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A Study on the Improvement of the Bond Performance of Polypropylene Macro Fiber according to Longitudinal Shape Change

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Abstract : This study intends to improve the bond performance of the polypropylene fiber used as reinforcing fiber for concrete by changing its shape into double crimped type through the enhancement its fabrication process. The bond performance of such double crimped fiber is evaluated by applying the JCI SF-8 (dog-bone shape) testing method. The test results reveal that the double crimped fiber develops bond performance improved by more than 19% compared to the conventional crimped type fiber.

Keywords : Bond, Polypropylene, fiber reinforcement, macro fiber, shape change
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