

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 topic of this work has gained interest during the last two decades in all three investigated aspects: casting, extrusion, and wear of ceramic particle-reinforced Al alloys, particularly the 7% Si alloy. Different sizes of the ceramic particles have been investigated in micro and nano sizes (especially as the micro-sized particle reinforcement results in a significant drop in ductility).

The work is generally good, but my comments are:

- 1. Why have the authors selected SiC among all the different particles investigated by researchers? Also, the sizes of the particles are not given.
- 2. The increase in both density and porosity with reinforcement percentage, as evident from figures 1 and 2 for the cast samples, is unexplainable and not logical. This is because adding more reinforcement is always associated with more gases and porosity. Also, the explanation given by the authors is not sound. I think the density is not correct. It is not clear how it was measured, or have the authors calculated it?

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