DPD Distribution Centre
Hinckley West Midland, United Kingdom

DPD are one of the largest distribution & logistics companies in the UK & The Globally is to set up a new 330,000 sq ft parcel distribution centre at Hinckley Commercial Park by 2015

Challenge
The external concrete paving which will have over 100 Docking bays will receive in the region of 700 to a 1000 truck movements per day. With the amount of vehicle movements most of which will be fully loaded articulated lorries the wearing course of the concrete will be susceptible to heavy wear and tear.

Solution
Fibrin XT offers up to 30% better abrasion resistance over conventional concrete, it also has up to 100% better impact resistance. By adding in Fibrin XT it meant that the service life of the concreted area would be greatly improved.

Project owner
DPD

Product
Fibrin XT

Function
XT Replaces conventional steel mesh reinforcement to reduce construction time, and reduces the occurrence of plastic shrinkage cracking and enhances the durability of the concrete by around 30%.

Contractor
Winvic

Sub Contractor
Fortel
Benefits of the solution
Winvic Engineering Contractors specified Fibrin XT at 0.910Kgm3 to enhance the abrasion and impact performance of the concrete slabs. The concrete was subcontracted to Fortel contractors with over 17,000m3 being placed.

Installation benefits
They were able to replace the top layer of steel mesh reinforcement, construction time was reduced as well as the significant Health & Safety hazards.

Result
Due to the mass of concrete on this project and the need to use the facility as soon as possible, this project had an on site plant. Which meant that more concrete was able to be poured, and with the removal of the top layer of steel mesh meant quicker construction.

With the incorporation of fibres the heavily trafficked depot will have the benefit of a higher abrasion and impact resistance, meaning a longer service life and improved durability.

Products used

Fibrin XT Monofilament Micro Fibre