

عنوان مقاله:

Analytical and Numerical Investigation of Progressive Damage in a Composite Layup

محل انتشار:

کنفرانس دو سالانه بین المللی مکانیک جامدات تجربی (سال: 1394)

تعداد صفحات اصل مقاله: 2

نویسندگان:

m Jahani - MSc student, Department of Mechanical Engineering, University of Isfahan, Isfahan, Iran

h Beheshti - Assistant Professor, Department of Mechanical Engineering, University of Isfahan, Isfahan, Iran

m Heidari-Rarani - Assistant Professor, Department of Mechanical Engineering, University of Isfahan, Isfahan, Iran

خلاصه مقاله:

In the present paper, the progressive damage modeling of a composite layup aminate is studied. The shell elements are used to include property degradation of the composite plies of composite layup. The Maximum Stress and Tsai-Wu stress-based criteria for in-plane failure are used to predict the first ply failure (FPF) force and Hashin criteria for predicting the progressive damage. The analytical results obtained in MATLAB are in a good agreement with the .numerical results obtained from numerical model and ABAQUS-CAE

کلمات کلیدی:

Composite, material degradation, progressive damage, stress-based criteria

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/510116>

