

Change of the Particle Morphology for the fabrication of Metal Powder Composites by a Planetary Ball Mill

보르 압가란, 최희규*, 사쿠라기 시오리, 이재현, 김성수¹, Bayanjargal Ochirkhuyag²
창원대학교; ¹하지이엔지;

²National University of Mongolia
(hkchoi99@changwon.ac.kr*)

In the grinding process, characteristics of powders have the particle size distribution, specific surface area and particle morphology. The particle morphology is the most important characteristic for the fabrication in industrial fields. Technological properties of powders (bulk density, flow-ability, wet-ability, etc) as well as the potential areas of their application depend on these characteristics. This study was investigated the morphology change of particle during planetary ball milling process. Morphologies of copper particle obtained by analyzed using the technique of scanning electron microscopy (SEM). We found that the morphology copper powder was changed from plate type to circle type for optimum experimental conditions as 1 mm ball, 700 rpm of revolution speed and increase grinding time.