

Review Form 3

Journal Name:	Advances in Research
Manuscript Number:	Ms_AIR_125819
Title of the Manuscript:	A review of rheological properties of steel fiber reinforced concrete
Type of the Article	

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	The manuscript has good scientific ideas but it should be improved 1. The English language should be improved it does not much scientific writing language. 2. The font of the article should be in uniform example the abstract is in "Arial format" while the main body is in New Times Roman	Modified
Is the title of the article suitable? (If not please suggest an alternative title)	The title is okay	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	<p>The abstract of the article needs to be modified as follows. The rheological properties of steel fiber-reinforced concrete have a significant impact on the engineering aspect. Experimental characterization of the rheological properties of steel fiber-reinforced concrete has a vital effect and value in concrete scientific research. The article compares and analyzes the construction characteristics and applicable scope of commonly used concrete rheometers, and analyzes the influence of factors such as water-cement ratio, mineral admixtures, aggregate properties, steel fiber properties, and additives on the rheological performance test results.)</p> <p>The finding results(result is missing should be added here)</p> <p>This can provide a reference for the selection of rheological performance testing methods and parameter control of steel fiber-reinforced concrete.</p>	The results show that there are significant differences in the test results using different rheometers, and the degree of influence of different factors on the rheological properties of steel fiber reinforced concrete is also different.
Are subsections and structure of the manuscript appropriate?	I suggest all subsections should be divided to Abstracts, 1. Introduction 2. Methodology. 3. Results and discussion 4. Conclusion. All other subsections should fall under this section	Modified
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	The manuscript technically has a good scientific sound but doesn't have strong novelty, the introduction is too short and should be improved to at least 2 pages 1. describing previous research on concrete rheological challenges. 2. Emphasizing why steel fibber has to be implemented in concrete	Due to the addition of mineral admixtures, additives, etc., traditional slump cone tests alone are far from sufficient to characterize the workability of concrete. After conducting extensive experimental research, it has been found that in order to fully and accurately grasp the complex workability of freshly mixed concrete, it is necessary to start with the rheological mechanism and model of concrete. Only in

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		this way can the interaction between various components in concrete and the mechanism of the workability of fresh concrete be better revealed, thus establishing the relationship curve or formula between the rheological properties of concrete mixtures and the workability parameters in practical engineering applications, achieving on-site construction control and application, and even numerical simulation of concrete and establishing virtual laboratories. At present, there have been many studies on the rheological properties of concrete. In order to improve the strength of concrete, most scholars choose to add an appropriate amount of steel fibers, which has also made great progress. However, there is not much research on the rheological properties of steel fiber reinforced concrete. The addition of steel fibers will have an impact on the rheological properties of concrete, and the specific degree of impact needs to be further explored.
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	The reference and introduction should added.	Added. However, the testing of rheological parameters of concrete and steel fiber reinforced concrete not only requires high instrument requirements, but is also expensive and usually not suitable for construction sites. Therefore, establishing the relationship between rheological properties and workability can open up a new way to solve this problem, and further research is needed ^[38] .
Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	Major revisions and the English language should be modified	Modified. For decades, the workability of concrete has been a significant concern in the field of civil engineering. The pumpability, placing, self-compatibility, and shaping of concrete are closely related to its rheological properties. Moreover, the rheological behavior of concrete also influences its strength and durability after hardening. The incorporation of steel fibers into concrete can modify its workability and rheological performance to a certain extent. Therefore, enhancing the workability of steel fiber-reinforced concrete remains a topic that requires further research, and the current body of knowledge on the rheological properties of steel fiber-reinforced concrete still needs to be expanded. In addition, establishing the correlation between rheological properties and workability is a new approach for optimizing the design of steel fiber reinforced concrete.
Optional/General comments	I suggest the main revision of this paper and if strongly modified it can be accepted for publishing	Modified

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	No