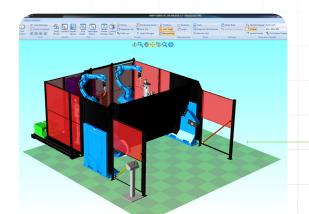


POWERFUL SIMULATION SOFTWARE



MotoSim EG-VRC

ver. 2016SP2

OFFLINE PROGRAMMING | 3D SIMULATION | VIRTUAL ROBOT CONTROL

KEY BENEFITS

Offline programming of complex systems reduces robot downtime

Highly accurate simulation of advanced control capabilities between Motoman® robots and our industry-leading positioners

SYSTEM REQUIREMENTS

| Recommended | Minimum |
|-------------------------------|----------------------|
| Windows® 10 | Windows® 7 |
| Intel Core i7 CPU | Intel Core i5 CPU |
| 16 GB RAM | 8 GB RAM |
| 3D Pro graphics card | 3D graphics card |
| 5 GB of free hard drive space | |

CONTROLLERS

 $\sqrt{}$

 $\overline{\mathsf{V}}$



YRC1000 DX200 DX100

M

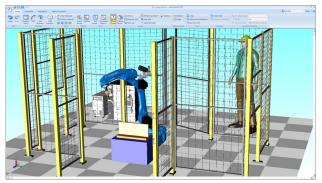


FS100 NX100

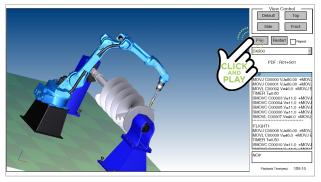
- Comprehensive software package that provides accurate 3D simulation of robot cells.
- Performs collision detection, reach analysis and cycle time calculations.
- Supports multiple process applications including arc and spot welding, cutting, handling, painting and sealing.
- This virtual robot controller displays the actual programming pendant interface; virtual programming steps are identical to those used in the real world.
- Supports standard INFORM programming language and completely simulates the controller software in the PC environment, including system configuration functions, condition file editing and FSU configuration.
- Easy-to-create 3D PDF and AVI files to view and share cell layouts or program operation. Viewing angle and start/stop playback of the robot program can be modified within the 3D PDF file.

- Offline programming and testing reduces programming time and increases production uptime:
 - Program new parts prior to production
 - Modify existing robot programs to increase efficiency and reduce cycle time
 - Detailed path calculation function plots robot's trajectory to simplify program verification
 - Programs created in MotoSim EG-VRC can be downloaded to the robot controller
- Offline cell design can minimize fixturing errors and reduce robot installation time:
 - Add markups and comments
 - Accurately measure distances
 - Create permanent measurement lines
 - Directly import 3D CAD files into MotoSim EG-VRC which eliminates need to convert files prior to import
- Utilize Yaskawa Motoman's model library or your own. Frequently used models can be dragged/dropped into a cell.

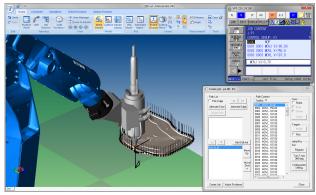
MotoSim EG-VRC



CELL LAYOUT AND DESIGN

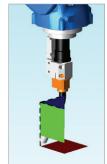


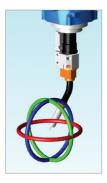
DOWNLOAD 3D PDF: http://www.motoman.com/motosim-3d/



PATH GENERATION FROM 3D CAD MODEL (CAM)







TCP DRAG FUNCTION

CAPABILITIES

- Supports multi-robot and multi-controller simulation
- Robot(s) and external axes control, including independent/coordinated motion and twin synchronous motion functions
- 3D CAD file formats supported: IGES, STEP, Inventor, ProE/Creo, Solidworks, Catia V5, SAT, Parasolid, HSF, HMF, STL, 3DS, RWX, DXF and PLY
- Supports standard and optional controller functions such as Macro Command and Relative Job
- Component-level collision detection
- User-definable views
- Automatic robot path generation based on 3D CAD model information. Customizable to include applicationspecific instructions. Motion type, velocity, number of positions generated and work angle are adjustable. Generate numerous program positions in seconds!
- Modify robot position and manipulate each robot axis by dragging with the mouse. User can also position the robot in Cartesian mode.
- Accurately align models to one another:
 - Process tool or end effector to robot
 - Fixture to positioner
 - Part to fixture

YASKAWA