

ІНФОРМАЦІЯ ПРО ДОКУМЕНТ

A numerical study of the dynamic response of sandwich plates initially damaged by lowvelocity impact

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Аннотация (English): A finite element (FE) model has been developed for the analysis of the dynamic response of sandwichplates with impact-induced damage involving core crushing, face sheet damage and core-to-face sheetdebonding. The effect of intermittent contact in fragments detached at the damaged interface due tothe impact event is examined. Simulation of the strongly nonlinear transient and steady-state dynamicresponses of impact-damaged sandwich plates are carried out with the FE code ABAQUS. The potentialof the obtained numerical results for detecting and locating impact-induced damage is discussed.

Ссылка на файл:

http://www.kpi.kharkov.ua/archive/Articles/Burlayenko/Burlayenko_Sadowski_CMS_2012.pdf