Simplified Robot Programming, or SRP, combines the skill and craftsmanship of a painter with motion tracking technology and software to create robot programs for industrial paint applications. A revolutionary time saver, SRP cuts paint programming times from hours to minutes.

A fast and efficient programming solution, SRP is the first robot programming tool of its kind for paint applications that are specifically designed to minimize programming times and complexity for the end-user.

Robot painting with ease
Guided by motion tracking software, programming with SRP begins by identifying an object’s paint coordinate system.

Through a set of comprehensive robot commands, which seamlessly communicate with the software application, the user “paints” an object by tracing it with the ABB’s SRP Teach Handle. The fluidness of the human arm and wrist are recorded into the robot program. This allows the SRP to teach the robot to paint specific trajectories (or motion path) and angles with ease.

Paint flow commands are controlled by the ABB Teach Handle’s trigger mechanism. At the same time, a line laser indicates where paint will be applied.

Once the paint robot program is saved, users can review, edit and verify their work in ABB RobView’s ShopFloor Editor. For the more experienced robot operator, accuracy, reach and cycle times can be authenticated in RobotStudio®.

SRP Teach Handle
The ABB SRP Teach Handle, which is connected to a computer, resembles a traditional spray gun. Recording mode is activated with use of function Button A on the teaching tool, the red LED at the top of the device glows to show an active recording. The user squeezes the handle’s trigger to enable painting commands and to activate a line laser for visual guiding and traces of a stationary object. Speed, accuracy and fluidness of motion are fully editable in RobView once the recording has stopped. Recording is stopped by pressing Button A second time.
Conveyor tracking
Once the paint program of an object is complete, the robot can begin painting. The robot can paint stationary objects or ones moving along a conveyor.

ABB Simplified Robot Programming system overview:

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**ABB RobView**
RobView is a proprietary PC-based commissioning and production tool which supports ABB robot systems. The software package includes an array of functions which allow users to operate and service one or more paint robots and their adjacent data units.

Integrated plug-ins like ShopFloor Editor allow users to modify robot program points and paint events. Other plug-ins like Brush Editor give programmers the flexibility to create, delete and edit brush tables.

**RobotStudio**
ABB's widely used offline 3D programming tool. RobotStudio offers as standard ready-made components for easy programming of the robots and paint applications.