

*Thank you for purchasing AP100US CAD/CAM v7.01! These release notes outline the new features or changes in the latest version of the software. These modifications are in response to customer suggestions and feedbacks. Please remember that this CAD/CAM System is licensed software, and cannot be freely distributed. Please read the license agreement that accompanied the software.*

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## **HARDWARE DESCRIPTION**

<b>CPU-</b>	Intel Pentium IV 1.2GHZ, AMD DURON 1.2GHZ or higher 32 bit CPU.
<b>Memory –</b>	256 MB RAM minimum, 512 MB RAM Recommended.
<b>Hard Disk -</b>	500 megabytes free hard disk space.
<b>CD-ROM -</b>	A CD-ROM drive is required for installation and the Multimedia Training presentation.
<b>Pointing Device -</b>	Serial or bus mouse with wheel button.
<b>Video -</b>	A graphics card capable of supporting a minimum resolution of 1024*768, 32MB RAM recommended, 32-Bit colors.
<b>Protection Block -</b>	You cannot operate the software without a protection block. Multimedia - An optional sound card, computer speakers or headphones are recommended for the Multimedia Training CD.

### **SOFTWARE DESCRIPTION**

**Operating System -** Windows 2000 or Windows XP or Windows 2003 server.

**Sentinel Driver -** You must install the Sentinel Driver before you can install the *AP100US* CAD/CAM System or optional software packages.

**Network -** For a network installation, the server computer must be running the server versions of Windows NT, Windows 2000 or Windows XP. It may also be necessary to update the Sentinel Driver on the server computer.

**Supported Application Software –** SolidWorks 2007, SolidEdge V17, AutoCAD 2006(.dwg support), AutoCAD(.dxf support), Pro/E WildFire2, Inventor 9.

### **ADDITIONAL INFORMATION**

SolidWorks 2006, 2007 does not support SolidEdge 16, 18, 19. If both SolidWorks and SolidEdge are installed, an OLE integration conflict will occur in the *AP100US* CAD/CAM system.

### **NEW FEATURES - v7**

#### **1. Part Info**

The Part Information window contains much more information than ever before. The part information is divided into two categories, i.e. generic and specific information. The generic information contains CAD Information, CAM Information and Production Information. The specific information contains Nesting Information.

#### **2. Punch Travel Zone**

The system can display the overtravel not only for the cutting machine, but also for the punching and combination machine. If you use the punching machine to process the sheet, the system can display the travel zones for the tools. If you use the combination machine, the system can display the cutting travel zone and punching travel zone for the Pre-Punch.

#### **3. Semi-Auto Tool Assignment**

This function provides you with easier and more intelligent tool assignment. The system will list all the matching tools for the pattern you select from the drop-down list automatically.

### 4. Notching Capabilities

Many notch templates are available in the system. The user can select one template and set it as needed, which makes creating notches easier and quicker. You can assign a relief tool to process the notch holes.

### 5. Keep Tool of Pattern

This function allows you to add a flag on the pattern, indicating the tool on the pattern is fixed or the pattern can't be assigned a tool when you load the part or machine.

### 6. FW Wizard

This function provides you with a quick method to get all functions done by a few clicks of the mouse. This reduces too much work for the system settings and raises the production efficiency greatly.

### 7. TK/PRII

This is an extended function in the nesting. The system can remove, sort and stack the machined parts from the machine. The position of last hit is determined by the system automatically.

### 8. MJC/IJP

The MJC is short for Micro Joint Cutter, which cuts the joint part in the unloaded sheet with joint. The IJP is short for Ink Jet Printer, which has a function to print part name, part size and other information on the part. There are two types of IJP device. One is combined with the MJC device, and the other is individual.

### 9. 3D Unfolder

#### 1) Duct Unfold

The Duct Unfold creates unfolded parts of an air-duct. The User selects an air-duct shape from the list and enters the parameters of the shape, such as height, width, diameter or angle. The system calculates the unfolded shapes and transfers them into CAD/CAM.

#### 2) Cross-Section Unfold

The Cross-Section Unfold creates unfolded parts by rough sketched cross-section figures. The User roughly draws cross-sections and defines the parameters such as length, angle or bend allowance. The system calculates the unfolded shapes and transfers them into CAD/CAM.

#### 3) Flange Unfold

The Flange Unfold creates unfolded parts by adding some flanges on a specified base face. User draws a base face shape in CAD/CAM, and then launches Flange Unfold. The Flange Unfold receives the base face shape and the user specifies some parametric flange shapes on it. The flange shapes are drawn by the same way as cross-section unfolding. User also can break the part by 3D edit functions if needed. The system calculates the unfolded shapes and transfers them into CAD/CAM.

### 10. FabriSIM

The Simulation module is software for validating NC programs created on CAD/CAM. If you perform simulation before proceeding with an actual process, you can predict the time of each process, discover probable errors, and avoid any mishaps. This software also enables you to edit or create new NC programs.

### **11. OLE Integration**

#### **SolidWorks Integration**

The system imports the bending properties including the bend line length, the bend angle, the inner radius, the bend deduction, the bend direction and the bend order.

### **12. NC Code**

This function allows the **Part Number**, **Programmer Name** and **Comments** in the **Part Information** window to be output in the NC Code files.

### **13. OLE Enhancement for SolidWorks**

This function allows you to control faces and also angles when OLE from Solidworks.

### **14. Setup Wizard**

This function will help the new user to setup some necessary files conveniently, such as tool inventory, material files, material inventory etc. Then user can run and use the system to design and generate NC code after he installs the system for the first time.

### ***NEW FEATURES- v7.01***

#### **NC Code Generation**

- The system will get the Customer Data as well as Revision Data output from Part Info, and output it to the NC Code.

#### **Intellinest**

- All sheets can have the remnant cut now, after nesting.

#### **Tool**

- Now shows tools with angle as a setting in the turret, regardless if the setting in Tool menu is “From Turret” or “From Tool Inventory”.
- The system will retain more tools when changing the machine file.

#### **Other**

- The maximum (“max”) microjoint that can be added in the system is now expanded to 250.

### ***FIXED ISSUES***

#### **Customize**

- The system would crash after customizing toolbars by deleting icons from Standard toolbar.

#### **Display**

- When two punching machines were loaded one after the other, the Overtravel lines did not refresh until Machine Info was selected and closed.
- The system should show “min dead zone” and “active station’s dead zone” when inquiring tools and viewing sequence.
- The “convert dialog” display was too small.
- The system would show different dimensions or parts in part mode when clicking the different part names on the part list dialog. The part and part name on the window caption does not automatically change.
- Close pull down menus would screw up the display.

#### **Load File**

- When loading Dxf, Iga, Dwg or Igs files, the system would ask the user to load sheet size and material thickness.
- Dxf files loaded through the Walk-Through Wizard will have a line side problem; the part should be processed.
- Added a switch to turn off the pop-up message for applying material and sheet thickness.
- “Apply material thickness and sheet size” system message would appear when loading old part, dxf file, dwg files, etc.
- DXF file output from the system would mistakenly create open entities.

### Edit

- “Cancel” button missing in the New Part dialog.
- When selecting Grid, clicking on the part and then centering Grid-X to put the part on the center of the sheet, the system moved the part to the far right side of the sheet.
- When start point moved to the part corner, prepunch would not move with the start point and stay in the original place.

### Intellinest

- Due to an angle placement conflict, the part did not nest with the angle set in the Part Information dialog and the parts were lost in the nesting report.
- An error message appeared when the user attempted to complete nesting jobs.
- When updating the sheet after nesting, the cutoff line on the sheet could not be deleted or edited.
- After nesting, the tools on the part would be lost and wrong tools would be assigned to the pattern.

### Preference

- Some parameter values were multiplied 25.4 times larger when displayed in the Tool Assignment dialog, if units converted from inches to millimeters.

### NC Code Generation

- When using a special tool as a Wheel tool, the system did not pass the correct value to the driver.
- The Cancel button, which showed up during generating NC code, did not do anything.
- The decimal value could not be entered in the Pop-Up dialog when generating NC code.
- Generating NC code off some sheets were excessively slow, and have been optimized.

### Sequence

- The Overtravel display of this sheet did not refresh when performing View Sequence.
- System would crash when set to auto sequence with cup and stack suction cups on the PRUL machine.

### Template Report

- The system could not print variables of the Tool conditions such as “FeedRate 1-4” in the template report.
- The table format in the Hole Chart template should be rearranged to support one hole in one line.

### Tool

- When placing tool hits and then using “Expand All Items” to select other tools to place, the tool hits placed were always the last one selected.
- “Check for Tool Interference” could not find the tool interference in some parts.
- Place Special Tool Hits would have ghost image problems with drawings in black backgrounds and white patterns.
- When turning on common tool punch, Remove DUPLICATE HITS did not remove the Square tool double hits in this sheet.

### Tool Assignment

- Assigning a special tool to the closed line, the system could hang up.

### Material

- When entering the string value into some items under Edit Material\CNC Code, pressing Enter button would change the string value into float value.

### Reposition

- After clicking on Edit Reposition Amount the user was able to right click and toggle between the repositions but when you left click nothing happened.

### 2D and 3D

- AutoCAD could not open .dxf files converted from .prt files, using the export program [expgr.exe].
- Under Windows 2000 Operation System, the part could not be seen in the Inquire/Correct window in CAD.
- IMPORT/EXPORT modules would not work correctly with Power User permissions set on NTFS hard drive partitions.

### OLE Integration

- The "Finish" button did not work under the OLE Preview dialog, when the angle was selected.
- "Error in retrieving data from CATIA" message appeared when importing parts from CATIA.
- There would be one additional ellipse when importing this part into the system.
- Part name would appear when pressing F10 or "Save As" but the part name would NOT be the file name box after OLE import
- Using Open and OLE from the File menu, the user could not get the Preview for OLE dialog

### Other

- The user could not tell which part was selected under Auto Tooling Options Dialog.
- Added a switch to the Preferences to turn off the pop-up message for applying material and sheet thickness.
- Unable to show all dimensions because the window was zoomed in too close.
- When outputting BMP file, the system would crash.
- The system did not remember the recent folder when importing AP100US 7 BMF content into MiniSDD client.
- If the angle was rotated in the Part Info dialog and the user switched the view, the part would rotate off the sheet.
- Area AutoGrid function had layout conflicts.
- The pop up dialog for generating NC code would create errors for any item displayed behind it.
- When entering Pattern Properties and other details, values would "round up" the input data before being saved into the database, after the user pressed OK or Tab button to accept input values.
- Place the ULX loader and the storage table at the left side by using ULXSIDE=1.
- The microjoints on this part would be lost when doing auto sequence.
- The system would crash when switching to view part mode by clicking Part button.
- When using "import material data from FT", an error message would appear saying "did not install FabriTRAK".

- With “Use Subroutines and Macro On” checked, the part grid on the sheet could not perform prepierce.

### UI

- Changed Part Width and Part Height into Part size X and Part size Y under the dialog for New Part and New Sheet.
- DimZ should be changed to “other name” in the Setup Wizard.

### Installation

- After the installation, the icons on the desktop would mess up.

*Please Note that some items may be optional and/or not accurately or fully described within these release notes. Pricing and features of software available and may differ, depending on product packaging.*