**Aluminum Metal Matrix Composites Mechanical and Thermal Properties -**

**A Review**

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**ABSTRACT**

Aluminum Metal Matrix Composites (AMMCs) are important materials for various applications due to their good physical and mechanical properties. These Aluminum metal matrix composites are attaining widespread acceptance for automobile, aerospace, agriculture farm machinery and many other industrial applications because of their essential properties. The present review deals with the addition of reinforcements such as graphite, fly ash, Silicon Carbide, Aluminum Oxide, Cubic boron nitride etc. to the Aluminum matrix in various proportions. Each reinforced material has an individual property which when added improves the properties of the base alloy. By the addition of these reinforcements into the metallic matrix improves the stiffness, specific strength, wear, toughness, thermal conductivity, hardness, creep and fatigue properties compared to the conventional engineering materials. This paper presents an overview of the effect of addition of different reinforcements with aluminum matrix by highlighting their merits and demerits. Extensive knowledge of the properties was provided in order to have an overall study of the composites and the best results can be employed for the further development of the Aluminum Metal Matrix Composites.

*Keywords: Aluminum Metal Matrix Composites; Mechanical Properties; Thermal Properties*