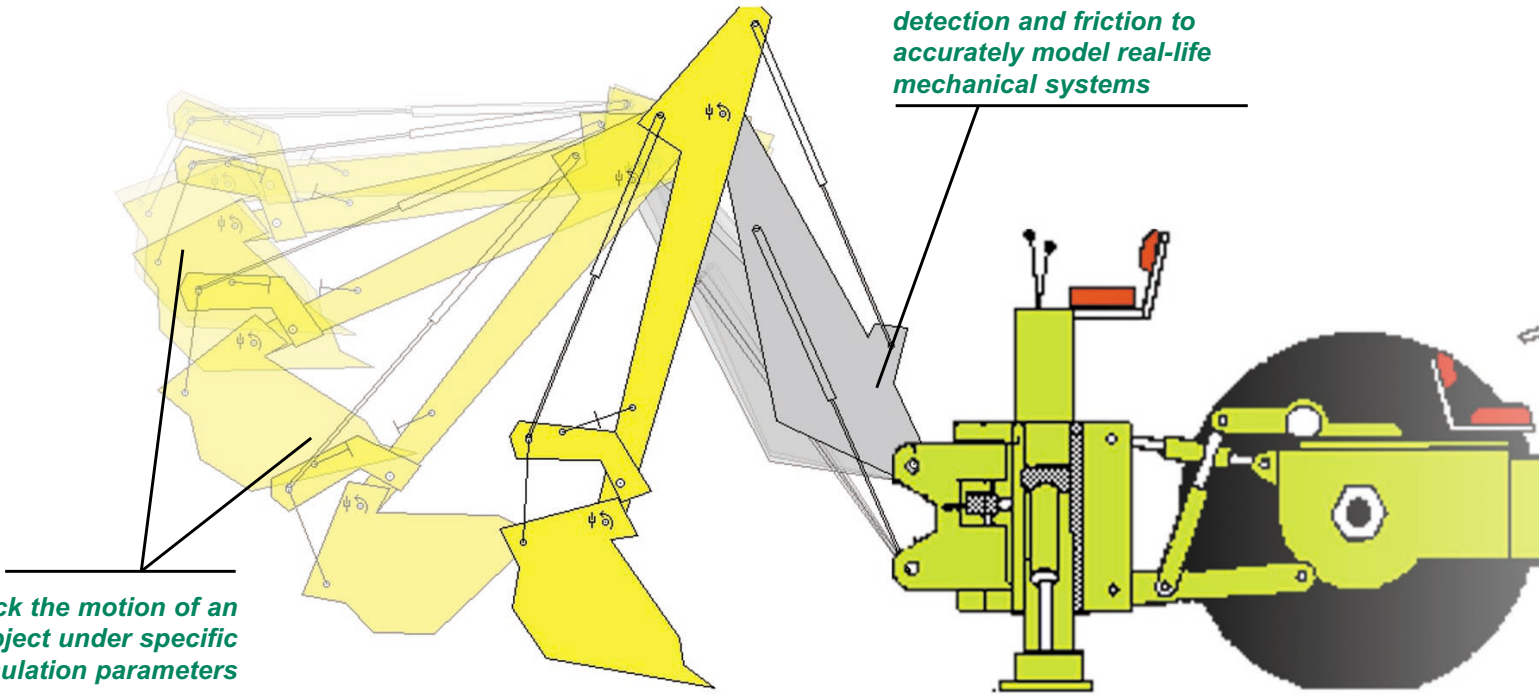
Working Model® 2D

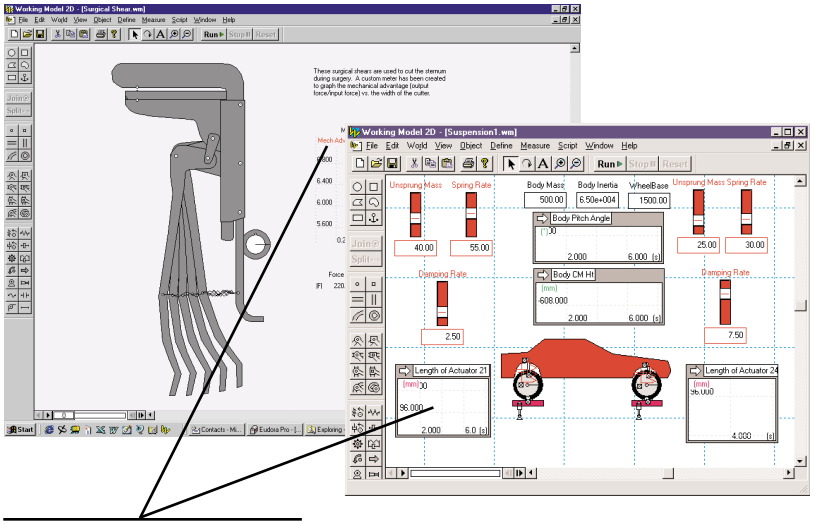
The world's most popular 2D computer aided engineering tool



Use automatic collision detection and friction to accurately model real-life mechanical systems

Track the motion of an object under specific simulation parameters

- Powerful physics-based 2D kinematic and dynamic motion simulation and analysis
- Provides accurate solutions to complex engineering motion simulation problems
- Save time and money by avoiding expensive prototyping and product failures



Record and display simulation data in real-time

Working Model 2D Features

SUPPORTED 2D FORMAT

DXF file format

BODY PROPERTIES & FEATURES

- Body types: circle, box, polygon and smooth (b-Spline edges)
- Mass, density, geometry, center of mass, moment of inertia, velocity and angular velocity, electrostatic charge and more
- Track the motion path of a body
- Automatic collision detection and response
- Automatically applied static and kinetic friction

CONSTRAINTS

- Pin, rigid, slot, keyed slot and curved slot joints
- Rods, ropes, pulleys and gears
- Linear and rotational spring/damper

MOTION DRIVERS

- Motor
- Actuator
- Force
- Torque

Constraints and drivers can be defined by numeric or equation input in the formula editor, or with tabular data.

UNITS SYSTEMS & FORMULAS

SI, English, CGS and user-defined

MEASURABLE PARAMETERS

- Position
- Velocity
- Acceleration
- Momentum
- Angular momentum
- Constraint force and torque
- Gravity, electrostatic and air force
- Kinetic energy, gravitational potential energy and power

Record and display simulation data in real-time with graphical and digital meters.

SIMULATION CONTROL

Run, stop, reset, single step, or pause the simulation at any time.

Control the accuracy of your simulation by modifying integration and animation steps and configuration tolerances.

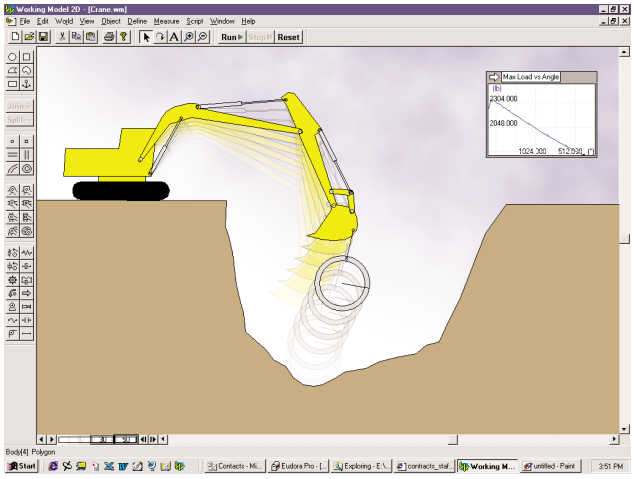
Superimpose multiple simulations.

INTERACTIVE CONTROLS

- DDE connection to Excel and MatLab
- Complete "Visual Basic" style scripting language with built-in debugger
- Menu and script buttons
- "Player" mode for content creation

VISUALIZATION

- Track the motion path of a body or its center of mass
- Attach graphics to bodies
- Images on bodies rotate
- Display system center of mass
- Multiple, moving reference frames



SCRIPTS

- Optimize
- Create constraint
- Document model
- Zoom to extents
- Measure distance between points
- Flip polygon
- Multiple file run
- Pin friction
- Slot friction
- Slot damper
- Flexbeam
- Shear and bending moment

OUTPUT

- AVI video files for playback
- Meter data from simulations to tabular data file

PRINTING

- Print an image of your simulation or meter data

WORKING MODEL 2D SYSTEM REQUIREMENTS

- Microsoft Windows NT® 4.0 or Windows 95/98/Me/2000/XP
- Pentium PC
- 16MB RAM Minimum
- Video card and monitor capable of at least 16-bit color
- CD-ROM Drive

MSC.Software
500 Arguello Street, Suite 200
Redwood City, CA 94063
800-766-6615, 650-381-3395
fax: 650-574-7541
wm2d.info@mscsoftware.com

www.workingmodel.com

MSC SOFTWARE
SIMULATING REALITY