

Study of Tribological Behavior of Aluminum Metal Matrix Composites

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Abstract: Material development is a vital part for any design process. In this field, essence matrix mixes are considerably delved because of their capability to be produced in a unique manner. There are vast number of operation areas of these accoutrements which include machine, aerospace, energy, biomedical fields. The current exploration work deals with the possible development of a new material with Aluminum alloy as the base essence. The underpinning patches used are Silicon Carbide (SiC) and Tungsten Disulphide is used as a slicking medium. In this exploration work, aliminium alloy essence matrix compound is fabricated by the procedure of stir casting and corroborated with Silicon Carbide greasepaint by investing the underpinning into 5, 10, 15 weight chance independently. The end of the exploration work is disunion testing of Aluminum essence matrix compound material on a leg- on- fragment outfit (For determining wear and tear rate). The substantial conclusions include how cargo & mounts affect the wear and tear characteristics of aluminium essence matrix compound.

Keywords: Metal Matrix Composites, Aluminum, Silicon Carbide, Tungsten Disulphide, Mechanical Properties.

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