

Review of: "Shear performance of polypropylene fiber reinforced high-strength self-compacting concrete beams"

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Potential competing interests: No potential competing interests to declare.

Review of the paper entitled "Shear performance of polypropylene fiber reinforced high-strength self-compacting concrete beams".

The paper deals with the influence of polypropylene fiber fraction on the obtention process and on the shear strength of the obtained composites.

Overall, the paper is short and lacks many references. Many studies already exist and have been published on this topic and provide deeper analyses than the one proposed here. Here are some recent examples, but not limited to:

Ríos, J. D., Cifuentes, H., Leiva, C., García, C., & Alba, M. D. (2018). Behavior of high-strength polypropylene fiber-reinforced self-compacting concrete exposed to high temperatures. *Journal of Materials in Civil Engineering* 30(11), 04018271.

Ramesh, B., Gokulnath, V., & Kumar, M. R. (2020). Detailed study on flexural strength of polypropylene fiber reinforced self-compacting concrete. *Materials Today: Proceedings*, 22, 1054-1058.

Zhang, C., Han, S., & Hua, Y. (2018). Flexural performance of reinforced self-consolidating concrete beams containing hybrid fibers. *Construction and Building Materials*, 174, 11-23.

As no real bibliography was performed, the present study does not show any new information. Here are my detailed comments.

1. In the material description, it is specified that the tensile strength of the fibres is about 350MPa. Please specify how this information was obtained. Was it by test, by provider information, or literature?
2. In the specimen description, how was the specimen geometry chosen? Is it from a standard?
3. In table 2, units are missing.
4. No information was provided on the repeatability of the test, and no error bars are presented. The conclusions are thus not supported with a rigorous experimental protocol.
5. The conclusions are general and do not present a deep analysis of physical phenomena. The conclusion seems to be a test report more than a scientific study providing something new, as the conclusions are already available in previous studies with deeper analyses.

