عنوان مقاله:

Influence of Magnetic Field in Creep Behavior of Three-phase Composite Cylinder

محل انتشار:

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خلاصه مقاله:

This article investigated the history of long-term radial and circumferential creep strain and radial displacement for a three-phase nano-composite exposed to an internalpressure and placed unifonn temperature and magnetic fields. Three-phase nano—composite made of Si11gle- Walled Carbon Nano Tubes (SWCNTs)/ /E-glass fiber (GF)fvinylester that used to micromcchanical models to calculate the mechanical and thermal properties. By assuming non-linear viscoelastic based on Sehapery integral model and using classical laminate theory, Prandtl- Reuss relations and Mendelson's approximation method achieved results. Distribution of the radial creep strain, circumferential creep strain and radial displacement in two states of without and with magnetic field and three temperature condition for lay-up [O/45/0/45] described for10years. It has been founded magnetic field reduced all .case studies

کلمات کلیدی:

Termo-inagneto-mechanical loading, three-phase composite cylinder, micromechanical model