

Review Report Of

**COMPUTATION OF MECHANICAL PROPERTIES OF METAL MATRIX
COMPOSITES WITH ALUMINA AS REINFORCEMENT**

A thesis submitted in the partial fulfillment of the requirement for the award for the degree
of

BACHELOR OF TECHNOLOGY

IN

MECHANICAL ENGINEERING

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CERTIFICATE

This is to certify that project report is entitled “**COMPUTATION OF MECHANICAL PROPERTIES OF METAL MATRIX COMPOSITES WITH ALUMINA AS REINFORCEMENT**” was carried out by, **K.SATEESH (17811A0327)** , **M.SRINIVASU (17811A0338)**, **B.GANESH KUMAR (17811A0309)**, **N.RAMA KRISHNA YADAV (17811A0343)**, in partial fulfilment of requirements for the award of the degree of bachelor of technology in “**MECHANICAL ENGINEERING**” by Jawaharlal Nehru Technological university , Kakinada During the years 2017-2021 .


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ABSTRACT

COMPUTATION OF MECHANICAL PROPERTIES OF METAL MATRIX COMPOSITES WITH ALUMINA AS REINFORCEMENT

Metal matrix composites (MMC) possess significantly improved properties including high specific strength ;specific modulus , damping capacity and good wear resistance compared to unreinforced alloys.there has been an increasing interest in composites containing low density and low cost reinforcements.among various discontinuous dispersion used,fly ash is of the most inexpensive and low density reinforcement available in large quantities as soild waste by product during combustion of coal in thermal power plants. Hence , composites with fly ash as reinforcement are likely to overcome the cost barrier for wide spread applications in automotive and small engine applications . it is therefore expected that the incorporation of fly ash particle in aluminium alloy will promote yet another use of this low-cost waste by-product and, at the same time ,has the potential for conserving energy intensive aluminium and thereby , reducing the cost of aluminium products . now a days the particulate reinforced aluminium matrix composites are gaining importance because of their low cost with advantages like isotropic properties and the possibility of secondary processing facilitating fabrication of secondary components . the present investigation has been focus on the utilization of abundantly available industrial waste flt-ash in useful manner by dispersing it into aluminium to produce composites by stir casting method.