

Tool Paths Step 4

https://docs.google.com/presentation/d/1EtbDBiv3Ij44lxMJLk_Sm8-AZEFstgvGCoDWpR_BtiY/edit#slide=id.g58f861a7a4_0_1292

2D CONTOUR : NECK RELIEF

Tool

Tool: Select...

#: 2 - Ø1/4" flat (-0.2...)

Coolant: Disabled

Feed & Speed

Spindle Speed: 10000 rpm

Surface Speed: 654.498 ft/min

Ramp Spindle Speed: 10000 rpm

Cutting Feedrate: 60 in/min

Feed per Tooth: 0.003 in

Lead-In Feedrate: 30 in/min

Lead-Out Feedrate: 30 in/min

Ramp Feedrate: 30 in/min

Plunge Feedrate: 30 in/min

Feed per Revolution: 0.003 in

Geometry

Contour Selection: 2 Chains

Tangential Extension Dist.: 0 in

Separate Tangential End L...:

Stock Contours

Tabs

Rest Machining

Wrap Toolpath

Tool Orientation

Clearance Height

From: Retract height

Offset: 0.4 in

Retract Height

From: Stock top

Offset: 0.2 in

Feed Height

From: Top height

Offset: 0.2 in

Top Height

From: Stock top

Offset: 0 in

Bottom Height

From: Model top

Offset: -7

Passes

Roughing Passes

Multiple Depths

Maximum Roughing Stepdown: .1

Finishing Stepdowns: 0

Finishing Stepdown: .1

Wall Taper Angle (deg): 0 deg

Approach Mode: Along ...

Finish Only at Final Depth:

Rough Final:

Use Even Stepdowns:

Order by Depth:

Order by Islands:

Use Thin Wall:

Stock to Leave

Smoothing

Feed Optimization

Linking

High Feedrate Mode: Preserve rapid r...

Allow Rapid Retract:

Safe Distance: 0.13937 in

Keep Tool Down:

Lift Height: 0 in

Leads & Transitions

Lead-In (Entry):

Horizontal Lead-In R...: 0.025 in

Lead-In Sweep Angle: 90 deg

Linear Lead-In Distar...: 0.025 in

Perpendicular:

Vertical Lead-In Radi...: 0.025 in

Lead-Out (Exit):

Same as Lead-In:

Ramp

Positions

Predrill Positions: Nothing

Entry Positions: Nothing

Red arrow outside of profile on contour

2D CONTOUR : CUSTOM PROFILE

Tool

Tool Select...

#2 - Ø1/4" flat (-0.2...)

Coolant Disabled

Feed & Speed

Spindle Speed 10000 rpm

Surface Speed 654.498 ft/min

Ramp Spindle Speed 10000 rpm

Cutting Feedrate 60 in/min

Feed per Tooth 0.003 in

Lead-In Feedrate 30 in/min

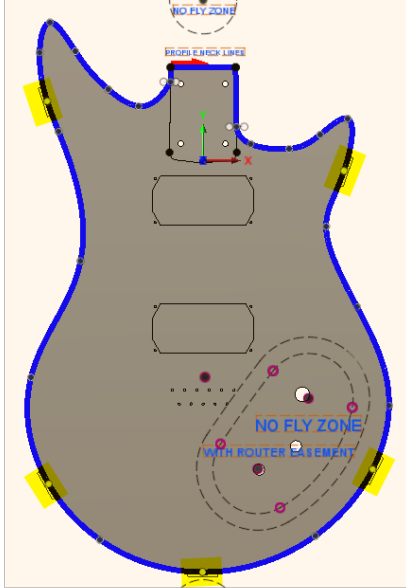
Lead-Out Feedrate 30 in/min

Ramp Feedrate 30 in/min

Plunge Feedrate 30 in/min

Feed per Revolution 0.003 in

OK Cancel



2D CONTOUR : CUSTOM PROFILE

Geometry

Contour Selection Chain X

Tangential Extension Dist... 0 in

Separate Tangential End E...

Stock Contours

✓ Tabs

Tab Shape Triangular

Tab Width 1 in

Tab Height 0.75 in

Tab Positioning At points

Tab Positions 5 Points

Rest Machining

Wrap Toolpath

Tool Orientation

OK Cancel

Finishing stepdown not needed except to preven errors

2D CONTOUR : CUSTOM PROFILE

Clearance Height

From Retract height

Offset 0.4 in

Retract Height

From Stock top

Offset 0.2 in

Feed Height

From Top height

Offset 0.2 in

Top Height

From Stock top

Offset 0 in

Bottom Height

From Model top

Offset -1.77

OK Cancel

2D CONTOUR : CUSTOM PROFILE

Passes

✓ Multiple Depths

Maximum Roughing Stepdown 0.22 in

Finishing Stepdowns 0

Finishing Stepdown 0.22 in

Wall Taper Angle (deg) 0 deg

Approach Mode Along ...

Finish Only at Final Depth

Rough Final

Use Even Stepdowns

Order by Depth

Order by Islands

Use Thin Wall

Stock to Leave

Smoothing

Feed Optimization

OK Cancel

2D CONTOUR : CUSTOM PROFILE

Linking

High Feedrate Mode Preserve rapid r...

Allow Rapid Retract

Safe Distance 0.25937 in

Keep Tool Down

Lift Height 0 in

Leads & Transitions

Lead-In (Entry)

Horizontal Lead-In R... 0.025 in

Lead-In Sweep Angle 90 deg

Linear Lead-In Distar... 0.025 in

Perpendicular

Vertical Lead-In Radi... 0.025 in

Lead-Out (Exit)

Same as Lead-In

Ramp

Positions

Predrill Positions Nothing

Entry Positions Nothing

OK Cancel

Notes:

Highlight 2D contour button

Entry Position to one side

Neck Relief 2D Contour

Tool

- 1 Select
1/4" Endmill

Geometry

- 2 Contour selection
2 Chains

Heights

- 3 Bottom Height
From [\[Model Top\]](#)
Offset [\[-0.7\]](#)

Passes

- 4 Multiple Depths
Maximum Roughing Stepdown [\[0.1 in\]](#)
Finishing stepdown not needed
except to prevent errors

Linking

No changes needed

Profile 2D Contour

Tool

- 5 Select
1/4" Endmill

Geometry

- 6 Contour selection
Chain
RED ARROW NEEDS
TO BE ON OUTSIDE

Heights

- 8 Bottom Height
From [\[Model Top\]](#)
Offset [\[-1.77\]](#)

Passes

- 9 Multiple Depths
Maximum Roughing Stepdown [\[0.22 in\]](#)
Finishing stepdown not needed
except to prevent errors

Linking

No changes needed

7 Tabs

- Tab Shape [\[Triangular\]](#)
- Tab Width [\[1 in\]](#)
- Tab Height [\[0.75 in\]](#)
- Tab Positioning [\[At Points\]](#)
- Tab Positions [\[5 Points\]](#)

10 Use Even Stepdowns