

# Profiling Parameters

## C Axis

C Axis

☐ Apply C Axis    Sharp Corner Angle    30

☒ C Axis Limit    Min./Max.    0    360

**Apply C axis:** Specifies whether the C axis will be used.

**Sharp Corner Angle:** When the angle specified is greater than the specified degree, the tool lifts up during the turn and performs the turn above, then continues its movement.

**C Axis Limit:** If there is a C axis limit on the machine, when limit values are entered, the tool path is calculated accordingly.

## Geometry

Geometry

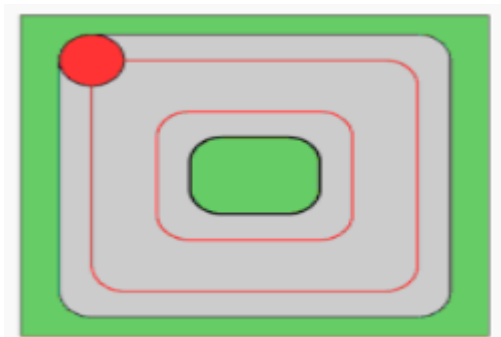
Type    Inner

Offset    20    ☐ Tool Comp. Open

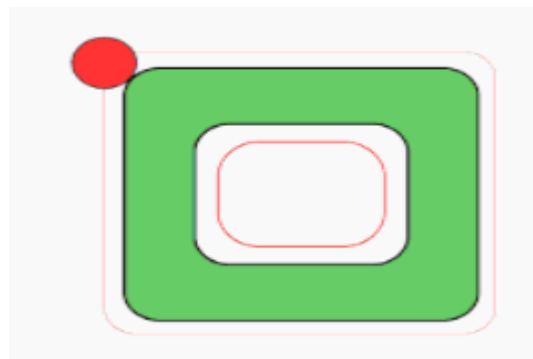
**Type:** Indicates whether the tool path will turn inside or outside the geometry.

**Offset:** It is the offset value according to the tool diameter or the offset value that the user can enter manually.

- If the "Tool comp open" option is enabled, tool compensation is performed by the controller, and G-code is generated according to the direction of the entity.



Inside Sample



Outside Sample

# Slice

Slice	
Entry Height	<input type="text" value="10"/>
Target Height	<input type="text" value="0"/>
Slice Mode	<input type="text" value="Count"/> ▼
Slice Count	<input type="text" value="1"/>
Slice Step	<input type="text" value="1"/>
Slice Pass Mode	<input type="text" value="Level"/> ▼

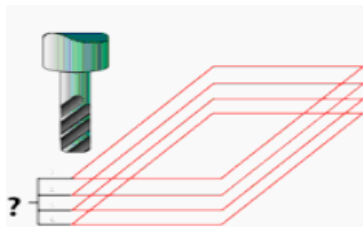
**Entry Height:** The height at which the initial entry into the part will be made.

**Target Height:** The target height where the tool will descend.

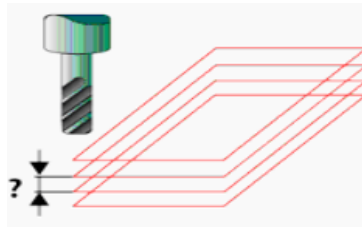
**Slice Mode:** Quantity, step, or height can be selected.

**Slice Count:** The number of steps from entry height to target height.

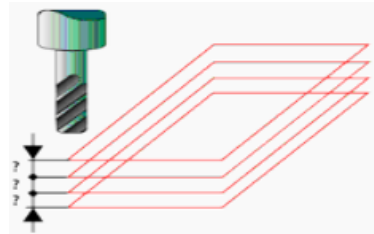
**Slice Step:** The height information of the steps.



Quantity

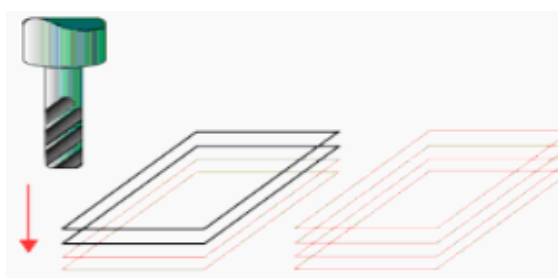


Step

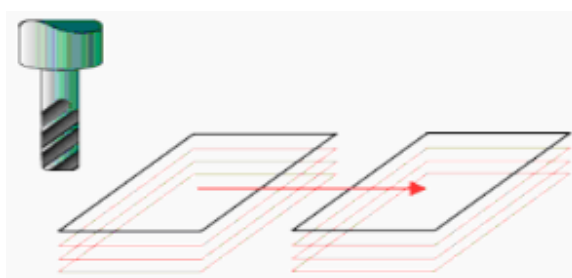


Height

**Slice Pass Mode:** Can be selected as field or level.




Field



Level

## Tool

Tool	
Tool No	<input type="text" value="1"/>
Spindle Rate	<input type="text" value="1000.00"/>
	

**Tool No:** Number of tool

**Spindle Rate:** Spindle rpm value

Tool	
FeedRate	<input type="text" value="3000"/>
PlungeRate	<input type="text" value="800"/>
RetractRate	<input type="text" value="4000"/>
RapidRate	<input type="text" value="5000"/>
Tool Diameter	<input type="text" value="16"/>
Tool Name	<input type="text" value="Tool 1"/>

**Feed Rate:** Feed speed

**Plunge Rate:** Plunge speed

**Retract Rate:** Retract speed

**Rapid Rate:** Rapid movement speed

**Tool Diameter:** Diameter of tool

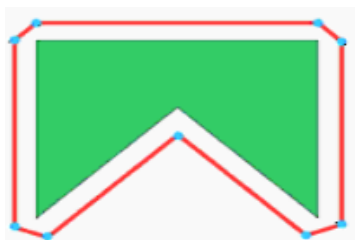
**Tool Name:** Name of tool

## Other

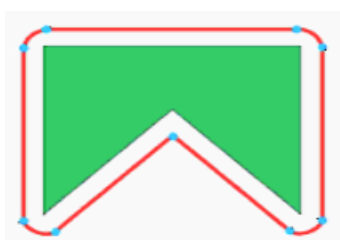
Other	
Cutting Direction	<input type="text" value="No change"/>
Join Type	<input type="text" value="Round"/>
<input checked="" type="checkbox"/> Explode Arcs	Arc Step <input type="text" value="1"/>

**Cutting Direction:** No change, Reverse, Clockwise, and Counterclockwise options are available. Set the cutting direction accordingly.

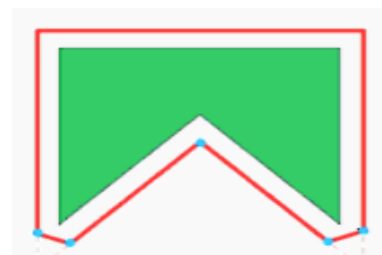
**Join Type:** Specifies the type of joining for offset given corners. Round, Square, and Miter options are available.



Round



Square

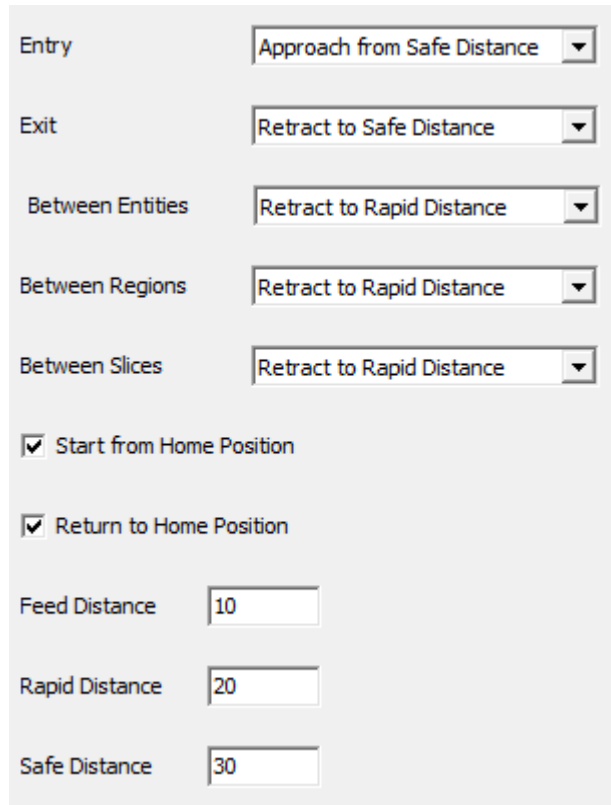


Miter

**Explode Arcs:** Enables the springs to be exploded, allowing XYZ type coordinates to be obtained from I and J type.

**Arc Step:** Specifies the distance for exploding the springs.

## Approach/Retract



Entry: Approach from Safe Distance

Exit: Retract to Safe Distance

Between Entities: Retract to Rapid Distance

Between Regions: Retract to Rapid Distance

Between Slices: Retract to Rapid Distance

☒ Start from Home Position

☒ Return to Home Position

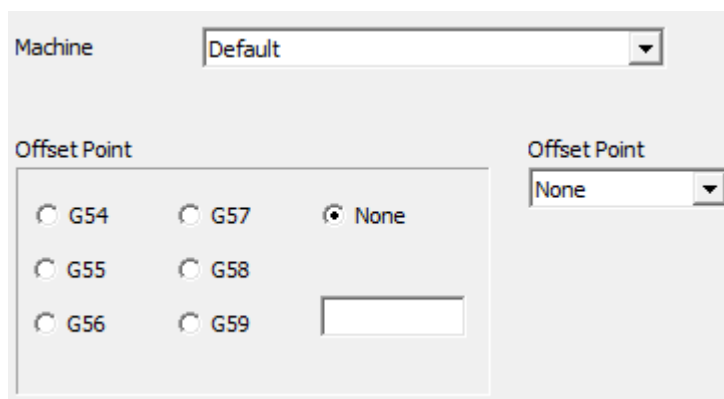
Feed Distance: 10

Rapid Distance: 20

Safe Distance: 30

- Selection can be made from Entry, Exit, Between Entities, Between Fields distances, Cutting Height, Rapid Movement Height, and Safe Height.
- Selection can be directly between slices or from the distances mentioned above.
- Starting and ending at the home position can be selected.
- Cutting, Rapid Movement, and Safe Height can be adjusted as desired.

## Machine



Machine: Default

Offset Point

☐ G54 ☐ G57 ☒ None

☐ G55 ☐ G58

☐ G56 ☐ G59

Offset Point: None

- The desired machine is selected, and G-code is obtained through its Post file.
- Offset points can be selected.

## Lead In/Out

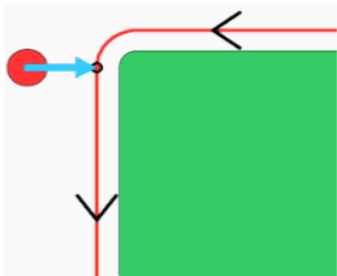
Lead In

☒ None

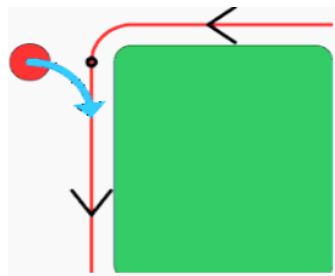
☐ Linear ☐ Circular ☐ Ramped

Distance

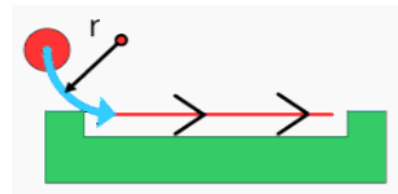
- Lead In selection can be linear or circular.
- If ramped is selected, it enters the part at an inclined angle.
- Lead In distance is determined.



Linear



Circular



Ramped

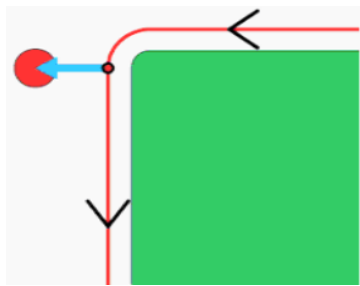
Lead Out

☒ None

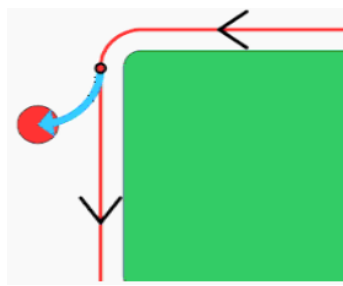
☐ Linear ☐ Circular ☐ Ramped

Distance

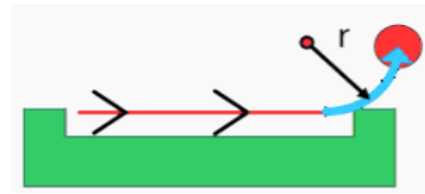
- Lead Out selection can be linear or circular.
- If ramped is selected, it exits the part at an inclined angle.
- Lead Out distance is determined.



Linear

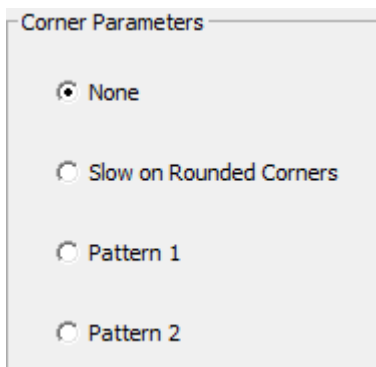


Circular

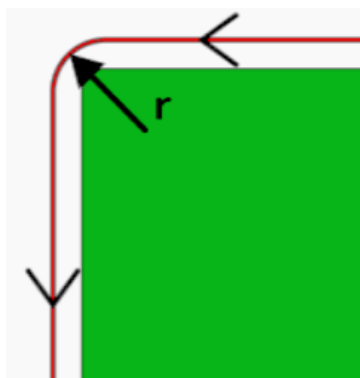


Ramped

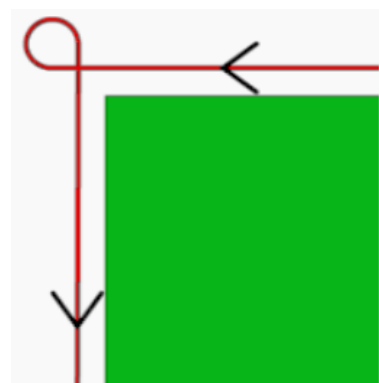
## Corner



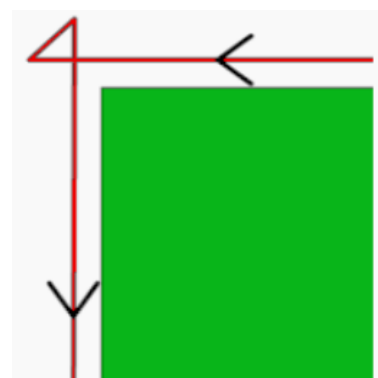
- At corners, the feed rate for large angles from a certain angle can be customized.
- Pattern 1 or Pattern 2 can be applied at corners.



Slow on Rounded Corners



Pattern 1



Pattern 2