

## AP100US 20.10 Update & Release Notes



Thank you for purchasing Amada's AP100US! These release notes outline the new features or changes in the latest version of the software as well as information regarding updating to the current version. These modifications are in response to customer feedback. The AP100US CAD/CAM System is licensed software and cannot be freely distributed. Please read the license agreement that accompanies the software.

AP100US now supports SDDJ v3.6, 5.1 and 6.0 Versions.

### **Important**

**Cumulative patches described herein are only for the AP100US version indicated! The patches fix various problems and add the enhancements outlined in this document. This most recent patch for AP100US 20 is NOT intended to upgrade 2019.x or earlier versions. *You may render earlier software versions inoperable if you attempt to use more recent patches!***

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## System Requirements

Hardware	Description
CPU	Intel® or AMD® Athlon™ dual-core processor, 2.0 GHz or higher.
Memory	8 GB of RAM (16 GB or more recommended).
Hard Disk	Minimum of 10 GB of free hard disk space.
Installation Procedure	Use the link provided in the Licensing Notification email to download the 3 GB ISO file. Using the native tools in Win11 & 10, right-click the ISO file and select Mount to begin the installation. If an installation DVD is required, contact the Amada Call Center separately.
Video Display	1,024 x 768 display resolution with true color (1,600 x 1,050 with true color recommended).
Browser	Google® Chrome™, Microsoft® Edge™ or Internet Explorer™ 11.0 or later web browser.
Pointing Device	Serial or USB mouse with wheel button.
Software	Description
Operating System (32 / 64 bit supp.)	Microsoft® Windows™ 11 Pro and Enterprise, 10 Ultimate, Professional, or Home Premium. Note: An internet connection is required to register the software, as AP100US must be registered to run. (See the License Manager Help file.)
Network Installation	For a network installation, the server computer must be running the server versions of Windows 2008, 2012, 2016 or 2019.
Supported Software	SolidWorks® 2023, SolidEdge® ST6, AutoCAD® 2023, Autodesk® Inventor 2023, Pro/E® Creo 3.  Note: If both SolidWorks and SolidEdge are installed on the same system, an OLE integration conflict may occur.

## New Enhancements in AP100US 20.10

### 1. Add Path to the WIN.INI file, pointing to GRP folder

This option allows the user to add a new path to the WIN.INI file, which points to the GROUP folder.

### 2. Export Option Schedule List

An Export option is added to the Schedule List to allow CSV/XLS format files to be exported with Quantity and Total Time attached.

### 3. Sheet Info Time Change

To be compatible with spreadsheet time formats, the Min-Sec format in Sheet Info > XLS/CSV Export has been changed to 00:00:00.

### 4. Sheet Wizard Add New Columns

Nesting an imported CSV file in Sheet Wizard is not Auto-Stacking as the user needs, so "Bin/Pallet" and "Stack Table" have been added as column header options for PSR and TKL machines to control stacking placement.

### 5. Stack Report Summary

To reduce overall size, the Stack Report needs to have a Summary Stack Report that is separate from the Sheet.

## New Enhancements in AP100US 20.9

### 1. Barcode Includes Extension

The barcode for the NC Code has been modified to include the extension with the name as an option.

### 2. Hover Cursor - See Stack Height

No need to click - Now Stack Height displays when the cursor hovers over a part stack in the work area.

### 3. Sheet Wizard Report Labels

In Sheet Wizard Reports, number labels (which correspond to the part thumbnail image) have been added to the parts on the sheet.

### 4. Stacker Creates New Stacks

For multiple sheets of the same layout, the part Stacker will meet the max height for part stacks and make new stacks as needed.

### 5. Support Pin Toggle

Support Pin display on the sheet in the work area can be toggled ON/OFF as needed.

### 6. View Last Sequenced

The View Last Sequenced feature available in Punching, is now available in Cutting.

## New Enhancements in AP100US 20.8

### 1. AP100US Recalls MJ Values

Previously, when Common Cutting, values had to be entered manually for each MJ added to similar parts. Now AP100 remembers the values and populates the Microjoint panel for each MJ added.

### 2. Assembly function in Sheet Wizard

The Assembly function from the Job Wizard has been added to the Sheet Wizard, allowing users to nest part assemblies in the module.

### 3. Shape Library Hexagon Option

A Hexagon shape has been added to the Shape Library, which now supports 22 standard shapes and a special shape.

### 4. TKL Arms Move In Unison

The user can check ON the Move Both Arms checkbox so the two arms can be moved in unison.

## New Enhancements in AP100US 20.7

### 1. Brush Die Stations

Brush Die Stations in the turret are supported. Brush Dies are used between high forming dies to avoid or minimize scratches to the material.

### 2. Commit Job to Schedule List will Save & Open CSV file

When this option is Sheet Wizard>Advanced Settings is enabled, hit the Commit icon to open and save a CSV file for the nesting job just processed. The saved CSV file can then be distributed to machine operators as needed.

### 3. Dimension - Show Part Info

Show part info as Dimensions on a part. In the dialog select which data will show with the part. (The data used is drawn from Part Info.)

### 4. Discontinued Features

When the program is launched a dialog displays informing the user that certain features will be removed from AP100US after the year 2022: 2D/3D Modules; Enhanced Importer; Unfold Flange; Orthographic; Job Wizard (Sheet Wizard will still be available) and Classic Mode Menus & Icons (only the Ribbon will remain).

### 5. Fast Laser Cutting - Define Max Cut

In Fast Cut>Advanced Settings the user can define the maximum length of a Defining box in X and Y.

### 6. Fast Laser Cutting - Even out Box Sizes

Based on the Max values for Fast Cut boxes, the system will coordinate and even out the size of each box for a neater sheet.

### 7. FastReport - Info Fields Added

Various info fields have been added, such as Pierce Count, NC File Name and Part Perimeter to FastReport report output.

### 8. FastReport - Part Info Added

The new Design Verification option in Part Info has been added to FastReport.

### 9. FastReport - Template Folder Path

In FastReport Settings the user can configure the template folder path. This is available in both AP100US and the Sheet Wizard.

### 10. FastReport - Tools Used List

The Tools Used list is included in a FastReport.

### 11. Import SVG Graphics

The user may import SVG images for use in the AP100US interface.

### 12. Material Library - Auto Split

To have the program automatically place splits on the sheet(s) in the Sheet Wizard, select Yes. Parameters for the splits are pulled from the Split Sheet Settings in the Material>Split Sheet tab.

### 13. Part Info Improvement

The Part Info > Comments field has improved formatting options. Also, the name of the person who verified the part design can be saved with the part.

### 14. Part Revision in Sheet Info>Part List and Sheet Properties

This option allows the user to easily scroll through a parts list to search for parts that have been revised. Entries are synchronized with the same cell in the Sheet Properties panel. The read-only code also appears in the Sheet Wizard>Edit Layout panel.

### 15. Preview of NC File

In Open NC file a preview of the NC file being open displays.

### 16. Process Time Improved

The processing time for splines in complicated drawings has been improved.

### 17. Select Simple Text as Default

Text Allow the user to select Simple Text as the etch/scribe text default. Etching parts with True Type fonts adds a lot of extra geometry, etching time and code.

### 18. Special Tool –Load DXF

AP100US supports loading a DXF file into the Design Special Tool module.

### 19. TK Assist Tool Support

Processed parts may stick to the skeleton, making it difficult for the TK pickup arm to lift the part out. Assign the TK Assist Tool to the edge of a part and the tool will hold the skeleton down allowing the part to be freely lifted out. See also Modules>Unloading menu.

## New Enhancements in AP100US 20.6

### 1. Customer Name

Edit or Delete a Customer Name in Part Info by clicking the Edit button to open the Edit Customer dialog.

### 2. Detect Non-Amada NC Files

AP100US can distinguish between Amada NC files and non-Amada NC files by detecting the presence of certain code structures and tokens. Only Amada NC files can be loaded into AP100US. This function depends upon user settings in the C:\AP100US\Parm\Cutting.ini file.

### 3. Distinguish Part & Sheet Files

When importing a dxf sheet file or NC file, AP100US can distinguish between the parts and the sheet file by interpreting part geometry. This enables AP100 to generate a more complete NC code file. This function depends upon user settings in the C:\AP100US\Parm\Setting.ini file.

### 3. Print FastReport

FastReport can now be edited and generated through the AP100US interface.

### 5. Reverse Driver File

When the user opens an Amada NC file the Reverse Driver File will automatically engage and reverse engineer the Amada NC file to create an editable part or sheet in AP100US.

## New Enhancements in AP100US 20.5

### 1. Control Last Split

To control the last split on a sheet, enter a value for Min last split cut space=X. If the unused space on the edge of the sheet is less than the value entered, the system will not make the cut.

### 2. Enhanced Pattern Selection

Check ON this option to make selecting precise patterns in a complicated part much easier. Active in sheet mode and part mode.

### 3. FastReport

FastReport, used only in the Sheet Wizard, generates and outputs reports in multiple formats. It supports various data sources and has built-in scripts for handling complex data.

### 4. License Notifications

License notifications sent to customers from EMS now show License type (Stand Alone or Network), Network and Number of seats.

### 5. Output SVG file

AP100US can now output part files in the SVG format. Such files are primarily for use in Amada Influx.

### 6. Remnant Name Customization

This function in the FastReport window allows the user to add a customized prefix to the Remnant Name.

## 7. Sheet Wizard Job Name

Entering a long job name was crashing the Sheet Wizard, so the character limitation has been lengthened to 48.

## New Enhancements in AP100US 20.4

### 1. Etching Patterns

After a part or sheet has been processed, patterns already defined for "etching" will remain as etching patterns.

### 2. Export Part to SVG

In AP100US parts can now be saved in the SVG format. (For Amada Influent users only.)

### 3. JKAX2 & JKMX2 files

AP100US now supports JKAX2 and JKMX2 condition files. The user will be able to load JKAX2 files in the Material Description panel and JKMX2 files for use in the Material Library.

### 4. Microjoint Display

If a user sets Split Cut Microjoints in the CNC table, they will be added into the NC code, but won't display in the work area. The program has been updated to display Split Cut Microjoints in the work area.

### 5. Part Info - Modify Customer Name

In Part Info Customer name of a specific database record can be modified in the Edit Customer dialog. Updating the name in the text field will create a new database record.

### 6. TK-L Part Pickup

This option includes a part pickup arm with two moveable side arms that may be dragged over a part or part group.

### 7. Tool Assignment

Duplicate the tool assignment to similar patterns that are not tooled. When "Replace All Instances of Tool" is checked ON, the tool will be assigned to all similar patterns.

## New Enhancements in AP100US 20.3

### License Manager

1. When a user downloads drivers, the manuals for those drivers are downloaded at the same time. This also includes non-Amada driver manuals as well.

2. In the "License Manager & Services Update" tab the user can check for and apply updates for the License Manager and the Sentinel Runtime service. Also configure and enable auto update settings.

3. The De / Re-activate function is a very simple way to de-activate and store a license for transfer. Later, the license can be reactivated for use in another computer.

### NC File Report

4. Customer Request - Have the Comments and Notes be output in the NC File Report in PDF.

### Printing a Template

5. The Print Template Style option on the Main Menu has been streamlined to reduce the time it takes to print.

### Sheet Wizard

6. For easy access to TK/PSR settings, the TK/PSR Settings button has been added to the bottom of the Settings window in Sheet Wizard.

7. The Ignore Utilization Settings checkbox in the Advanced Settings panel allows the Sheet Wizard to nest parts and ignore sheet utilization settings entered in the Material Library or elsewhere in AP100US.

### Unloading

8. A new driver control flag has been added to the CNC Code Panel to force an SY2 file to be output when generating the NC file, even if there isn't an unloading sequence.

9. For quick reference, a new icon on the Modules>Unloading Menu shows info, stack height for each part on the sheet.

## New Enhancements in AP100US 20.2

### Preferences

1. The Disable Filename Character Check checkbox has been added to the Preferences>NC File panel to allow the NC Filename check to be turned OFF. This allows characters such as underscores to be used in file names and places responsibility for the filename on the user.

### 2. Notch Cut Out Range

This feature allows the system to automatically apply simple Notch Cut Outs to notches on a part. Enter a size range, process the part and then sequence. Disable this option by entering a 0 in the range field.

## New Enhancement in AP100US 20.1

### Edit Stacking

1. When stacking in the CAM program the system will use settings from the Auto Stacking Layout Settings dialog in the Stacking Module.

## NEW FEATURES AP100US 20

### 1. Sheet Wizard - Priority, Work Center & Filler Parts

Setting a Priority to parts on a sheet forces the system to nest such parts first, before lower priority parts. The user may assign parts to a specific Work Center, so that when nesting, parts assigned to different work centers will be pushed into separate jobs. A part assigned as a Filler Part will be used by the system to fill up open spaces during nesting.

### 2. Sheet Wizard - Parts List for Nest

The Parts List for Nest, which contains part-specific information, allows the user to make last-minute changes to sheets in a nesting job. From the list a user may Add and Remove Parts, edit columns such as Schedule Number, Filler Number and Rotation and then re-nest directly from the Parts List for Nest.

### 3. License Manager Update

The License Manager utility enables the user to activate, update, check out or transfer a license and import Amada drivers and machines in one streamlined utility. Depending upon the user's requirements, AP100US can be run with a local license or a network license on a corporate server. See the License Manager Guide.pdf in the C:\AP100US\Manual folder.

### 4. Fast Cut Enhancement - Manual Define

To apply Fast Cutting to individual Round patterns that are of different sizes and may not be placed in evenly arranged rows, select Manual Define.

### 5. Part Unloading - Profile Frame Kit

Profile Frame Kit allows smaller parts that were nested inside the cutout of a larger part, to be grouped and unloaded separately from the larger part by using Manual Unload Part. The user may then manually unload the larger part to a different place on a stacking table.

### 6. Save TK/PSR Arm Data with Part

Parts can now be saved with Part Remover Arm data. This speeds up the nesting process because these "ready-to-unload" parts can easily be opened in the Sheet Wizard or pulled onto any sheet at a later date. Multiple copies of a part at various angles can be saved by using the scaled-down version of the Unloading menu while in Part View. A suitable machine, such as an ACIES-TK, F1-TK, HPTK or PSR must be loaded.

### 7. TK Unloader Settings - Part Conveyor Option

The TK Settings panel now contains a Part Conveyor option that allows users to be able to visualize and configure part unloading to a conveyor belt in the AP100US interface. This option is for users equipped with an Amada EML machine with part conveyor option.

### 8. PSR Unloader Settings - Shuttle Table Work Zone & Stacking Table Zone

These options allow an operator to control the movement of a PSR arm in areas with limited space, eliminating collisions between the PSR arm and adjacent equipment or barriers.

### 9. Calibrate Run Time Estimate

Click Calibrate to calibrate Run Time by Real Time standards on the machine (only when using AP100US). When using this option the user may manually enter a run time estimate in the Hours/Minutes/Seconds fields.

#### **10. Label Text on Part / Bar Code Generator**

To assist users in tracking production parts during the manufacturing process, labels with text may now be placed on a single part or on all parts on a sheet using simple interface commands. An auto-generated barcode may also be placed on the labels. This option requires a specific Amada driver.

#### **11. Common Edges**

This option allows the user to select two parts on a sheet, in order to process them in the same Common Cut. The processing of any other parts on the sheet will not be affected.

#### **12. True Shape Common Cutting**

Parts that are processed with standard, common cut processing may leave corner scraps in place, which can tilt on the shuttle table and hinder the part removing process. Check ON this option to allow True Shape processing for common cut processing.

#### **13. Grouping Parts in Common Cutting**

Use this feature to create evenly spaced part rows and groups on a sheet that is going to be common cut. This will provide greater stability for the sheet and reduce the risk of laser head having potential dive problems (or Z Alarm issues).

#### **14. Separate Parts / Separate All Parts**

To modify a single instance of a part without affecting the remaining instances of the same part, use the Separate option to convert it to an individual, stand-alone part. Use Separate All Parts to quickly separate all parts on a sheet that may contain copied or gridded parts of different types.

#### **15. Auto Unload, Create Stack**

Using the options in the CAD/CAM interface, the user may Manually unload two or more parts from a sheet to the stacking table. When the user selects Auto Unload at this point all of the remaining parts on the sheet will be automatically stacked on top of the two manually unloaded parts. This will work for any number of parts or stacking arrangement.

#### **16. Pallets Display in the CAD/CAM Work Area**

Pallets and Pallet Layouts that are created and assigned to a stacking job, will also appear on the stacking tables for that same job in the CAD/CAM work area.

#### **17. Special Tool Updates Saved to Tool Inventory**

When a Special Tool is edited in the Special Tools Designer, changes made will automatically be updated to the Tool Inventory. Also, AP100US now supports setting tool travel direction to Line by Line for a special tool. (See Tool Info Dialog.)

#### **18. Tool Comment Column added to Tool Inventory**

Enter information about the tool, for example the location where the tool is stored. When saved, this read-only information is viewable in the Tool Comment column in the Tool Inventory>List View and Tool Inventory panels in the Turret Window.

#### **19. ATC - Select Die Clearance**

The ATC tool cabinet is structured to hold two dies for every one tool. In the ATC Storage panel users will be prompted to select Die Clearances for each of the two dies and from these choices the program will select the more suitable die.

## 20. Explode Grid option

Newly added to the Edit menu, this option allows the user to explode a pattern that has been grouped or gridded into individual patterns.

## 21. SDDJ AP100US Setting

Previously, to use the SDDJ Server the user had to install the actual SDDJ software (either SDDJ server or client) so that AP100US (32 bit only) could connect to the SDDJ server. Now a web service has been implemented as an optional middle layer between the SDDJ server and AP100US, so there is no need to install the SDDJ software.

## 22. Minimum Cutout Size For Pre-Punch (Times)

This new enhancement allows the user to set a minimum size value that will be used for assigning the Pre-Punch tool. The user must enter a value that will be multiplied (Times) by the Pre-Punch tool Diameter, and that value will be used for assigning a pre-punch tool. Any pattern less than the value will not get pre-punched.

## 23. View Tool List in the NC Code and Work Space

The Tool List according to Turret Order is inserted into the NC Code by default. By selecting Sequence Order NC is output according to the Sequence Order. These same options have been added to make the Tool List available in the Work Space panel for easy reference.

## 24. Show Trace Line for Every Trace or only Single Trace

By default Every Trace displays the trace line for every move in the sequence. But if that causes a great deal of clutter, the user may select the Single Trace option, which will display only the trace line for the last pattern sequenced. This option works with both Punching and Cutting machines.

## 25. Minimum Sheet Utilization

This option controls nesting job output based on the percentage of the sheet that is filled with parts. If this value is not met on one or more sheets in the job, AP100US will not output those sheets in the nesting job.

## 26. NC Path & Machine Setup options in Preferences and in Machine Settings

The NC Path and Machine Setup fields both appear in the Preferences>Default Values panel and the Machine Setup panel. If the paths in Preferences are checked ON, the system will use the paths in Preferences; however, if the checkboxes are OFF, the system will use the paths in the Machine Settings>Description panel.

## 27. Options Added to Control 1 Tool Sequence

Previously, switches like Trace On and Show Tool Hits were applied globally to all tools on a part. Now these new switches allow the user to control such options on a tool-by-tool basis.

## 28. Station Sequence Priority in Turret Window

By entering a value in the Priority column the user can assign a sequence priority to individual tools in a standard machine setup. When the machine is saved these priorities become the default for that machine.

## 29. Tool Sequence Priority Window Update

Tool Sequence Priority now allows the user to control sheet sequencing and various display options. Also, floating independently over the CAD/CAM program, the window can be moved aside while the user continues working in the CAD/CAM program.

**30. Distance to Corner option in Machine Settings**

Use this option to avoid overheating the material when the laser begins cutting a pattern on a sharp corner. Enter a distance value, which will control where the new start point will be placed.

**31. Auto-rotate Imported Part to Fit Sheet**

When Switch part X/Y if Y > Sheet Height is checked ON, if the loaded part in Y is greater than the sheet height, then the part being imported will rotate automatically to fit the current sheet.

**32. View Untooled / Unsequenced Patterns**

To view untooled or unsequenced patterns on a part or sheet, click the View Untooled or Unsequenced Patterns icon. The pattern(s) that are untooled will be hi-lited in red. This option is available for both Punching and Cutting operations.

**33. Box Select to Unassign Tooling**

By selecting Box Unassign from the pull-down menu and dragging out a box around specific adjacent patterns, the user can remove tooling from the selected patterns.

**34. Near-to-Corner Microjoint Placement Option**

When a quantity of two microjoints is selected, the user may select the option that places microjoints near opposing corners. The distance from the corner value can be controlled by the user.

**35. Show Nesting Margin Option**

Enable this option to show a dashed line representing the nesting margin, on the sheet in the Work Area. Even when the option is disabled, the nesting margin will still be in place. Configure the Nesting Margin in Machine Settings>Sheet Layout Info>Location on Sheets.

## Fixed Issues in AP100US 20.10

**Arm Information Error**

1. Arm information confirms an error in Sheet View after editing in Part View.

**Auto Split Cutouts Lost**

2. Clicking Auto Split Cutouts after processing a sheet and doing a Straight Common Cut causes the splits in a hole to be lost.

**Close Part Boundary**

3. At the corner of the part close the gap on the boundary profile that was made for a microjoint during NC code input.

**Customer Name not being Updated - 1**

4. Customer Name is updated in the Part Information panel, but the customer's name is not being updated in the Sheet Wizard.

**Customer Name not being Updated - 2**

5. Customer Name is edited in the Part Info panel and updated, but the name is not being updated in the Sheet Wizard.

**Cut Condition Color Setting not working**

6. Cut Condition color setting not working when doing Common Line Cutting.

**Duplicated Cuts in Common Cutting**

7. Cuts are being duplicated when using Part by Part Common Cutting.

**DXF Part Text is Corrupted**

8. Import a DXF file with text and letters (especially M and H) have gaps.

**FastCut Lineside Incorrect**

9. The Fastcut lineside is incorrect on holes not in the pattern line.

**FastReport Comment Content**

10. Part info Comment content not completely showing in FastReport.

**FastReport Revision Field Empty**

11. The Revision value entered in the Part Info window is not showing up in the FastReport field.

**Import from ATC Tool Server Corrupts Tool**

12. Importing a CSV file from the ATC Tool Server changes the tool condition and drops the RO tool.

**Inquire Tool Not Accurate**

13. When using the Inquire tool with RE tools, the Number of Hits given in the Tool Info panel is not accurate.

**Material Library - Function Buttons**

14. Select the OK/Cancel buttons is difficult when adding a new sheet to the material inventory.

**Microjoint Size Incorrect**

15. Advanced MJ Options the user-entered Microjoint size is not being applied to microjoints on parts in the work area correct size.

**NC File Missing Patterns**

16. When the NC file is loaded, some patterns are missing or corrupted.

**OLE from SheetWorks Crashes AP100**

17. The dll file name in SheetWorks is not being registered correctly, causing OLE from SheetWorks to APCAD and sometimes AP100 CAM to fail.

**Perimeter Notch Cannot be Nested**

18. Parts with a Perimeter Notch cannot be nested in Sheet Nest or Sheet Wizard.

**Perimeter Notch Relief Not Working**

19. Perimeter Notch Relief does NOT work if the Beam Diameter is set to 0.008 and the Joint Tolerance is 0.

**Report Content Poorly Arranged**

20. Content (WO No and Router No) in Sheet Wizard Reports is poorly arranged in relation to surrounding elements.

**Router No Option added to Parts List**

21. The Router Number option that exists in Assembly > CSV input has been added to the Sheet Wizard-Parts List for Nesting.

**RunTime Estimate Corrupted**

22. Load a .JKAX2 file into a Regius machine and then open the Runtime Estimate panel in the Machine Settings to show that the cutting condition tables are corrupted.

**Sheet Layout Error - Zooming In**

23. The Sheet layout Error shows up after zooming in on the sheet in Edit mode then returning to the Nesting Results window.

**Sheet Wizard Add Parts Corrupts Reports**

24. If the user adds more parts to a layout and then updates the report, the data and images in the report become corrupted.

**Sheet Wizard Unloading Error**

25. In the work area, the Sheet Wizard appears to be unloading a small part that has no Suction Cup assigned to it.

**Split Sheet Lines Based incorrectly**

26. When Straight Common Cutting, the Split Sheet lines should be based on the real boundary of the part, not the rectangle shape.

**Stack Editor Changing SY2 File**

27. After NC and SY2 files are generated in the Sheet Wizard, opening the SY2 in the Stack Editor will change the SY2.

**Stack Height Improvement**

28. Previously in the Stacking Module the Stack Size (height of stacked parts) were also included the Stacking Table height. Now only the Stack Size will be counted.

**Transfer from Inkscape to AP100**

29. During transfer from the Inkscape converter to AP100US graphics are converted to PRT (geometry). This action corrupts the AP100 Work Area. Also, the file names do not transfer correctly.

**Zoom Window Not Refreshing**

30. When making changes to the sheet, the Zoom Window is not updating immediately as it should.

## Fixed Issues in AP100US 20.9

### Boundary Laser Cut

1. When loading an NC file, AP100US should make the boundary laser profile cut outside the line instead of directly on the line.

### Can't Open Files in Edit Sheet

2. Opening Group, dxf, etc. files while in Sheet Wizard>Edit Sheet will display an incorrect warning dialog.

### Command Buttons Moving to Right

3. In the Turret>PDC panel, selecting the Add or View Sorted Tools Command buttons pushes other Commands to the right.

### Correct Placement of TK Assist Tool

4. Previously, the TK Assist special tool allowed the user to select the punch side on the part boundary. Now the option will force the user to select the correct side.

### Error when Loading SVG File

5. Load an SVG file from Part View, and the system will display an incorrect warning dialog and the part can't be opened.

### Hatch Cut Ignoring Boundary

6. With the Hatch Angle set at a certain angle (such as 45 degrees) the Hatch Cuts continue cutting inside of holes.

### Import from SDDJ Corrupts Shape

7. Data/Part/IGA imported from SDD-J to APCAD/CAM fails to import standard shape correctly.

### Inquiry Tool Fails or Crashes AP100

8. When Preferences>Enhanced Selection is checked ON, Inquiring a tool fails to give Tool Info or crashes AP100US.

### Part Preview can't be Sorted

9. Parts can't be sorted in Part Preview using the up/down keys in the Sheet Wizard>Assembly Panel>Part Info Table.

### Sheet Wizard Incorrect Behavior

10. Set "Without Sequence and Code Generation" to ON, and the program still sequences, generates code and hangs up.

### Skeleton Sheet not Appearing

10. A Skeleton Sheet created in the Material Library doesn't show up in the Sheet Size pulldown in the Sheet Wizard.

### Skip Sheet Edge Cut option

11. If Skip Sheet Edge Cut is ON, then cutting on the edge should be skipped as in Straight or Edge Common Cutting.

**Stack Amount Number Incorrect**

12. When hovering the cursor over the stacked parts, the stack quantity changes and shows an incorrect amount.

**SY2 not Matching Last Punch Tool**

13. The FTOOL line in the SY2 file does not match the final last punch tool in the NC file, causing arms to not pick up.

**Undo Action Crashes CAD/CAM**

14. Using the Undo option to reverse a box unassign will cause AP100 to crash.

**Unloading Sheet option not working**

15. The Unloading Sheet option in the Sequence Option panel gives a bogus error message and doesn't work.

## Fixed Issues in AP100US 20.8

**Auto Sequence Incorrect**

1. The tool is double hitting in common line tools when "Use Subs" in the Tool Sequence Priority dialog is checked off .

**Common Cut Processes 3 Grids**

2. When selecting Common Cut > Process All Parts creates three separate grids to process a single sheet.

**Correct Placement of TK Assist Tool**

3. Previously, the TK Assist special tool allowed the user to select the punch side on the part boundary. Now the option will force the user to select the correct side.

**Incorrect CAD from Loaded NC File**

4. When viewing the NC CAD image in Open File the file is normal, but when the file is loaded the image is incorrect.

**Load NC File – Crashing AP100US**

5. When loading an NC file in to AP100US, the program crashes.

**Pack-up Files Ignoring Cut Cond.**

6. The Cutting Condition is being left out of the packup file folder.

**Part Boundary Profile Cut**

7. When loading an NC file, AP100US is making the boundary profile cut on the line; it should be outside the line.

**Part Name Displays Poorly**

8. In Show Part Info, the Part name display in the English version needs to be improved.

**Q Value being output to NC code**

9. A Q value is still being output in the G111 in the NC code, even after the Lead-in was turned OFF.

**Regius 3015 AJ-Not Supporting Fast Cut**

10. Because AP100US does not recognize the machine ID #25711=REGIUS-AJ, it can't support FastCut.

## Fixed Issues in AP100US 20.7

**Common Cut Processing – Out of Memory**

1. Common Cut Processing is struggling to process a simple sheet of parts with microjoints.

**Fast Cut - Incorrect code**

2. Fastcut is outputting a Q value of 0 in the NC Code if no jkax file has been loaded.

**Job Wizard - Name Incorrect**

3. The Customer Name display in the Parts List for Nest is incorrect after making a change.

**Job Wizard - Parts disappear from list**

4. Deleting the Customer name in the Part Info panel will cause parts to disappear from the Parts List for Nest panel.

**Load NC File - Incorrect Result**

5. When the NC file is loaded the resulting layout is incorrect.

**NC Folder Path Not Saving**

6. The manually entered NC Folder path is not being retained as in previous versions of AP100US.

**Origin Point - Part View**

7. In Part View the parts are placed away from the origin point.

**Tool Assignment Incorrect**

8. AP100 is assigning a Rectangle tool to replace an OB tool when the part is rotated during nesting.

**Process All Grids not Assigning MJs**

9. Process All Grids for Common Line Cutting is not assigning microjoints to all grids on the Sheet.

**SVG file shows Incorrect Properties**

10. When an SVG file is loaded, the Properties Panel incorrectly shows a Round (arc) pattern as a Line.

**Sheet Wizard - Double-click Crash**

11. Double clicking the sheet causes the Sheet Wizard to crash.

**Sheet Wizard - Dropping Tools**

12. When a part is tooled and then processed through the Sheet Wizard, some tools are removed & some aren't sequenced.

**Sheet Wizard - Fast Report Output**

13. The Router Number is not being output into the FastReport file.

**Sheet Wizard - Filler Parts count**

14. As filler parts are used in a Sheet Wizard nesting job, the count must be adjusted after the job is completed.

**Sheet Wizard - Layout Duplicates**

15. When a job with a Filler part is nested, duplicate sheets of the same layout are created. Also, a dialog warns the user that a value must be entered in the Quantity column when there is a Filler part.

**Sheet Wizard - Method B Warning**

16. When Quantity = 0 and Filler Number = 1, nesting with Method B displays a Nesting Failed dialog.

**Sheet Wizard - Router Number**

17. Router No switch is not available in the Sheet Wizard Column List and the number does not output in Job Reports.

**Sheet Wizard - Sheet Display**

18. Sheet display is incorrect after sequencing and generating the NC Code in the Sheet Wizard.

**Sheet Wizard - XML Report Display**

19. When Sequence & Code Generation is switched OFF, the sheet layout diagram in the XML report does not appear

## Fixed Issues in AP100US 20.6

**Common Cut > Microjoints with no Pierce**

1. Common Cutting with Microjoints outputs an M103A0 (No Pierce) into the code, even though the Microjoint without Pierce setting is switched ON.

**Common Cutting Part by Part**

2. When processing gridded parts with Common Cutting>Part by Part, AP100US is piercing multiple times; one pierce should cut out the entire grid of parts.

**Process Sheet adding MJ**

3. Process Sheet is adding an extra Microjoint to the part; Process Part is functioning normally.

**Reposition Error**

4. The Reposition First option (Machine Settings>Repo info) is not working for cutting, when the Punching priority is set.

**Sheet tab>Nest option**

5. Using Reset or Auto Sequence will cause AP100US to crash after using the Sheet tab>Nest option.

**Slug Destroy**

6. Slug Destroy is assigned to four similar holes but one hole is not being cut out.

**TKL Arm Display**

7. The TKL arm display is showing an error in the Edit Stacking module.

**TKL in Manual & Auto modes**

8. TKL in Manual and Auto modes is hanging up and / or failing to assign arms with suction cups.

**Undo / Redo**

9. Hitting Undo or Redo will cause an Out of Memory dialog to display and cause AP100US to crash.

**Zoom Box – Part Not Showing**

10. The part selected in the sheet does not appear in the Zoom Box view.

## Fixed Issues in AP100US 20.5

### Auto Unload

1. When unload sequence exists, click Auto Unload and then select a part will display a warning that the part cannot be loaded.

### Cluster Tool Assign

2. A Cluster Tool cannot recognize more than one angle when the tool is in an AI station.

### Define Cluster Tool

3. Defining a Cluster Tool in Part View will cause AP100US to crash.

### Delete Microjoint

4. When using the Delete Microjoint Tool, the system won't allow the microjoint to be deleted.

### Fast Cut

5. When in Part View the Fast Cut cutting path cannot be rotated along with the entire part.

### MCode & GCode

6. When using the wheel tool and NC code is generated, M698 and G00 are incorrectly placed after the G70 and G27.

### OLE from SheetWorks

7. When doing OLE from SheetWorks to APCAD (and sometimes AP100US CADCAM) fails and will not load part.

### OLE from SolidWorks

8. When using the OLE function from SolidWorks 2020, 2021 & 2022, bend lines on the part may be reversed; the user must then manually reverse the lines to match the original.

### Raise Laser Head M104

9. In Pierce Location>After Cut Conditions if the Raise Head option is set to YES, but no value has been set (0.0) the laser head will not raise because there's no Z value after the M104.

### Rectangle Lines

10. When a Rectangle Line box is dragged out, the last line does not appear.

### Sequence Remnant

11. Using the Sequence Remnant feature with a punch machine forces the system to reposition when not needed, causing a collision with the clamp in the punching area.

### Sheet Info

12. Clicking the Sheet Info button will open an incorrect "failed to load file:\*svg" error dialog on the Open File window.

### Sheet Nest Option

13. Grouped Parts will disappear after using nesting options in the Sheet tab.

### Sheet Wizard

14. Sheet Wizard screens are hanging up before switching to the next screen.

**Tool Sequence Setting**

15. The customer reports that when the Sequence Features>Sequence Direction>X Direction is selected the program gives inconsistent results.

**Fixed Issues in AP100US 20.4****Auto Unload Error**

1. Errors with the unloading arm are occurring for the LCC1-PR in 20.x versions.

**Converting a Special Tool**

2. Converting a Special Tool to a cutting pattern will cause AP100US to crash.

**DXF Graphic**

3. Opening a dxf file with too many entities and/or features that AP CAD can't understand, is crashing AP100US.

**Final Hit Direction**

4. The final hit direction display is incorrect when assigning the final hit.

**Part Info/CAM Info tab**

5. Part Info/CAM Information tab does not retain the correct material thickness setting for a part.

**Processing Error**

6. Assigning tools with the turret first and then assigning laser cutting tools will cause a process error.

**Reposition**

7. When using the Auto Unload option, the sequence is adding an unnecessary reposition.

**Shape Library**

8. Changing the pitch value and then placing a special shape will cause the CAD/CAM program to hang up.

**Sheet Wizard**

9. The customer's parts are overlapping when nesting in the Sheet Wizard.

10. During the nesting progress the Part / Sequence display in the CAD/CAM work area does not display in the correct place.

11. Sheet Wizard is not outputting Run Time in the Results window or the Report.

12. Filler parts are not being added to the sheet at the first attempt to nest; however, filler parts can be added on the second attempt.

**Split Cutouts**

13. The Split Cutouts>Cut Island First option is not working.

**Stack Editing Module**

14. "Auto" layout doesn't nest the parts on the selected stacking table.

**Tool Assignment**

15. The RE tool would be missing after adding an OB tool to the Tool Inventory and switching to the Turret List page.

**Upgrade to Newer Version**

16. Customer reports after upgrading from AP2018 to APv20.2 the program is terribly slow with a sheet that has many features. The software becomes unresponsive when redrawing, loading, viewing and switching from part to sheet.

**Zoom All**

17. The Zoom All feature should include all objects in the work area, even those that are positioned below the 0,0 base point.

**Fixed Issues in AP100US 20.3****Auto Grid**

1. After Auto Gridding a sheet and then zooming in will cause AP100US to crash if a pattern exists on the sheet.

**Common Cutting**

2. Group parts, add microjoints, process for Common Cutting, copy the group & then delete the copy will cause all parts, common cut processing, etc. to be lost on the original group.

3. Use Auto Grid to grid out a group of parts and the grid will lose common cut processing & other features.

**Control 1 Tool Sequence**

4. In Control 1 Tool Sequence, sequence a rectangle tool in the Y and the sequence does not take the proper path.

**Drivers**

5. When generating NC View code, drivers were causing "Invalid parameter passed to driver" error.

**Grouping & Gridding**

6. A grouped and gridded part that has been sequenced manually causes non-existent trace lines to be added to the display.

**Microjoint**

7. Microjoint lead-ins are remaining at the at the same location even after the microjoint is deleted.

**NC File**

8. The NC File Name is now being limited to 25 characters for all machines.

**OLE Addin - Autodesk Inventor**

9. Doing OLE from Autodesk Inventor will crash AP100US.

**Open and OLE**

10. AP100US crashes when loading OPEN-OLE from the SolidWorks PDM Vault.

**Open File**

11. Open File fails after selecting a file from a folder in a different location.

**Part Preview Display**

12. The Part Preview Display for dxf and prt files is not working in the File open window.

**Patterns on Sheets**

13. A pattern inside of a cutout on the sheet can't be added to the sequence.

**Process Part/Sheet**

14. Process Part/Sheet is not clearing Corner features that were added as attributes.

**Shape Library**

15. Select a Special Tool that is stored in the Shape Library and Special Tools that are currently on the part will stop displaying in the correct display color.

**Sheet**

16. Customer's sheet file is causing AP100US to crash after editing a part and toggling back to Sheet view.

17. Editing a part on a customer's sheet is causing AP100US to assign a cluster tool (Special Tool) to random holes on part.

**Sheet Wizard**

18. Multiple issues ticket:

- For unloading machines, the drop table is blacked out when the sheet is selected the first time after nesting.
- With multiple nested sheets, Sheet Wizard loads the last sheet into the CAM window, regardless of which sheet is selected.
- When the correct sheet loads the scale is off & the drop table does not appear.

19. Sheet Wizard is nesting parts inside of cutouts that have been defined for Etching.

20. In Sheet Wizard if the Layout in TK Settings is set to Sheet, the stacking report will not appear in the first sheet report but will appear in all the other sheet reports.

21. Sheet Wizard is replacing saved arm locations if any of the Common Cut methods are selected in the Material File.

**Special Tool Design**

22. While in the Special Tool Design module, if the user hits the F11 (Auto-grid Part) hot key, the module crashes, system returns to the CAD/CAM work area & the tool bar is corrupted.

**Tools**

23. Defining a cluster tool is affecting geometry not associated with the cluster.

**Stacking Module**

24. Stacking Module randomly crashes when the customer is using Special Tool Groups.

**Turret Info**

25. Clear Tools in the Turret window is removing the Priority numbers on tools in fixed stations.

**Unloading**

26. Arm Display in Part View is inconsistent when using the registers in the Work Space window.

27. Auto Unloading Groups - Area Sequence causes parts to drop from the sheet.

## Fixed Issues in AP100US 20.2

### Common Cutting

1. The View Common Cut path runs very slowly.
2. Common Cut doesn't process the parts inside of a box frame.
3. When True Shape Common Cutting is ON, some parts are still being processed for Standard Common Cutting.

### Cutting Feature

4. When Optimize Start Points is selected, microjoints assigned to starting points are not shifting to optimized locations.

### Job Wizard

5. Job Wizard is laying parts on top of each other.

### Material Library

6. Sheets with a Grain Direction cannot be removed from the Default Sheet Sizes tab in the Material Library.
7. When adding sheet sizes from the Default Sheet Sizes list, if the Sheet Size has a Grain Direction, the direction is not being passed to the Grain Direction column.
8. The Default Sheet Sizes list only allows the first size in the list to be selected. Other sizes are disabled.

### NC Code

9. The Graphic Display of the Stop Sign (Program Stop) appears in the wrong location when NC code is generated.

### Preferences

10. In the Default Values panel, the System will not allow the NC Extension to be removed; "nc" is always reloaded into the field, even after it has been deleted.

### Punch Sequence

11. The sequence is not optimized with multiple Grid Patterns.

### Save as

12. The incorrect file name error message that should appear (with NTK machines) is unstable. Sometimes it is output for non-TK machines, or not output at all.

### Sheet Wizard

13. Nesting results are unsatisfactory - not enough parts are placed on the sheet.

### Tool Assignment

14. Tool Assignment for ATC machines (Acies) is not assigning keyed tools correctly on rotated parts with Pattern Lines, Grids and other features.

**Turret**

15. The Type column in the Turret List window is not sorting correctly.

**Fixed Issues in AP100US 20.1****Common Cutting**

1. Common Cutting with Microjoints is not placing the Microjoints on one side of the part.

**Cutting Feature**

2. The Perimeter Notch Relief feature will sometimes use the inside condition for the cut and sometimes the outside condition.

**Design Special Tool**

3. Using the File Button and F10 Save Special Tool will save the tool, but the unsaved warning still appears when exiting to the CAD/CAM program.

**Edit Stacking**

4. When manually stacking parts in CAM mode for PSR using Stacking Table Zones, when stacking the second part the system will also show the stacking zones on the first part stacked.

**Fast Cut**

5. Manual Define Fast Cut does not consistently use tangent lines between holes.

**Help**

6. In the Stacking Module, selecting the "Question Mark" icon will not open the Help File. Instead, a "Cannot open file..." error dialog appears.

**Job Wizard**

7. In Job Wizard the system adds a punching condition (M-Code) to a 0.250 SQ tool that does not have any punching conditions assigned to it.

**Sequence Priority**

8. The Sequence Priority window is not immediately updating changes to the Turret Station Priority List.

**Sheet Report**

9. The Single Sheet nesting report in Sheet Wizard displays on two pages in v20, instead of on one page as it should.

**Split Sheet**

10. When using the Split Sheet option and the sheet size is greater than the Max. OT value, the system doesn't use the Top/Right Edge value for the end of the cut.

**Tool Assign**

11. When using the Tool Assign>Box Unassign option to unassign tools in a grouped pattern, the display incorrectly shows that tools are still assigned.

12. When unassigning a cutting tool from patterns with a combo machine, the lead-ins shown in the display are not removed.

**Unloading**

13. When editing part conveyor size in the TK/PSR Settings window, the user should save the current machine in the Machine Settings>Description panel to save these new values as the default.

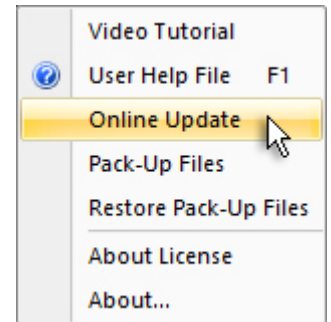
*Please note that some features may be optional and/or not accurately or fully described within these release notes. Pricing and features of software available may differ depending on product version.*

## Update Installation via Online Update

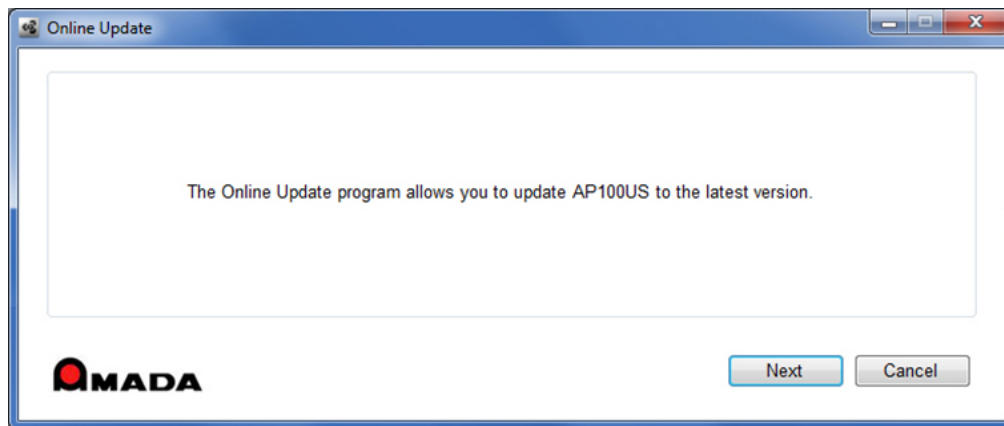
If you have Internet access, use the Online Update utility to **update** your Amada CAD/CAM program to the latest version. Select **Online Update** from the AP100US program Help Menu to update your system to AP100US 20.0. This current update only applies to the current version you are using to update to the latest patch. For future updates use patches pertaining to 20.0.

Note: To update from earlier versions of AP100US or FabriWIN, contact the Amada Call Center.

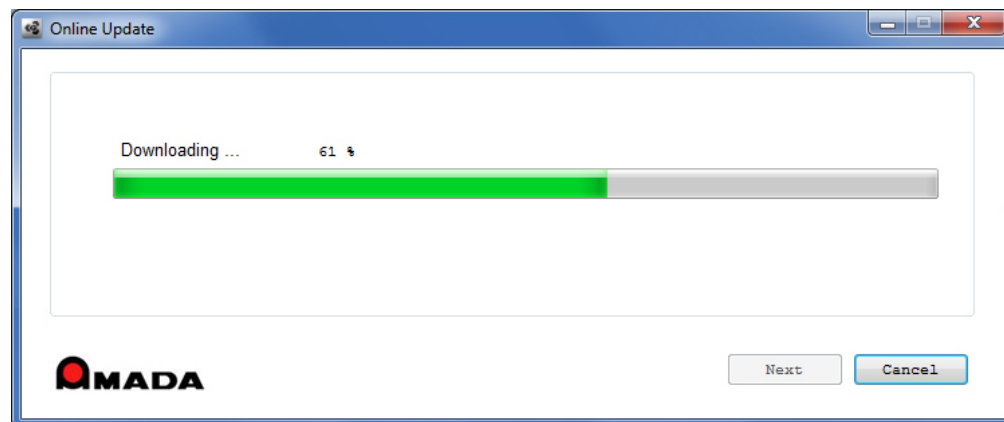
During installation the system will close all Amada CAD/CAM programs. Please back up your files and clear Read-only attributes assigned to AP100US to allow the installer to access these files.



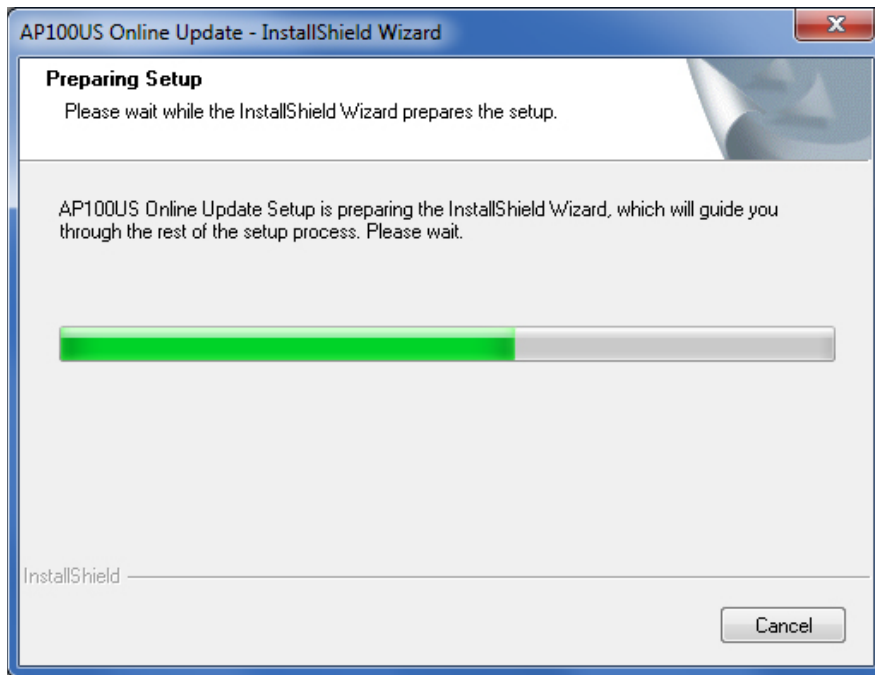
1. Click **Next** in the first Online Update screen to appear.



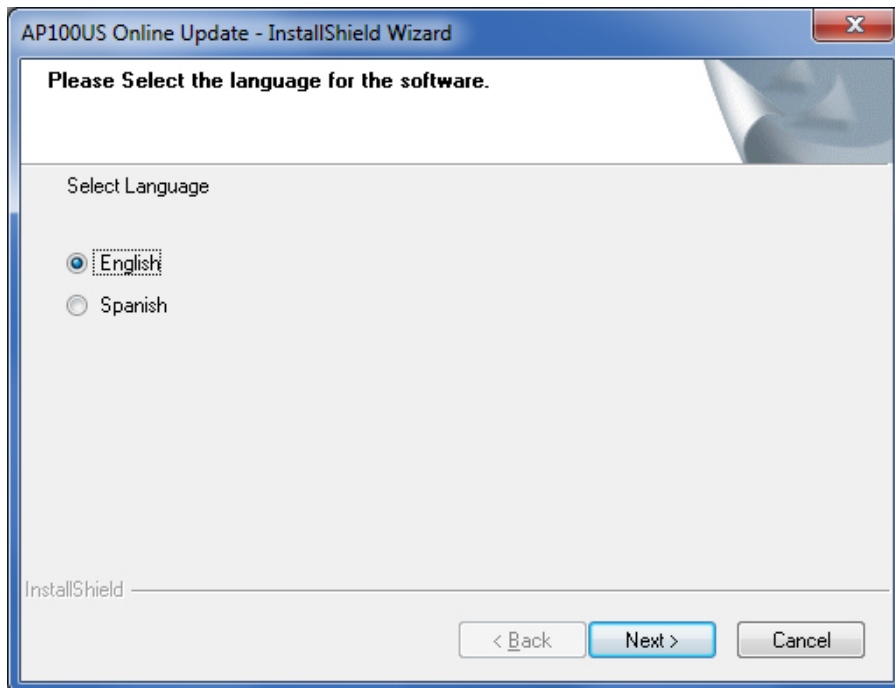
2. Allow the Update to download.



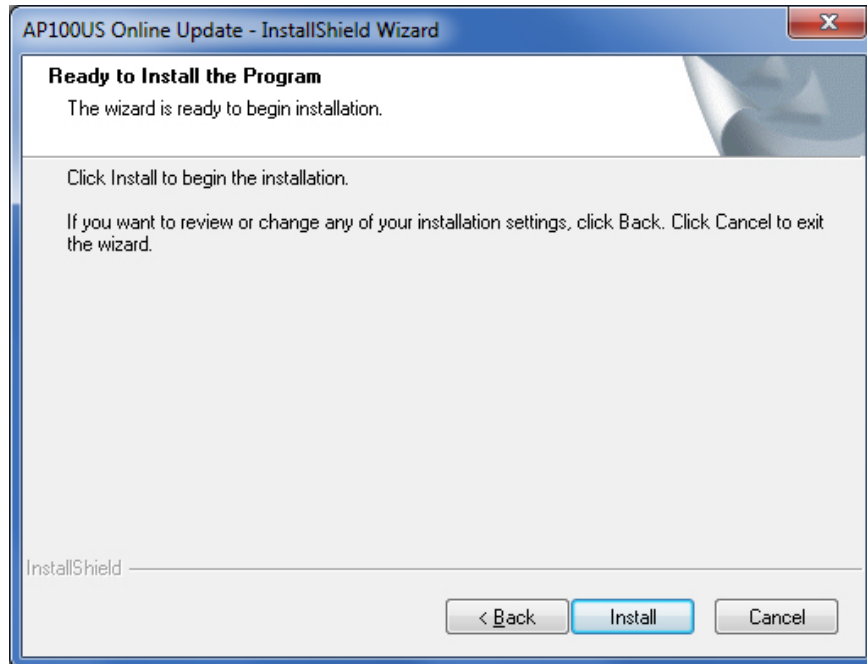
3. Allow the InstallShield Wizard to prepare the setup.



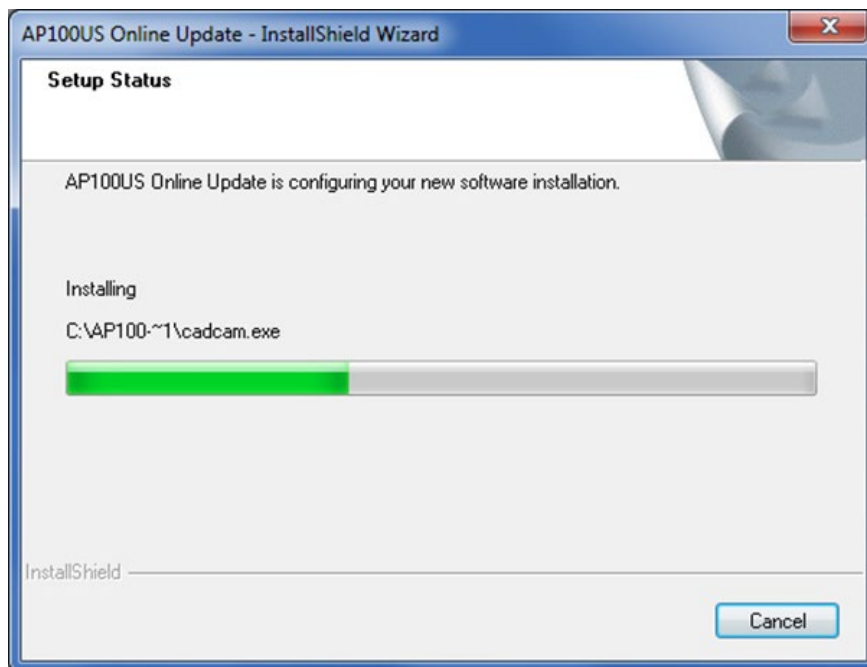
4. Select the language for the update and then click **Next** to proceed.



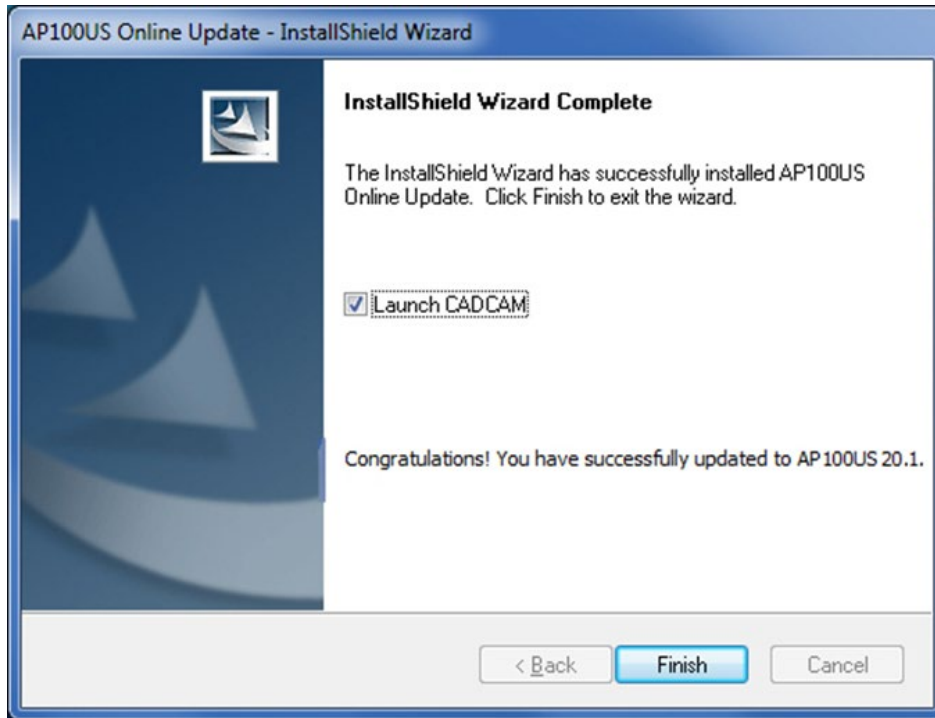
5. Click **Install** to begin installing the update. During update installation your current files (such as “PARTS” and “SHEETS”) will remain intact in the installation folder.



6. Allow the update installation to be completed.



7. When the installation is completed, click **Finish** to finalize the installation. Check ON the **Launch CAD/CAM** button to immediately launch the program.



## Contact Information

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