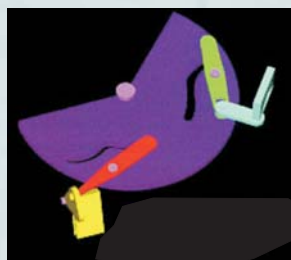


NISA - Dymes

A general purpose program for static, kinematic, and dynamic analyses of constrained multibody mechanical systems undergoing large, nonlinear, three-dimensional displacements. DYMES/Control has been integrated with DYMES for controlled mechanical system simulations.



Air Plenum Door Operating Mechanism



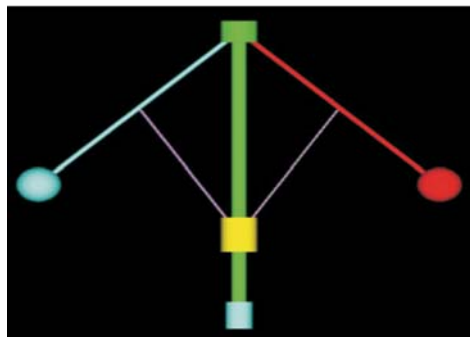
Controlled Motion of Puma Robot

HIGHLIGHTS

- Well organized free format input with excellent readability and flexibility for modification
- Integrated with DISPLAY III/IV for model creation and graphical results interpretation
- Enhanced graphics with animation in the post-processor for easy visualization of highly nonlinear motion of complicated mechanisms
- Sophisticated full vehicle or suspension system modeling
- Large library of standard and composite joints for modeling mechanical systems
- Many sophisticated force elements to stimulate cables, springs, dampers, actuators, beams, bushings, etc.
- DYMES/Control for controlled mechanical system simulation

SALIENT FEATURES IN DYMES/Control

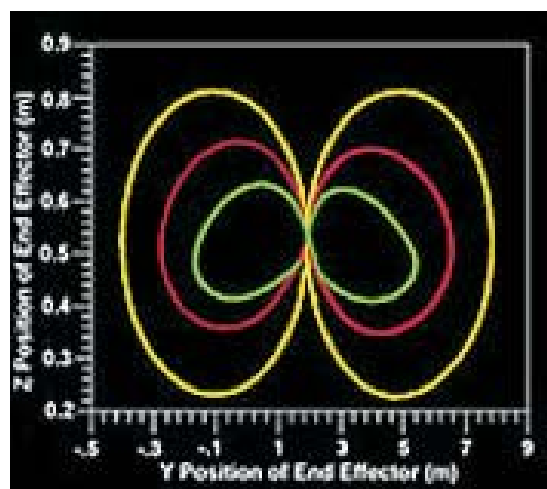
- Single-Input Single-Output (SISO) and Multiple-Input Multiple-Output (MIMO) control system modeling
- Actuation of mechanical system according to controller commands
- Feedback of variables from mechanical system to control system
- Transfer function matrix generation
- Vector import and export of control blocks
- Accessibility of all node and state variables
- Parameter variation study
- Pure control system simulation



Governor Mechanism Motion Analysis

ANALYSIS CAPABILITIES

- Assembly Analysis
- Redundancy Analysis
- Static Equilibrium Analysis
- Quasi-Static Equilibrium Analysis
- Dynamic Analysis
- Kinematic Analysis
- Inverse Dynamic Analysis



End Effector Trajectories with Different Gain Settings

Cranes Software International Limited is a leading provider of Computer Aided Engineering (CAE) services to the Automotive, Aerospace, Energy & Power, Civil, Electronics and Sporting Goods industries. Over 70 dedicated scientists, technology architects and software engineers providing NISA based solutions have helped major engineering companies reduce analysis turnaround time, improve user productivity, and ensure faster return on investments. The Company has its presence in 33 countries across the world and has a user base of more than 350,000.

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