

Review Form 3

Journal Name:	Journal of Engineering Research and Reports
Manuscript Number:	Ms_JERR_129287
Title of the Manuscript:	Research on the Stability of Steel Pipe Column-Berger Beam Support System
Type of the Article	Opinion 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: 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. A minimum of 3-4 sentences may be required for this part.	The manuscript is scientifically plausible but incomplete in its methodology, validation, and explanation of results. While the fundamental concepts discussed are correct, the lack of validation and quantitative rigor makes it difficult to fully ascertain the accuracy of the findings.	
Is the title of the article suitable? (If not please suggest an alternative title)	No, The title refers to an analysis of the Berger beam support system, but the research focuses on the Bailey beam support system. Please clarify the distinction between these two systems and ensure consistency between the title and the content of the research.	
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.	The abstract mentions that the support system has good stability, but the necessity for conducting a stability analysis is not clearly articulated in the script. Additionally, clarify the existing research gaps and explicitly highlight the scope of this study.	
Is the manuscript scientifically, correct? Please write here.	Yes This manuscript addresses a crucial aspect of structural engineering. With improvements in clarity, structure, and discussion, it can provide significant contributions to the field.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The given reference is sufficient	

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Is the language/English quality of the article suitable for scholarly communications?	The article suffers from grammatical errors and unclear phrasing, especially in Section 1. A thorough language review are required for clarity and coherence.	
Optional/General comments	1. The introduction gives an overview of the steel pipe column-Bailey beam support system but confuses the Berger beam with the Bailey beam. This inconsistency needs to be clarified. Are the systems being compared, or is this a misstatement? 2. The abstract mentions that the support system has good stability, but the necessity for conducting a stability analysis is not clearly articulated in the script. 3. In the introduction section, discuss the limitations of the previous studies and how your model addresses these gaps, if applicable. This approach not only validates your findings but also underscores the contribution of your study to the field. 4. Critical details about the elements, such as their material properties, geometric dimensions, and boundary conditions, are either missing or not adequately elaborated. Furthermore, the specific characteristics of the rods, such as their dimensions, stiffness, and connection methods, are not clearly explained, leaving gaps in understanding their role within the model. 5. In Section 2, titled "Buckling Analysis," the analysis of buckling modes is visually well-supported by figures but lacks a deeper explanation of the modes' significance. Discuss the implications of each mode in practical scenarios and include comparisons with theoretical or empirical benchmarks to validate the results. 6. While figures like buckling modes and load-displacement curves are helpful, their descriptions are too brief and lack interpretation. 7. A comparison of these results with theoretical predictions or existing literature would further validate the findings and provide additional insight. This comprehensive approach will significantly improve the depth and quality of the buckling analysis presented in the study. 8. In this model, "Semi Rigid Connection" was established to limit the deformation in order to ensure stability. To achieve that, spring element is added. The properties and behavior of the springs, including their stiffness coefficients, load-bearing capacity, and interaction with other elements, are not explicitly stated. This lack of detailed information makes it challenging to assess the validity and robustness of the finite element model. A thorough explanation of these components is essential for a comprehensive understanding of the study and to ensure that readers can fully evaluate the methodology and results. 9. To validate the model and ensure its safety and reliability, it is essential to include a comparison with previous studies. Such a comparison helps establish the credibility of the model by demonstrating its consistency with established research and theoretical predictions. 10. The results are presented descriptively but lack sufficient discussion linking findings to practical implications or prior research. Discuss how the identified critical buckling modes or the effect of semi-rigid connections can improve design standards. Highlight key takeaways for engineers and designers.	

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PART 2:

	Reviewer’s comment	Author’s comment (if agreed with the 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?	The manuscript does not present any overt ethical issues	
Are there competing interest issues in this manuscript?	From the manuscript provided, no explicit competing interest issues are evident. However, the absence of a formal declaration regarding competing interests leaves room for potential concerns. Competing interests can arise when authors, sponsors, or institutions stand to gain (financially or otherwise) from the publication of the study's findings.	
If plagiarism is suspected, please provide related proofs or web links.	Currently I do not have plagiarism checking facility. May have a chance in this article. Kindly do it in your way.	

PART 3: Declaration of Competing Interest of the Reviewer:

I declare that I have no competing interest as a reviewer

PART 4: Objective Evaluation:

Guideline	MARKS of this manuscript
Give OVERALL MARKS you want to give to this manuscript (Highest: 10 Lowest: 0) Guideline: Accept As It Is: (>9-10) Minor Revision: (>8-9) Major Revision: (>7-8) Serious Major revision: (>5-7) Rejected (with repairable deficiencies and may be reconsidered): (>3-5) Strongly rejected (with irreparable deficiencies.): (>0-3)	8

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Editorial Comments (This section is reserved for the comments from journal editorial office and editors):

	Author's Feedback

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