

Simulation and Analysis of Mechanisms (SAM)

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ABSTRACT

Simulation and Analysis of Mechanisms (SAM) is an interactive PC-software package for the motion and force analysis of arbitrary planar mechanisms, which can be assembled from basic components including beams, sliders, gears, belts, springs, dampers and friction elements. SAM integrates pre-processing, numerical analysis and post processing, such as animation and xy-plots, in an easy to-use environment offering pull-down menus, mouse support and help facilities.

The mathematical foundation of the program is based on the well-known finite element approach. Open loop, closed loop, multiple loop and even complex planetary mechanisms can equally well be analyzed due to the finite element formulation.

Keywords: THEORETICAL MECHANICS, DYNAMICS OF SYSTEM OF A RIGID BODIES

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