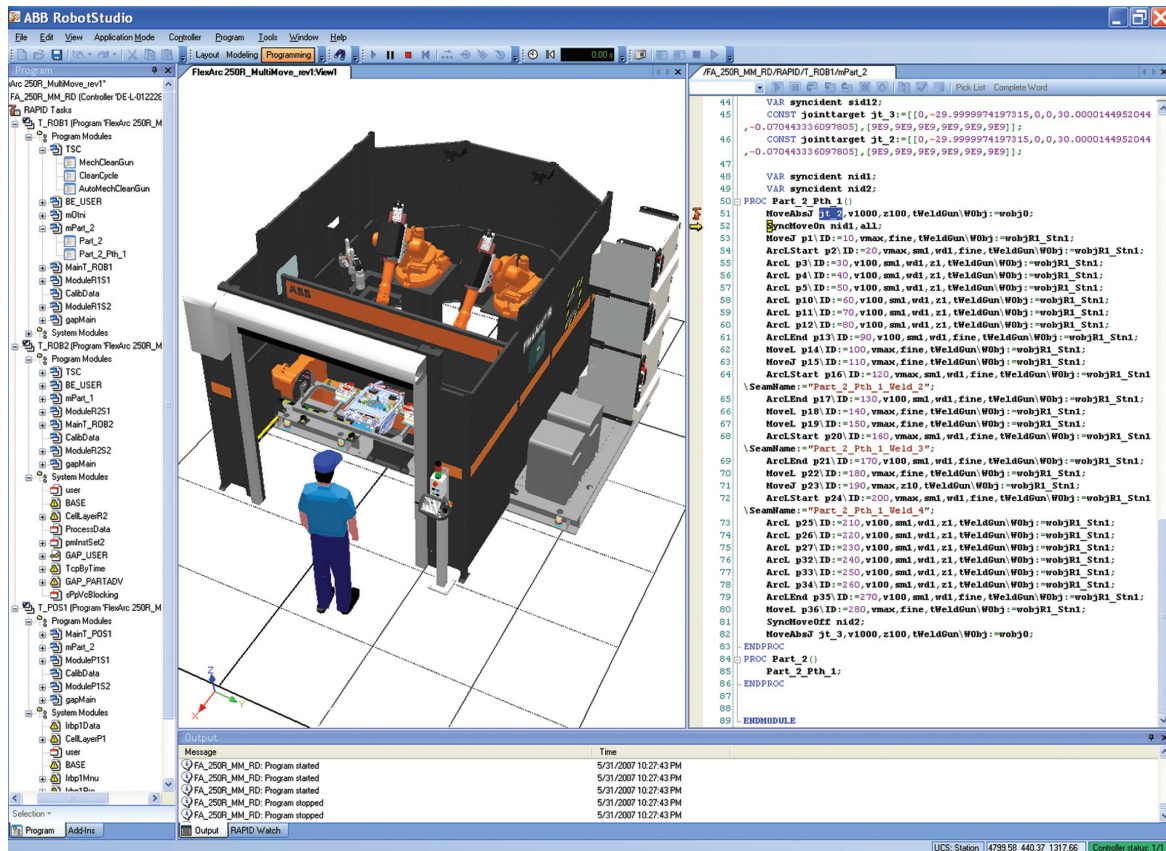




RobotStudio™ 5

Industrial Software Products



RobotStudio™ for IRC5

True Offline Programming

RobotStudio 5 is the leading product for offline programming on the market. With its new programming methods, ABB is setting the standard for robot programming worldwide. Offline programming reduces the risk by visualizing and confirming solutions and layouts before the actual robot is installed, and generates higher part quality through the creation of more accurate paths.

Virtual Robot Technology

To achieve true offline programming, RobotStudio utilizes ABB VirtualRobot™ Technology. ABB invented VirtualRobot™ Technology more than ten years ago.

MultiMove

With RobotStudio 5, ABB takes its Virtual Robot Technology to the next level. It is now possible to run several virtual robots at the same time, and there is support for MultiMove, the new IRC5 technology for running several robots from one controller.

CAD Import

RobotStudio can easily import data in major CADformats, including IGES, STEP, VRML, VDAFS, ACIS and CATIA. By working with this very exact data the robot programming is able to generate more accurate robot programs, giving higher product quality.

AutoPath

This is one of the most timesaving features of RobotStudio. By using a CAD model of the part to be processed it is possible to automatically generate the robot positions needed to follow the curve in just a few minutes, a task that would otherwise take hours or days.

AutoReach

AutoReach automatically analyses reachability and is a handy feature that lets you simply move the robot or the work piece around until all positions are reachable. This allows you to verify and optimize the work cell layout in just a few minutes.



Enjoy the power of True Offline Programming™

Path Optimization

RobotStudio can automatically detect and warn about programs that include motions in close vicinity to singularities, so that measures can be taken to avoid such conditions. Simulation Monitor is a visual tool for optimizing robot movement. Red lines indicate which targets you can improve to make the robot move in the most effective way. It is possible to optimize TCP speed, acceleration, singularity or axes to gain cycle time.

Collision Detection

Collision detection prevents costly damage to your equipment. By selecting the objects concerned, RobotStudio will automatically monitor and indicate whether they will collide when a robot program is executed.

Virtual FlexPendant

This is a graphical representation of the real FlexPendant, powered by the VirtualRobot. Essentially, everything that can be done in the real FlexPendant can be done in the Virtual FlexPendant, making this a great teaching and training tool.

True Upload and Download

Your whole robot program can be downloaded to the real system without translation. This is a unique feature thanks to the Virtual Robot Technology that is a technique only provided by ABB.

Rapid editor

With the new powerful RAPID Editor, RobotStudio becomes an Integrated Development Environment (IDE). The editor supports customary features, such as syntax coloring, search and replace, basic intelligence (bracket matching, pick list, parameter info) and more.

Debugging

Thanks to the fact that RobotStudio supports RAPID debugging, breakpoints can be set, and the RAPID program can be stepped through when pinpointing the possible cause of fault.

The WatchWindows displays selected variables during RAPID debugging. The data, which is displayed and managed in the Watch Window, is automatically updated when the controller comes to execution state "stopped" e.g. at breakpoint.

EventManager

With the EventManager you simulate actions when a specific event occurs. For instance, you can attach an object to a gripper when the gripper reaches the object, or when an I/O signal is set. With the new EventManager, you can easily define a range of actions to be executed when a single event is triggered.

VSTA

Microsoft Visual Studio Tools for Applications (VSTA) gives the possibility to customize and extend the behavior of RobotStudio. Using so-called VSTA add-ins, you can create macros in C# or Visual Basic .NET that can be triggered by simulation events. You can also create your own features and integrate them with the usual RobotStudio GUI. The VSTA add-in is managed from the new add-in browser.

MechanismModeler

With the MechanismModeler, users can model their own tracks, tools or grippers for use in RobotStudio simulations.

ScreenRecorder

The ScreenRecorder enables the user to make a recording of his work in RobotStudio, either the entire GUI or just the graphics viewer. This is useful for demonstrations and training purposes. The ScreenRecorder is based on Microsoft Windows Media Technology.

VirtualTime

With VirtualTime you have the possibility to estimate the true cycle time for the robot program, including logical instructions.

AutoConfiguration

The AutoConfiguration feature helps you to automatically define the optimal robot configuration for a whole path in just one click.

Instruction templates

The instruction templates enable RobotStudio to recognize and program any RAPID instructions. RobotStudio comes with predefined templates for all standard RAPID instructions and you also have the possibilities to create and share templates for your own custom processes and instructions.

Language versions

RobotStudio is now available in English, German, French, Spanish, Italian, Chinese and Japanese.