



## **BANTAM TOOLS MILLING MACHINE SOFTWARE**

### **VERSION 2.6.2 RELEASE NOTES**

- **Updates**
  - Added support for new desktop spindle controllers
  
- **Bugfix**
  - Fix BTP not loading right-alignment for stock
  - Possible fix for locale/decimal entry issue
  
- **Known issues**
  - Windows intermittent connection causes the machine to stop responding during a job while the spindle continues to spin. (This is usually helped by using only the included USB cable and not connecting to a hub)
  - False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.
  - Issue causing machines to “brown-out”/reset on tool change or at the end of jobs. Investigating but current work around is to load toolpaths as separate files
  - Stl support - selecting a new tool will clear any position offsets
  - STL path generation can be slow on complex STLs or with fine step down

### **VERSION 2.5.34 RELEASE NOTES**

- **Updates**
  - Single file, Single tool STL support added
    - This feature supports flat endmill removal of material around a loaded STL model, the paths are constrained to the material dimension that has been input
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- **Bugfix**
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- **Known issues**
  - Windows intermittent connection causes the machine to stop responding during a job while the spindle continues to spin.
  - False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.
  - Z can fail to retract at the end of some gcode jobs, we are actively investigating
  - Issue causing machines to “brown-out”/reset on tool change or at the end of jobs. Investigating but current work around is to load toolpaths as separate files
  - Stl support - selecting a new tool will clear any position offsets
  - STL path generation can be slow on complex STLs or with fine step down

## **VERSION 2.5.33 RELEASE NOTES**

- **Updates**
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- **Bugfix**
  - fixed firmware flashing issue that would brick some desktop CNCs
- **Known issues**
  - Windows intermittent connection causes the machine to stop responding during a job while the spindle continues to spin.
  - False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.

- o Z can fail to retract at the end of some gcode jobs, we are actively investigating
- o Issue causing machines to “brown-out”/reset on tool change or at the end of jobs. Investigating but current work around is to load toolpaths as separate files

## **VERSION 2.5.28 RELEASE NOTES**

- **Updates**

- o All files requiring CAM generation do not auto generate on load, you will set all settings and then select the “generate gcode” button at the bottom or your can select the lego brick icon in the title bar of the plan
- o Material setup has been moved above file setup to better facilitate STL workflow and scaling based on stock size
- o Support for the Bantam Tools Desktop CNC (black edition)
- o Support for the Bantam Tools Explorer
- o

- **Bugfix**

- o probe diameter showing -1 on some machines

- **Known issues**

- o Windows intermittent connection causes the machine to stop responding during a job while the spindle continues to spin.
- o False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.
- o Z can fail to retract at the end of some gcode jobs, we are actively investigating
- o Issue causing machines to “brown-out”/reset on tool change or at the end of jobs. Investigating but current work around is to load toolpaths as separate files

## **VERSION 2.4.10 RELEASE NOTES**

- **Updates**

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- **Bugfix**

- o issue corrupting .btm files from being properly saved/loaded resolved. Please note that any .btm files created from version 2.4.6 through 2.4.9 will need to be regenerated.

- **Known issues**

- o Windows intermittent connection causes the machine to stop responding during a job while the spindle continues to spin.
- o False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.
- o Z can fail to retract at the end of some gcode jobs, we are actively investigating
- o Issue causing machines to “brown-out”/reset on tool change or at the end of jobs. Investigating but current work around is to load toolpaths as separate files

## **VERSION 2.4.9 RELEASE NOTES**

- **Updates**

- o ability to disable maintenance messages for cleaning and belt tightening
- o updated results readout for single axis probing
- o ability to display stock relative position instead of bed relative position

- **Bugfix**

- o Machine getting stuck on “initializing” bug identified and resolved

- **Known issues**

- o Windows intermittent connection causes the machine to stop responding during a job while the spindle continues to spin.
- o False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.

- o Z can fail to retract at the end of some gcode jobs, we are actively investigating
- o Issue causing machines to “brown-out”/reset on tool change or at the end of jobs. Investigating but current work around is to load toolpaths as separate files

## **VERSION 2.4.7 RELEASE NOTES**

- **Updates**

- o M1 Mac support
- o Conversational CAM text engraving now supports the Bantam Tools Desktop CNC 4th Axis Accessory
- o Advanced and basic SVG engraving now supports Bantam Tools Desktop CNC 4th Axis Accessory
- o Updated home page

- **Bugfix**

- o Rendering engine has been updated to address performance and compatibility issues
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- **Known issues**

- o Windows intermittent connection causes the machine to stop responding during a job while the spindle continues to spin.
- o False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.
- o Feedrate and spindle override are not available when the 4th axis accessory is installed
- o Z can fail to retract at the end of some gcode jobs, we are actively investigating

## **VERSION 2.4.4 RELEASE NOTES**

- **Updates**

- o Support for the new Bantam Tools Desktop CNC 4th Axis Accessory
  - Install Wizard
  - basic probing routines
  - A axis added to the jog panel
  - Origin button now returns the A axis to its starting position
- o Error reporting from TinyG controller: When the TinyG controller issues error reports they will not show up in a yellow-orange status bar to alert the user and can be cleared by clicking the status bar
- o updates to the pyramid engraver in the tool library
  
- **Bugfix**
  - o T-Slot relative position updated to be more accurate
  
- **Known issues**
  - o Windows intermittent connection causes the machine to stop responding during a job while the spindle continues to spin.
  - o False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.
  - o Conversational CAM routines do not utilize the 4th axis when installed
  - o Feedrate and spindle override are not available when the 4th axis accessory is installed



# PLAN SETUP

HELP



Now that you've set up the stock material, place the toolpath at your desired location. Use the preview to confirm the toolpath placement.



**INITIAL SETUP** HELP

Load your file and get an estimate of how long it will take to mill. You can also install and configure a milling tool.

[+ OPEN FILE](#) [NEW CAM](#)

RECENT FILES

RECENT LOCATIONS

INSTALL TOOL

Current installed tool: Unknown

BRACKETS AND ACCESSORIES

Probe a fixturing bracket to set a material offset if it is not practical to probe the material directly, or attach and align other accessories.

Bed:  T-slot  Fixturing Pallet NEW

L-BRACKET Not Installed

[LOCATE](#) [REMOVE](#)

PCB BRACKET Not Installed

[LOCATE](#) [REMOVE](#)

LOW PROFILE VISE Not Installed NEW

[LOCATE](#) [SET ENDSTOP](#) [REMOVE](#)

Surface:  Bed  Inner Step  Outer Step

4TH AXIS Installed NEW

[INSTALL](#) [CALIBRATE](#) [REMOVE](#)

Estimated Milling Time: 00:00:00 SAVE

-1.299in X  
4.646in Y  
-- in Z  
0.00° A  
A-axis-mount-relative

▲ Machine Disconnected

HOME

INITIAL SETUP

MATERIAL SETUP

PLAN SETUP

SUMMARY RUN JOB

SETTINGS

JOG

Bantam Tools - 2.4.4

## VERSION 2.2.16 RELEASE NOTES

- **Updates**
  - Pocketing operations added to conversational CAM
  - Spindle warm up cycle under settings menu for use with the Bantam Tools Desktop CNC Milling Machine being run in cold environments
  - UI updates including new "Save" and preview icons
  - Tooltips enabled for preview buttons
  - Added 3rd decimal place to tool diameter input when using metric units
- **Bugfix**
  - Default feeds and speeds for the Bantam Tools Desktop PCB Milling machine were using V2 defaults causing very slow performance when using the default tool library
  - Fixed error where connecting to the Bantam Tools Desktop CNC milling machine under windows the machine sometimes the preview does not update properly sometimes.
- **Known issues**
  - Windows intermittent connection causes machine to stop responding during a job while spindle continues to spin.
  - False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.

## VERSION 2.2.13 RELEASE NOTES

- **Updates**
  - Maintenance reminder now tracks machine running time and will prompt users of the Bantam Tools desktop CNC milling machine when it is



recommended that they retension the spindle drive belt to maintain optimal performance.

- o Conversational CAM updates
  - Boring operations will now use a helixing ramp to improve speed and efficiency
  - Facing operations allow you to adjust the lead in and lead out distance
  - Single-direction facing now uses climb milling directionality (.13)
- o Cleanup of old UI elements and other assets no longer needed to reduce install size
- **Bugfix**
  - o SVG operations will no longer try and use engraving tools for cutout operations
  - o
- **Known issues**
  - o Windows intermittent connection causes machine to stop responding during a job while spindle continues to spin.
  - o False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.
  - o When connecting to the Bantam Tools Desktop CNC milling machine under windows the machine preview does not update properly sometimes. The current work around is to disconnect the machine and manually set the machine type under settings before reconnecting.

## **VERSION 2.2.10 RELEASE NOTES**

- **Updates**
  - o Two new probing routines added to find the center point of a web or pocket
  - o New Conversational Cam facing routine added with linear climb milling passes
  - o Improved UI in the probing routine wizard

- Material preview now includes a darker top layer to make it more clear when engraving
- Ability to set machine preview (PCB or CNC) when not actively connected to a machine allows jobs to be configured remotely
- Various UI tweaks and improvements
- **Bug Fixes**
  - Corrected broken URL links in some of the warning messages
  - Increased clearance height when using internal CAM for SVG and PCB support to avoid collisions when milling uneven material
  - Increased Z plunge speed before spin up
  - Corrected an issue with probing small bores that caused the probe to impact the opposite side when backing off from touch off.
- **Known issues**
  - Intermittent connection issue on Windows causes machine to stop responding during a job while spindle continues to spin.
  - False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.
  - False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.

## **VERSION 2.2.7 RELEASE NOTES**

- **Updates**
  - Conversational CAM added with support for facing and boring operations
  - Improved material probing workflow
  - New material thickness probing sequence added

- **Bug Fixes**
  - Setting added to fix scaling on high DPI displays under MacOS
- **Known issues**
  - Bug during tool touch off that produced an error intermittently when jogging to a new tool touch off location
  - First connection to a pcb mill after flashing new firmware does not show the correct preview. Please power cycle machine and restart software.
  - False positive error in some plans warning the user that the retract height will cause a collision with the top of the machine.
  - SVG support will use all available tools to perform a cutout operation including engraving tools. Workaround by running engraving and cutout operations separately.

## **VERSION 2.2.5 RELEASE NOTES**

- **Updates**
  - The PCB milling workflow now includes support for Gerber files.
  - All internal CAM operations, which are generated through PCB files or SVG

files, utilize climb milling to improve performance in all materials.

- Feeds and speeds have been updated for Bantam Tools Desktop CNC Milling Machine tool library.
- New content around PCB milling has been added to the help menus.
- SVG cutouts will now use all available tools for cut out, beginning with the largest tool and ending with the smallest tool.

- **Bug Fixes**

- M06 no longer added between shapes in advanced SVG support
- Inside cutouts now are possible as small as 0.001" larger than tool diameter
- Fixed a bug in single axis probing that would sometimes cause the tool to not stop when making conductive contact with the material.

- **Known issues**

- Bug during tool touch off that produced an error intermittently when jogging to a new tool touch off location
- The first connection to a Bantam Tools Desktop PCB Milling Machine after flashing new firmware does not show the correct machine preview. Please power cycle machine and restart software.
- There's a false positive error shown for some plans where the user is warned that the retract height will cause a collision with the top of the machine. Unless your machining a program with a height greater than the Z build volume (1.6" PCB Mill, 3.5" CNC Mill) this can be disregarded

## **VERSION 2.2.4 RELEASE NOTES**

- **Updates**

- Added PCB milling support with .brd files from Eagle
- Updated help menu copy and images
- Added a pause state after tool changes until the resume button is pressed

- Updated milling job estimates to be more accurate
- Updated the jogging control interface by adding jog and step controls

- **Bug Fixes**

- Tool selection UI now syncing with summary tab info; ComboBox visual update
- Jog buttons now disable at max extents of travel
- Bracket position now persists after power cycle
- Engravings now show a warning when a smaller tool is needed

- **Known issues**

- Advanced SVG support spins down spindle between all shapes
- Gerber support not yet implemented for PCB milling
- Machine requires power cycle after firmware update to reset usb connection
- SVG jobs currently utilize conventional milling rather than climb cutting