Commercial

The enhanced hydration of Portland Cement using Hydramax 1609 means that not only are there many performance benefits to using the product, there can also be many commercial benefits, some of which are listed below.

Reduction in materials

- At a 2.5% dosage rate of Hydramax 1609 in a mix design, the performance of the product is such that there is the potential to reduce the Portland cement content by up to 25%.

- The increase in compressive, tensile and flexural strengths of a precast concrete element dosed with Hydramax 1609, means that section thicknesses can potentially be reduced.

- The combination of Hydramax 1609 with innovative reinforcement for facade sections, not only has the benefit of reducing element thicknesses, but also has the potential to offer many other benefits to the structure they are being attached to (such as reducing loading to the structure).

Reduction in Time

- The enhanced hydration of the concrete, as a consequence of incorporating Hydramax 1609, makes it possible to strike moulds within 4 to 7 hours, depending on the mix design.

- Concrete containing Hydramax 1609 will typically achieve 7-day strengths in 3 days, and 28-day strengths in 7 days[(1).]

Increase in Production

- The benefits of quicker strength gains make an increase in productivity possible.

Reduction in Product Rejections

- The increases in flexural and tensile strengths reduce the possibility of breakages when striking moulds.

- The reduction in porosity, together with the physical binding of the calcium hydroxide and increased matrix density of the precast elements treated with Hydramax 1609, reduces the risk of unsightly efflorescence and colour variations.

(1) Based on on a Hydramax 1609© dosage rate of 2.5% of OPC by weight, added to a comparable mix containing no admixtures.

ACIL Limited, Unit 7, Britannia Business Centre, Britannia Way, Malvern, Worcestershire, WR14 1GZ, United Kingdom