Manufacturing Facility Utilises GCP for Easier and Safer Construction

STRUX® synthetic macro fibres provides the perfect solution for strengthening manufacturing facility floors.

The Project	Manufacturing Plant, Pineville, LA
Concrete Supplier	TXI Inc., Alexandria, LA
Concrete Contractor	Imperial Concrete, Champaign, IL
GCP Solution	STRUX® synthetic macro fibres

The Overview

The Project

From detergent to floor cleaner, from shampoo to prescription drugs, household products need packaging. When one of the world's leaders in plastic container manufacturing needed to expand into Central Louisiana to serve one of their key customers, it meant the construction of a new manufacturing facility.

The design of the building was important, and special consideration was directed at the performance of the floor needed to support the heavy manufacturing equipment.

The project initially specified steel fibres in the slab-on-ground concrete flooring of the plant. Steel fibres have been used in these applications for years. However, when Kevin Williams, TXI's Area Manager, was asked to supply concrete for the project, he knew there was an even better way to construct the manufacturing facility floor.

While the company had taken steps already to design slabs using macro fibres, eliminating welded wire mesh from their projects, steel fibres still posed disbursement and finishing problems for them. With the requirement of high, long-term performance at a cost-effective price, Kevin recommended STRUX®synthetic macro fibres to replace the steel fibres.

In fact, for this project, STRUX®90/40 provided an opportunity for better performance, which immediately prompted Imperial Concrete, the concrete contractor on the project, to take the quote to the owner.

The owners of the manufacturing facility were quick to embrace the switch to STRUX®, acknowledging the advantages synthetic macro fibres have over steel fibres.

Made from a unique polymer blend, STRUX®90/40 synthetic macro fibres are patented, high tenacity synthetic monofilaments, designed to replace steel fibres, welded wire mesh, light rebar and other secondary reinforcement in concrete slab-on-ground applications.

Unlike traditional "micro" fibre reinforcement, STRUX®90/40 is specifically engineered to provide high, post crack-control performance in these applications. STRUX®90/40 has been shown to reliably achieve average residual strength values in excess of 150 psi that can easily be batched and finished in the field and is easier and safer to use than these other types of secondary reinforcement.

The Results

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