|  |
| --- |
|  |
| Book Name: | **Proceedings of the 8th International Conference on Solidification and Gravity** |
| Manuscript Number: | **Ms\_BPR\_** **3590.8** |
| Title of the Manuscript:  | **Effect of daley time and pin velocity on mechanical properties in local squeezing during high pressure die casting of aluminum alloys** |
| Type of the Article | **BOOK CHAPTER** |

|  |
| --- |
| PART 1: Review Comments |
| Compulsory REVISION comments | Reviewer’s comment | 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. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.** | **This manuscript is significant for the scientific community as it explores how delay time and pin velocity in local squeezing during high-pressure die casting affect the mechanical properties of aluminum alloys. Understanding these factors is crucial for optimizing casting parameters, improving material performance, and advancing manufacturing technologies in automotive, aerospace, and other industries.** |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | **Yes, (but grammatical correction required).****Effect of delay time and pin velocity on mechanical properties in local squeezing during high pressure die casting of aluminum alloys** |  |
| 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. | **Addition required.****The author has highlighted significant improvements in tensile strength; however, it is recommended that the abstract includes the percentage increase or decrease in results compared to the standard process for better clarity and impact.** |  |
| **Are subsections and structure of the manuscript appropriate?** | **Section 2 heading requires correction.****Suggestion: 2. Experimental setup and steps** |  |
| **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.** | **This manuscript is scientifically robust and technically sound as it addresses a critical aspect of high-pressure die casting (HPDC) processes, particularly for the automotive industry where complex geometries and mechanical properties are crucial. The study provides a detailed analysis of the timing and velocity of the squeeze pin, linking these parameters to significant improvements in tensile strength, which is a key performance metric. The experimental approach, including systematic variation of delay time and pin velocity, ensures the reliability of the findings. Moreover, the focus on reducing shrinkage porosity and optimizing solidification aligns with industry demands for high-quality castings, demonstrating practical relevance and scientific rigor.** |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.****-** | **References are suitable.** |  |
| Minor REVISION commentsIs the language/English quality of the article suitable for scholarly communications? | Grammetical corrections are required in the manuscript. |  |
| Optional/General comments |  |  |

|  |
| --- |
| **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)* |  |

|  |
| --- |
| **Reviewer Details:** |
| Name: | **Chintan Morsiya** |
| Department, University & Country | **L. J. Institute of Engineering and Technology, India** |