

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.

The paper addresses an interesting research topic: improvement of shear strength of self-compacting concrete by addition of polypropylene fibers. In the presented experimental program, polypropylene fibers were added in three different percentages to self-compacting concrete mixes; the fresh and hardened properties, as well as the flexural behavior of reinforced concrete beams, were tested, and the results were presented and discussed. The paper is well organized, and the text is clear, understandable, and nearly free of grammatical and style errors. Some slight errors are corrected in the attached revised file. The results are sound and sufficiently discussed, and the conclusions are reasonably deduced. However, some modifications and corrections should be made for the paper to be acceptable, as follows:

- References 1-4 have no relation to the research paper topic, should be removed, and the references re-numbered in the list and manuscript.
- References in the reference list should have the same style and formatting.
- In Table 1, Mix proportions, the weight of micro-silica fume is written by mistake as 570 kg and should be corrected to 57 kg.
- Descriptions should be given for the materials used in the experimental work: cement type and properties, gravel, sand, fibers, admixture, etc.; also, photos may be given.
- Also, photos should show the experimental beam specimens, test setup for beam tests, etc.
- The results of fresh concrete tests are listed in Table 2 but are not discussed; a discussion should be given for the results, as well as a comparison with previous research results.
- Experimental results should always be compared with previous results reported by others in published research, for fresh and hardened test results and for beams whenever possible.