Greengill anaerobic digestion plant, Penrith

Project case study

Hanson
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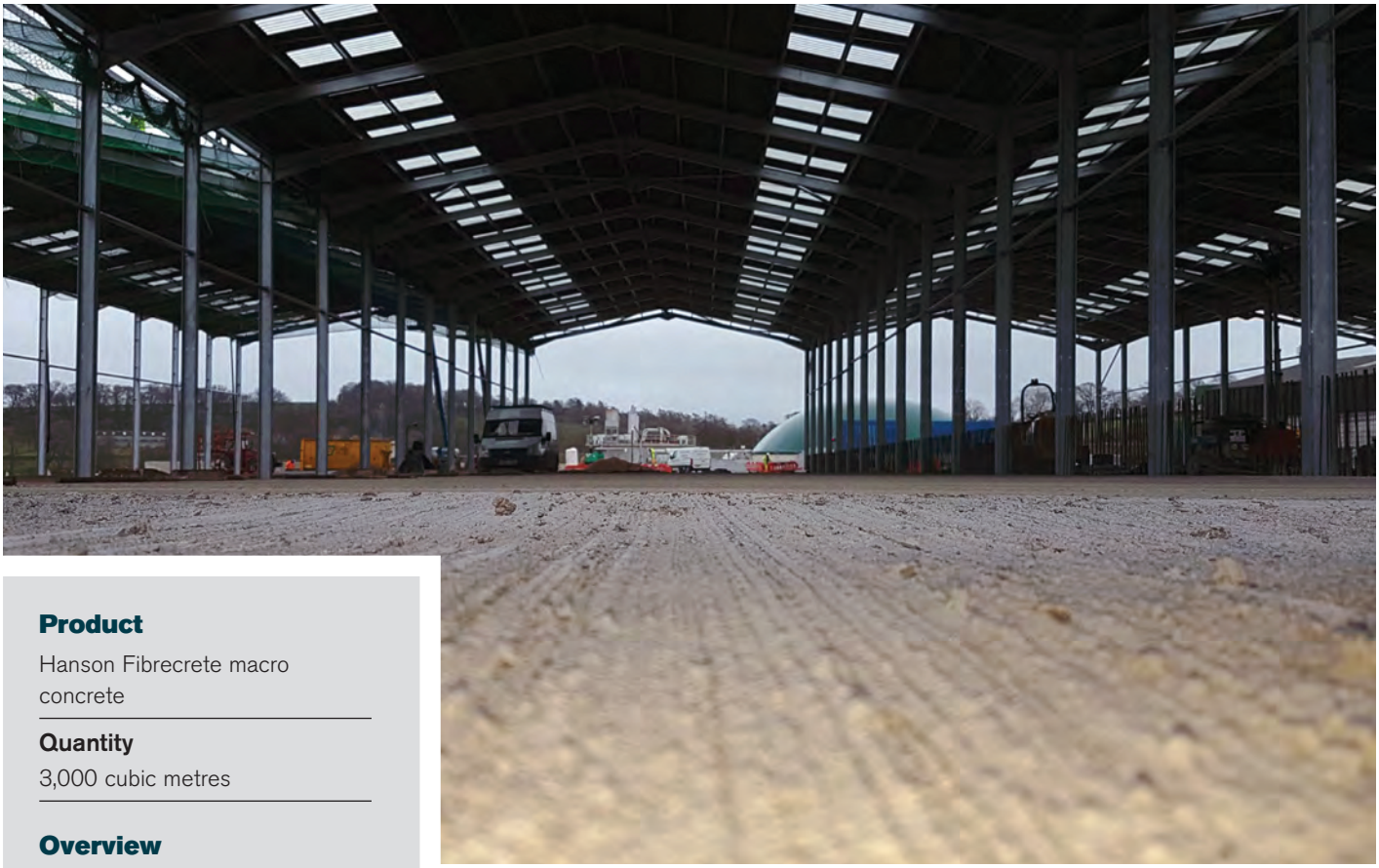

Product

Hanson Fibrecrete macro concrete

Quantity

3,000 cubic metres

Overview

Hanson supplied its specialist Fibrecrete (fibre reinforced) concrete to help construct an anaerobic digestion plant in Cumbria.

Project description

A new 2.4MW anaerobic digestion (AD) plant is being constructed on land at Greengill Farm on the outskirts of Penrith, Cumbria using Hanson's Fibrecrete macro concrete.

When fully operational the renewable energy plant will produce approximately 8M kWh of electricity a year; equivalent to the average use of 2,400 households.

Fibrecrete macro contains structural fibres in the ready-mixed concrete to help improve its performance. The fibres are manufactured from a high-strength, high modulus synthetic plastic and are designed to replace welded mesh and light reinforcement bars. They increase energy absorption and fire resistance while reducing shrinkage cracking, fracture formation and crack widths.

At Greengill Farm, Fibrecrete is being used to construct the huge storage bays that house the silage before it is fed to the AD plant. The product was specified by contractor Tim Kemp of T J Kemp Ltd.

"The original specification for the bays was a concrete with reinforcing mesh to provide the structural performance required," said Tim.

"But I have used Hanson's Fibrecrete on previous projects and know what it can deliver in terms of time and cost savings. With this proven track record it was not difficult to convince the client of its benefits and the results speak for themselves."

Hanson supplied over 5,000 cubic metres of concrete to the project, including 3,000 cubic metres of Fibrecrete from its nearby Penrith plant.

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