Acrylonitrilebutadienerubber의 함량에 따른 페놀수지 및 마찰재의 열특성 및 마찰·마모 특성

김창제 · 장 호 · 윤호규

고려대학교 공과대학 재료금속공학부

Thermal Characteristics and Friction and Wear Characteristics of Phenolic Resin and Friction Material with the Content of Acrylonitrilebutadienerubber

Chang Jea Kim, Ho Jang and Ho Gyu Yoon

Division of Materials Science and Engineering, Korea University

Abstract - The thermal and friction characteristics of phenolic resin and model friction materials were investigated with the content of acrylonitrilebutadienerubber(NBR). The thermal characteristics of material was performed by dynamic mechanical thermal analysis and differential scanning calorimetry. The friction and wear characteristics of the material were determined by using friction material testing machine. The results show that with the more content of rubber, the loss modulus of friction material was increased. The friction coefficient and the specific wear rate with various NBR contents were reported.

Key words - phenolic resin, DMTA, friction coefficient, acrylonitrilebutadienerubber.