

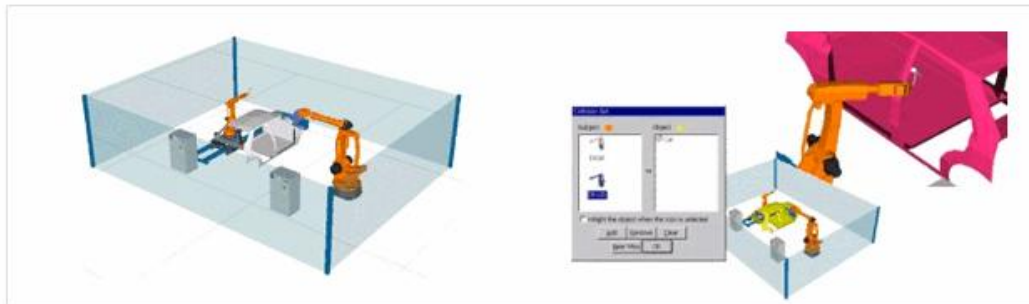
- Designing, Simulation and Off-line Programming for Multi-joint Robot : V-ROBOT

| About | Case Study | Testimonial | Package |

■ About   

▢ Introduction

- Designing, Inspection, Off-line
- Interactive 3D graphic simulation tool for programming
- Various functions and contents for robot training and application



▢ Function

* **SIMULATION**

- Step simulation , robot control with virtual digital I/O ports, Multi simulation, Manipulation of animation speed, Working time
- 3D/2D Modeling Data -IGES, DXF file format saving. Printing

* **Verification**

- Automatic collision detection between robot and robot or robot and work-piece, Selection of collision check, Manipulation of verification speed, Visual check of 3 dimensional robot working routine

* **Analysis**

- Cycle time
- Position and status
- Joint Values, Speeds, Accelerations, Tool Center Point Location
- Reachable workspace

* **OLP(Off-Line Programming)**

- Robot language operator
- Grammar check and analysis
- Program verification through simulation
- Command information and parameter setup
- Extraction of tag points from CAD data for off-line programming
- Data base control
- Calibration
- Output robot program to link with real robot

* Path Planning

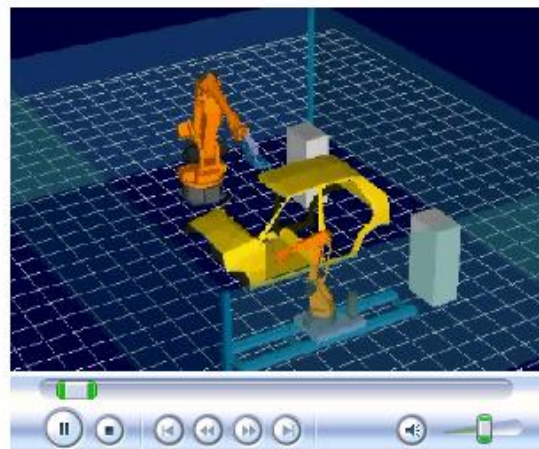
- Extraction of working information from CAD data
- Tag Point
- Position + Orientation
- Tag Point DB
- Creation, edit and save
- Off-Line Teaching

*Transmission

- Transmission of robot program into real robot
- Internal DNC (RS232C protocol)
- Floppy diskette

*Libraries

- Robot, torch, Gripper, RGV, M/C, Turning



Effect

- Process verification of Robot Work-cell
- Retrenchment of cost and time of new equipment
- Existed equipment repair and suppliment
- Increase of efficiency with verification and application cases
- Suitability check of robot and equipment to product
- Increase of educational effect through virtual training
- Safety supervision from robot and work-cell