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Experimental Investigation of Aluminium7075 Alloy Reinforced with Alumina and E-glass

Harish R S[1] and Dr. M. Sreenivasa Reddy[2]
Research Scholar, Department of Mechanical Engineering[1]
Guide, Department of Mechanical Engineering[2]
R.L. Jalappa Institute of Technology, Bangalore Rural, India
hariish.1987@gmail.com and sreenivasam123@gmail.com

Abstract: *In this present investigation efforts have been made to study the tensile strength and hardness properties of as cast Al7075 alloy reinforced with Alumina and e-glass. The vortex method of stir casting was employed, in which the reinforcements were introduced into the vortex created by the molten metal by means of mechanical stirrer. Brinell hardness and wear strength samples have been prepared as per the ASTM standards. The results revealed that there will be greater effect of reinforcing different percentage of Alumina and E-glass compared to aluminium alloy matrix composites. An improved wear and hardness properties occurs on reinforced compared to Unreinforced MMCs alloys*

Keywords: Al matrix composites; Alumina, e-glass, wear and hardness.

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