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## Release Notes Machining PowerPac 5.14.02

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## Release Information

### *Release Name*

The release name of the product is Machining PowerPac 5.14.02 (MPP5.14.02).

The installed program version is displayed in the *About Machining* dialog box of the *Ribbon* menu. The build number of Machining PowerPac 5.14.02 is 5.14.1336.2031

### *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 **2011- 10**

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## *Supported Platforms*

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

### **Required Software**

RobotStudio 5.14.02

RobotWare 5.14.2031 or later releases

### **Supported Operating Systems**

Microsoft Windows XP Professional with Service Pack 2 or higher.

Microsoft Windows Vista Business or Enterprise

Microsoft Windows 7 Enterprise

### **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 5.14.02

This section describes the features that have been made in MPP5.14.02 since MPP5.14.01.

### *New Features*

#### **Add Reverse Option for "Optimize Speed On Surface" Functionality**

The Solution Wizard has an "Optimize Speed On Surface" functionality, which varies the speed depending on the curvature of the surface (i.e., maximum speed for biggest curvature, minimum speed for smallest curvature).

By selecting the "Reverse" option in the "Optimize Speed On Surface" functionality, the maximum speed is applied to the point with the smallest curvature and the minimum speed is for areas of biggest curvature.

#### **Add More Speed Values for "Optimize Speed On Surface" Functionality**

The Solution Wizard has an "Optimize Speed On Surface" functionality and its minimum and maximum speeds could be varied between v10 and v100.

Now this range has been enlarged from v10 to v7000.

### *Fixed Bugs*

- 1) If a work piece is attached to an equipment with external axes, the newly created workobject does not superpose the local origin of the work piece.
- 2) A new template cannot be added into Approach Departing templates.
- 3) Reachability check can not be executed for all selected targets on open paths.
- 4) In the Solution Wizard, if user changes the selection of surface, the wizard cannot clear the selected points or edges on the original surface.
- 5) When option 'Optimize Speed On Surface' is selected in Solution Wizard, speed is not distributed linearly according to the changes of surface curvature.

### *Known Limitations*

#### **Parts' Name**

Imported parts to be machined cannot have a same name.

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### **Adjust Starting Points**

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

### **Limited Support of “MoveC” Instruction**

MPP5.14.02 supports modifying “MoveL” and “MoveJ” motion instructions to “MoveC” from path view, but does not support creating “MoveC” motion instructions from surface directly.

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

MPP5.14.02 does not support a second robot system if it is added after MPP5.14.02 has been launched in RobotStudio. Two robot systems have to be added prior to the launch of MPP5.14.02.

### **Performance Limitation**

It normally takes a long time to generate more than one thousand paths and ten thousand targets. In cases like this, operations like opening the path view or saving the station can be very slow, or even fail due to memory limitation.

### **Different Results for Path Configuration**

There are several path configuration algorithms in MPP5.14.02 and none of them is perfect. They are also different from the one used in RS5.14.02. Therefore, you might get different results when using the path configuration functions in RS5.14.02 and MPP5.14.02.

### **Problem with Undo**

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

### **Out of Memory**

When creating a solution with wizard, it generates temporary objects that will be deleted after finishing. However, the application might run out of memory due to the large amount of temporary objects created.

### **Difficulty in Adjusting Start or End Points Automatically**

In cases where several holes or obstacles exist in a machining surface, the generated path will be sectored 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.

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### **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.

### **Coordinated MultiMove Programming Not Supported**

Programming coordinated MultiMove targets are not directly supported. Users can use RobotStudio basic functionality to access these information.

For independent MultiMove, users can create paths for multi-tasks, open them in PathView and simulate together.

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## Installation of Machining PowerPac 5.14.02

### *How to Install Machining PowerPac 5.14.02*

Machining PowerPac 5.14.02 can be installed on an installation of RobotStudio 5.14.02 with or without a previous installation of Machining PowerPac 5.14.02. Install Machining PowerPac 5.14.02 by double-clicking on the file ***Machining PowerPac 5.14.02.exe*** in the Machining PowerPac installer package.

### *How to Uninstall Machining PowerPac 5.14.02*

Select to uninstall Machining PowerPac 5.14.02 from the *Add or Remove Programs* tool of the Windows *Control Panel*.