

Extraction of paraffin wax binder from ceramic injection molded part by SCF CO₂

임준혁, 유기풍, 임종성*
서강대학교
(limjs@sogang.ac.kr*)

The purpose of this experiment was to suggest methods of improving supercritical fluids debinding and reducing debinding time. The effects of process variables such as pressure, temperature and flow rate of supercritical carbon dioxide on the binder removal rate in the ceramic injection molding have been investigated. Experimental results lead us to the conclusion that density of supercritical fluids is important to reduce debinding time and the extraction temperature should be higher than melting point of paraffin wax. Totally, supercritical debinding save time and energy and also offer safe working environment so the supercritical debinding can be alternative to the conventional debinding methods.