RobotStudio Paint
True off-line paint programming and simulation

The Painting PowerPac integrates paint programming knowledge and paint process tools into RobotStudio. We call it RobotStudio Paint.

It will speed up your programming and simulation of painting robots and equipment. It is a faster and more intuitive way to create paint programs.

Simulate your complete paint cell
With RobotStudio Paint you can simulate and run a paint cell with multiple robots, including conveyor tracking. You reduce the risk by confirming layouts and solutions before the robots are installed. RobotStudio Paint comes with CAD models of IRC5P paint robots and ABB's applicators included.

Smart paint programming
Paint strokes are easy to create and edit. Paint instructions are automatically created and robot positions for acceleration and deceleration distances calculated automatically.

Increased production
New paint programs can be created and paint process performance parameters predicted and verified offline - without disturbing the ongoing production. It is easy to introduce new parts in the line without stopping production and get high first run paint finish quality.

Offline programming is the best way to maximize return on investment for your robot system. RobotStudio is the leading product for offline programming on the market.
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RobotStudio is an offline programming system that allows you to build an exact virtual copy of your real ABB paint robot system.

RobotStudio is based on ABB’s VirtualRobot™ Technology. The real robot software is running on your PC and controlling the robot simulation. This ensures that your programs are accurate and ready to run in the paint booth.

Simulate your paint cell
Robot positioning challenges can be solved early. Move the robot or the work piece around until all positions are reachable. This allows you to easily verify and optimize the paint cell layout.

Programs can be tuned for speed and process efficiency and cycle times verified before production starts.

Automatic collision detection prevents costly damage to your equipment.

Fast paint programming
Paint strokes are easy to program. Click on the object where you want painting to begin and end. SetBrush instructions for the paint events are automatically added to your program and the event trigger axis automatically selected. Robot positions for the acceleration and deceleration distances are calculated automatically.

Optimized for Gun or Bell
RobotStudio Paint will minimize the paint tool reorientation by creating a paint path that is optimized for a gun or a bell.

Help getting organized
New painting programs are automatically named and created according to the guidelines for painting. When you create new modules, correct module names are proposed and procedures are automatically put into the correct modules.

Paint strokes are automatically identified and grouped as “PaintStrokes” based on SetBrush instructions in the paint program and the brush specification defined in RobotStudio Paint. This also allows you to do operations on one or more selected paint strokes. Examples of such operations are tool rotate, tool align and delete.

Screen recording
Use the ScreenRecorder to make a recording of your work in RobotStudio. This is useful for demonstration and training purposes.

Rapid editor
Should you need to edit the RAPID program code itself, RobotStudio supports syntax coloring, search and replace, bracket matching, etc.

Paint robot CAD models included:
- IRB 52 (short and long vertical arm)
- IRB 580 (standard horizontal arm)
- IRB 5400 Slim arm (floor, clean wall rail and in-booth rail)
- IRB 5400 Process (floor, clean wall rail and in-booth rail)
- IRB 5500 (A and B)

CAD models of applicators included:
- Spray Gun
- ROBOBEL 926 T
- ROBOBEL 926 TD
- ROBOBEL 926 WTD
- ROBOBEL 926 MC
- ROBOBEL 951 T
- ROBOBEL 951 TD
- ROBOBEL 951 WTD
- ROBOBEL 951 MC
- ROBOBEL 951 2K
- ROBOBEL 1000 SSD
- ROBOBEL 1000 SAD
- ROBOBEL 1000 WSC 500cc
- G1 Direct Charge
- G1 COPES

CAD data import
All major CAD formats, including IGES, STEP, VRML, VDAFS, ACIS and CATIA, can be imported.