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Study of Mechanical and Tribological Behavior of Fly ash with E-Glass fibre Reinforced AL MMC's

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Abstract: *AMC's specimen made by liquid stir casting technique, by addition of fixed 3% E-glass fibers and fly ash particles in different proportions (4, 6 and 8 wt.%) prepared the matrix phase. A uniform distribution of reinforcement is obtained with good bonding with matrix. Dry sliding wear behavior of the aluminum alloy and the composites has been studied and tested using a pin-on-disc wear and friction monitor. The testing carried out on sliding velocity of 1.5, 2.5 and 3.5 m/s and load ranges from 1, 2 and 3kgf. The composite shows better mechanical properties than the base alloy. Abrasive wear resistance improves by addition of fly ash reinforcement*

Keywords: Al2024 alloy composite, Al-fly ash composites, wear test, sliding wear, E-Glass fiber, mechanical properties

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