

ABSTRACT

Material used for aluminium product usually made of aluminium scrap. Currently, the price of aluminium scrap is increased. It is necessary to minimize the cost of production by reducing the weight of the aluminium product at the same time remain the form or the shape of the product. Fabrication of aluminium matrix composite is one of the method to reduce the weight of aluminium but the modulus improved due the addition of ceramic materials as reinforcement. In this research, the idea of combining aluminium with polymers has been developed. Acrylonitrine Butadiene Styrene (ABS) was selected because of its low density and low melting temperature. The results indicated that homogenous microstructure and better strength can be obtained.

Keywords: General Metallurgy, Polymer, Foundry Metallurgy