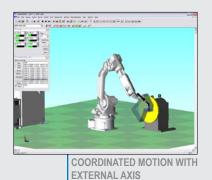


MotoSim<sup>®</sup> EG-VRC (Motoman Simulator Enhanced Graphics – Virtual Robot Control) is a comprehensive software package that provides accurate 3D simulation of robot cells. This powerful simulation software can be used to optimize robot and equipment placement, as well as to perform collision detection, reach modeling and cycle calculations. It also provides accurate off-line programming of complex systems. Virtual Robot Controller capability means that the simulation software now operates and displays the actual programming pendant interface for the DX100 and NX100 controllers. The VRC supports standard INFORM (robot language) instructions, and can completely simulate the DX100 and NX100 controller software in the PC environment, including system configuration functions and condition file editing.

**MotoSim EG-VRC** 



SYNCHRONIZED MOTION



# **TOP REASONS TO BUY!**

- Accurate simulation and off-line programming of complex robotic systems.
- Provides "real" robot experience while programming off-line on a PC.
- Improved simulation of advanced control capabilities between robots and external devices.

# MotoSim EG-VRC

- Provides a display of the DX100 or NX100 robot controller pendant on a PC.
- Robot movement is controlled through the pendant display.
- Users can import CAD files in .hmf, .hsf or .3ds formats.

#### Teach Pendant Programming

Whether a programmer is using a teach pendant on a DX100 or NX100 controller or using MotoSim EG-VRC on a PC – the interface display is exactly the same. Steps used to accomplish actions in the "virtual" world of the simulator are identical to the actions required in the actual (real) world.

# Cell Layout Advantage

Using a standard 3D graphics engine provides ability to add markups/comments to robot simulation and accurately measure distances. Ability to create permanent measurement lines is a big advantage during the cell layout process.

#### Increase Uptime

MotoSim EG-VRC reduces programming time, thus increasing uptime of the production equipment. New parts can be programmed off-line before production begins, and existing robot programs can

# HIGHLIGHTS

be modified to increase efficiency and reduce cycle time – without sacrificing production schedules.

#### Virtual Testing

- High accuracy allows programs to be tested on the PC instead of on the robot system, reducing robot downtime.
- Enables user to make changes to improve robot performance.
- Detailed path calculation function plots robot's trajectory to simplify program verification.
- Creates process angles, allowing user to create programs that maintain the robot's tool orientation in relation to an uneven surface, such as a sharply angled part, or gradually changing shapes, such as propellers or motorcycle gas tanks.

#### Off-Line Programming

- Robot paths, speeds and other program data – such as tool center points, user frames, and I/O monitors – can be defined on the PC.
- User can move the virtual robot, enter the data to create a robot program, and download it to the robot controller.
- When Motoman Robotics' MotoCal<sup>®</sup> software and optional filters are used, programs created in MotoSim EG-VRC can be downloaded to the robot controller with minimal or no touch-up.

# MotoSim EG Components

 Sample system cells are available on the installation CD and accessory parts.

#### Capabilities

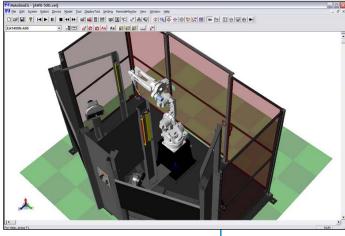
- Enhanced multiple robot control.
- Independent/coordinated motion functions.
- External axis control and coordination.
- Macro command.
- Relative job.
- Collision detection.
- Same easy-to-use INFORM language instructions as the robot controller.
- Can be used to minimize fixturing errors.
- Can be used to reduce robot installation time.
- User-definable view.
- Cycle time and reach analysis.

# **GIVE YOURSELF AN EDGE**

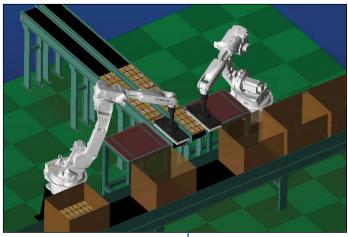
...with MotoSim EG...a powerful tool that takes the guesswork out of system design.

# **MOTOSIM EG-VRC**

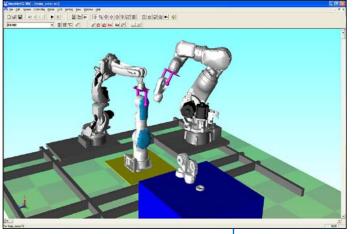
#### SCREENS



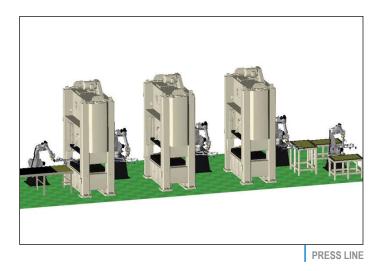
STANDARD WELD SYSTEMS



MATERIAL HANDLING APPLICATION



ASSEMBLY APPLICATION



# OPTIMIZE YOUR DESIGN AND YOUR PROCESS...BEFORE THEY'RE BUILT!

### MINIMUM SYSTEM REQUIREMENTS

- Windows<sup>®</sup> XP
- 2 GHz processor
- 1 GB RAM
  - (2 GB recommended)
- 256 M video card
- 20 G hard drive (Systems may run on less)

# COMPATIBILITY

- DX100 controller
- NX100 controller
- NXC100 controller

NOTE: Previous controllers can not be created in MotoSim EG-VRC. MotoSim EG-VRC can open and play back CEL files (.cel) previously created in MotoSim EG.



www.motoman.com

MOTOMAN ROBOTICS 100 AUTOMATION WAY, MIAMISBURG, OHIO 45342 TEL: 937.847.6200 ■ FAX: 937.847.6277