

The Crashing Behaviour of Motorcycle Basket under Impact Loading

ABSTRACT

The finite element method (FEM) is employed to investigate the collapse of motorcycle basket under the action of dynamic axial loading. A detailed finite element model of a common motorcycle basket used in Malaysia has been developed. The validation of the finite element analysis is performed by experimentally captured deformation stages of the basket using video camera. The implications of the finite element simulations together with the test results are discussed in relation to the overall impact deformation of the basket.