

## Challenges

One of the Big 3 Automotive companies was dissatisfied with how often they needed to repaint the line striping, cross hatching, and stop signs on their floor. Each time these areas were repainted, traffic needed to be re-routed while waiting for the paint to dry which caused a large inconvenience.

In addition, the plant's Environmental Engineer had also been given a directive to reduce VOCs. Using the current floor product, made it difficult to attain this goal.

The Safety Manager was also 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



**RapidShield™ Line Striping**

## Providing Solutions

The manufacturer agreed to apply RapidShield™ to its floors. Because of the quick turn around needed, the plant was able to coat a 1,200 ft<sup>2</sup> locker room and put it back into use in 25% of the time needed for a traditional process.

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.

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.

The performance of the RapidShield™ products to date has exceeded the customer's expectations regarding longevity in high-wear areas.



**RapidShield™ Safety Entrance**



## 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.

## 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

## Application and Equipment Information

### RapidShield™ Floor Coating

<b>Floor Area:</b>	20,000 ft <sup>2</sup> floor; 12,000 In. ft. Line Stripes
<b>Substrate:</b>	Old power floated uncoated concrete
<b>Surface Preparation:</b>	Grinded
<b>Products:</b>	RapidShield™ QV 0007 Clear RapidShield™ QV 0604 Safety Yellow RapidShield™ QV 304 Light Gray RapidShield™ QV 0501 Safety Green
<b>Equipment:</b>	Quaker 220v single-phase UV Curing Lamp with QV Technology
<b>Applicator:</b>	In conjunction with local CFC (Certified Flooring Contractor)

The information contained herein is based on data available to us and is believed to be accurate. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR TO BE IMPLIED, REGARDING THE ACCURACY OF THESE DATA. THE RESULTS TO BE OBTAINED FROM THE USE THEREOF, OR THE HAZARDS CONNECTED WITH THE USE OF THE PRODUCT. Quaker Chemical Corporation assumes no liability for any alleged ineffectiveness of the product or any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is solely attributable to negligence on the part of Quaker Chemical Corporation.