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Dealt with by, telephone Xinyu Fang, +86 21 6105 2631			

## Release Notes Machining PowerPac 5.12

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## Release Information

### *Release Name*

The release name of the product is Machining PowerPac 5.12 (MPP5.12).

The installed program version is displayed in the *About Machining* dialog box of the *Ribbon* menu. The build number of Machining PowerPac 5.12 is 5.12.1343.0138

### *Release Information*

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

For more information please visit the support web site at  
<http://www.robotstudio.com/community>

### *Release Date*

Release date **2009-04**

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## Supported Platforms

Before you install Machining PowerPac, make sure your system conforms to the following requirements:

### Required Software

RobotStudio 5.12

RobotWare 5.12.0138 or later releases

### Supported Operating Systems

Microsoft Windows XP Professional 32-bit edition with Service Pack 2 or higher.

Microsoft Windows Vista Business or Enterprise 32-bit edition

**Note 1:** *Machining PowerPac 5.12 does not support 64-bit operating systems.*

### Recommended Hardware

High performance desktop or laptop workstation:

**CPU:** 2.0 GHz or faster processor

**Memory:** 1 GB system memory at minimum,  
2 GB if running Windows Vista, stations with several robot systems,  
or large CAD-models.

**Free disk-space:** 5+ GB free space

**Graphics card:** High performance DirectX 9 or OpenGL-compatible graphics card  
with the corresponding up-to-date drivers installed

**Display settings:** Screen resolution: 1280 x 1024 pixels or higher

**DPI:** Normal size (96 dpi)

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## Features in Machining PowerPac 5.12

This section describes the features that have been made in MPP5.12 since MPP5.11.

### *New Features*

#### **Remove Targets' Configuration in Path View**

Users can now remove one or more targets' configuration from path view. This facilitates users who want to refine configuration for the selected targets. After this action, the configuration status will be changed to Undefined.

#### **Examine Edge and Point**

When using Edge and Point selection control, sometimes the selected objects cannot be observed easily in 3D graphic view. With this function, the selected object in the list can be examined.

#### **Improved 'Move to' Speed**

A new algorithm for 'Move to' function is implemented, which improved 'Move to' speed for about 50 percent compared with the previous version.

#### **Highlight Multi-selected Objects in 3D View**

In the object selection control of MPP5.11, the user can select only one object in selection list to highlight in 3D graphic view. From this version, with 'Shift' or 'Ctrl' key, multi objects can be selected and highlighted. The selection list includes three types, i.e. faces, edges and points.

#### **Indicator for the Repeated Selection on the List**

In the previous version, users are not clear whether a selected object (face, edge) in 3D has already been included into the selection list. In MPP5.12, if an object has been selected previously, a "+" symbol will be added in front of the selected item on the list to notify users.

#### **Confirm the Clear Action**

A dialog will be shown to request users to confirm the clear action when clicking Clear button or Clear item in the context menu. This function can avoid clearing items in the list by mistake.

#### **New Mechanism of Installation Deployment**

From this version, the directory for MPP installation is changed to "...\\Program Files\\ABB Industrial IT\\Robotics IT\\Machining PowerPac \*.\*\\" ("\*.\*" being the specific version number of MPP), independent of the specific RobotStudio version. This enables the possibility of MPP 5.12 to run on future versions of RobotStudio.

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## *Fixed Bugs*

- 1) MPP can not initialize successfully if there are several Virtual Controllers on the network.
- 2) The modified values of the controls in a wizard page will not take effect when the 'Next' button is clicked, if they are activated by the 'Tab' key.
- 3) Redundant blank occurs in the beginning of the path view sometimes.
- 4) Old templates are not replaced by the imported new ones.
- 5) Empty paths are created if 'Merge into one path' option is selected in wizard.
- 6) Stopping simulation may cause fatal problem in path view.
- 7) The RobotStudio start page is hidden in the machining tab.
- 8) The attachment property of pre-defined workobject is modified incorrectly after the solution wizard creates paths under it.
- 9) Approach/departing targets are created wrongly after modifying its approach/departing template.

## *Known Limitations*

### **Parts' Name**

Imported parts to be machined cannot have the same name.

### **Adjust Starting Points**

Based on the geometrical features, the starting points of all paths within a solution can not be close to each other.

### **Limited Support of "MoveC" Instruction**

MPP5.12 support modifying "MoveL" and "MoveJ" motion instructions to "MoveC" from path view while not support creating "MoveC" motion instructions from surface directly.

### **Limited Support of Two Robot Systems in One Cell**

MPP5.12 do not support a second robot system if it is added after MPP5.12 has been launched in RobotStudio. However, if two robot systems are added prior to launch of MPP5.12 they will both be supported.

### **Performance Limitation**

It will take a long time to generate more than one thousand paths and ten thousand targets. When there are so many objects in the station, some operations

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like opening the path view or saving the station can be very slow, or even fail because of lack of resources.

## Different Results for Path Configuration

There are several path configuration algorithms in MPP5.12 and none of them is perfect. They are also different from the one used in RS5.12. Therefore, you might get different results when using the path configuration functions in RS5.12 and MPP5.12.

## Problem with Undo

Several empty items will be inserted into the undo list after some actions; such as creating a new solution with the wizard and creating calibrations.

## Out of Memory

During creating solution in wizard, there will generate many temporary object. The application might run out of memory due to the large amount of temporary objects.

## Difficulty in Adjusting Start or End Points Automatically

In some cases where several holes or obstacles exist in a machining surface, the generated path will be sectorized accordingly. Unfortunately the sequence of the sections is not well-defined.

MPP will try to adjust the sequence automatically, deciding which are the first and the last section in the whole path and then arranging other sections accordingly. However, the result may turn out not to be what users expect, since, for example, they may need a different section as the start or end place.

## Name Convention Collision with Robotware Machining FC

In the current version of MPP and RWMFC, different name conventions for some objects are used:

"Departing" target in MPP is called as "Withdraw" target in RWMFC.

"Via" target in MPP is called as "Process" target in RWMFC.

This will be resolved in the next major release from RWMFC side.

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## Installation of Machining PowerPac 5.12

### *How to install Machining PowerPac 5.12*

Machining PowerPac 5.12 can be installed on an installation of RobotStudio 5.12 with or without a previous installation of Machining PowerPac 5.12. Install Machining PowerPac 5.12 by double-clicking on the file **Machining PowerPac 5.12.exe** in the Machining PowerPac installer package.

### *How to uninstall Machining PowerPac 5.12*

Select to uninstall Machining PowerPac 5.12 from the *Add or Remove Programs* tool of the Windows *Control Panel*.