

Mastercam Software Extension

Nesting Manager



Mastercam[®]

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Product Information

Product Name : Nesting Manager for Mastercam

Product Description : the Nesting Manager enables users to automatically create a Nesting Set-up and Generate Stock Set-up using Mastercam's nesting tools.

Software Version : 2023 (For older versions of the software, please contact sales@theebyte.com)

Version : 1.0.0.0

Number Of Seats : 1

License Type : Perpetual

License Duration : Unlimited

Release Date : 06-06-2023

Introduction

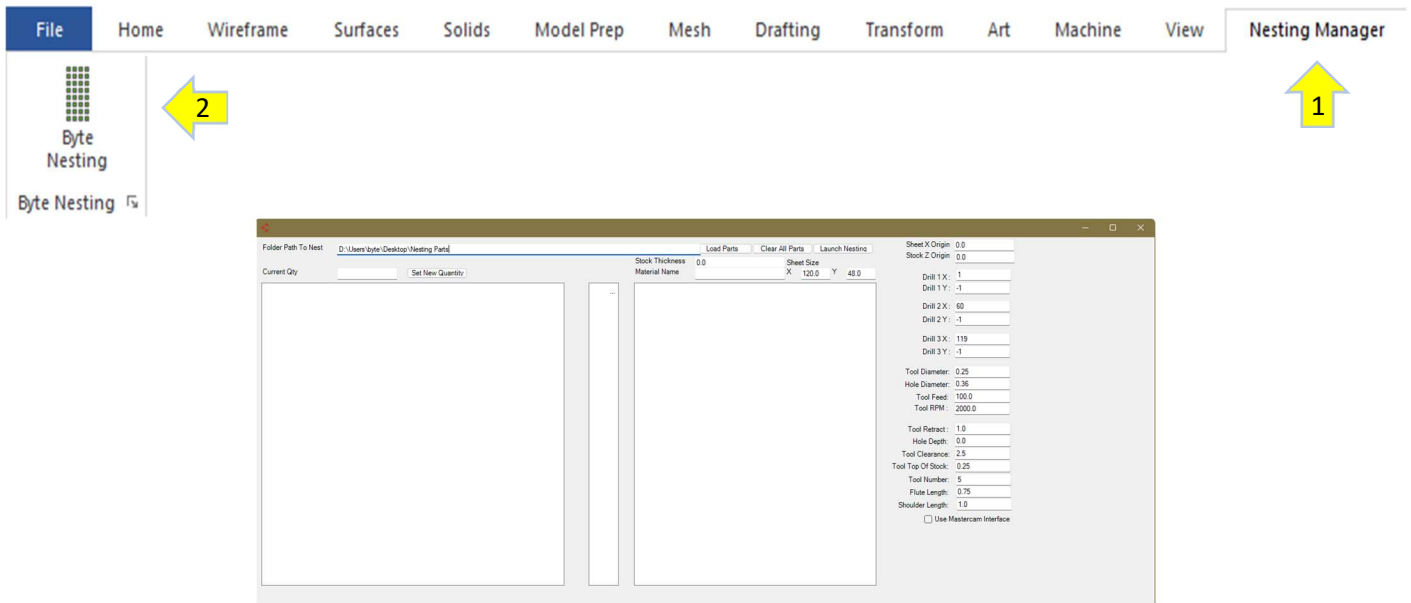
The Nesting Manager is a powerful tool for CNC machinists and programmers looking to consolidate the management of their Nesting Set-ups and Stock Set-up.

With its intuitive interface and flexible data management capabilities, the Nesting Manager enables users to easily set a stock size, set quantity, select a starting coordinate, create a nesting layout, edit and execute custom toolpath operations for all their CNC nesting needs.

It requires the Mastercam built-in Nesting tools that come with the mill license. This user guide will provide you with all the information you need to get started with the Nesting Manager.

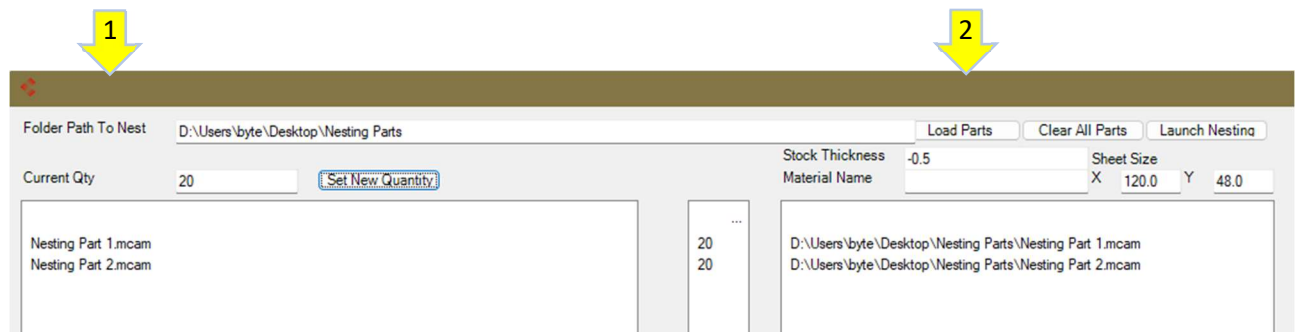
User Guide

1. **Getting started:** To start using the Nesting Manager, simply open Mastercam and select the Nesting Manager, tab to access the main menu.
 - > Select the Byte Nesting button to access the Nesting Manager window.



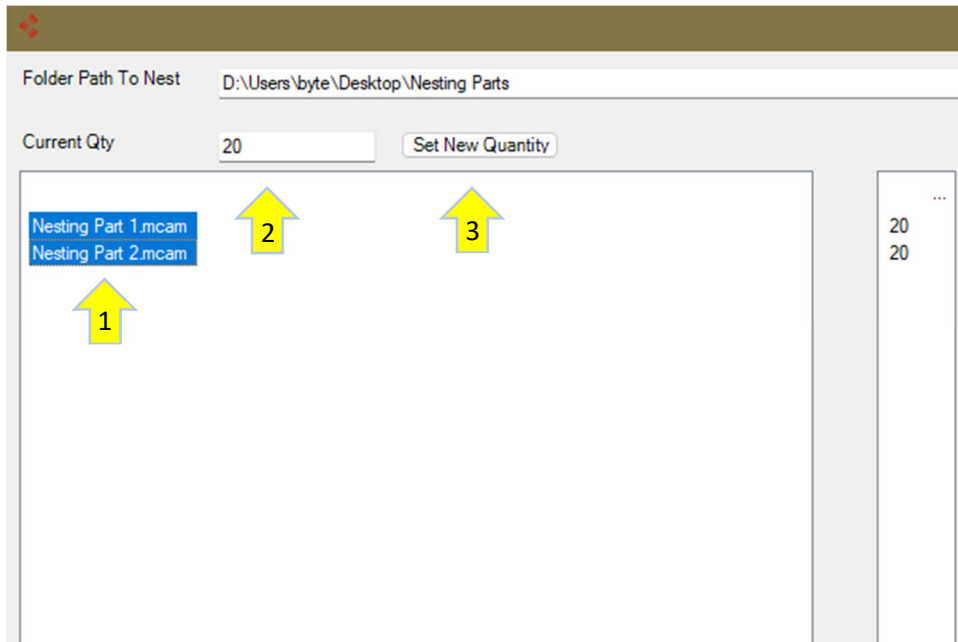
2. Load Nesting Parts:

- > Choose the folder that has the parts for Nesting. Copy/Paste the folder path into "Folder Path to Nest."
- > Click Load Parts button to import parts to the Nesting Manager. This will add all the parts from that folder to the Parts list.



3. **Set Quantity:** To set a part quantity, enter the number into Current Qty, then select the part from the list and click "Set New Quantity" button
 - > You can set the same quantity to multiple parts by selecting multiple parts at the same time, then select "Set New Quantity" button.

The updated part quantity will be visible next to it.

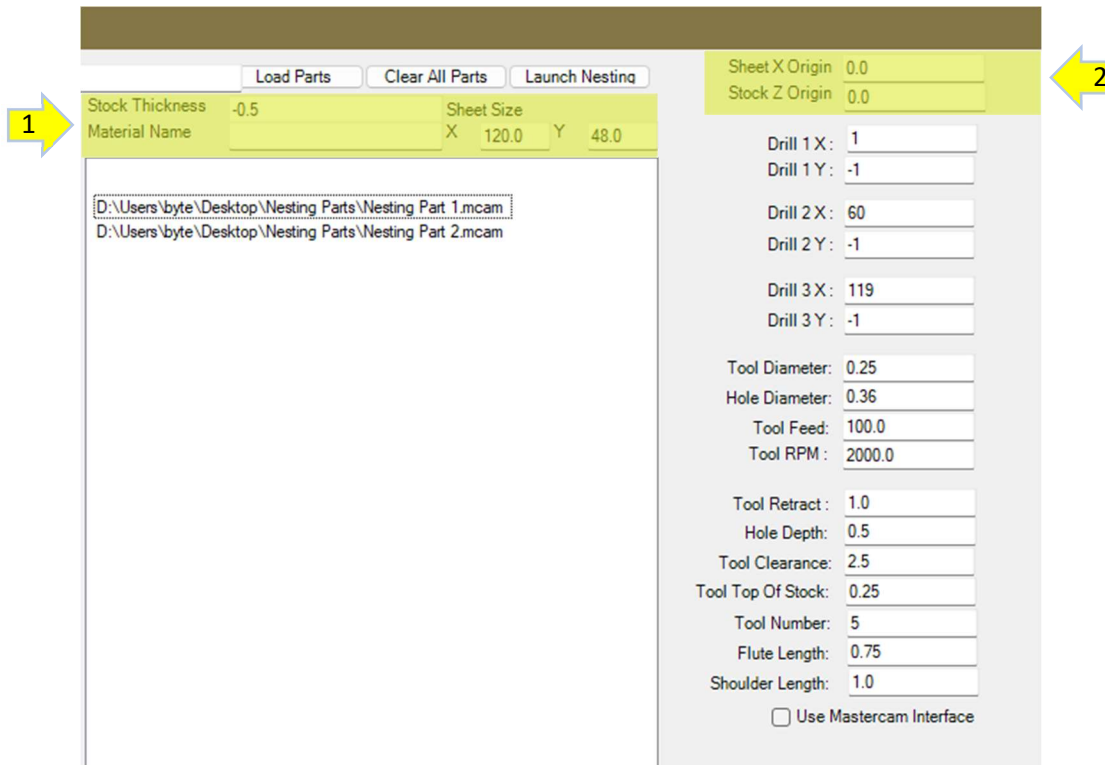


4. Setting stock and sheet parameters

- >Set stock thickness property in the text box.
- >Set the Sheet size X and Y in the text box
- >Material name is optional and can be added as well.

5. Setting stock and sheet origin

- >Set Sheet X origin property in the text box.
- >Set Stock Z origin property in the text box.



The screenshot shows the Mastercam software interface with the following parameters and fields:

- Buttons:** Load Parts, Clear All Parts, Launch Nesting
- Stock Thickness:** -0.5
- Material Name:** (empty text box)
- Sheet Size:** X 120.0, Y 48.0
- File List:**
 - D:\Users\byte\Desktop\Nesting Parts\Nesting Part 1.mcam
 - D:\Users\byte\Desktop\Nesting Parts\Nesting Part 2.mcam
- Origin Fields (highlighted in yellow):**
 - Sheet X Origin: 0.0
 - Stock Z Origin: 0.0
- Drill Parameters:**
 - Drill 1 X: 1, Drill 1 Y: -1
 - Drill 2 X: 60, Drill 2 Y: -1
 - Drill 3 X: 119, Drill 3 Y: -1
- Tool Parameters:**
 - Tool Diameter: 0.25, Hole Diameter: 0.36
 - Tool Feed: 100.0, Tool RPM: 2000.0
 - Tool Retract: 1.0, Hole Depth: 0.5
 - Tool Clearance: 2.5, Tool Top Of Stock: 0.25
 - Tool Number: 5, Flute Length: 0.75
 - Shoulder Length: 1.0
- Use Mastercam Interface:**

6. Setting Location Drill Hole Parameters

> The rest of the parameters in the Nesting Manager are for Drill Holes.

Important: **Verify that the Hole Depth parameter matches the stock origin.**

> Drill Holes can be added by entering the X and Y values into the Drill 1, Drill 2, and Drill 3 text boxes.

> The following values can be added for Drill Holes next, if needed:

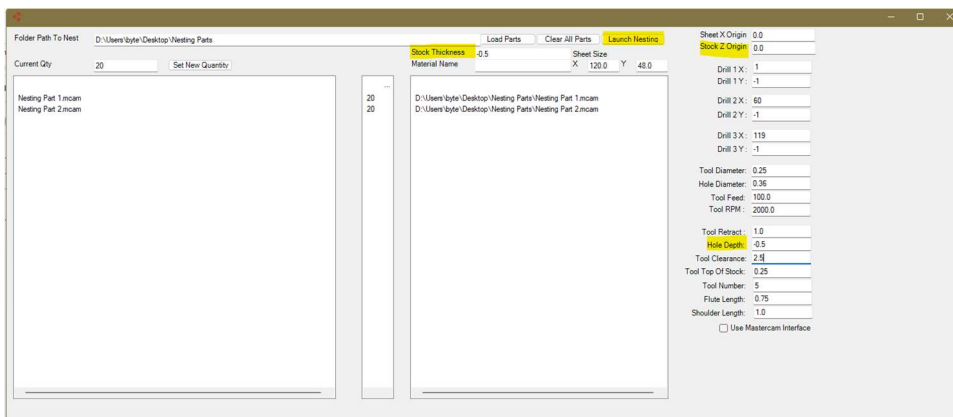
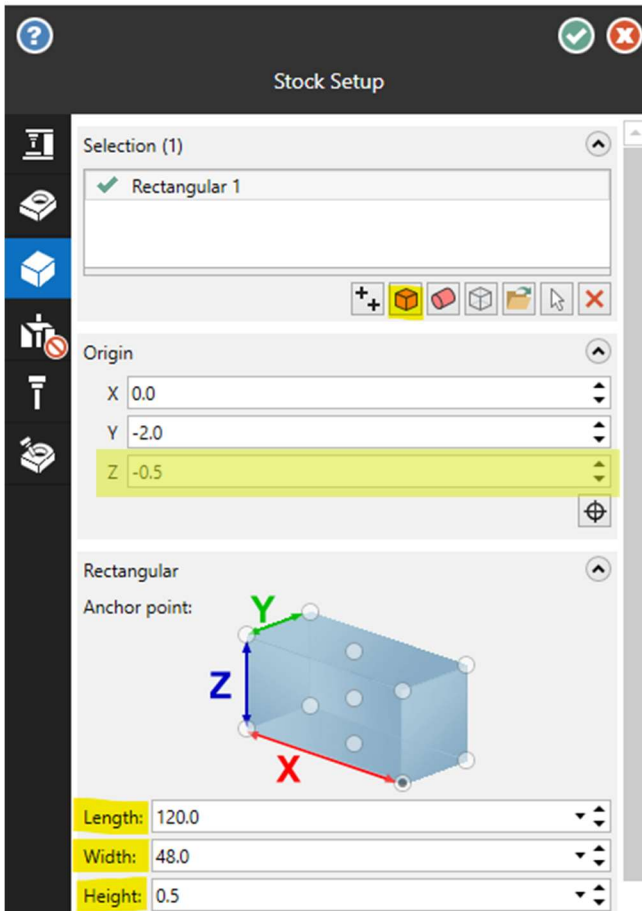
Tool diameter, Tool Feed, Tool RPM, Tool Retract, Hole Depth, Tool Clearance, Top of Tool Stock, Tool Number, Flute Length, Shoulder Length.

Sheet X Origin	0.0
Stock Z Origin	0.0
Drill 1 X :	1
Drill 1 Y :	-1
Drill 2 X :	60
Drill 2 Y :	-1
Drill 3 X :	119
Drill 3 Y :	-1
Tool Diameter:	0.25
Hole Diameter:	0.36
Tool Feed:	100.0
Tool RPM :	2000.0
Tool Retract :	1.0
Hole Depth:	0.5
Tool Clearance:	2.5
Tool Top Of Stock:	0.25
Tool Number:	5
Flute Length:	0.75
Shoulder Length:	1.0
<input type="checkbox"/> Use Mastercam Interface	

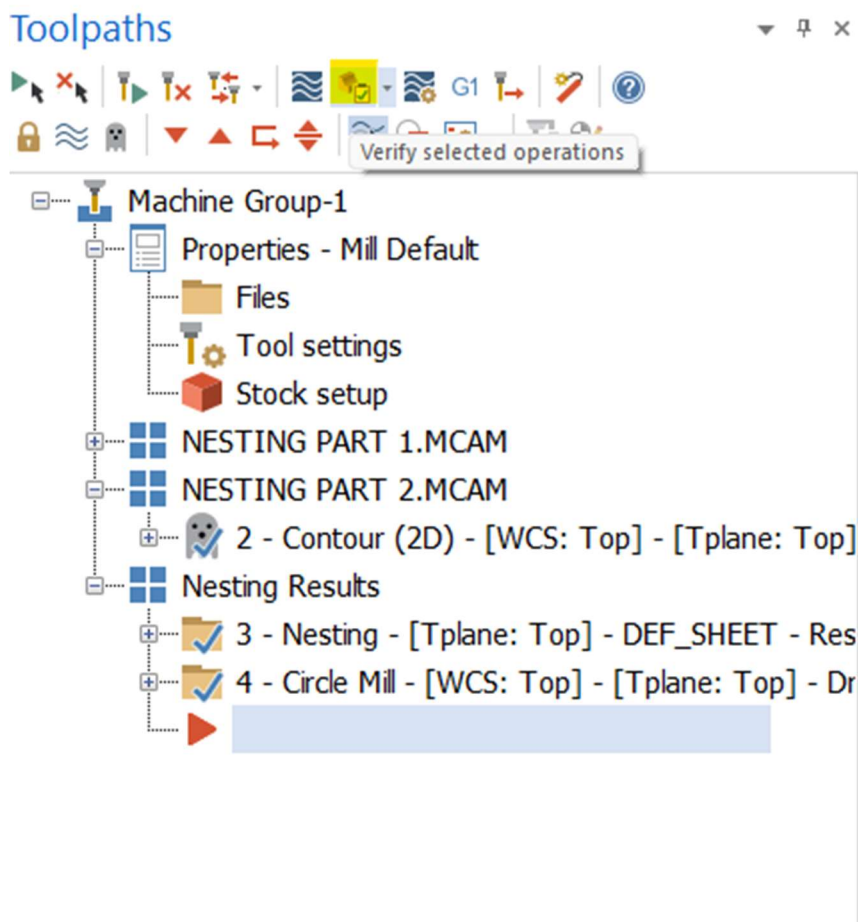
7. Verifying Stock in Mastercam

- > Setting the stock is an important step for any part that is being nested
- > The stock origin Z should match the Stock Z in the Nesting Manager
- > The Sheet length, width, height should match the Sheet size in the Nesting Manager

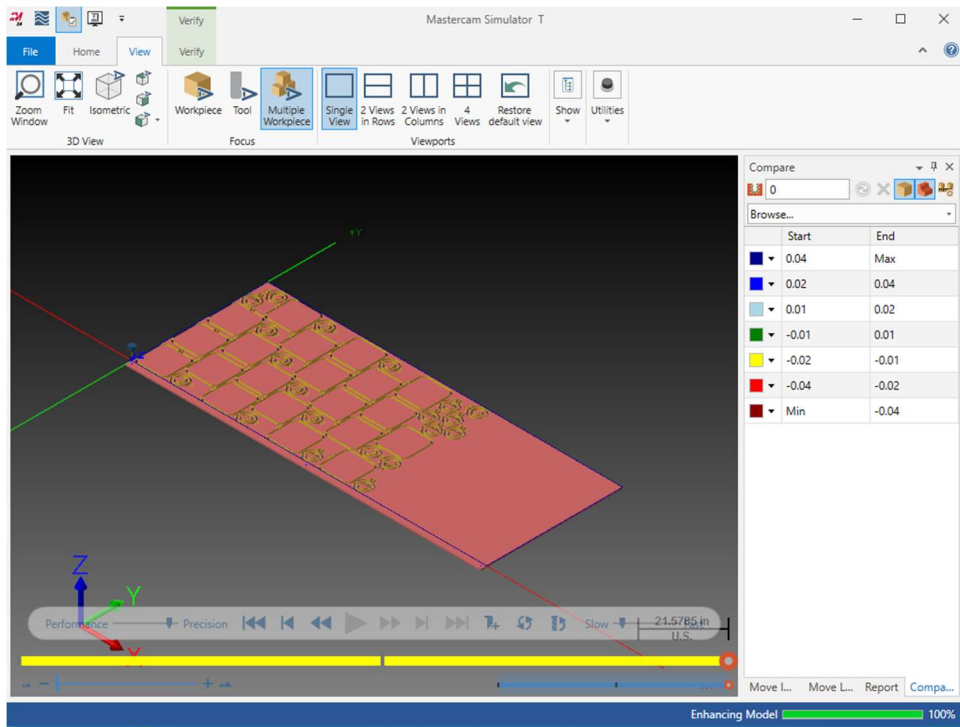
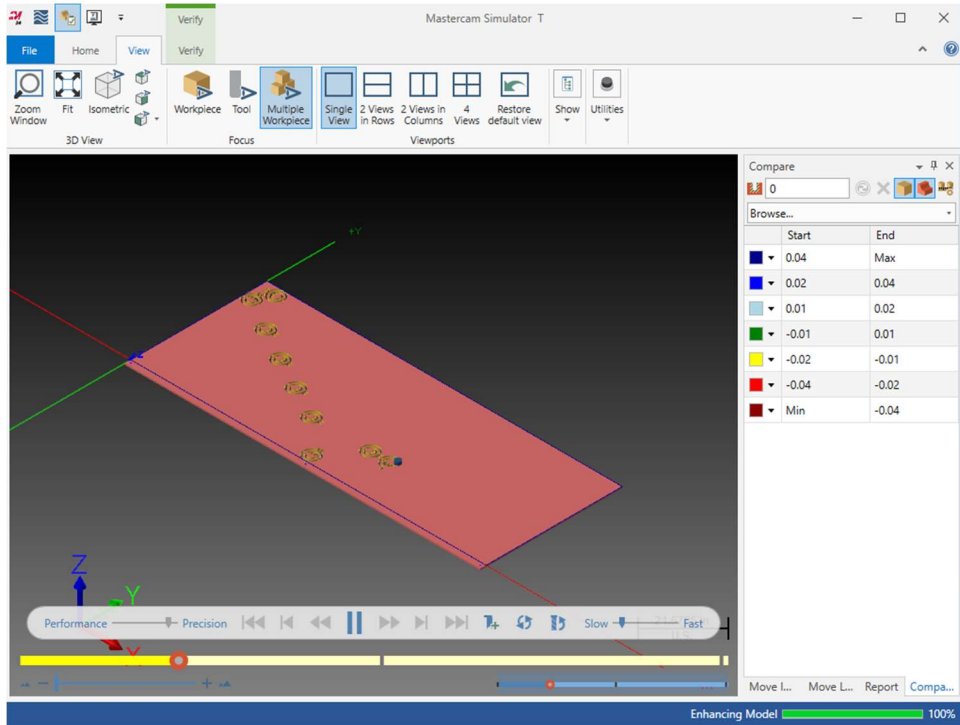
Machine Group Setup



8. Saving Configuration Data: Feature coming soon. Contact support@theebyte.com
9. Check "Use Mastercam Interface" to open the Mastercam Nesting Manager after "Launch Nesting"
10. Launch Nesting: To launch the nesting, click "Launch Nesting"
 >Select "Nesting Results" in the Mastercam docking manager to view the toolpath output of the Nesting Manager.



Conclusion: With the Nesting Manager, managing and stock set-up, drill holes, and nesting parameters has never been easier. Whether you're a seasoned machinist or just starting out with CNC programming, the Nesting Manager provides a powerful and flexible tool for optimizing your nesting capabilities.



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