

Efek Fraksi Volume Al_2O_3 terhadap Kualitas Komposit Isotropik Al/ Al_2O_3 dengan Metode Metalurgi Serbuk

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20304716&lokasi=lokal>

Abstrak

Aluminum matrix composite which was reinforced by ceramic is one of MMCs which is developed as automotive part. This current research use aluminum as matrix: and alumina (Al_2O_3) powder as reinforced with volume fraction of 10%, 20%, 30%, 40%. With Al-Mg coated by electroless. The result show that composite with Al-Mg coating owned better interfacial bonding than composite without coating. The highest elasticity moduli of Al_2O_3 is forward at volume fraction of 40% is 259.9 GPa. However elasticity modulus of composite without coating treatment with volume fraction 40% is 178,8 GPa, or increased about 45%.