

**ABB AB  
Robotics**

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|--|---|--|-------------|
|  | Form title<br><b>Machining PowerPac 6.08.01<br/>Machining Functionality</b> | Ref  |             |
| Department<br>ABB Robotics/BU Robotics Product | Date<br>4/19/2019   | File name<br>Machining PowerPac-<br>Machining Functionality<br>Release Notes.doc | Page<br>1/5 |
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## Release Information

### *Release Name*

The release name is RobotStudio Machining PowerPac 6.08.01 - Machining Functionality.

The release contains following products:

Installation package of Machining PowerPac 6.08.01

### *Release Information*

The information should be considered as last minutes information and most up-to-date.

For more information please contact project manager: CN-Robotics-Software@abb.com

### *Release Time*

Release time **2019-4**

### *Ordering number*

Ordering number for the Machining PowerPac 6.08.01 - Machining Functionality Manual is  
**3HAC054781**

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## General

### Installation information

- 1) Download Machining PowerPac 6.08.01 from the following link, <http://new.abb.com/products/robotics/robotstudio/downloads>
- 2) Click “ABB Machining PowerPac 6.08.01.exe” to install Machining PowerPac - Machining Functionality
- 3) Machining PowerPac - Machining Functionality will be installed under “Robotics IT”, the standard install location for RS PowerPac

### Language information

Machining 6.08.01 Supports following languages:

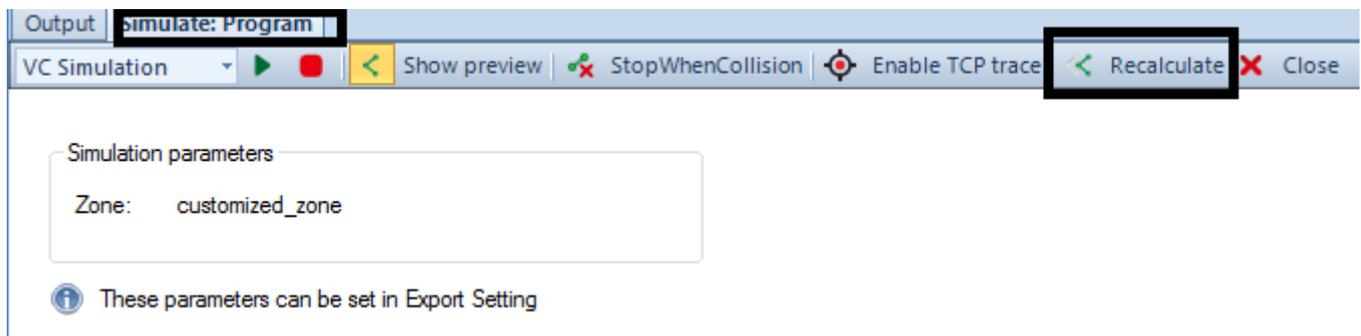
- English
- Chinese

### New functions

- Continuousness between operation

When simulating in program node, following problems can be solved by clicking “Recalculate” button

- Discontinuity between robot joints
- Discontinuity between external axis



### Main functions

- Create Tool model
  - Easily create tool geometry

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- Support user-defined contact point on tool
- Create geometry
  - 5 strategies to create path curves based on the Cad model
  - Geometry boundary to constrain process area
- Create operation
  - Tool axis control
  - Flexible non-process move setting strategies
  - WAVE path
  - Safe path
- Path edit
  - 2 strategies to do smooth tool axis interpolation
  - Support smooth contact point(on tool) adjustment
- Simulation
  - New quick simulation and collision check in RS
  - Support VC simulation
- Export RAPID
  - Extendable with template

## **Limitations**

- Zig/zigzag pattern for operation is not available after editing the sequence of feature curves
- Flexible contact point on tool is not supported for tool face machining
- System supports only ABB 6-axis robots, except for IRB 6640ID, IRB 6640 LeanID, and 6-axis painting robots IRB 52, IRB 5400, and IRB 580

## **Known issues**

- The Machining PowerPac - Machining may encounter error if users have run Machining Powerpac older version in the same RobotStudio session
- For operation tool axis, if the specified fixed tool axis is close to 90 degree with the original tool axis, the calculated tool axis maybe wrong

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- Undo for creating tool in Machining PowerPac doesn't work well, users need to undo twice to undo a tool creating operation
- CAMWorkobject node in geometry view and tool node in tool view don't support copy/paste from keyboard(ctrl + c/ctrl + v)
- The user interface layout of Machining PowerPac maybe incorrect if users don't use "smaller – 100% (default)" in Windows display setting
- Tool change of operation causes incorrect position of safe path in quick simulation
- Quick simulation of robot on track for safe path is incorrect while VC simulation is OK
- Safe path defined in operation is not included in operation template
- IRB6700\_300\_270 kinematics has an error, currently this robot type is not supported.