عنوان مقاله:
Prediction of uncut fiber factor in drilling composite with PVC core

محل انتشار:
کنفرانس دو سالانه بین المللی مکانیک جامدات تجربی (سال: 1392)

تعداد صفحات اصل مقاله: 8

نویسندگان:
P Ghabezi - *PhD Student of Tehran University, Tehran, Iran*

M Khoran - *Lecturere of Esfarayen University, Esfarayen, Iran*

I Khoran - *Master of science Student, Shahid Bahonar University, Kerman, Iran*

خلاصه مقاله:
Sandwich panels have some advantages such as ability to provide high bending stiffness, buckling and fatigue strength and light weight structure. For this advantage many researcher worked on this group of composites. In this work the influence of cutting speed, feed rate, and tool diameter on the uncut fiber has been investigated. A design of experiments (full factorial) was used to assess the importance of the drilling parameters, and digital photography technique was used to evaluate the damages from drilling. Uncut fiber factor (UCFF) in drilling is important factor. This paper is focused to develop a reliable method to predict cutting UCFF in drilling process with used artificial neural networks (ANNs) based on experimental data.

کلمات کلیدی:
Uncut fiber factor, Drilling, sandwich structure composite, artificial neural networks