

عنوان مقاله:

Investigation of Crack Parameters' Effects on Vibration Characteristics of Turbine Blades Using Finite Element and Experimental Modal Analysis

محل انتشار:

پنجمین کنفرانس پایش وضعیت و عیب یابی (سال: 1389)

تعداد صفحات اصل مقاله: 8

نویسندگان:

Hossein Goudarzvand Chegini - Msc Student, Mechanical engineering department, Islamic Azad University of Takestan, Takestan, Iran

.Foad Nazari - Msc Student, Mechanical engineering department, Bu-Ali Sina University, Hamedan, Iran

.Mahdi Karimi - Assistance Professor, Mechanical engineering department, Bu-Ali Sina University, Hamedan, Iran

خلاصه مقاله:

The main propose of this article is the investigation of influences of crack parameters on vibration characteristics of turbine blades. This paper consists of two main part. In first part, modal analysis experiments were done on some cracked turbine blades and it's process has been described. In second part, Finite Element Method (FEM) was used to analysis the effects of variation of depth and location of crack on blade's vibrational characteristics. Finally, by comparing the results, it was shown that FEM results were in good agreement with experiments

کلمات کلیدی:

Crack, Natural frequency, Mode shape, Experiment modal analysis, Finite element method, Turbine blade

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/128198>

