

Challenges

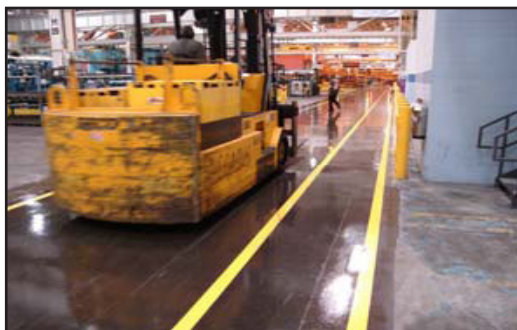
A plant manager was disappointed trying to create a work place organization that was “tour ready” at all times with their current floor line stripe product. The current product was not sticking to the floor, causing peeling and flaking and a short wear time.

In addition, the current painting turn-around process time was too long, making it impossible to keep traffic off of the line stripes before they had time to dry.

The plant’s Environmental Engineer had also been given a directive to reduce VOCs, and using the current floor product made it difficult to attain this goal.

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™ Isle Way

Providing Solutions

The manufacturer agreed to apply RapidShield™ to its floors. Because this was a 24/7 operation, RapidShield™ was able to be applied and cured without shutting down production or forklift traffic. The plant also achieved substantial reductions in paint used, VOCs and costs including:

- 3,500 lbs. reduction in VOCs
- 1,800 gal. reduction in paint
- 300 gal. reduction in floor wax
- \$40,000 reduction in flooring costs
- \$100,000 reduction in labor application cost

The use of Quaker’s RapidShield™ colored and clear floor coatings also resulted in the following:

- Improved employee morale
- Achievement of a work place organization and long term “Tour Ready” plant
- Elimination of staining from draw compounds and oil



RapidShield™ Stop Sign and Isle Way



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	
Floor Area:	100,000 ft ²
Substrate:	Old power floated uncoated concrete
Surface Preparation:	Grinded
Products:	RapidShield™ QV 0007 Clear RapidShield™ QV 0604 Safety Yellow RapidShield™ QV 0902 Safety Red RapidShield™ QV 0102 Black RapidShield™ QV 0202 White RapidShield™ QV 0702 Dark Brown
Equipment:	Quaker 220v single-phase UV Curing Lamp with QV Technology
Applicator:	In conjunction with local CFC (Certified Flooring Contractor)

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