Modal and kineto-elastodynamic analyses of flexible-body mechanisms by using MD Patran, MD Nastran and MD Adams

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Purpose of the study

- Modal and Kineto-elastodynamic analyses of closed-loop mechanisms
  - Generation of a model which takes into account the compliance of the mechanism components
    - closed-loop mechanisms generally operate at high dynamics
      → flexibility of the parts should be considered to obtain a reliable model
  - Investigations of the elastodynamic behaviour
    - Modal analysis: estimation of natural frequencies and mode shapes
    - Kineto-elastodynamic (KED) simulations: evaluation of the dynamic performances by monitoring driving actions and reaction forces for different working conditions