

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



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

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 upto 100% better impact resistance. By adding in Fibrin XT it meant that the service life of the concreted area would be greatly improved



Over 100 Loading bays



17,000m3 of Fibre reinforced concrete

Benefits of the solution

Winvic Engineering Contractors specified Fibrin XT at 0.910Kg/m³ 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