Key Words: Industrial waste management, copper converter slag residue, physical properties, flash sintering

Flash sintering method was employed to reuse copper converter slag (CCS). The materials used for this process were obtained from Eti Copper Inc. in Turkey. This study was conducted to understand the effects of the flash sintering process on the grain growth and hardness of CCS pellets along with its characteristic. The results revealed that the process’s conditions were faster and more stable than those of conventional processes. It was revealed that the electric field applied during the process can lead flash sintering at around 430-660 °C depending on the applied voltage within 30 seconds. Besides, the total power density absorbed by the sample determined the density and hardness of the end products. The study was able to demonstrate the successful use of a lower temperature flash-sintering process for CCS pellets.