

# A Review of the Effects of Reinforcement on Aluminum Metal Matrix Composites

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**Abstract:** Aluminum-based composites are becoming more popular in all manufacturing sectors due to their unique properties such as high strength-to-weight ratio, good mechanical properties, and longer durability. As a result, much research has been conducted in aluminum composite materials with the addition of carbide-based particulate reinforcement. However, in the present In a competitive market, manufacturing sectors seek better properties, such as easy nature and eco-friendly based materials. It has been discovered that there is a significant research gap for excellent property improvement and eco-friendly materials. Continuous research in this area has improved fabrication methods, which has led to the use of these composite materials in structural and marine applications rather than the majority of monolithic materials. The current studies are based on a review of the literature on the density, hardness, and wear behavior of composites made of aluminum and metal.

**Keywords:** Composites Material, AL, Sic, Hardness, Density

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