow the floor to accept industrial traffic within mere seconds of being exposed to the special UV-light system. During the hardening the coating "cross links" forming a 3-dimensional polymer with far greater hardness and superior chemical resistance to conventional coatings that require hours or days to fully harden.





After, Line Striping



After, Safety Entrance

Application and Equipment Information

RapidShield™ Floor Coating

Floor Area:	Up to 2,000 m ² plus 1,200 linear meters of demarcation lines
Substrate:	Old power floated uncoated concrete
Surface Preparation:	Grinded
Products:	RapidShield™ 0007, Clear RapidShield™ 0304, Light Gray RapidShield™ 0501, Safety Green RapidShield™ 0604, Safety Yellow
Equipment:	Quaker 3-phase UV-unit
Applicator:	In conjunction with local CFC (Certified Flooring Contractor)
Specific Operation:	RapidShield™ Floor coating (clear with lines stripes)

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