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| Book Name: | [**Engineering Research: Perspectives on Recent Advances**](https://www.bookpi.org/bookstore/product/engineering-research-perspectives-on-recent-advances-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_5731** |
| Title of the Manuscript: | **The theoretical bases and study parameters with FEA application approach on a bending tool design** |
| Type of the Article | **Book Chapter** |

**Special note:**

**A research paper already published in a journal can be published as a Book Chapter in an expanded form with proper copyright approval.**

**Source Article:**

**This chapter is an extended version of the article published by the same author(s) in the following journal.**

**IOP Conf. Series: Materials Science and Engineering 568 (2019) 012064.**

**Doi:10.1088/1757-899X/568/1/012064**

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)* |
| **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 topic is significant to mechanical engineering and automotive manufacturing, and may be of interest to researchers in FEA and design optimization. The usage of ANSYS with Solid Edge demonstrates a viable method to engineering design and simulations. The paper takes a practical approach to an engineering problem.** |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | **The title is unclear. A suggestion would be Structural Analysis of a Bending Device Support Plate through Finite Element Methods.** |  |
| 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 should be rewritten to concisely summarize the problem, methodology, key results and the significance of the findings. The abstract introduces the problem of elastic and plastic deformation but does not specify the study's objectives.** |  |
| **Is the manuscript scientifically, correct? Please write here.** | **The paper lacks critical details about the FEA setup, such as mesh convergence studies, or validation of the results against experimental data. The comparison between aluminum and structural steel is promising but underdeveloped. No material properties or methods of comparing these materials are provided. The paper does not discuss limitations of potential sources of error in the FEA analysis. The paper should end with at least some details about further research.** |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | **The references are a mix of academic and non-academic sources. Reference [1] is a web link, which is inappropriate for a scientific paper. Some references ([5], [6]) are relevant but outdated (ANSYS 19 from 2019). More recent sources should be included to reflect current practices. The citations are inconsistently formatted and lack sufficient detail (missing page numbers or DOIs for some references).** |  |
| Is the language/English quality of the article suitable for scholarly communications? | **Technical terms are used inconsistently or incorrectly (“execution rates and the games”). The use of passive voice and redundant phrases (“the material undergoes plastic deformations stresses, the piece deforms plastic”) should be corrected.** |  |
| Optional/General comments |  |  |

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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?** | *(If yes, Kindly please write down the ethical issues here in detail)* |  |

**Reviewer details:**

**Vlad Gheorghita, Romania**