

Finite Element Analysis of Two Wheeler Rim By Using Composite Material

Dr. J. Kingston Barnabas¹, Saran S², Dhivan M³, Santhosh P⁴, Vignesh S⁵

Department of Mechanical Engineering¹⁻⁵

Anjalai Ammal Mahalingam Engineering College Kovilvenni, Tamilnadu, India

Abstract: *The cylindrical cam and follower mechanism is highly used in the packaging industry to obtain the sequential operation of material filling in the packaging machine. The occurrence of frictional wear between the cam and follower involves the reduction of cam life that eventually affects the quality of packing in package industry. In this work, an attempt is made to simulate the dynamic analysis with different material. Dynamic simulations are made for the cylindrical cam follower arrangement using a commercially available finite element code ANSYS. The simulation of analysis is carried out to predict the deformation of cam. The simulation of dynamic analysis is also conducted to investigate the effect of vibration on the performance of cam follower mechanism during a packing operation.*

Keywords: Rim wheel, Finite Element Analysis, ANSYS, Dynamic Analysis

