

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

Ahmed S. Abd El-Maula¹

¹ Benha University

Potential competing interests: No potential competing interests to declare.

In my judgment, the paper could be accepted for publication after taking into consideration the following comments:

1. In the Abstract, the last three to four lines should offer results information with facts and records. Give the numerical percentage of the increase or the decrease.
2. The keywords should be arranged alphabetically.
3. At the end of the introduction section, the author must give some explanation of the novelty of the current study, showing its novelty.
4. In section "2.2 Specimens Description," the author must give a reference for the used code EFNARC.
5. In Figure 1, the author used the unit of "kg/cm²" for the concrete compressive strength, while throughout the manuscript, the used unit for the concrete compressive strength is "MPa." So, the author must unify the used units.
6. Throughout the manuscript, there is no mention or commentary of Figure 1. The author must point out and comment on each figure or table in the study to clarify its importance.
7. The beam specimens' length is mentioned in the Abstract as 1.80 m long, in Figure 2 the total length is mentioned as 1.60 m long, in Figure 3 the total length is mentioned as 1.40 m long. I believe that the correct description is 1.60 m long with a simply supported span of 1.40 m long. The author must correct these descriptions to be congruent.
8. In Figure 2, the author must give dimensions for the cross section to show the beam width and depth. Also, the author must correct the text of the bottom tensile reinforcement to be 3f10 instead of 2f10.
9. The distance between the two applied loads (P/2) in Figure 2 is stated as 500 mm, while it is mentioned in Figure 3 as 450 mm. The author must correct this mistake and mention the accurate distance that has been executed.
10. In Table 3, the author must mention what is meant by D_m/D_M . It is preferred to add a section for the used nomenclature and symbols at the end of the manuscript.
11. In Figure 4, the vertical axis of P(kN) must be unified to finish at 35 kN for both curves at compressive strengths of 80 and 90 MPa. Also, the horizontal axis of deflection of the mid-point must be unified to finish at 16 mm for both curves at compressive strengths of 80 and 90 MPa.
12. In Figure 6, the same comment as Figure 4.
13. In Figure 10, sample numbering does not exist.
14. In the References, try to add the DOI for every reference whenever possible.
15. In the References, the year of publication must be added to all references, as there are some references in which the

year of publication is not mentioned.

16. References No. 1 & 7: The names of the authors must precede the title of the reference.

17. Reference No. 10: The title of the reference must be provided.