# Article information:

Full article: Parametric Study on a Self-Centering Beam-Column Joint Equipped with Arc-Shaped Steel Plate Damper  
<https://www.tandfonline.com/doi/full/10.1080/13632469.2023.2174781?src=>

# Article summary:

1. Traditional welded and bolted connections have been widely used in steel moment-resisting frame structures, but they are susceptible to plastic deformation and can cause unacceptable post-earthquake economic losses.

2. To improve the seismic performance of frame structures, many types of beam-column joints have been proposed and studied, such as self-centering beam-column joints with prestressed steel strands, shape memory alloy materials, or disc springs.

3. Many new types of beam-column joints have been investigated experimentally, including those with steel cover plates, steel curved dampers, inclined tapered steel plates, and metallic energy dissipation devices.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy in its content. It provides a comprehensive overview of the various types of beam-column joints that have been proposed and studied to improve the seismic performance of frame structures. The article is well researched and provides detailed information on each type of joint as well as their respective advantages and disadvantages. The authors also provide references for each type of joint discussed in the article which adds to its credibility.

However, there are some potential biases present in the article which should be noted. For example, the authors focus mainly on the advantages of these different types of beam-column joints without providing an equal amount of attention to their potential drawbacks or risks associated with them. Additionally, while the authors do provide references for each type of joint discussed in the article, they do not explore any counterarguments or alternative points of view which could be beneficial for readers looking for a more balanced perspective on this topic.

In conclusion, while this article is generally reliable and trustworthy in its content it does contain some potential biases which should be taken into consideration when reading it.

# Topics for further research:

* Beam-column joint seismic performance
* Advantages and disadvantages of beam-column joints
* Alternative beam-column joint designs
* Counterarguments to beam-column joint designs
* Seismic performance of frame structures
* Risk assessment of beam-column joints

# Report location:

<https://www.fullpicture.app/item/f2310279ad922cd449492e6118a3ee49>