



Aluminium AA 7075 properties enhanced by Zirconium and Chromium nano particle

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Abstract: The enhancement of mechanical properties of any material can be done by numerous methods. In this research work, tensile tests and hardness measurements were utilized. By growing the content of Zirconium and Chromium in AA 7075 metal matrix composites corrosion resistance is improved and also the hardness material also increased. The metal matrix produced by stir casting method at room temperature. Fabrication of samples composite done by different proportions (Al-97% Cr-2%Zr-1%) ,(Al-95% Cr-4%Zr 1%) and (Al-93% Cr-6%Zr 1%). The experiments result concludes that the enforcement of nano particle in optimum level in matrix material values is increased.

Key words : Aluminium AA 7075, Zirconium and Chromium, stir casting, mechanical property, volume fraction

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