



Challenges

The distribution centers for the largest food and clothing store in the UK were experiencing continuous problems resulting from their standard demarcation lines wearing out on a monthly basis. The problems the centers were encountering included:

The issues were:

- Difficulty in managing fork lift truck movements
- Difficulty in placing pallets in their correct and precise location
- Ongoing Health and Safety issues with fork lift traffic movements
- Concerns over pallet management, a vital part of the distribution process

The distribution centers operated on a 24 hour a day 7 day a week schedule. Therefore, they were in need of a floor coating solution that would not cause interruptions with a lengthy cure time.

Quaker Chemical wanted to show that by using RapidShield™ the distribution centers could gain the following benefits over conventional floor paints:

- Cures instantly
- Improved wear and durability
- Excellent chemical resistance
- One-component formulation
- VOC compliant (less <50 g/l) and low odour
- Reduced floor maintenance costs
- Reduced application downtime
- Increased safety
- Minimizes 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

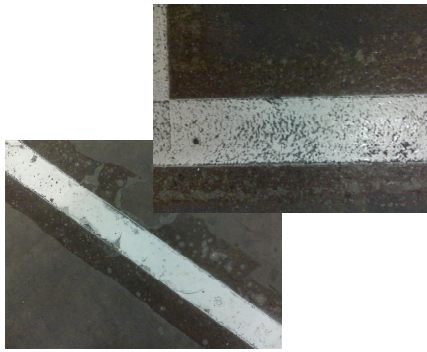
Providing Solutions

The food and clothing store agreed to apply RapidShield™ to its distribution centers' floors. RapidShield™ was able to be applied without interrupting the distribution operation or forklift traffic. The use of RapidShield™ also resulted in the following:

- Highly visible lines
- Easy to clean and maintainable lines
- Easy removal of fork lift tire marks
- Longer lasting standard demarcation lines
- Dramatically improved worker attention and moral
- Dramatically improved site-wide Health and Safety due to more visible lines and safer fork lift traffic movements
- Improved pallet placement and management

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.



Before



After

Application and Equipment Information

RapidShield™ Floor Coating

Floor Area:	18,000 linear meters
Substrate:	Power Floated concrete with failed lines
Surface Preparation:	Light enclosed blast or light grind to remove all old coatings
Products:	RapidShield™ 0007 Clear, New spray applied lines
Equipment:	Quaker 3-phase UV-unit
Applicator:	In conjunction with local CFC (Certified Flooring Contractor)
Operation:	Hybrid System

Hybrid System

The Hybrid System is a combination of standard resin coating used in conjunction with one of three RapidShield™ performance top coats.

The Hybrid System is a two step process. First, a fully Quaker tested and approved line paint is applied directly to a prepared concrete surface and allowed to dry. Next, one of the three RapidShield™ performance top coats is applied over the line paint, cured instantly and handed back to production.

This unique system offers a massive lifetime improvement over standard line paint as well as an attractive and high visual

appearance over long distances. Most importantly the system is easily cleaned and resistant to tire marks from forklift traffic.

With great chemical resistance, minimal odor, no solvents, and a large temperature application window, the RapidShield™ element of the Hybrid System can be used in even the most difficult areas. These areas include chiller and cold rooms, food processing and packaging areas, and clothing stores. In addition, the total RapidShield™ system is an instant cure floor concrete coating, and can be applied while work continues nearby.

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