

# Review of: "The Influence of Hot Extrusion on The Mechanical and Wear Properties of an Al6063 Metal Matrix Composite Reinforced With Silicon Carbide Particulates"

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Potential competing interests: No potential competing interests to declare.

The article **"The Influence of Hot Extrusion on The Mechanical and Wear Properties of an Al6063 Metal Matrix Composite Reinforced With Silicon Carbide Particulates"**

presents interesting and current issues in the field of materials production, modification of their mechanical properties, and wear resistance. However, the work requires correction and addition of several elements:

1. The aim of the work should be clearly stated in the abstract and introduction. Justify the choice of material and the adopted reinforcement percentages.
2. The drawings and photos are blurry and illegible.
3. In each research method, the method of conducting the experiment and the number of repetitions should be provided - although the standards according to which the tests were carried out were provided in point 2.1, it would be useful to provide a more detailed description of the test stands and methodology.
4. Provide confidence intervals (error bars) in the graphs.
5. How does hardness affect wear? Is there any correlation?
6. Was a linear function used to create Figure 9? Describe and justify how to create this graph.
7. Why is the sliding distance 1005.4m (Figures 10 and 13)? According to ASTM G99, it is 1000m.
8. Why is section 3.6 titled "Adhesive wear test"? The standard adopted for the study concerns the procedure for conducting tests on a given test stand (pin-on-disk), and does not determine the type of wear. The last sentences of point 3.6 „...Wear track morphologies change with varying loads, and it is observed that different wear mechanisms are dominating at different loads, as seen in graphs 14-17...” show that there is not only adhesive wear (this is confirmed by the drawings from chapter 3.7).