National Conference on Advances in Materials and Manufacturing Processes 2020 – NCMMS'20
Department of Mechanical Engineering, Sri Ramakrishna Institute of Technology, Coimbatore

Evaluation of tensile properties in A356 aluminium alloy metal matrix composites with different reinforcement (SiC,Gr and B4C)

Suresh V[1]*, Anoop J[2], Raghavendra K P[3]

[1]Professor, [2]Assistat Professor[3] M.Tech Student

Department of Mechanical Engineering,

Holy Mary Institute of Technology and Science, Hyderabad, Telangana-501301.

Email: winsureshv2011@gmail.com, Mobile: +91-9524492475.

Abstract:

In the current research work, a audacious is accomplished to prepared and compared the tensile properties of A356-Silicon Carbide (SiC), A356-graphite (Gr) and A356-boron carbide (B4C) composites. The composites were prepared to formulate utilize of stir casting process in which amount of reinforcement is freckled from 4 wt% of SiC, Gr, B4C. The prepared composites are characterised by tensile properties were estimated as per the standards. The dispersed SiC, Gr and B4C in LM25 alloy contributed in enhancing the tensile strength of the composites.

Keywords: AlMMCs, SiC, Gr, B4C, Stir Casting, Tensile properties.