



New Post Checklist

Dear Customer,

The Post Department at GibbsCAM wants to ensure that the first delivery of your post is as close to how you program your machine as possible, within the programming requirements of the GibbsCAM software. We do not want to force you to conform to our G-code format.

Instead, we feel that your familiarity with your code along with your local machine representative's guidance should inform us on how to output your code.

In order to do that, we need information from you: how you program your machine, what requirements you have, how your machine was setup, etc. Please help us **provide you** with a post that outputs code you recognize by **providing us** with the following information:

Post Research Document filled out for this machine

Sample Program(s) that shows all the options you want your post to support

Machine Specs for this machine

Machine Schematics including Working Area and Reference Positions for each axis

Programming Manual from the Machine Tool Builder for this machine

With this information, we will build a post processor for you that will run your machine and that your programmer and operator will recognize immediately. When we build the post for you, here's **our commitment**: that with the format in your sample G-code, and the information found in the programming manual, we will deliver a working post, and fix any errors or format deviations for free.

In order to provide you that guarantee, we also need a **commitment** from you: that the information you provide is factual and complete; that it represents everything you need to run your machine.

After we deliver the post to you, any changes that may be requested will have to be evaluated against the original information provided. If the change deviates from the original information, then **a fee may be imposed in order for us to change the post.**

Agreed to by

Committed to by

Customer Contact Name

*The Gibbscam Post
Department Team*

GibbsCAM Post Department

We look forward to working with you on this post processor project. If you have any questions or concerns, please contact us at post@gibbscam.com.

Post Processor Research for Lathe

Please fill out all pages that pertain to your post processor so that your post is accurate. If it is available, any schematics and other machine documentation can be very helpful and may be all that is required.

GENERAL INFORMATION: Required

- 1. Customer Info**
- 2. Post Info**
- 3. Machine Specs**

POST OPTIONS: Only fill out options you need.

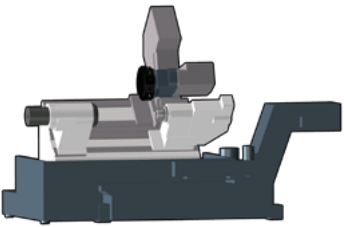
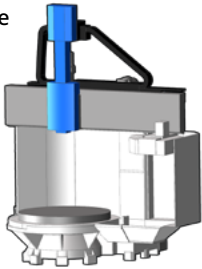
- 4. Additional Axes for Lathe**
- 5. Additional Spindles for Lathe**
- 6. Additional Tool Groups for Lathe**

1 Customer Info

GENERAL CUSTOMER INFO

Company Name:	Location:
Contact Person:	Contact Phone:
Email Address:	Date:

GENERAL MACHINE INFO

Machine Make and Model:	
Machine Build Year:	Serial#:
Control Make and Model:	Software Version:
Does your machine support rotary axes?	C-axis (rotates around Z-axis) B-axis (rotates around Y-axis)
How many tool groups does your machine have? (Tool Group = turret, gang, slide, fixed post, etc.)	How many part spindles does your machine have? (e.g. standard, Swiss, moving)
Machine Orientation: Horizontal Lathe 	Vertical Lathe 

GIBBSCAM OPTIONS

What GibbsCAM version will you use with this machine?	
What GibbsCAM options should the new Post Processor support?	
<ul style="list-style-type: none"> 5-Axis Simultaneous Cutting Eccentric/Elliptical Turning Head Changing (swappable heads) 	<ul style="list-style-type: none"> Broaching GibbsCAM Probing

2 Post Info

OUTPUT OPTIONS

Which Output Modes will your post need to support? *(Post Department may need to contact you for additional information.)*
(Check all that apply)

Multiple WFOs (G54-G59, G54.1P1-48)	TCP (G43.4, TRAORI, M128)
Workplanes (G68.2, Cycle 800, Plane Spatial)	

SUB PROGRAM MANAGEMENT

Sub Program:
How does the post call a Sub Program?
 Sub Program:
 Sub Routine:
 No Subs:

Sub Location must be:
 Below the main program in the same file
 In a separate file

By default we increase the Number from the Main program:
 Use the default (increase Subs by 1 from the Main program)
 Start numbering from:

3 Machine Specs

NOTE: If you provide the schematics for this Lathe machine, please skip the rest of these questions.

MACHINE SPECS

Distance from the center of Spindle to Reference Position in each direction [mm.]		
X-axis:	Z-axis:	
Maximum Working area/Traversing range/Machine limits		
X-axis:	Z-axis:	
GibbsCAM can track the distance travelled and warn the programmer that an axis has overtravelled. Do you want GibbsCAM to identify an overtravel and warn the user? NO. I do not want GibbsCAM to warn me when I overtravel in an axis YES. I want GibbsCAM to warn me when I overtravel in an axis. I understand that warning will show up in GibbsCAM *and* in the posted G-code.		
Part Spindle Speed: (RPM min to max)		
Does your machine support changing gears depending on the specified Spindle Speed? NO. My machine does not support changing gears *OR* I do not want the post to support changing gears. YES. My machine does support changing gears *AND* I want the gear codes to be output in the g-code: Name: _____ Code: _____ Speed Range: _____		
Number of tool positions:		
Tool changing time: (Seconds from from tool to tool)		
Maximum cutting feedrate: (X/Z [mm./minute])		
Rapid feedrate: X/ Z [mm./minute]		
Does your machine support Live Tooling? NO. My machine does not support any live tooling. YES. My machine does support live tooling. Milling Spindle Speed: (RPM min to max)		

COOLANT OPTIONS

Name	On	Off
1		
2		
3		
4		
5		

Example

Name	On	Off
1 Flood	M8	M9
2 Thru Spindle	M7	M9
3 Pulse	M25	M28

MISCELLANEOUS ACCESSORIES (Bar Feeder, Bar Puller, Tail Stock, Part Catcher, etc.)

Check all that apply:			
Bar Feeder	Part Loader	Part/Spindle Indexer	
Bar Puller	Part Gripper	Tail Stock	Part Catcher
Other1:		Other2:	

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Additional Axes on Lathe

YES, this post needs to support Additional Axes. If NO, please skip this page.

NOTE: If you provide machine specifications and schematics for your Lathe, then please skip the rest of this page.

Lathe Machines that support Live tooling often have an additional C-axis to rotate the part and may also include a Y-axis for milling operations. If your machine has either of these axes, please fill out the relevant section below.

C-AXIS:

1. My Lathe machine has a C-axis that rotates the part:
 If NO, please skip to next section.
 If YES, please provide info below for C-Axis.
 When facing the part spindle, a positive C-axis angle rotates which direction?
 Clockwise Counterclockwise
 C-Axis Max Cutting Rate [°/min]: C-Axis Max Rapid Rate [°/min]:
 Do you use M<codes> to clamp the rotary axes?
 NO, I do not have or do not want to use rotary clamping codes.
 YES. Please using the following Clamping Codes for my machine:

Name:	Clamp On Code:	Clamp Off Code:
Name:	Clamp On Code:	Clamp Off Code:
Name:	Clamp On Code:	Clamp Off Code:

Y-AXIS:

2. My Lathe machine has a Y-axis for live tool milling operations:
 If NO, please skip this section.
 If YES, please provide info below for Y-Axis:
 Y-Axis Working area/Traversing range: Min Limit: Max Limit:
 Y-Axis Max Cutting Rate [°/min]: Y-Axis Max Rapid Rate [°/min]:
 When my Y-axis moves on the machine:
 It moves at a 90 degree angle to the X-axis (orthogonal)
 It moves at some non-90 degree angle to the X-axis (wedge)

B-AXIS:

3. My Lathe machine has a B-axis that rotates the tool:
 If NO, please skip this section.
 If YES, please provide info below for B-Axis.
 With a Tool in the spindle pointing straight down (OD), my B-angle at that orientation is:
 With a Tool in the spindle pointing at the face of the Main Spindle, my B-angle at that orientation is:
 B-Axis Max Cutting Rate [°/min]: B-Axis Max Rapid Rate [°/min]:
 Do you use M<codes> to clamp the rotary axes?
 NO, I do not have or do not want to use rotary clamping codes.
 YES. Please using the following Clamping Codes for my machine:

Name:	Clamp On Code:	Clamp Off Code:
Name:	Clamp On Code:	Clamp Off Code:
Name:	Clamp On Code:	Clamp Off Code:

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Additional Spindles on Lathe

YES, this post needs to support Additional Spindles. If NO, please skip this page.

NOTE: If you provide machine specifications and schematics for your Lathe, then please skip the rest of this page.

Many Lathe machines support additional part spindles that allow machining on the backside of the machined part. If your machine has an additional part spindle, please fill out the questions below.

<p>1. Distance from the nose of the Main spindle to the nose of the additional part spindle:</p> <p style="margin-left: 20px;">X-axis:</p> <p style="margin-left: 20px;">Z-axis:</p>									
<p>2. Spindle Speed of the additional spindle (RPMs):</p> <p style="margin-left: 20px;">Min:</p> <p style="margin-left: 20px;">Max:</p> <p>Does your machine support changing gears depending on the specified Spindle Speed?</p> <p style="margin-left: 20px;">NO. My machine does not support changing gears *OR* I do not want the post to support changing gears.</p> <p style="margin-left: 20px;">YES. My machine does support changing gears *AND* I want the gear codes to be output in the g-code:</p> <table style="margin-left: 40px; width: 80%;"> <tr> <td style="width: 33%;">Name:</td> <td style="width: 33%;">Code:</td> <td style="width: 33%;">Speed Range:</td> </tr> </table>	Name:	Code:	Speed Range:						
Name:	Code:	Speed Range:							
<p>3. Maximum Cutting Feedrate and Rapid Rate [mm./minute]:</p> <table style="margin-left: 20px; width: 80%;"> <tr> <td style="width: 25%;">X-axis:</td> <td style="width: 35%;">Cutting Feedrate:</td> <td style="width: 35%;">Rapid Rate:</td> </tr> <tr> <td>Z-axis:</td> <td>Cutting Feedrate:</td> <td>Rapid Rate:</td> </tr> </table>	X-axis:	Cutting Feedrate:	Rapid Rate:	Z-axis:	Cutting Feedrate:	Rapid Rate:			
X-axis:	Cutting Feedrate:	Rapid Rate:							
Z-axis:	Cutting Feedrate:	Rapid Rate:							
<p>3. My additional spindle has a C-axis that rotates the part:</p> <p style="margin-left: 20px;">NO. If no, please skip the rest of this section.</p> <p style="margin-left: 20px;">If YES, please answer the following questions.</p> <p style="margin-left: 20px;">When facing the part spindle, a positive C-axis angle rotates which direction?</p> <p style="margin-left: 40px;">Clockwise Counterclockwise</p> <p style="margin-left: 20px;">C-Axis Maximum Cutting Feedrate [°/min]:</p> <p style="margin-left: 20px;">C-Axis Maximum Rapid Rate [°/min]:</p> <p style="margin-left: 20px;">Do you use M<codes> to clamp the rotary axes?</p> <p style="margin-left: 20px;">NO, I do not have or do not want to use rotary clamping codes.</p> <p style="margin-left: 20px;">YES. Please using the following Clamping Codes for my machine:</p> <table style="margin-left: 40px; width: 80%;"> <tr> <td style="width: 33%;">Name:</td> <td style="width: 33%;">Clamp On Code:</td> <td style="width: 33%;">Clamp Off Code:</td> </tr> <tr> <td>Name:</td> <td>Clamp On Code:</td> <td>Clamp Off Code:</td> </tr> <tr> <td>Name:</td> <td>Clamp On Code:</td> <td>Clamp Off Code:</td> </tr> </table>	Name:	Clamp On Code:	Clamp Off Code:	Name:	Clamp On Code:	Clamp Off Code:	Name:	Clamp On Code:	Clamp Off Code:
Name:	Clamp On Code:	Clamp Off Code:							
Name:	Clamp On Code:	Clamp Off Code:							
Name:	Clamp On Code:	Clamp Off Code:							

6 Additional Tool Groups on Lathe

YES, this post needs to support Additional Tool Groups. If NO, please skip this page.

NOTE: If you provide machine specifications and schematics for your Lathe, then please skip the rest of this page.

More complex Lathe machines support additional groups of tools that move together, allowing for more than one tool to be machining at a time. If your machine has an additional tool groups, please fill out the questions below.

	1st Add. Tool Group		2nd Add. Tool Group		3rd Add. Tool Group	
Tool Group Name						
Distance from the center of Spindle to Reference Position	X-axis:	Z-Axis:	X-axis:	Z-Axis:	X-axis:	Z-Axis:
Max Working area/Traversing range/Machine limits	X-axis:	Z-Axis:	X-axis:	Z-Axis:	X-axis:	Z-Axis:
Live Tool Spindle Speed: (RPMs)	Min:	Max:	Min:	Max:	Min:	Max:
Number of tool positions						
Tool changing time: (Seconds from tool to tool)						
Rapid feedrate: [m/minute]	X-axis:	Z-Axis:	X-axis:	Z-Axis:	X-axis:	Z-Axis:
Maximum cutting feedrate: [m/minute]	X-axis:	Z-Axis:	X-axis:	Z-Axis:	X-axis:	Z-Axis:

My additional tool group has a Y-axis for live tool milling operations:

NO

If YES, please provide info below for Y-Axis:

Y-Axis Distance from the center of Spindle to Reference Position in each direction [mm.]:

Y-Axis Working area/Traversing range/Machine limits:

Minimum Limit: _____ Maximum Limit: _____

Y-Axis Rapid Feedrate: Y-axis [mm./minute]

Maximum Rapid: _____ Maximum Feed: _____

When my Y-axis moves on the machine:

It moves at a 90 degree angle to the X-axis (orthogonal)

It moves at some non-90 degree angle to the X-axis (wedge)