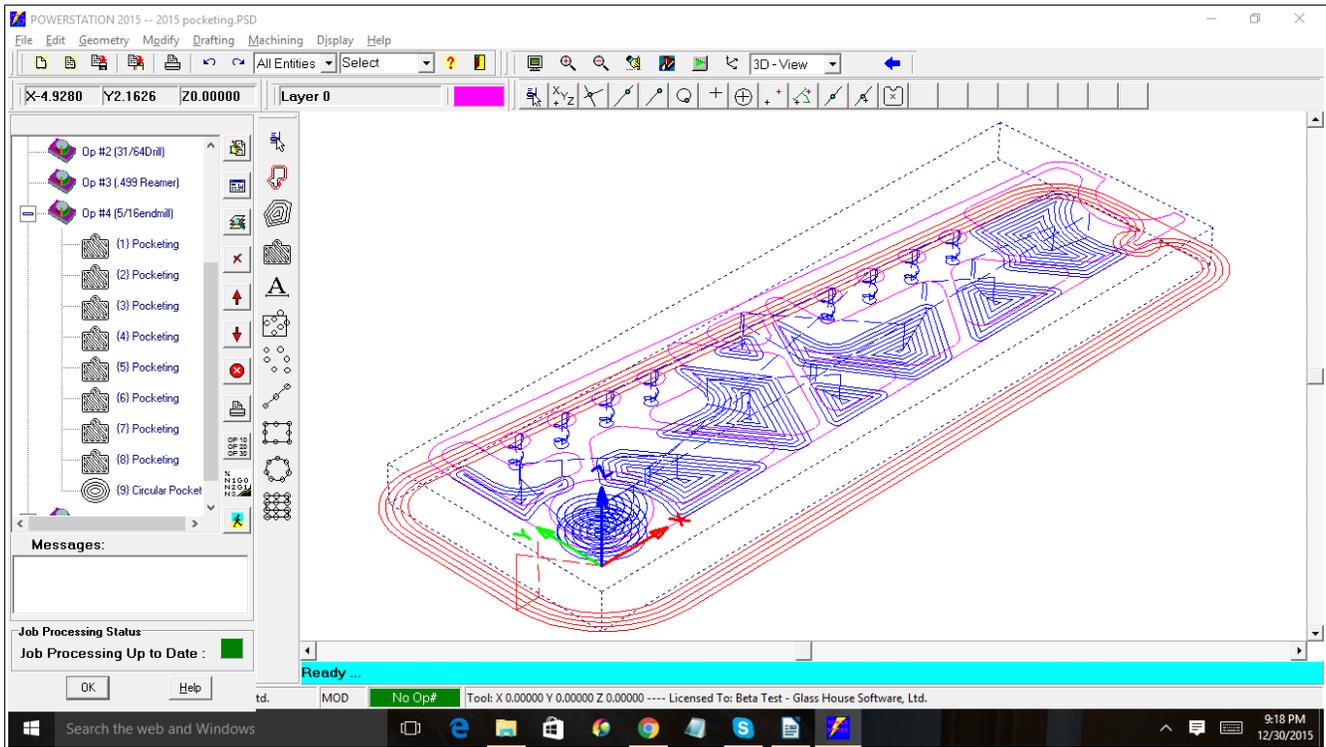


# POWERSTATION 2015

Fact Sheet (6/20/17)  
[WWW.MICROCIMM.COM](http://WWW.MICROCIMM.COM)  
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***Over 100 new or improved features!***

## **General Features**

- File open, save, print (all use the most advanced dialog version available on your version of WINDOWS)
- File - Open Preview now uses JPG files instead of EMF (EMF is no longer supported by windows)
- File Import DXF, equal axes ellipse are now converted to arcs, Polyline better detects mesh type
- File Import DWG – Provisions to install and use a DWG converter to automatically import Autocad “DWG” files in to POWERSTATION.
- Printer settings in the file menu. The "File" "Printer setup" now has a setup button for normal printing and PDF file printing. The commands "File", "Print" or "Print to PDF" will automatically go to these preset printers.
- DXF Export, dialog now offers to assume X0,Y0 as origin, new arrow head styles are output
- File-Save -- saves the operation file under the same name as drawing (If enabled)
- Job Processing dialog is now on the left side of the display and can be left there while

doing machining.

- <Escape key> now can be used in place of pressing the right mouse button and selecting <Escape>
- Most all Geometry and machining dialogs are now drawn in a large size, screen center and contain 1 or more example graphics
- New Machining menu icons.
- File-Import-Import STL now works with both ASCII & Binary STL files (STL files are for display only)
- Error message display is wider
- File menu has more recently used files (8 Total)
- Main-Menu now has many more icons
- Minimum Required resolution is now 1024 X 768, if the resolution is lower than this, a warning will be displayed.
- Initial POWERSTATION Splash screen is much cooler looking!
- New toolbar buttons for single block, axis display, and repeat last command
- Cross's drawn to indicate points are now drawn to the size specified in the INI file as "CrossSize"
- Zoom window, and mouse scroll wheel zooming in, will stop when the calculated width or height of the display is less than 0.0005
- New licensing controls
- Main Display -- The bottom right panel on the display in addition to the tool position, it will now display the currently active command.

### ***New Geometry Features:***

- Power-Snap - Turns the mouse cursor into a smart cursor that will automatically jump to precise locations on the existing geometry.
- New menu structure Geometry-Shapes -- Contains all multi-element shapes (Slots, box, polygon, etc..)
- Geometry-Shapes-Spiral/Helix command (Draws a series of lines to form a spiral), Tool image, dove tail, Parabola ,Draw Text this new command borrows from our Wingraver technology, to add geometry to draw/machine text with a large number of options.
- New polar dialog for Chamfer, sketch, block insert, and point-polar from point
- Shapes, Box command now has straight, radius, or chamfered corners, specified by corner or center point, option for direct entry of coordinates
- Geometry-Line-Bisector Select two non parallel lines and generate a bisecting line.
- Geometry-blocks-delete now uses windows system call so they can be recycled
- Geometry-blocks-merge now uses the polar entry dialog
- New drawing commands: Geometry-Shapes-Flange Draws a basic flange, Geometry-Shapes-Star Draw an N-Pointed star, Draw-Grid, Draw a Dial/Ruler, Draw a Thread, Draw a Triangle.
- Geometry-Shapes-Lead-In Arcs -- New dialog, completely new logic if you select a line.
- Geometry-Line-Polar -- Asks for Start point, then distance and angle
- Geometry-Pattern- Pattern information dialog now has option to draw holes (circles) or points

- Geometry-Shapes-Flange -- Now draws four basic types of flanges (Ex: round, oval, rectangle), a new command for drawing a Dial/Ruler
- Geometry-Arcs-Arc Mode -- If turned on, uses the normal arc coordinates dialog to allow entry/editing
- Intersect a line and an ellipse
- Geometry-Line-Sketch -- Now uses fewer / cleaner dialog box's
- Geometry Tool Bar -- New toolbar for geometry/modify/trimming commands. Fully customizable (like the machining bar), under the "display", "ToolBars" menu. Note: a screen resolution of 1280 wide is required to display all 20 buttons.

### ***Modify Menu Changes:***

- Modify-Change text- Now defaults to the size of the selected text, not the current text height Setting
- Modify-Trimming-Flip-Arc/Line
- Modify-Scale new dialog includes scale, and options for inch/metric conversion
- Modify-Trimming-Convert Circle to arc: Now uses the full Circle-coordinates dialog to change anything about the circle/arc
- Modify-Rotate: new dialog includes several options for angle entry, consistency with other dialogs
- Modify-Trimming-Break Arc at Quadrants, breaks circles/arcs on the quadrant lines
- Modify-Drag New command, after selecting geometry, it allows to to interactively move it using the cursor. Note: While dragging, only the first 200 points/lines/arcs will be displayed. Once the final position is entered all of the selected geometry will be moved. At this time, there may be some artifacts left on the display. A simple refresh <F5> will clean things up.
- Modify-Copy/Mirror -- Copying blocks or dimensions creates new independent entities
- Modify-Easy-Trim -- There is a new setting (in the POWERSTATION Windows Desktop), where easy-trim will delete any selected entity that does not intersect with any other entity (makes trimming faster once you get used to it).
- Modify-Change -Z- Level - Updated to use a new dialog.
- New Trimming command to modify an existing line's length.
- Trimming Menu -- There is a new command "Split Entity", used to divide a single line or arc in to two lines/arcs.

### ***Drafting Menu Changes:***

- Arrow head styles: Standard, Curved Arrow, Slash, Circle, Solid Arrow (Filled version of standard style). The default can be set in PS.INI ; default arrow style DIMASTYLE=0
- New Dimension type "Radial", dimensions arc/circle perimeter
- Drafting,"Text". If the current is a true-type font a button is available to insert special characters in that font.
- Drafting-Dimension-Ordinate now shows dual units if selected
- Drafting-Insert Symbol-Origin, better looking

- Cross Hatch -- Several bugs fixed, pattern can now be selected on hatch dialog
- Dimension Drags -- At times the sample dragged dimensions would be too light to see because of the current color selection. Now they are always draw in red (White background), or cyan (Black background)
- Drafting-Geometric Tolerance -- Has been completely rewritten for easier use and more flexibility.
- Drafting – Surface Finish, new command to add surface finish symbols to the drawing.
- Drafting – Text Box, draws a box around the selected text.
- Shaft Break -- New Drafting command to draw a standard "Shaft Break" symbol
- Change Line Length -- New Trimming command to modify an existing line's length.

### ***General Machining Changes:***

- Tool Offset: no more crash when not enough room to roll a corner.
- Chain cutting, corner rolling is now set in the chain dialog
- In Job Processing, the first item in the tree is now "Settings" which includes "Stock". It brings up the stock dialog used in solid viewing and allows you to define the mill or lathe stock to be displayed and used by solid verification. As you click on a process, a small green triangle will be drawn at the first selection point for that process. The DISPLAY menu now has an on/off for the stock display. The stock drawing color is set in the PS.INI file, under [POWERSTATION], "STOCKCOLOR=1", the second item is "Settings" which pulls up the "File-Preferences" dialog. You can now set the machine name and NC-code file name to be stored with the drawing (In the .PSJ file)
- operations-print -- a sample tool image is now included, all important operation information is now printed (dia, stock, etc..)
- Machining-Move/Cut-Go Home, now defaults to Rapid mode
- Operations - New command "Select from History". A master list of recently used operations is stored under "operationhistory.opf". A new dialog allows you to select from a list of these operations and insert them into the current drawing.
- Post modified to never put out a space as the first thing in a line
- Move/Cut - Chain, the EDM Tab/Glue Stop has been added.
- Post processor if a NC code file name has been previously specified (either in the post dialog, or the job preferences dialog), it will be assumed and used.
- Move/Cut - Chain, new approach/depart arc option for added linear segment, new Cutter comp macro variables.
- Edit Tool Path, Stock Allowance, Repeat, and project, have all been moved to the Machining-Utilities Menu
- Edit Tool Path, Single Block Display moved to the main Machining menu
- Utilities-Stock Allowance, completely redone. Now has a dialog and actually works!
- Job processing new "Copy all operations processes" button
- Operations Manager – Now contains a basic speed & feed calculator, Now includes a chip thinning calculator.

## ***Machining Milling Changes:***

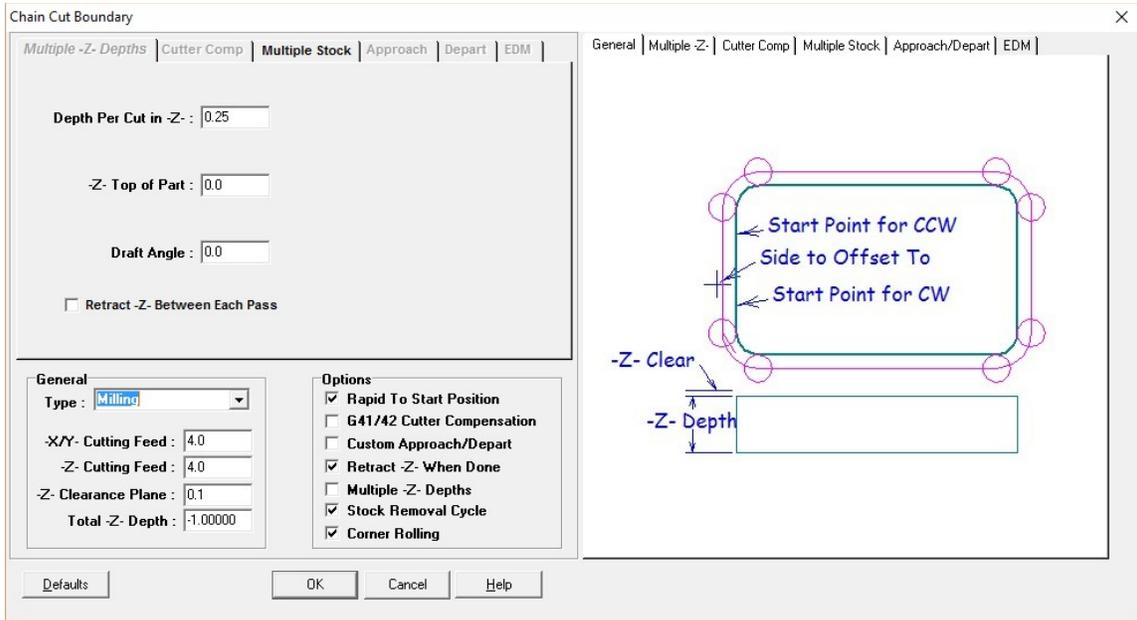
- Machining-Circular pocket rough,finish,z feeds, new option to spiral from outside, inward. New helical rough/finish options. You can now select multiple holes (32 max) at once
- Thread mill dialog now calculates and displays the total length of the thread, rough/finish pass, arc in/out, and cutter compensation.
- In Job Processing, single click on the operation number to make it the current operation. Double click on the operation number (In the tree) the operations dialog comes up with that operation selected (for editing).
- Move/Cut - Approach now has an XY Rapid plane option (IE. do the initial x/y position at this -Z-, then -Z- down to the clearance plane)
- Move/Cut - Utilities has new "Set Milling Plane" dialog to call in plane change macros
- Move/Cut - Mill Plane has been renamed to "Alternate Plane Milling" and now has it's own dialog and is included in the job processing
- Machining-Pocketing-Pocket -- New spiral pocketing options.
- Powersurf - is now available in the Job Processing dialog. Meaning that once entered, the machining parameters can be easily changed and then "reprocessed" to display the changes. Previous versions required the surface to be deleted and rebuilt from scratch. The dialog has been improved, and the documentation has been improved.
- Pocketing Clean -- Tool path has been significantly improved, including and optional circular (Looped) path to start each cut.

## ***Machining Turning Changes:***

- Lathe Roughing now supports "Use canned cycle if available"
- All Lathe cycles have been moved to the "Machining-Lathe Cycles" menu
- Lathe Grooving - new "Part off" cycle
- Lathe Grooving - Contour rough/finish grooving done for OD, ID, and Face
- Lathe threading now supports left hand threads
- Machining-Lathe Cycles-Lathe Bar Pull
- Machining-Insert -M-Codes, added chuck open/close
- Machining-Utilities-change modes- Set Maximum RPM
- Machining-Lathe drill, now has a tapping cycle

## ***Display Menu Changes:***

- Axis now drawn in a wider pen, separate x/y/z colors and labeled.
- F5 is now = to "Display-Refresh"
- In 3D viewing mode, pressing and holding down the left mouse button will freely rotate the view.
- Draw Stock -- The Stock can now be defined in the job processing tree
- Quick-Calculator from Quick-Link



Sample New Style Dialog