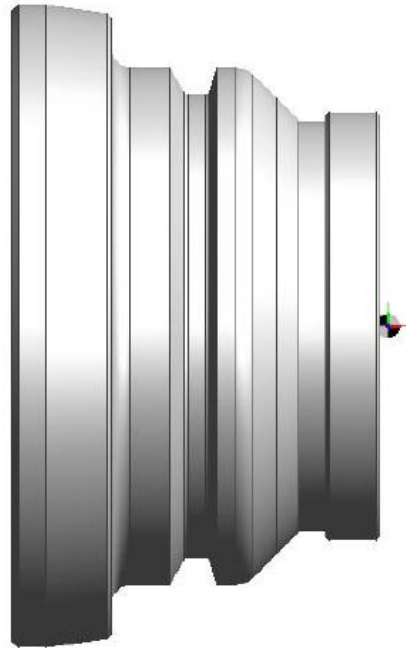


INSTITUTO FEDERAL
SUL-RIO-GRANDENSE
Campus Sapucaia do Sul

Disciplina de CAM

Torneamento Aula 2

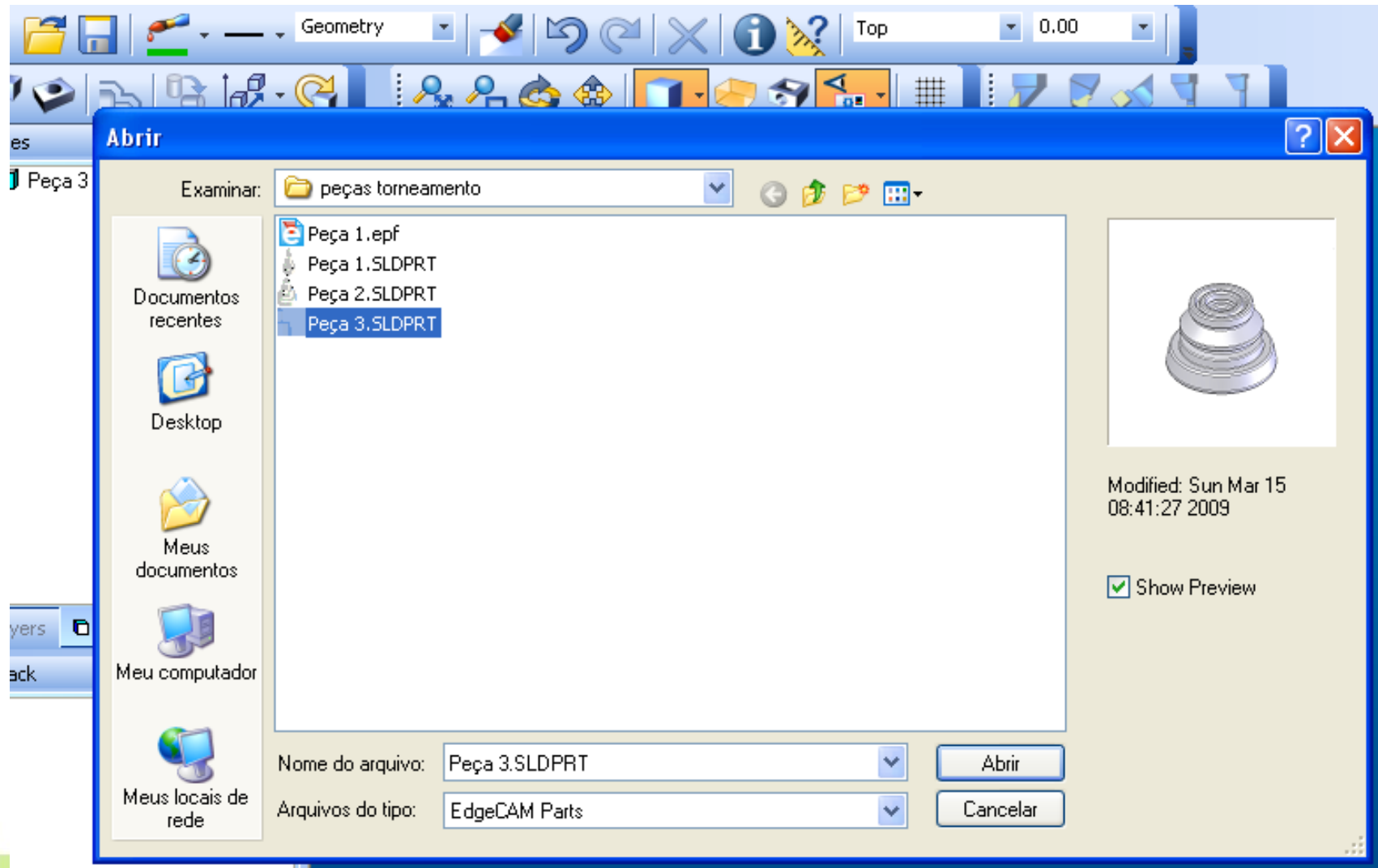


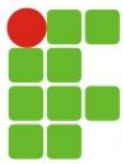
Professor: André Carvalho Tavares

Carregando um modelo CAD

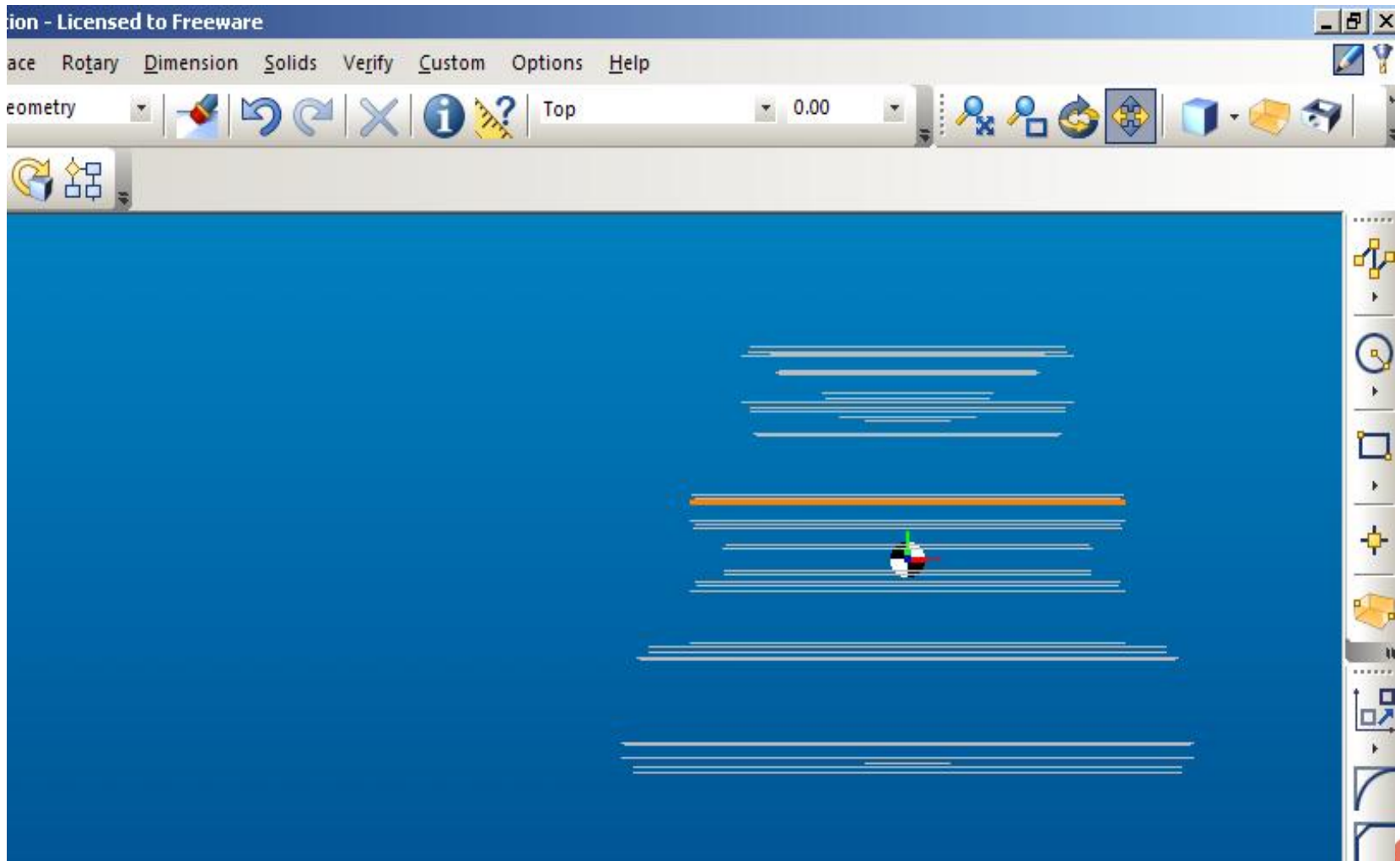
- •Clique no botão *Open*
- •Na caixa de dialogo Open que aparecer, navegue até encontrar o arquivo.
- •Abra o arquivo *Peça 3.sldprt*

Selecione a peça 3 para abrir.

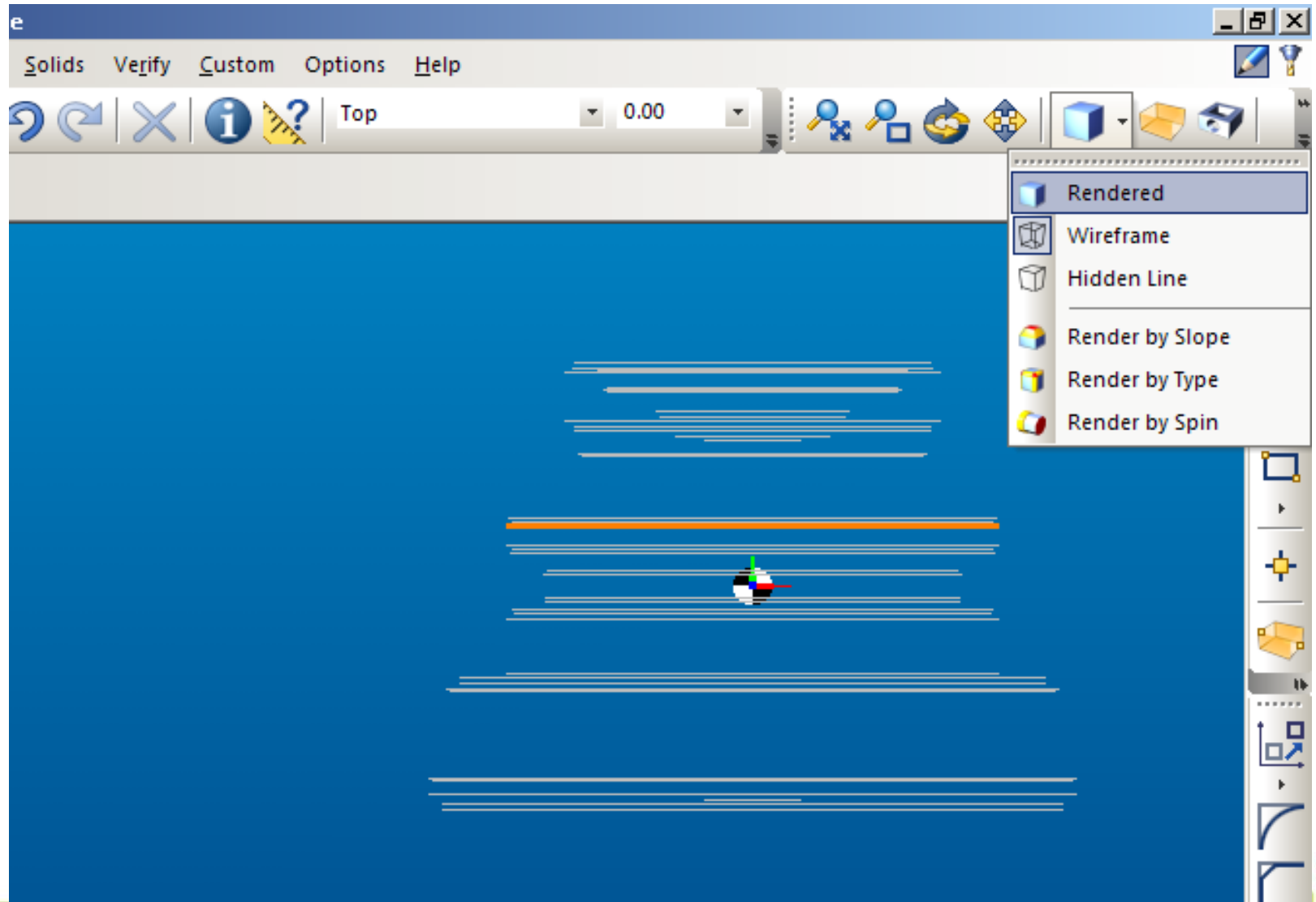




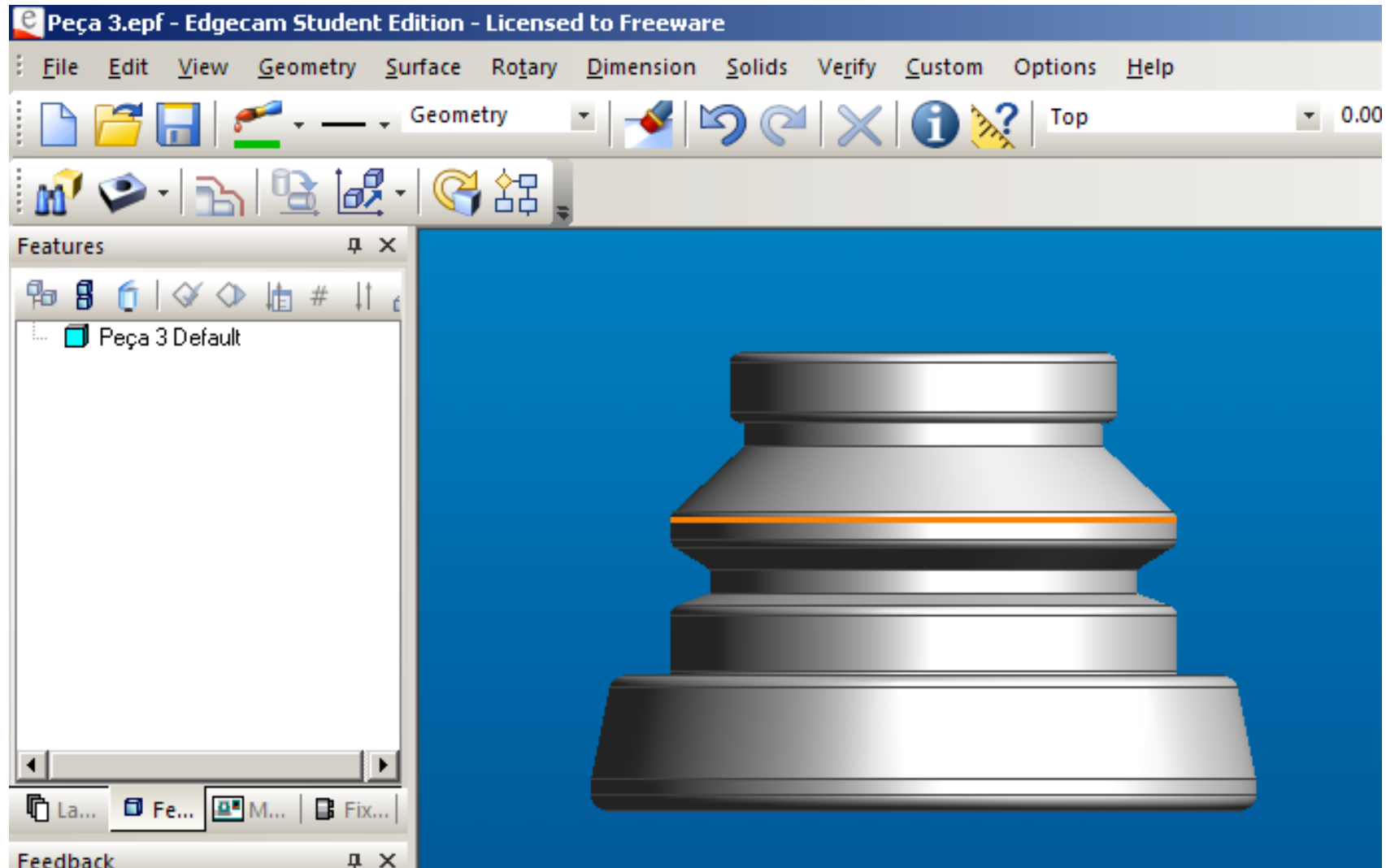
Observe o surgimento da peça.



Vá no ícone “Rendered” para renderizar.



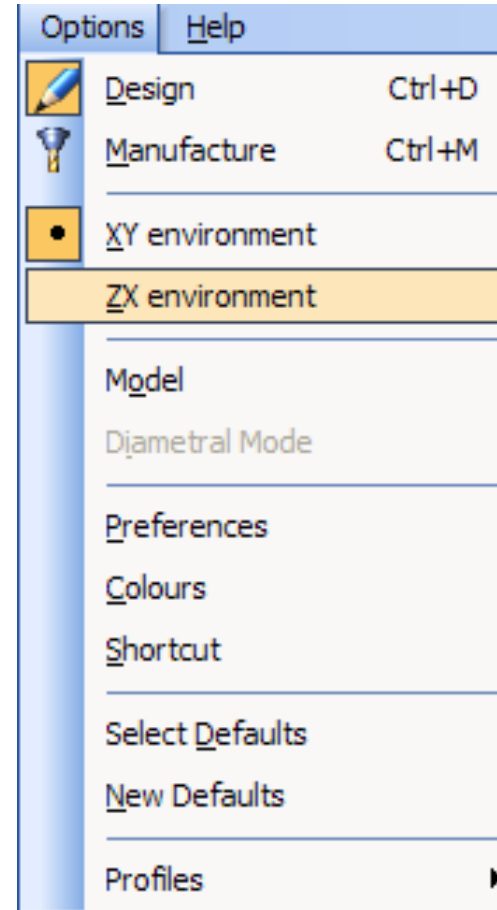
Observe que aparece uma árvore da peça.

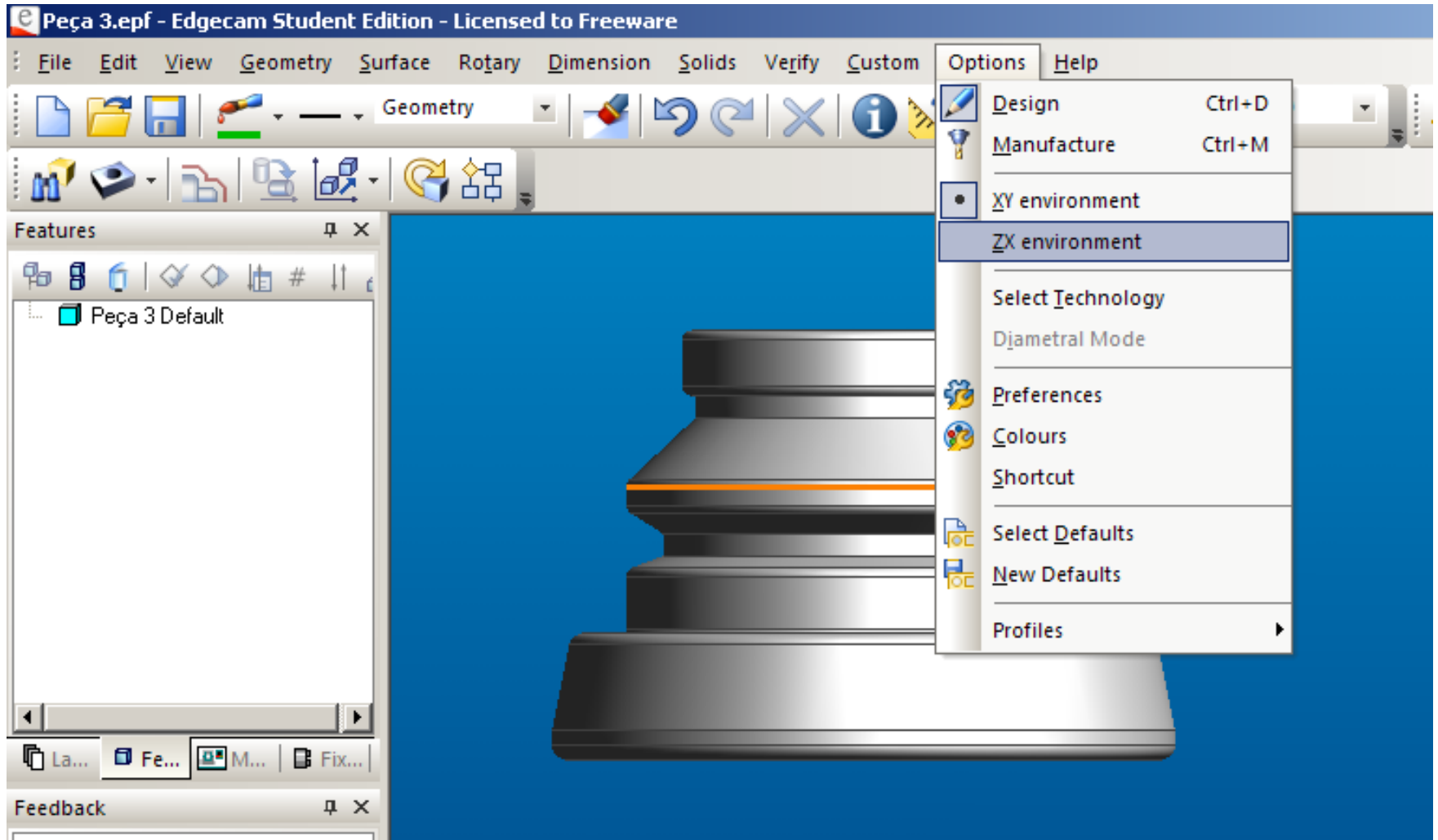


Selecionando plano para Torneamento

- Para programar uma peça em um torno você deve mudar o plano de trabalho de XY para ZX, para tanto faço o seguinte:

- No menu Options, clique em ZX environment

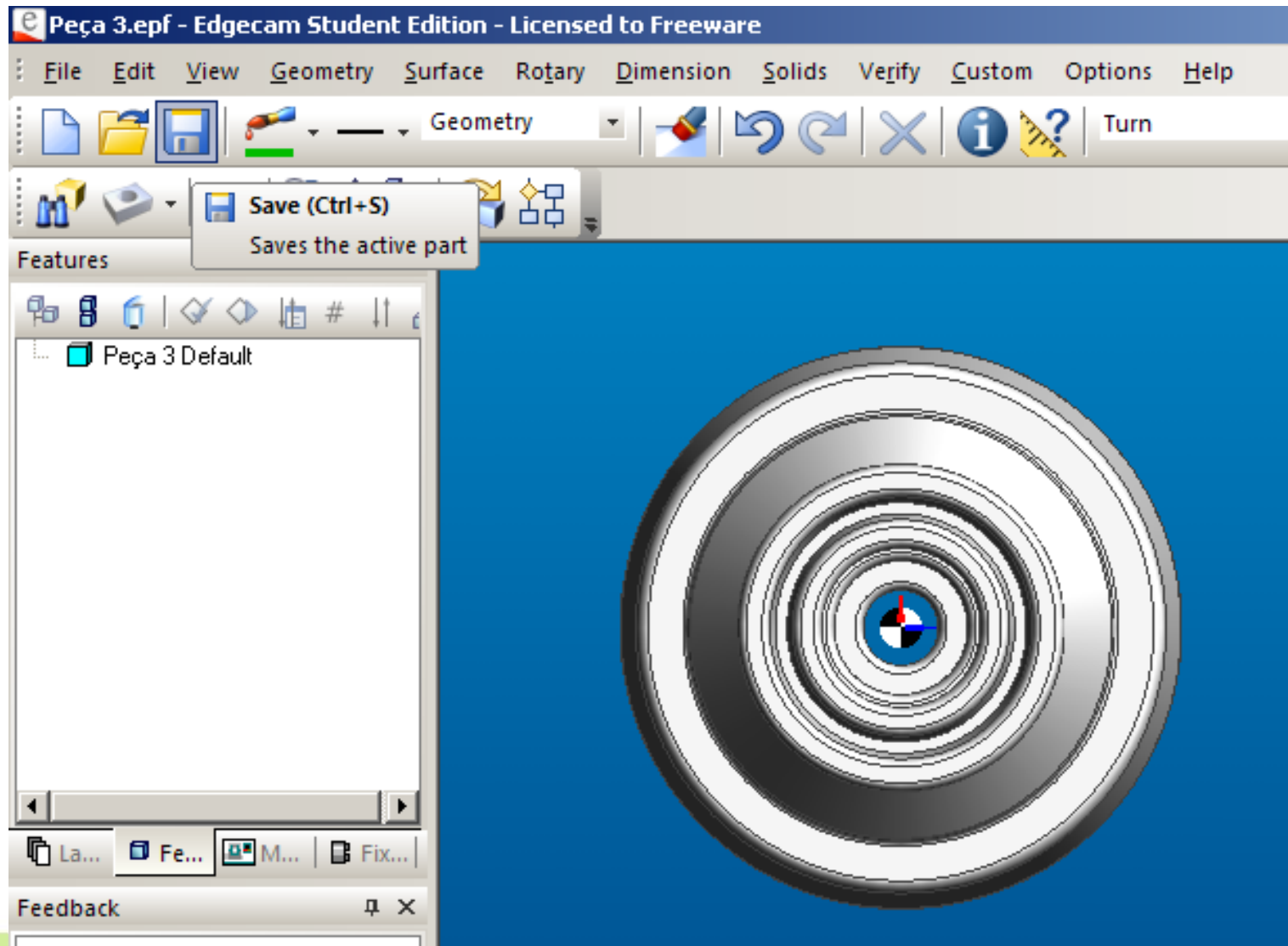




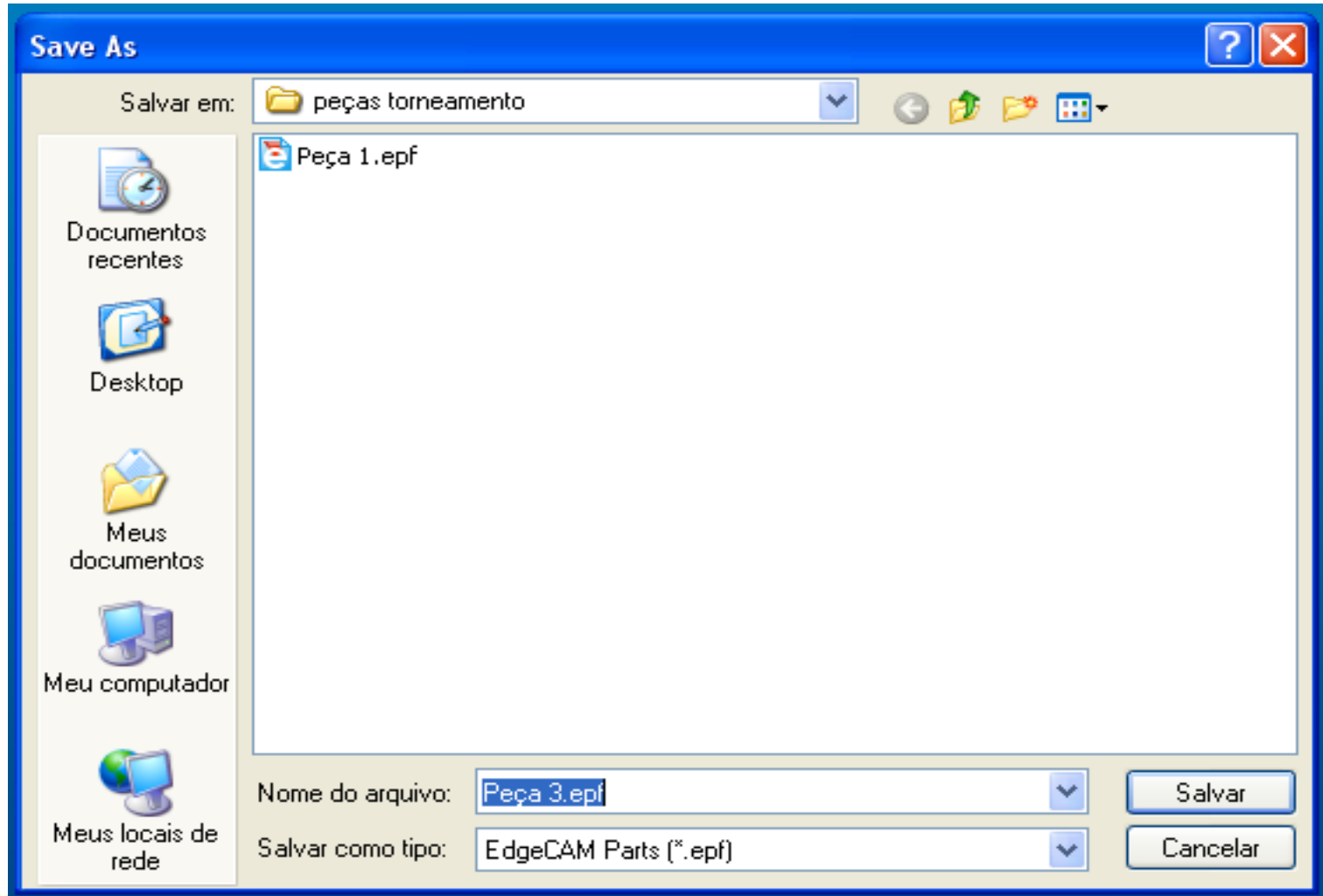
Observe que mudou a posição da peça.



Salve a peça.



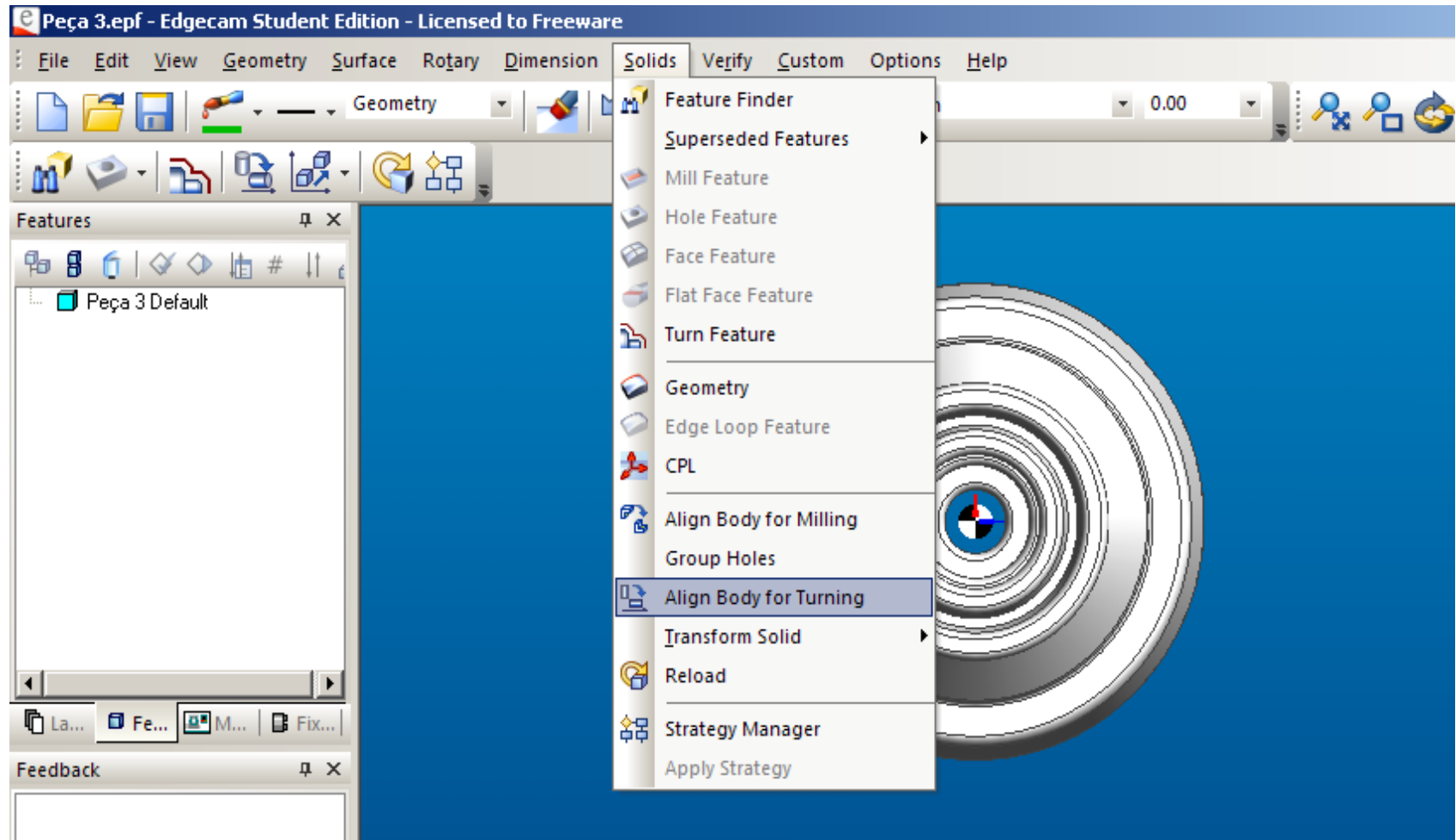
Escolha o nome da peça e o local onde colocará.



Posicionando o sólido para torneiar

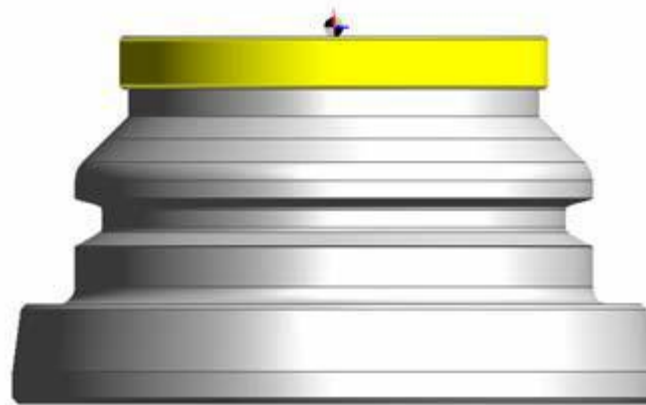
- Você deve alinhar o diâmetro do sólido com o eixo Z, e alinhar a face com X.
- Existe uma maneira automática para fazer isso:
- Na barra de ferramentas ***Solidclique no botão AlingBody for Turning***





Posicionando o sólido para tornear

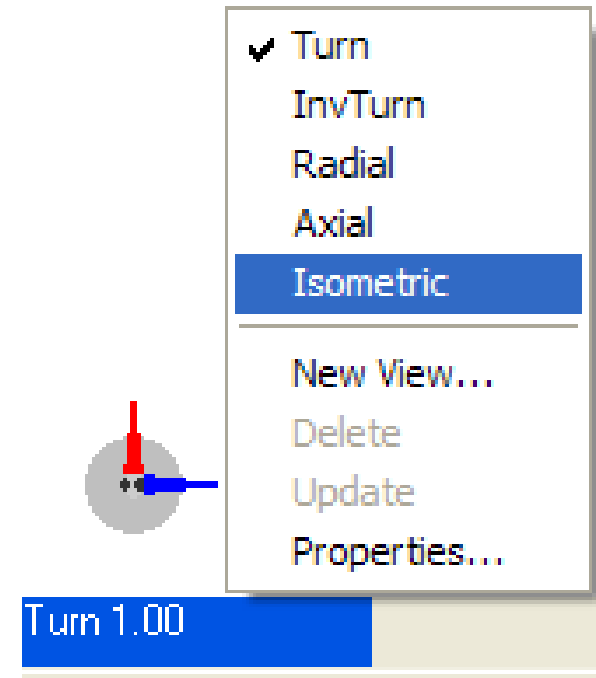
- Na barra de alinhar o eixo de rotação, clique o diâmetro conforma a figura:



- Após clicar, confirme com o botão da direita.

Posicionando o sólido para torneiar

- Sem sair do comando, clique com o botão da direita em *ViewCaptione no menu clique em Isometric.*

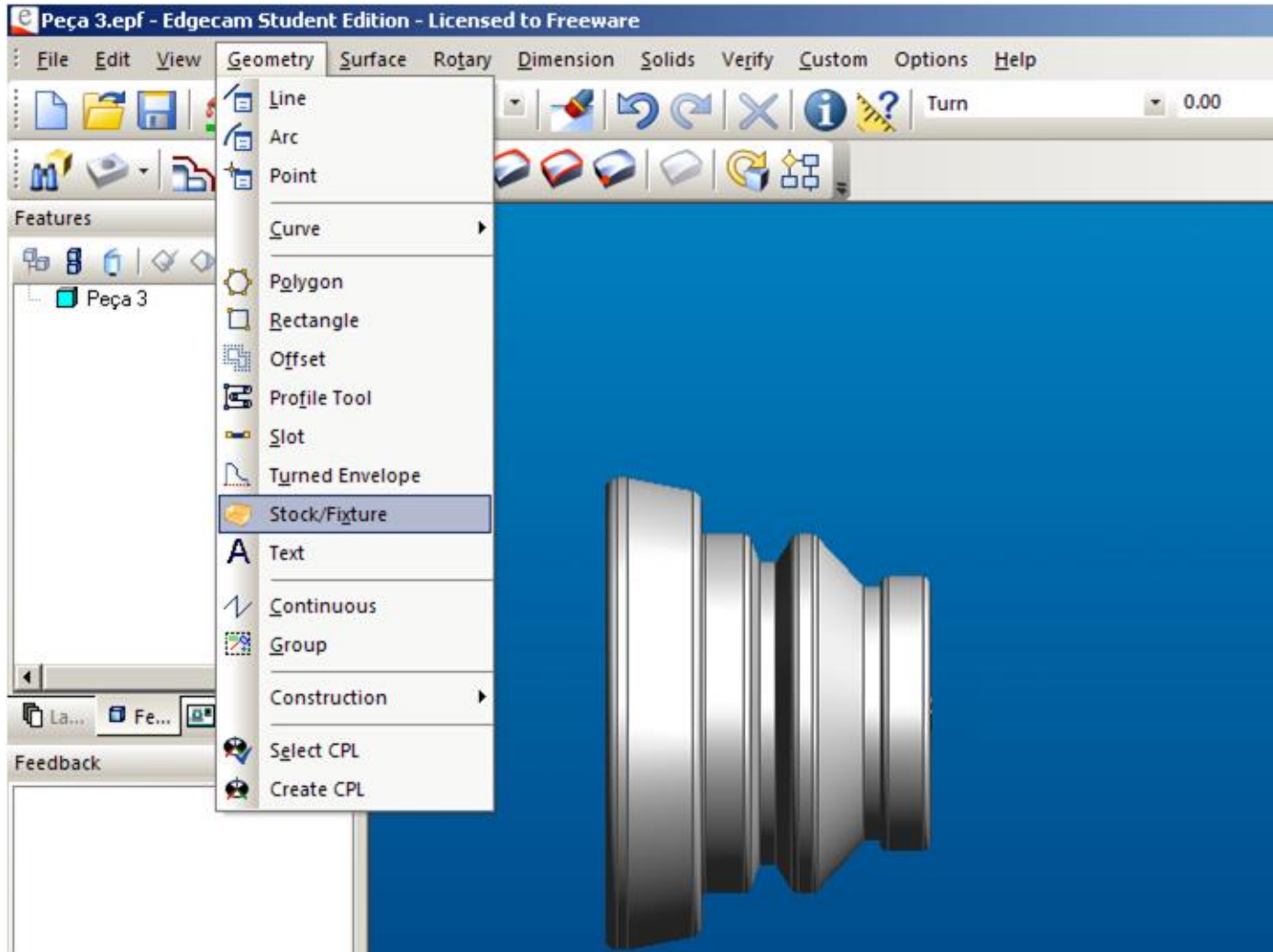




Criando o material bruto

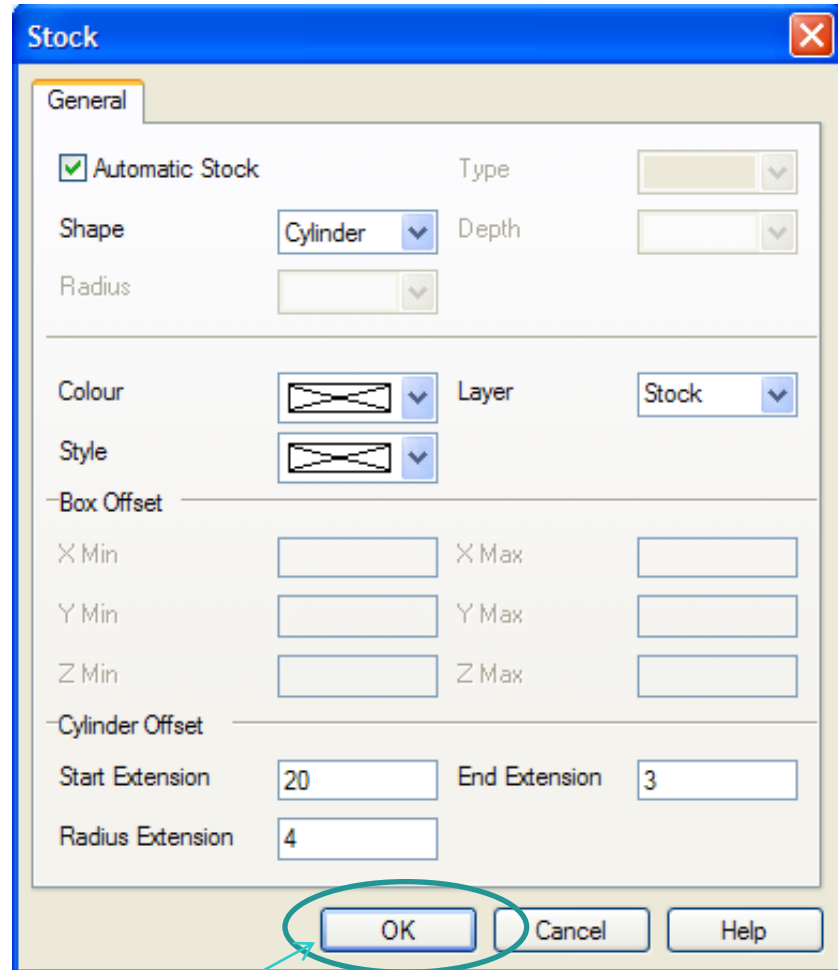
O bruto representa a matéria prima da peça a ser usinada. (Quando você for usinar o simulador do EdgeCAM este material é o material que vai aparecer sendo usinado criando a peça.) Para criar o bruto:

Para criar o material seleciono:



Como criar o Stock

Na caixa de diálogos faça estas configurações.



Stock

General

Automatic Stock Type []

Shape Cylinder [v] Depth []

Radius []

Colour [] Layer Stock [v]

Style []

Box Offset

X Min [] X Max []

Y Min [] Y Max []

Z Min [] Z Max []

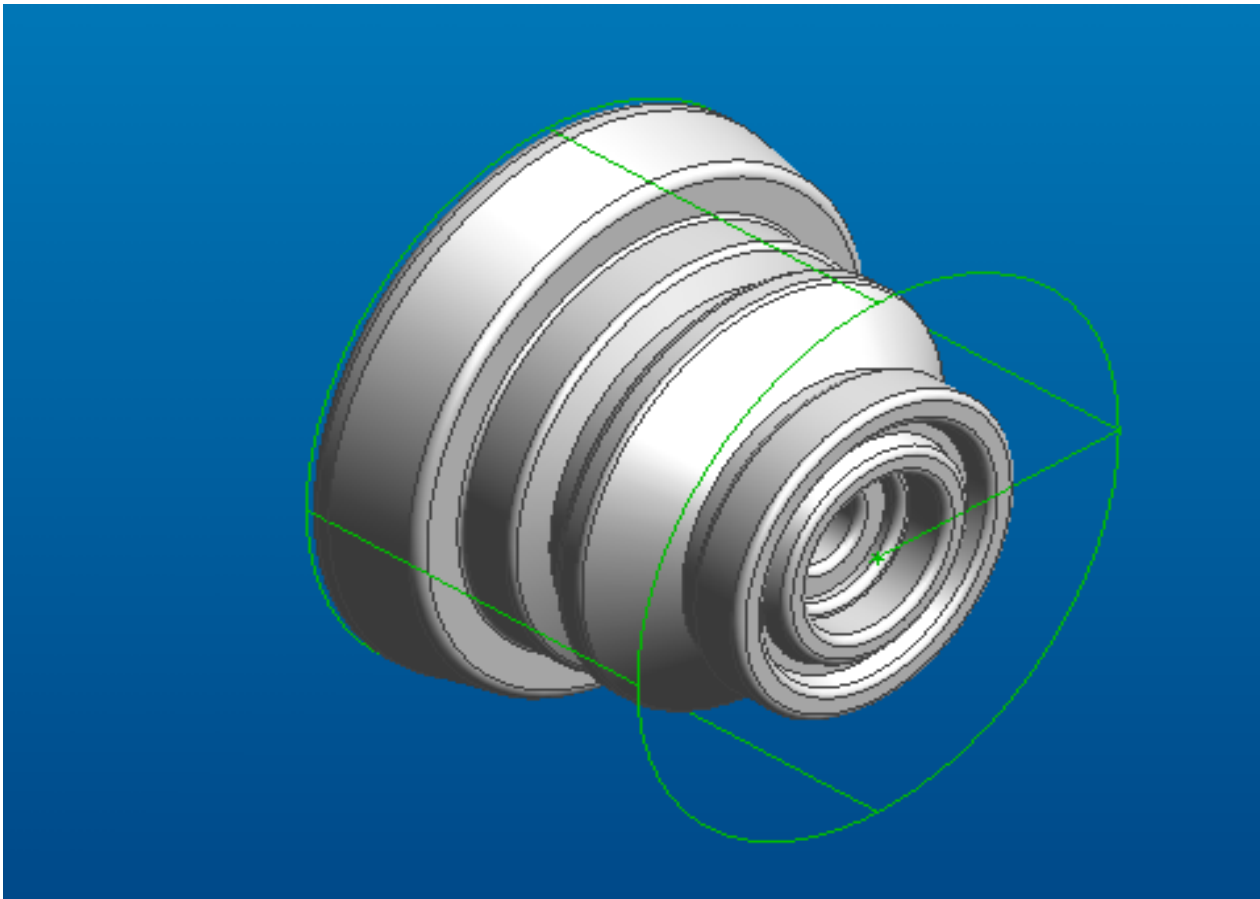
Cylinder Offset

Start Extension 20 End Extension 3

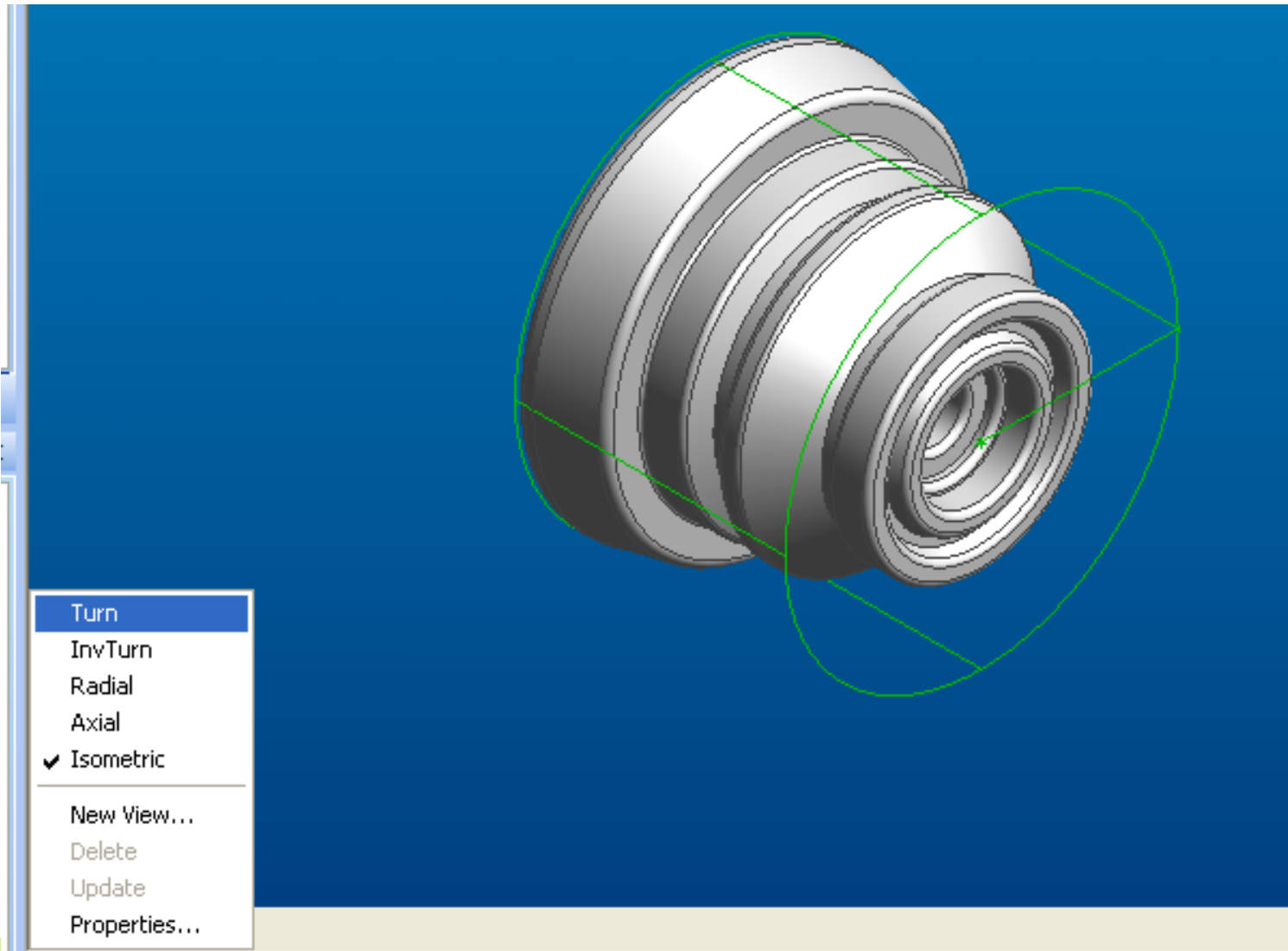
Radius Extension 4

OK Cancel Help

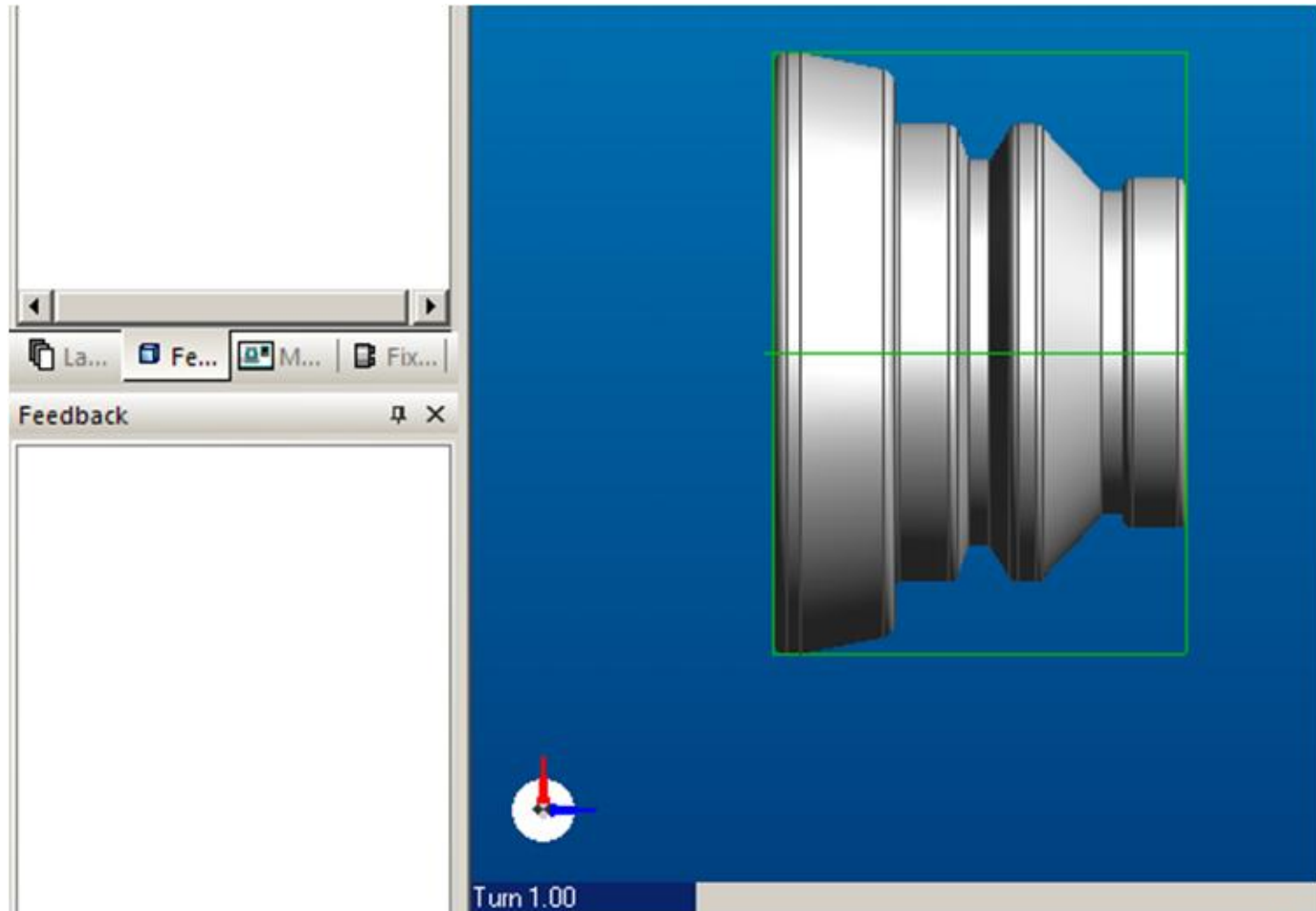
As linha que aparecem representam do material em bruto.



Selezione a vista Turn (torno)

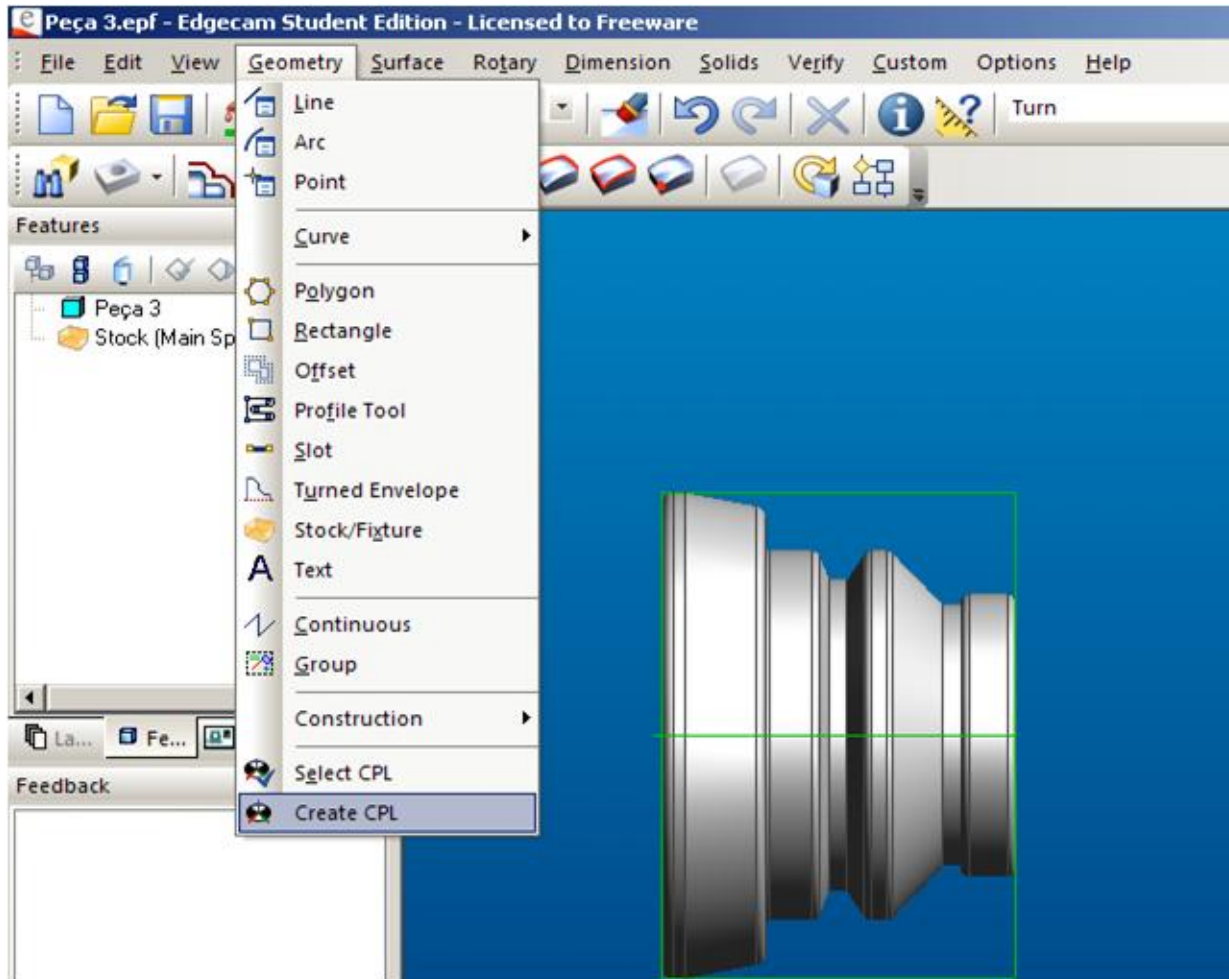


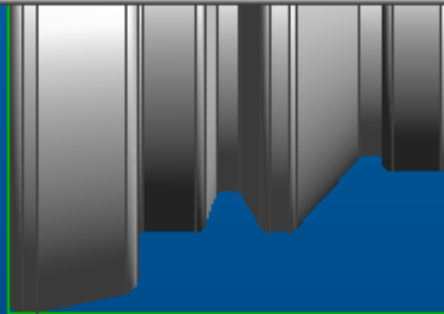
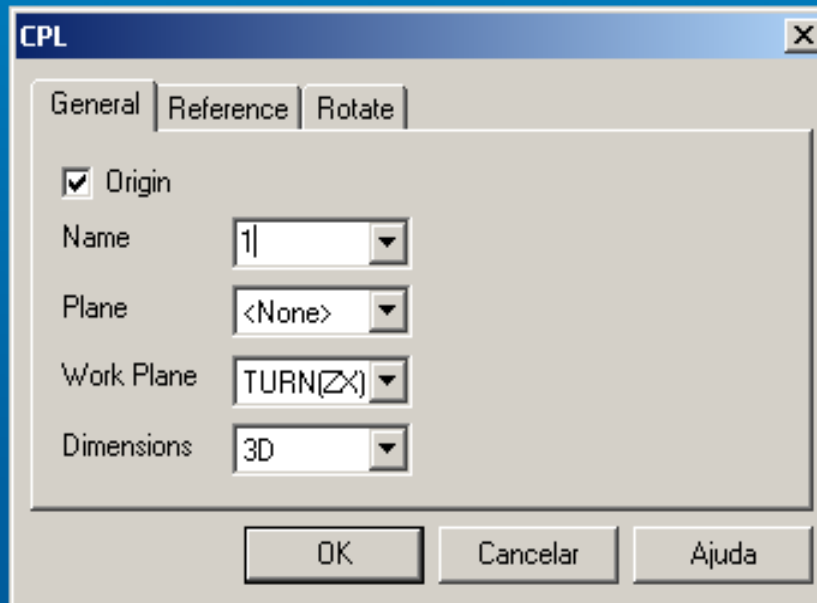
Observe a mudança da vista.



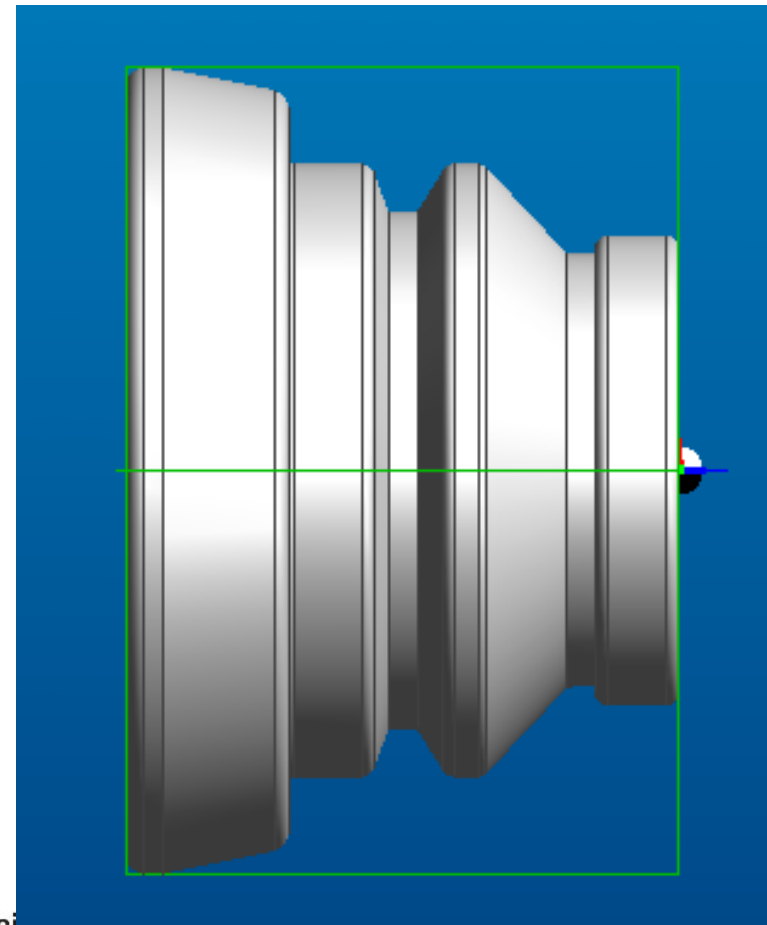
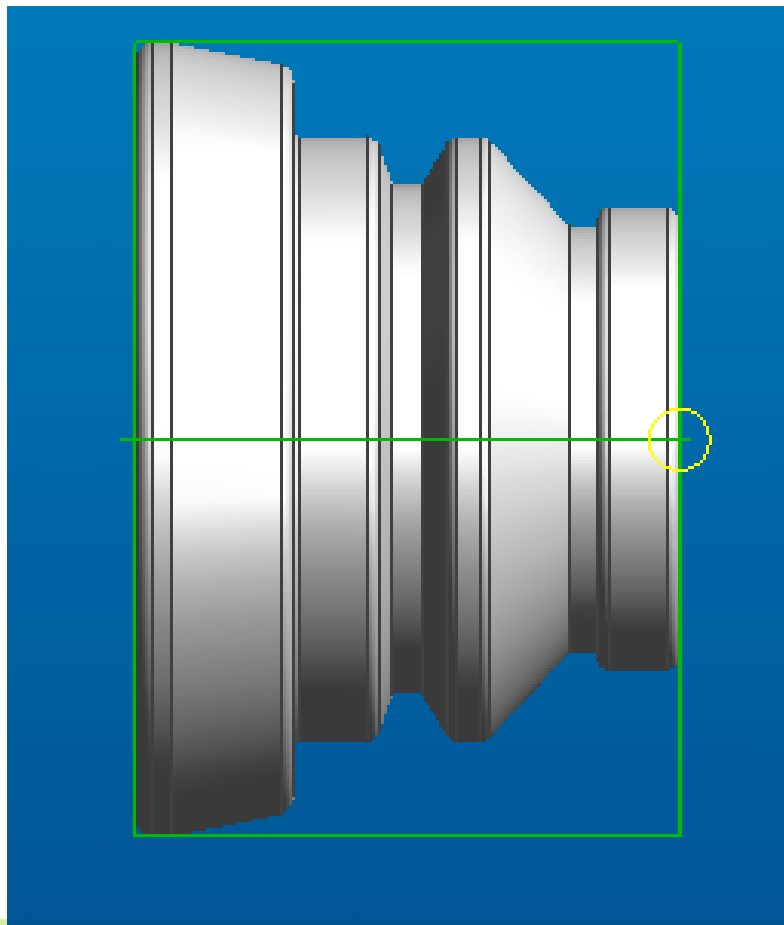
Crie a origem CPL

Criando a origem CPL (origem da peça)

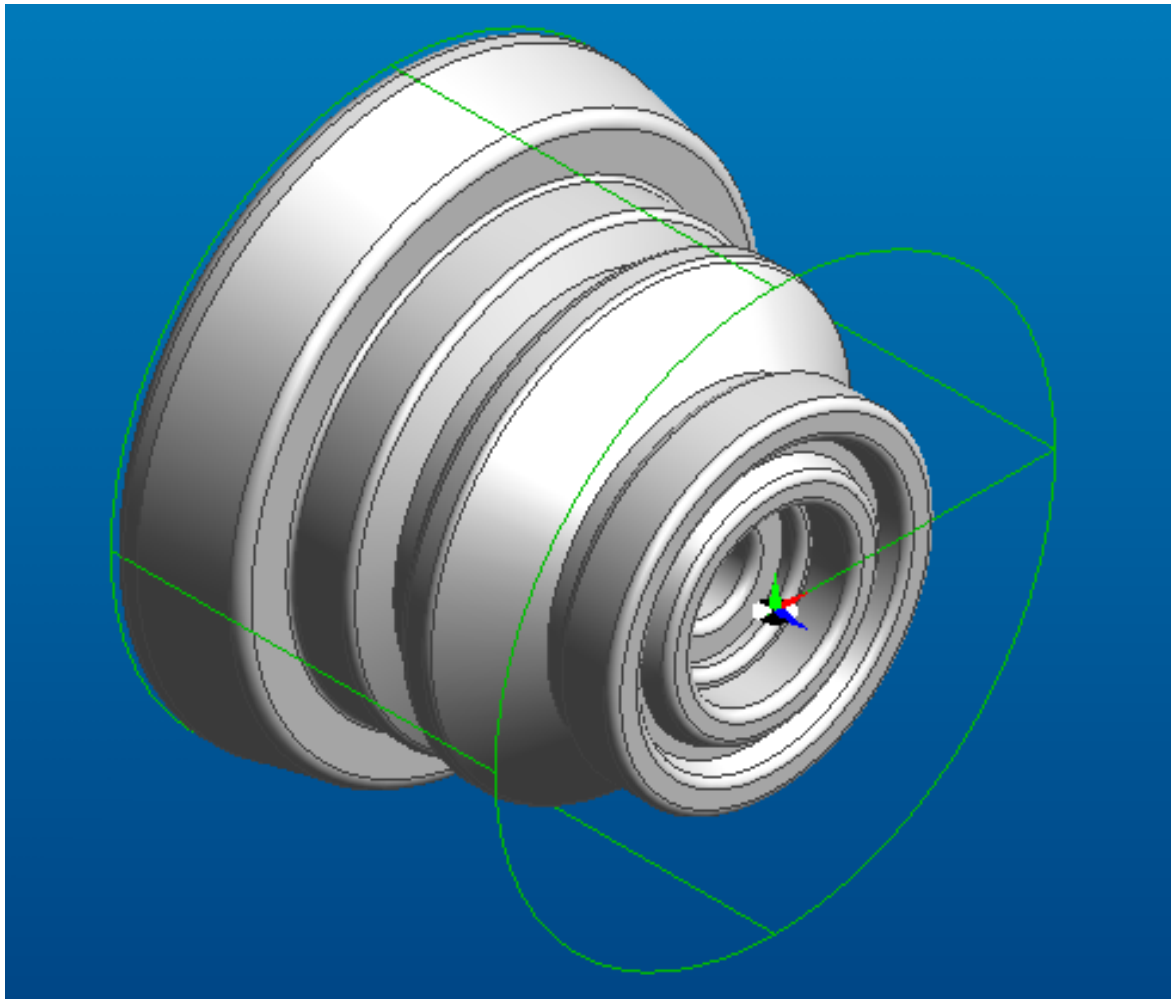




Observe que a origem foi para a extremidade da peça.



Mude, se precisar a vista para “pegar” o ponto de origem.



Encontrando as Features

- Features são áreas pré definidas no modelo que você pode usar para aplicar sua usinagem. Para achar as features:

Na barra de ferramentas Standard verifique a configuração da CPL (**CPL Selector**). Se não estiver **Turn**, clique e na lista selecione **Turn** (Repare que aqui, a barra de ferramentas aparece com textos – veja página 13):



CPL Selector

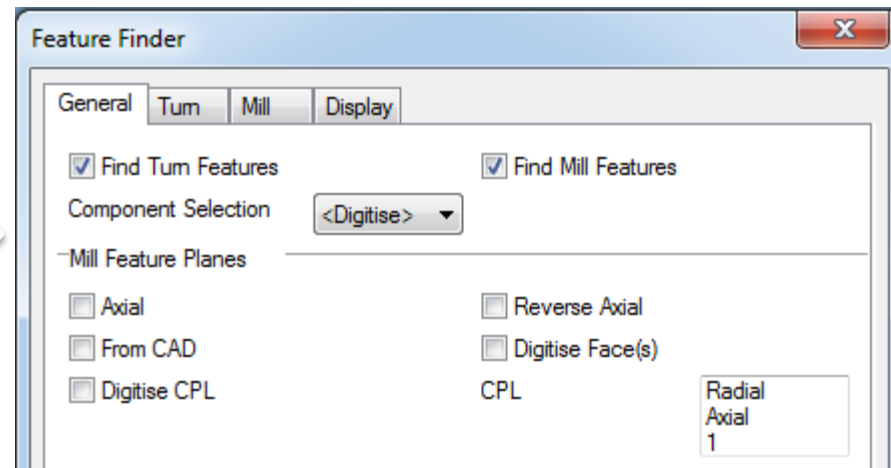
Encontrando as Features

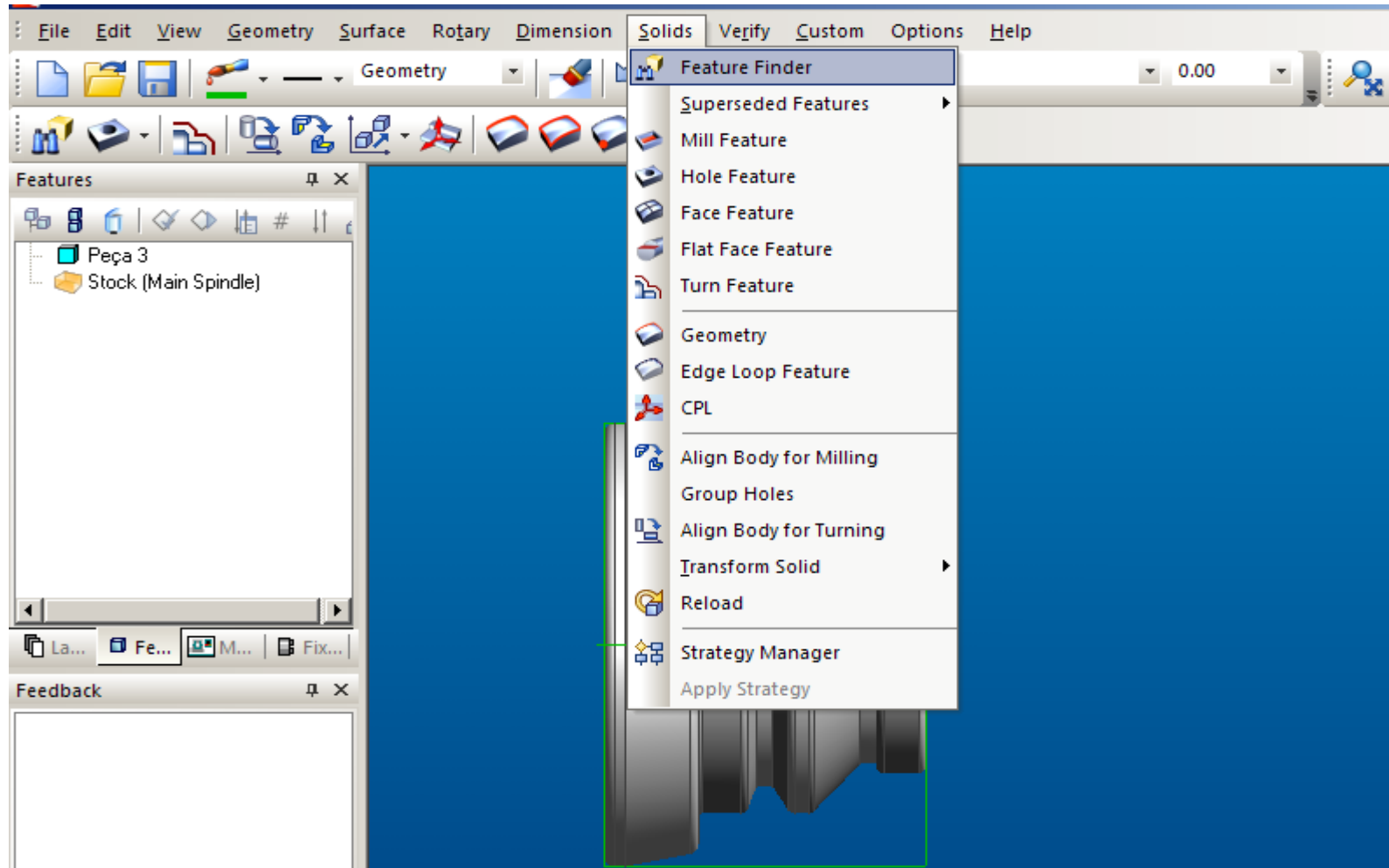
- Clique no menu *Soliduse* clique em *FeatureFinder*



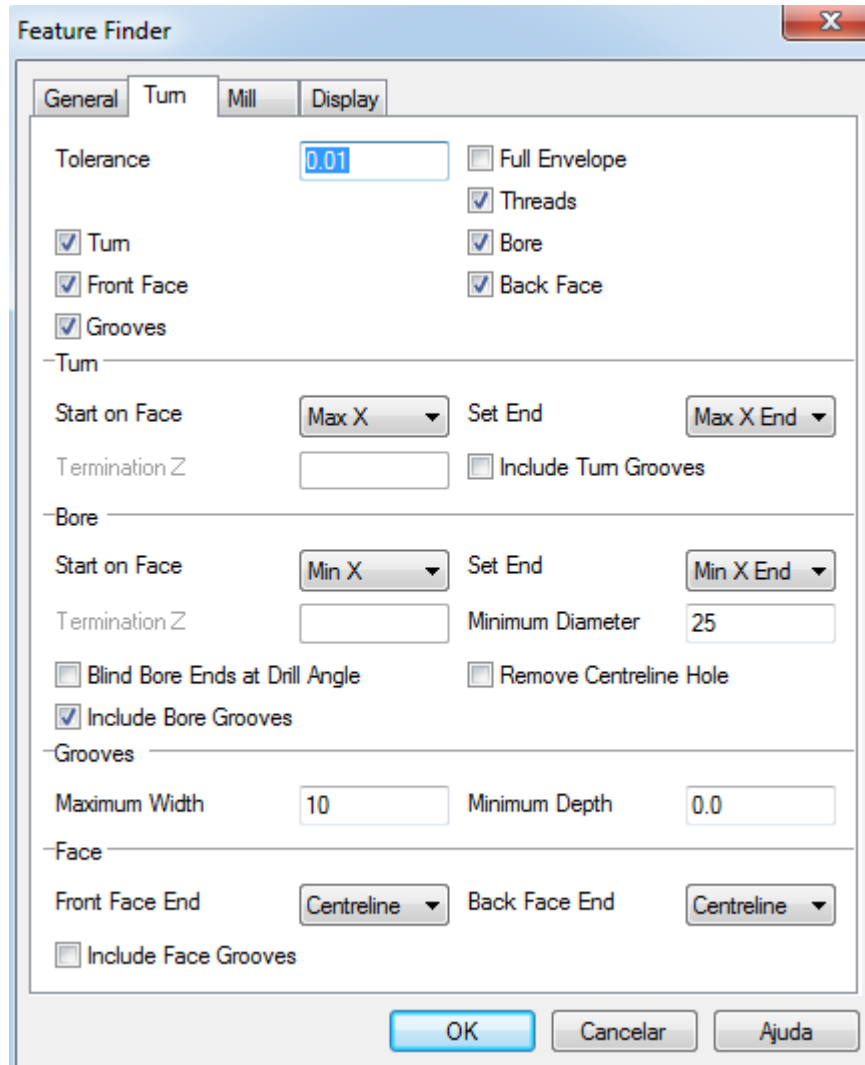
Configurar

Configurar os dados conforme a figura ao lado





Na aba Turn, faça as seguintes configurações:.

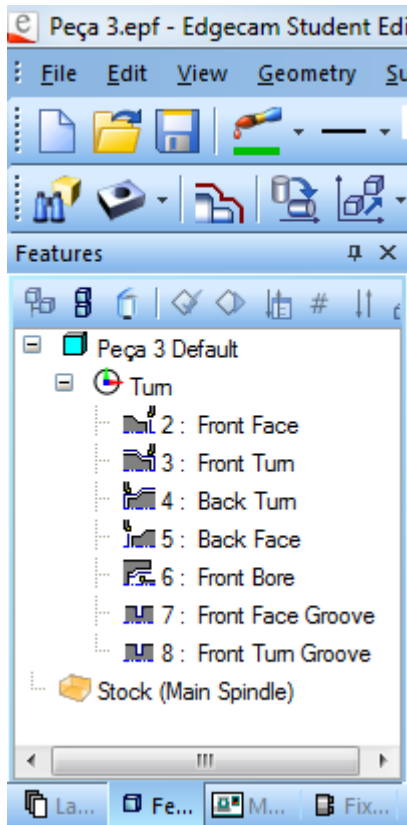


The screenshot shows the 'Feature Finder' dialog box with the 'Turn' tab selected. The configuration is as follows:

- General:** Tolerance: 0.01; Full Envelope; Threads; Bore; Back Face.
- Turn:** Turn; Front Face; Grooves; Start on Face: Max X; Set End: Max X End; Termination Z: (empty); Include Turn Grooves.
- Bore:** Start on Face: Min X; Set End: Min X End; Termination Z: (empty); Minimum Diameter: 25; Blind Bore Ends at Drill Angle; Remove Centreline Hole; Include Bore Grooves.
- Grooves:** Maximum Width: 10; Minimum Depth: 0.0.
- Face:** Front Face End: Centreline; Back Face End: Centreline; Include Face Grooves.

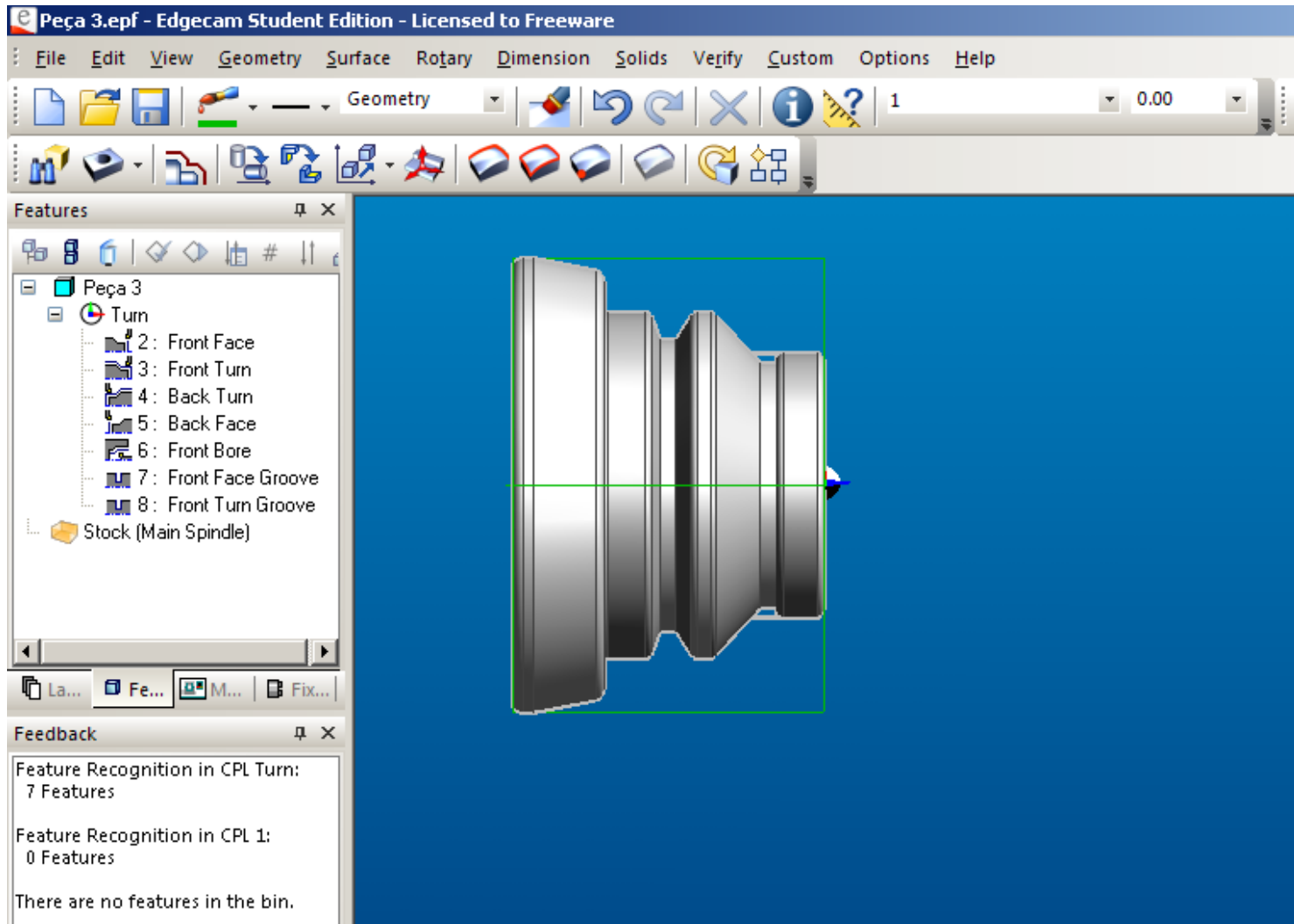
Buttons at the bottom: OK, Cancelar, Ajuda.

Note que a árvore de Features aparece na janela esquerda da tela



Operações de modelagem da
peça reconhecidas pelo
sistema CAM

Observe como ficou a configuração da peça.

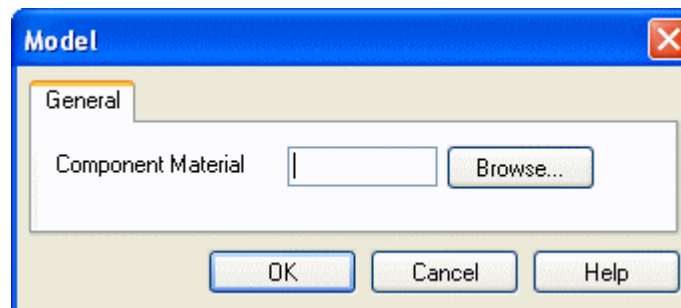
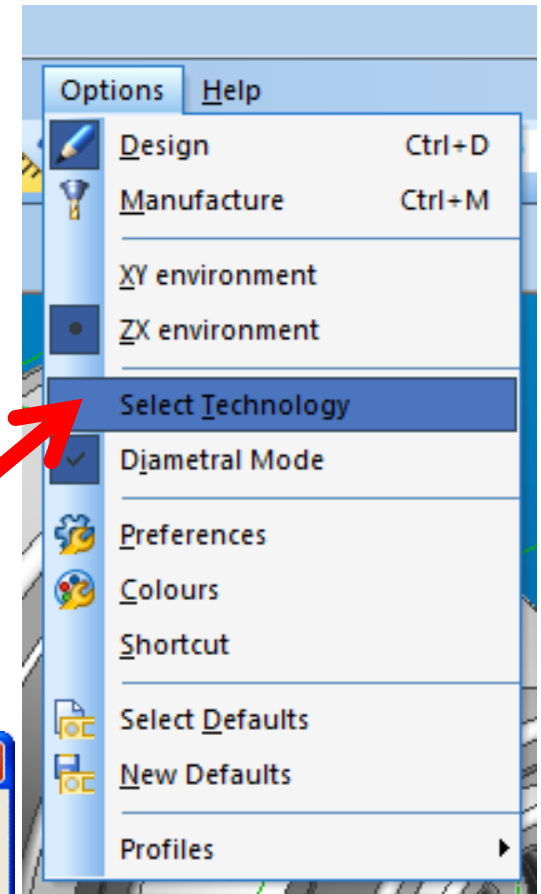


edgecam[®] Especificando um Material

EDGE CAM.COM

Clique no menu
Options depois em
Select Technology

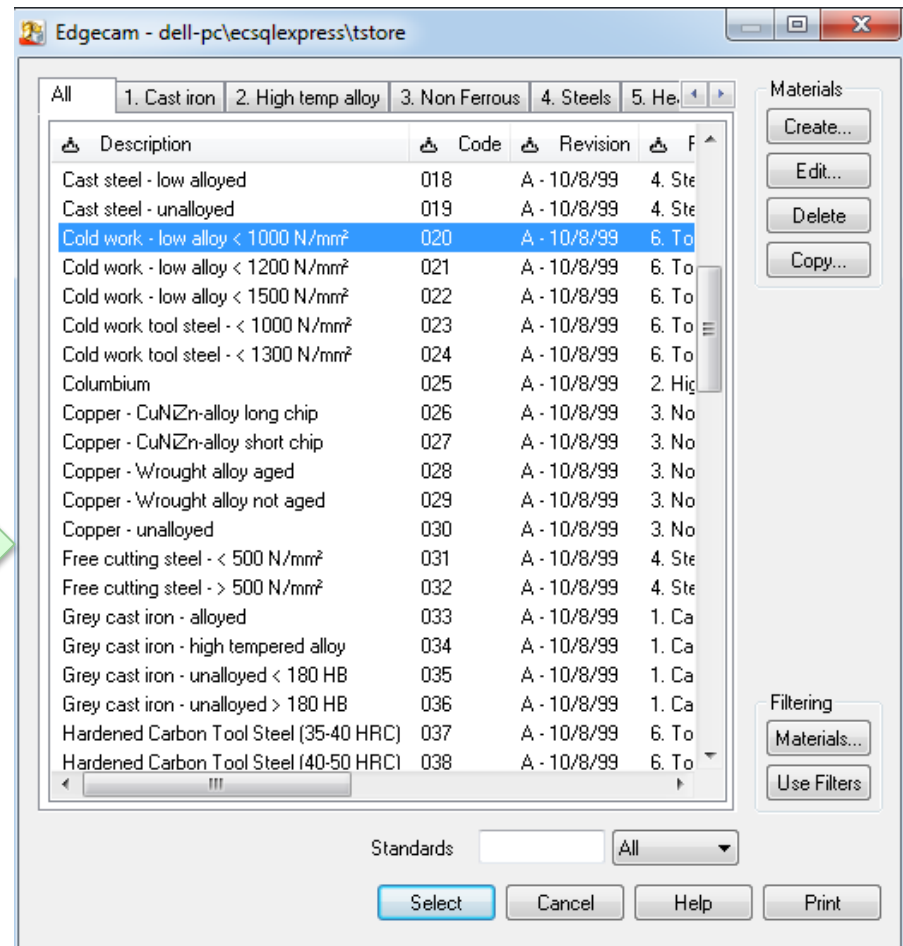
Na caixa de diálogo
Model clique
em **Browse**



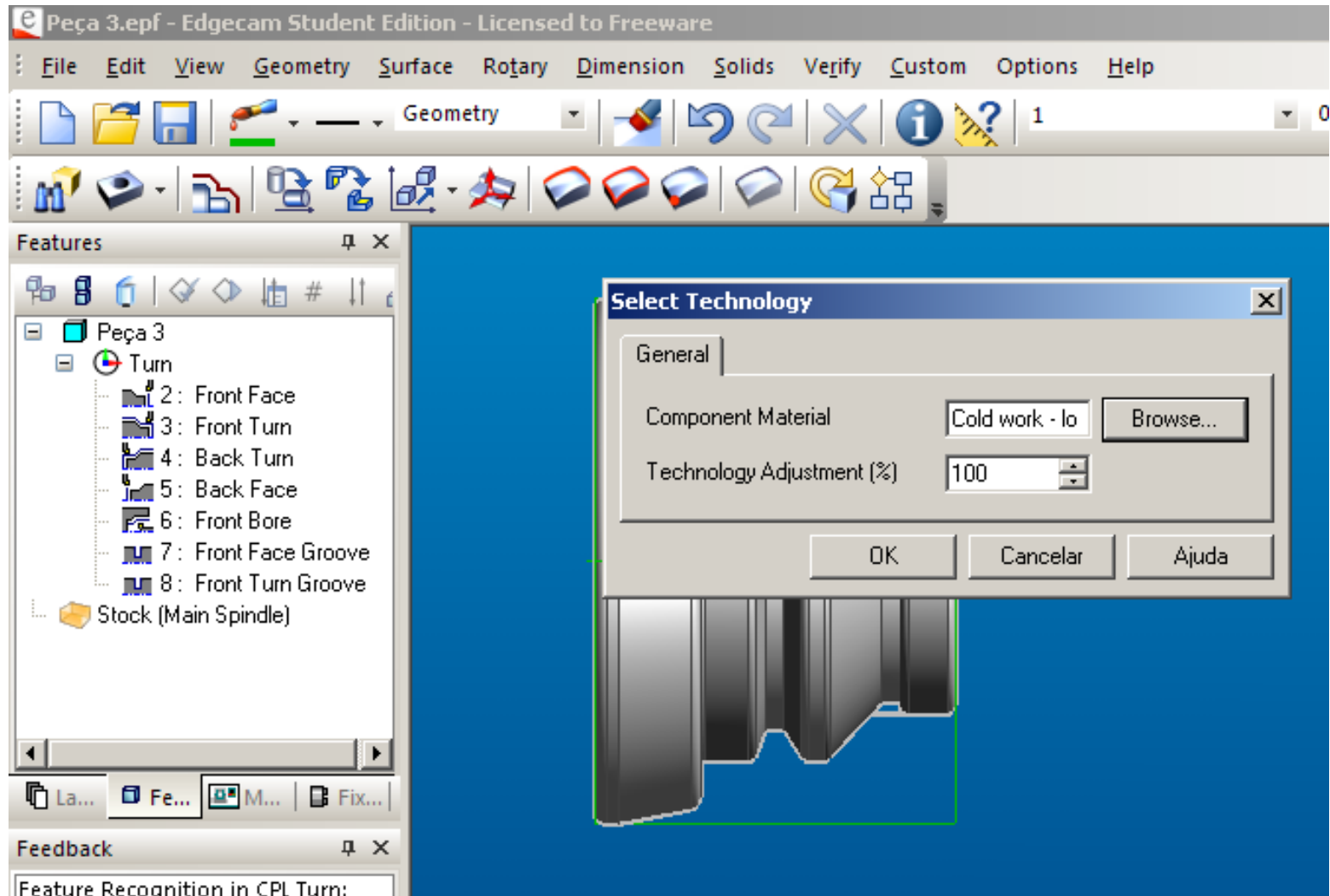
Especificando um Material

Abrirá uma janela com biblioteca de materiais.

Na caixa de diálogo procure na lista da aba All, e clique em Coldwork –lowalloy< 1000 N/mm², para selecionar clique no botão Select.

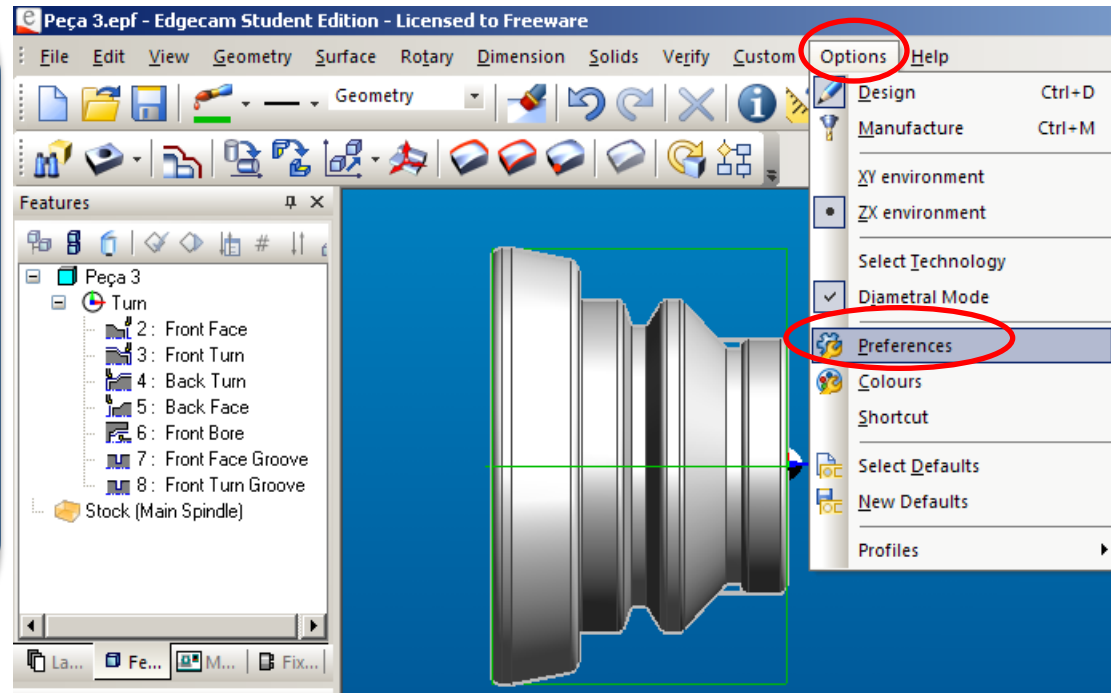


Clique ok para finalizar a escolha.



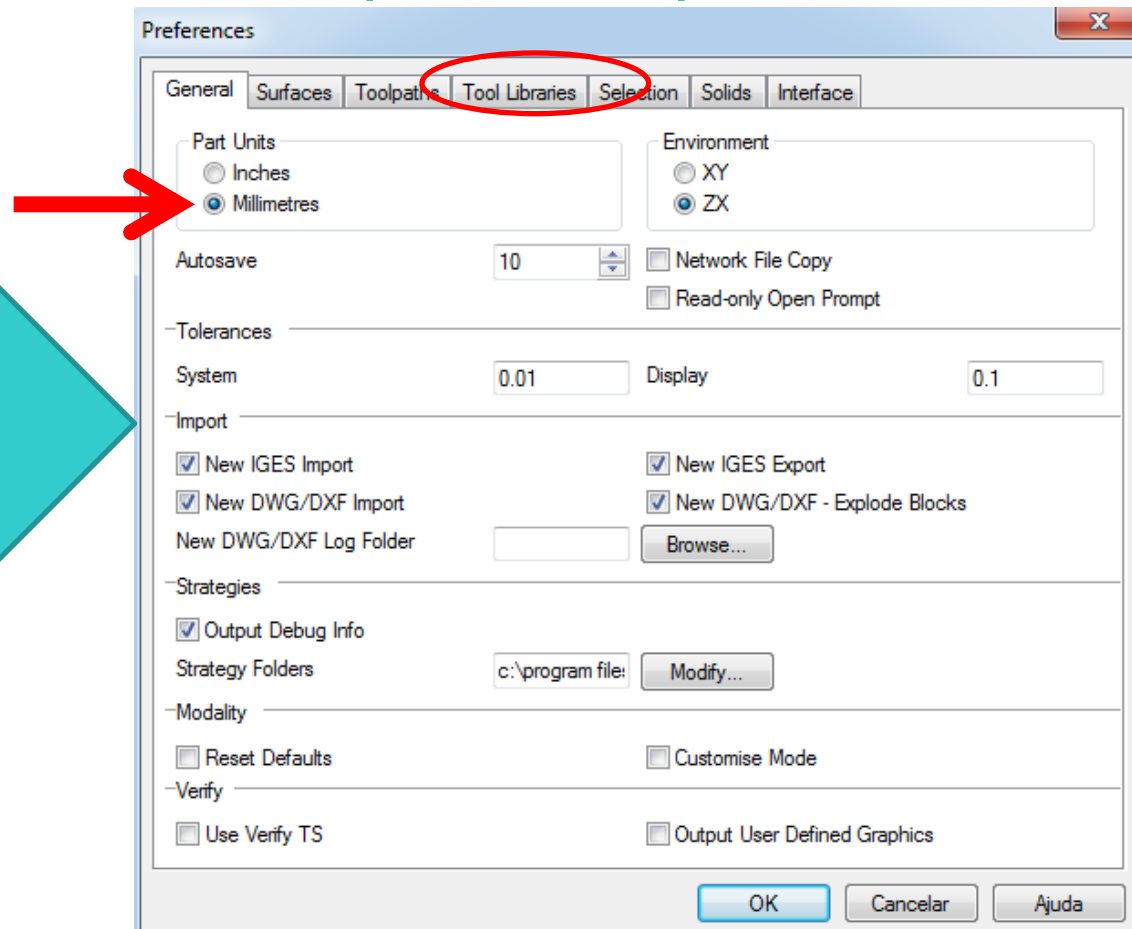
Usando a ToolStore você pode acessar ferramentas de banco de dados diferentes,

Para verificar ou alterar configurações gerais do sistema clique em :



Neste exemplo, não será alterado nada, mas você poderia mudar o sistema de medidas, por exemplo:

OBS: Outra coisa que podemos alterar aqui é o banco de dados de ferramentas, em ToolLibraries.



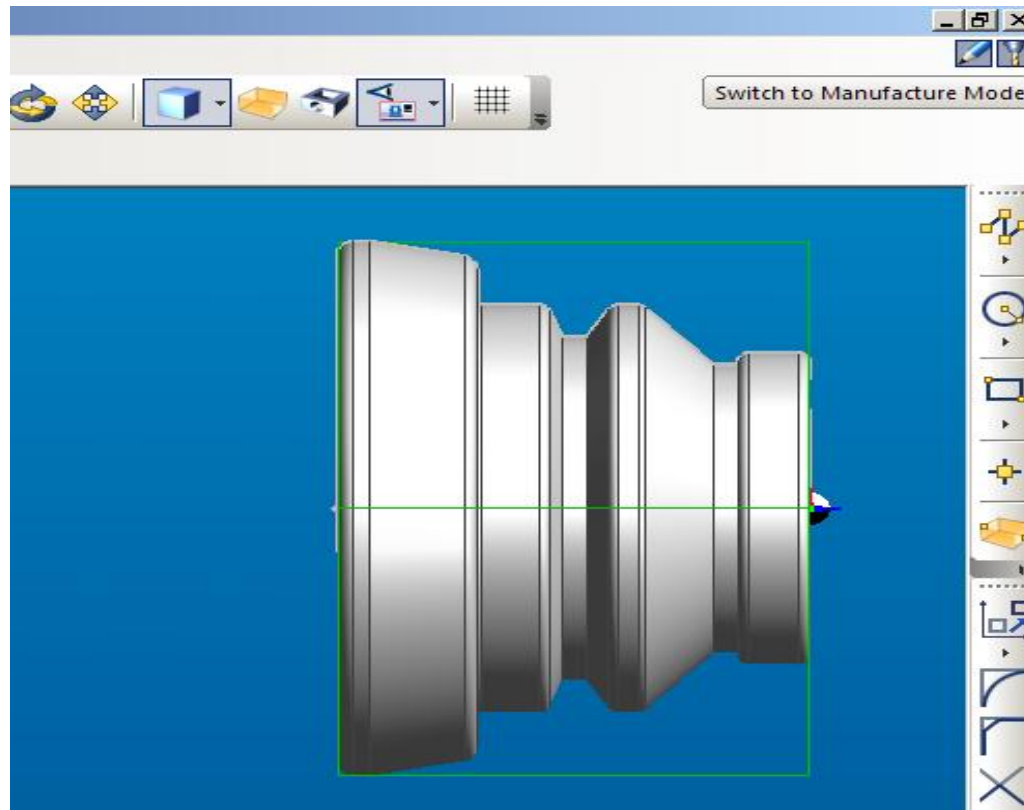
Sequência de Usinagem

Após estas configurações e ajustes a nossa peça está pronta para ser usinada.

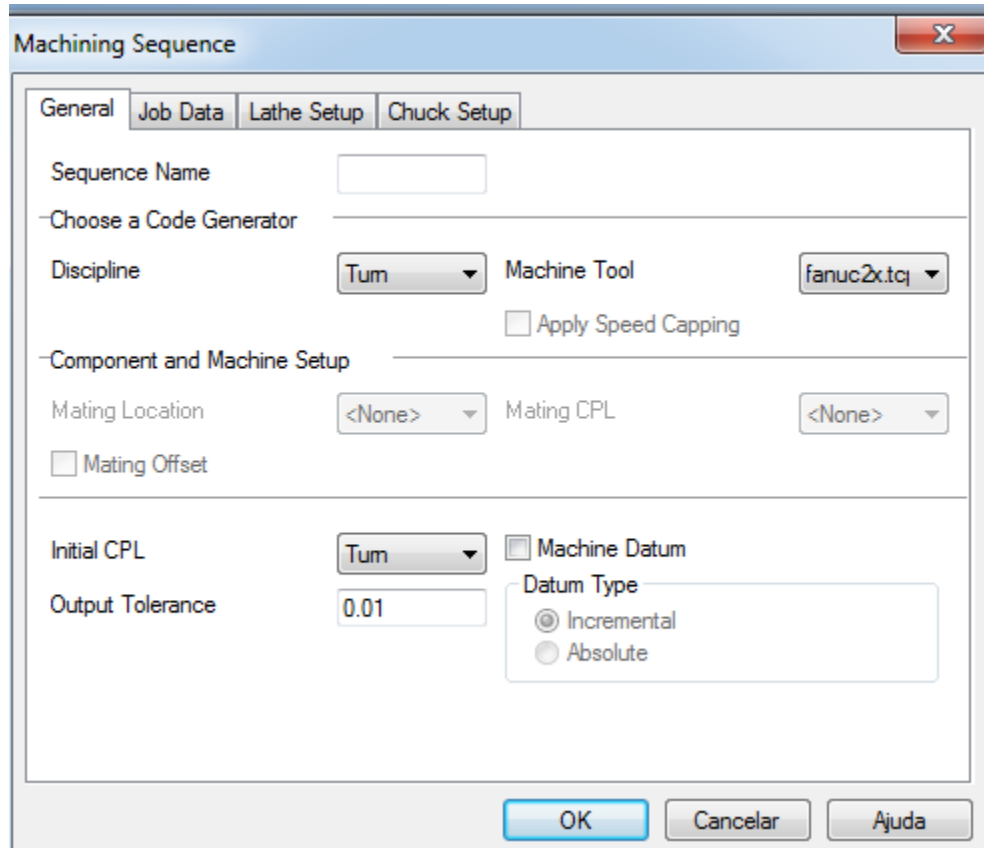
Vamos criar agora a sequência de usinagem!

Criando uma Sequência de Usinagem

Passa para o modo de Manufatura – clique no ícone Manufacture no canto superior da janela do EdgeCAM.



Escolha do pós processador



Machining Sequence

General | Job Data | Lathe Setup | Chuck Setup

Sequence Name

Choose a Code Generator

Discipline Machine Tool

Apply Speed Capping

Component and Machine Setup

Mating Location Mating CPL

Mating Offset

Initial CPL Machine Datum

Output Tolerance

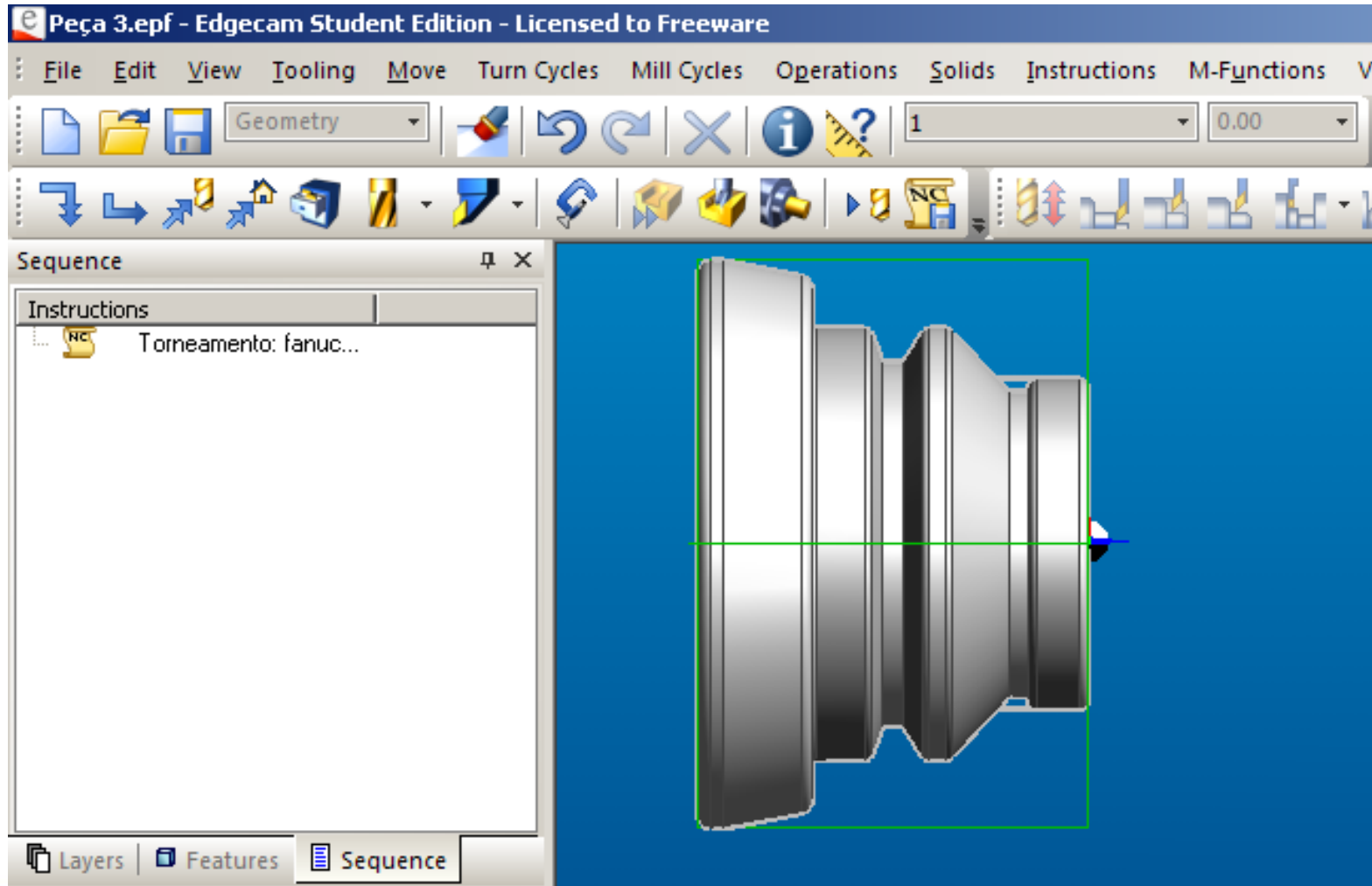
Datum Type

Incremental

Absolute

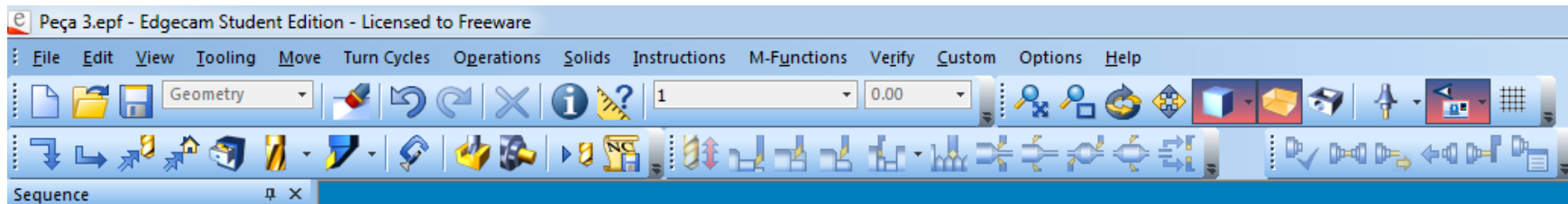
OK Cancelar Ajuda

No “modo” de manufatura você vai ver que a interface muda para suportar os processos de usinagem



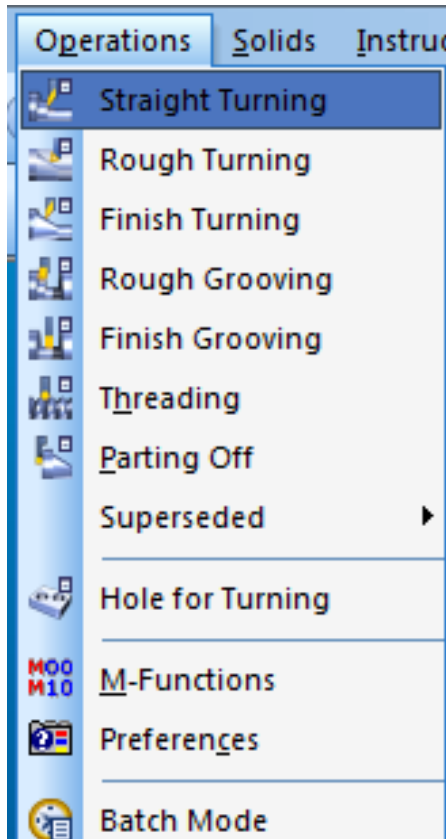
Modo de manufatura

No “modo” de manufatura você vai ver que a interface muda para suportar os processos de usinagem.

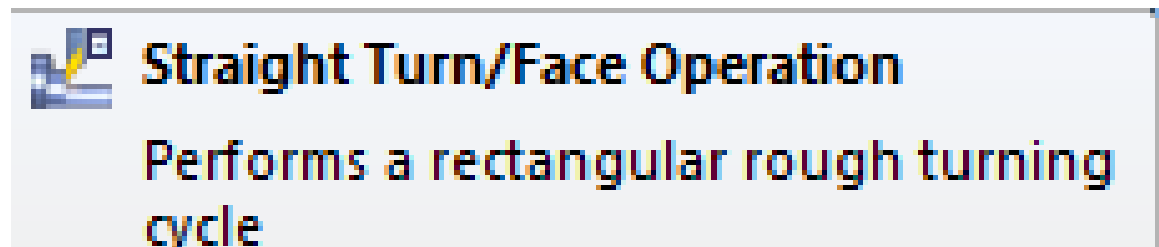


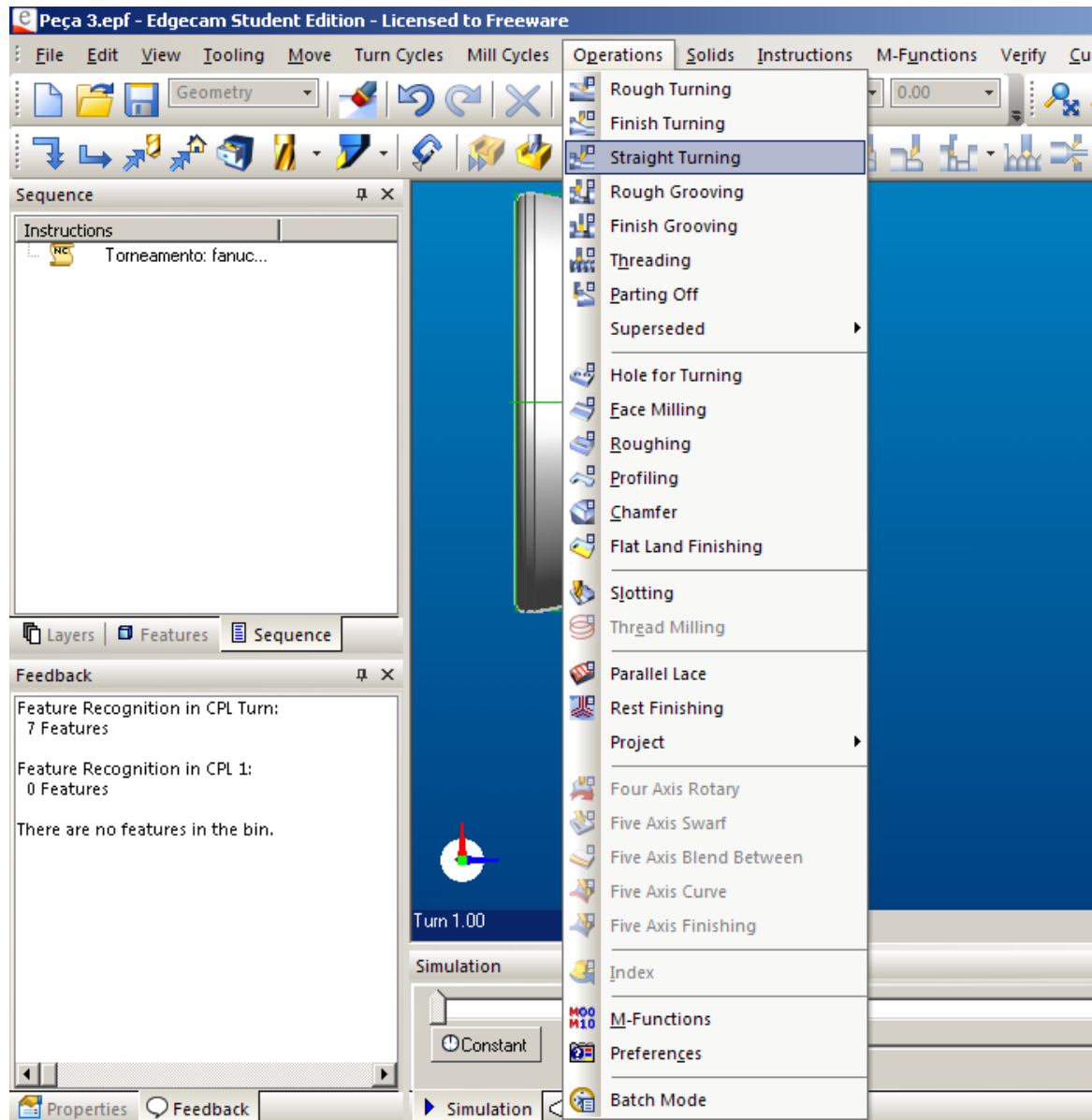
Para facear a peça selecione a opção “*StraightTurning*”

- Pelo menu Operations



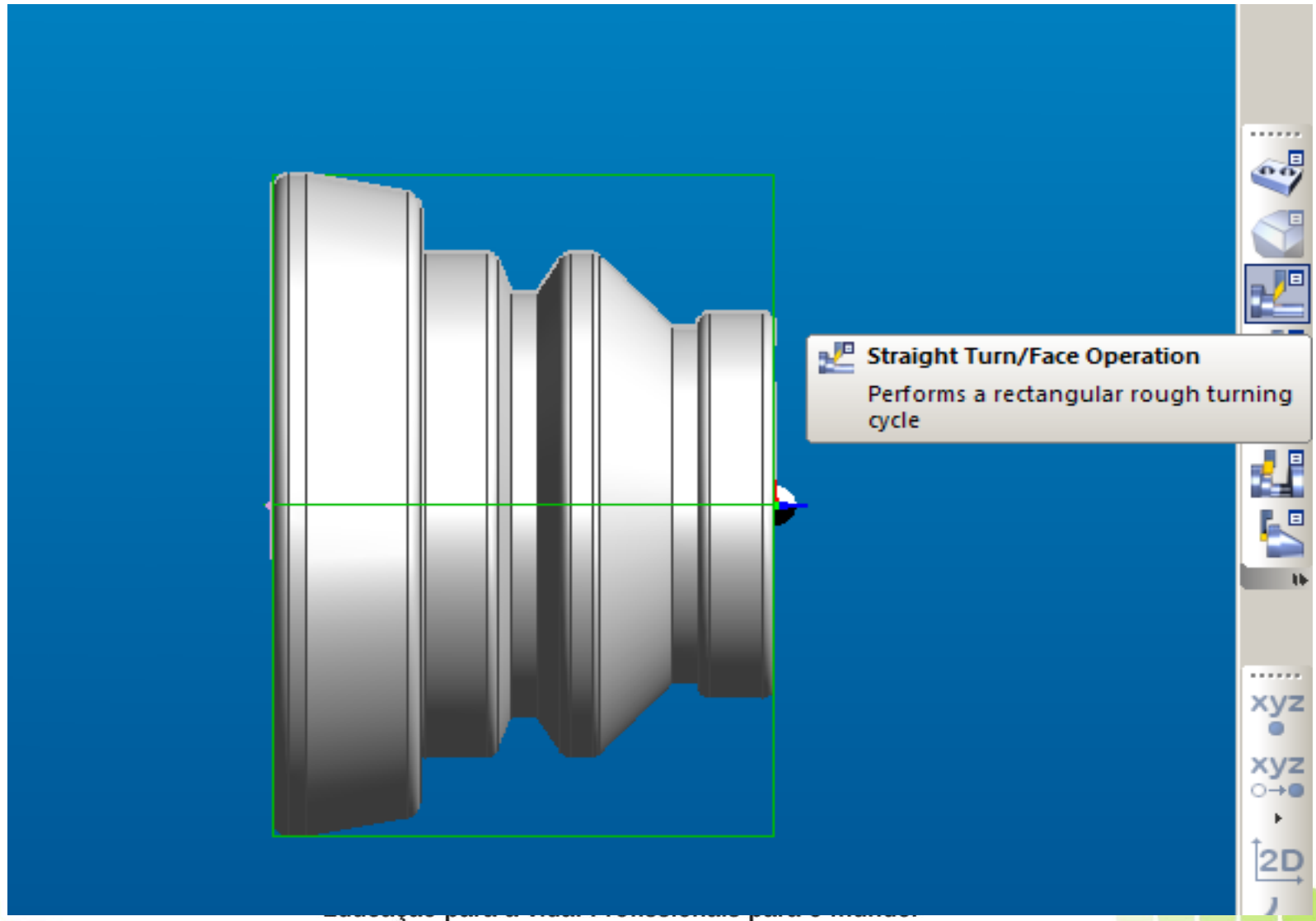
- Ou vá direto no ícone:





Para fazer a
Peça faça
conforme a
figura.

Ou vá direto no ícone.



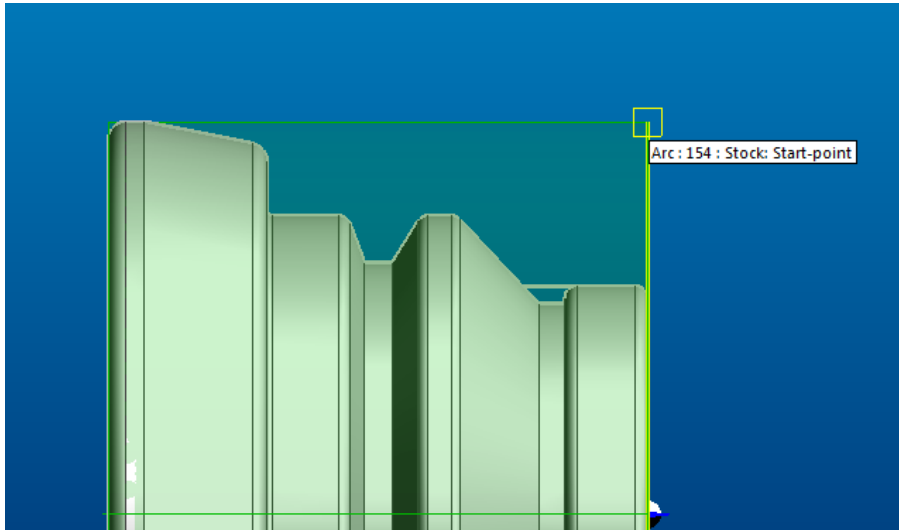
Após clicar no comando
“StraightTurning”, o Edgcam nos pergunta
:

Onde
inicia-se a
usinagem?

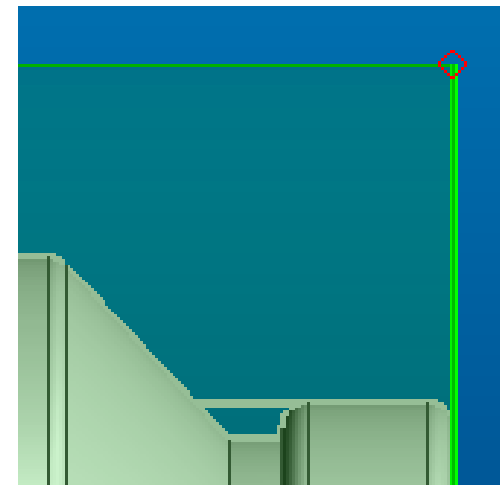
Podemos verificar
as informações
solicitadas pelo
sistema no canto
esquerdo da tela.

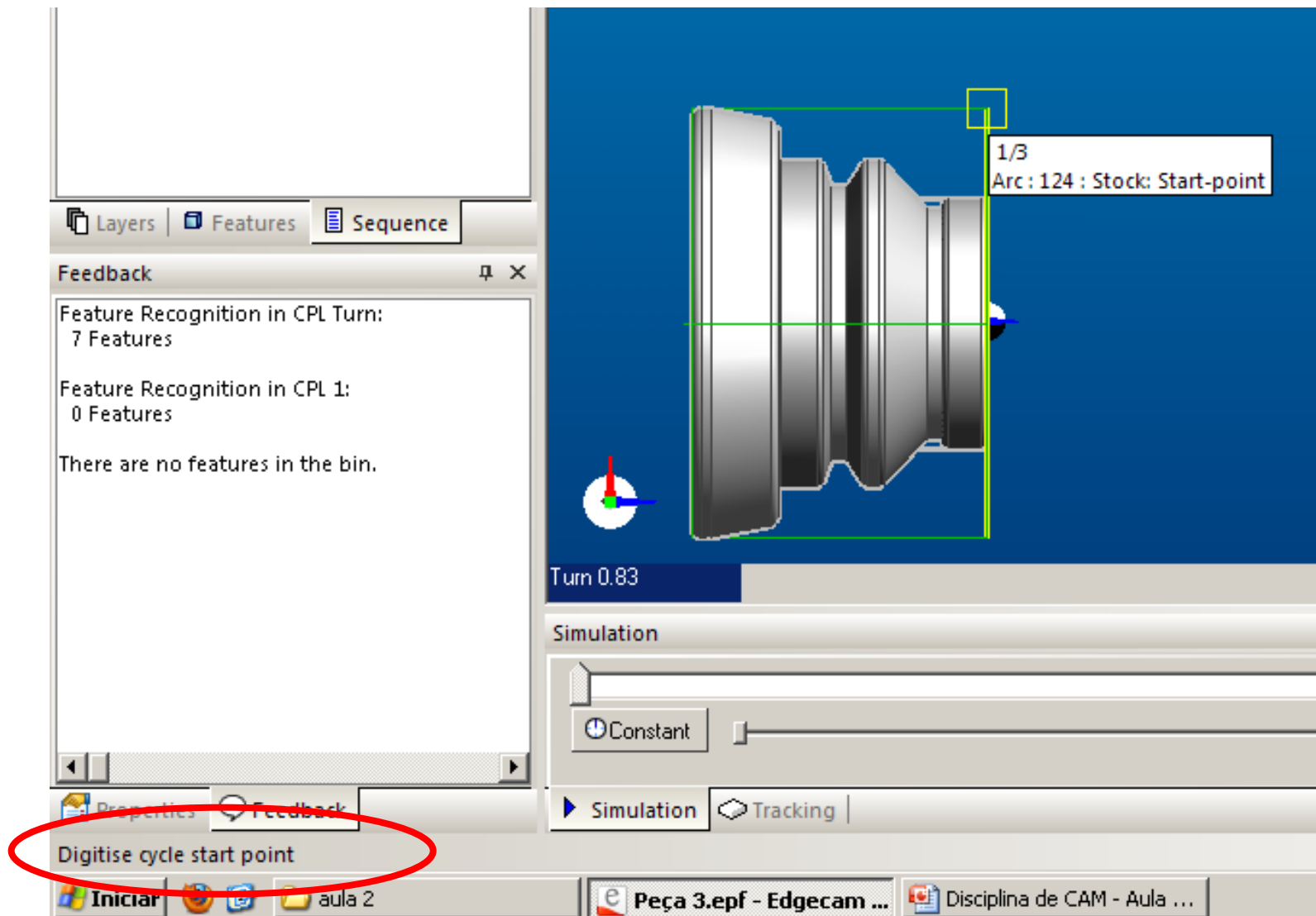


- Start Point: Pode ser indicado através de coordenadas ou clicando na tela.



- Após o clique deve aparecer um
 - losango vermelho

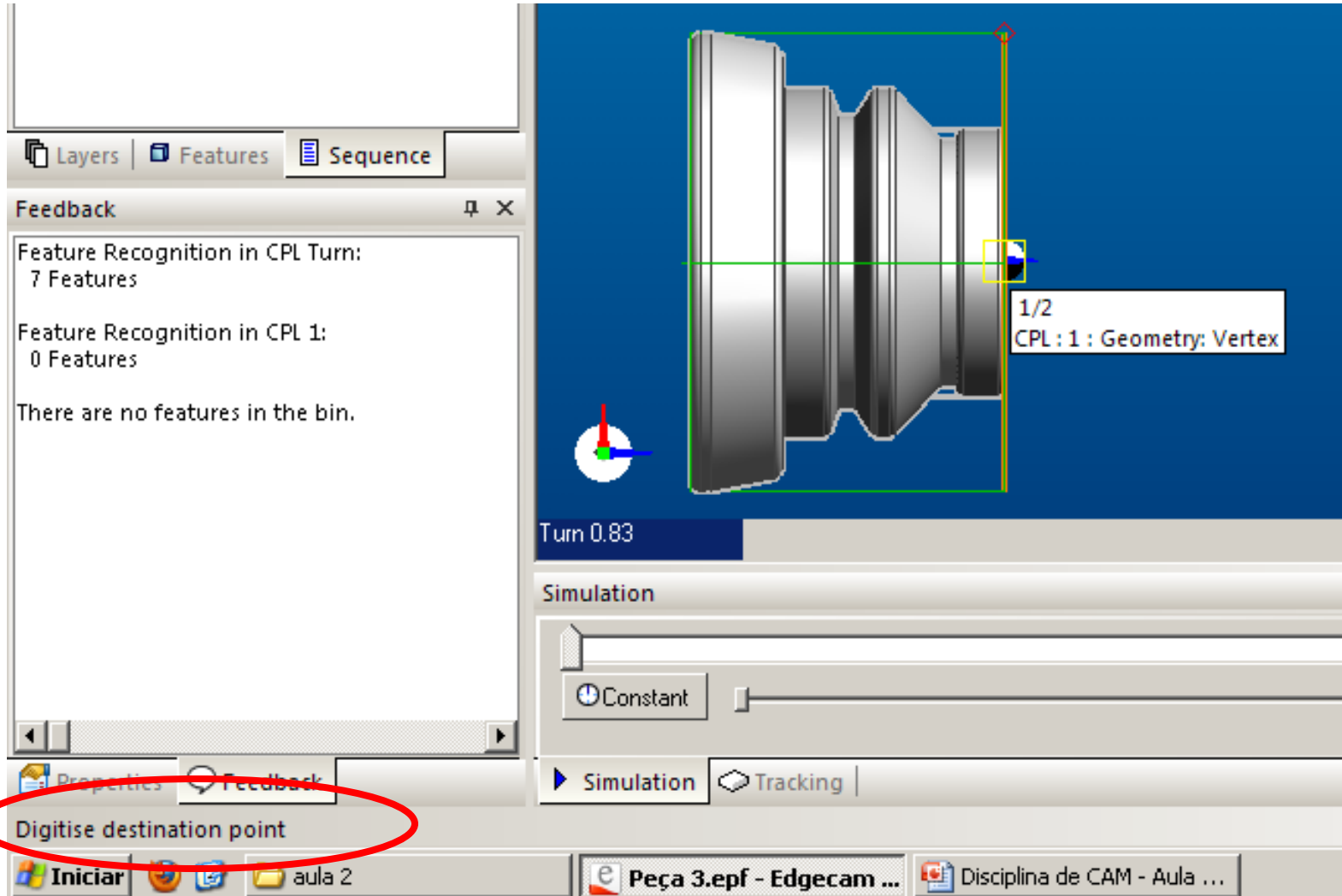




The screenshot displays the Edgecam software interface. On the left, a 'Feedback' window shows the following text:

- Feature Recognition in CPL Turn: 7 Features
- Feature Recognition in CPL 1: 0 Features
- There are no features in the bin.

The main workspace shows a 3D model of a mechanical part. A yellow box highlights a point on the part, with a tooltip displaying: '1/3 Arc : 124 : Stock: Start-point'. Below the model, a 'Simulation' panel includes a 'Constant' button and a slider. At the bottom, a toolbar contains a button labeled 'Digitise cycle start point', which is circled in red. The Windows taskbar at the bottom shows the 'Iniciar' button and open applications: 'aula 2', 'Peça 3.epf - Edgecam ...', and 'Disciplina de CAM - Aula ...'.



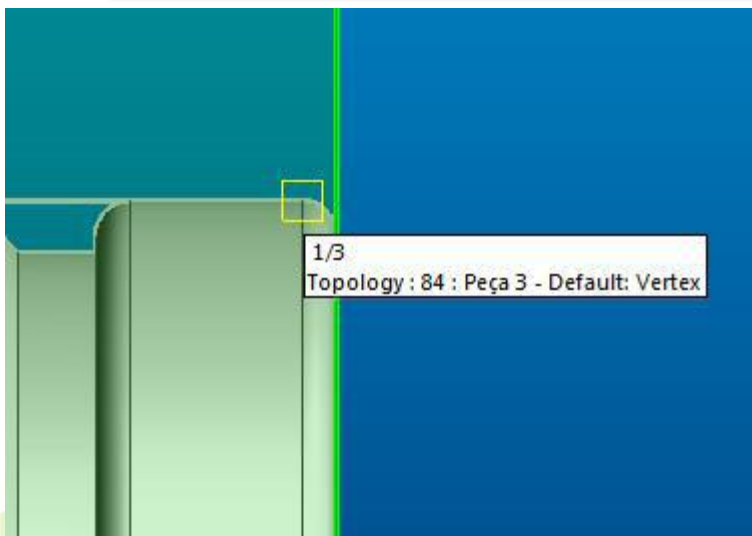
The screenshot displays the Edgcam software interface. On the left, a 'Feedback' window shows the following text:

- Feature Recognition in CPL Turn: 7 Features
- Feature Recognition in CPL 1: 0 Features
- There are no features in the bin.

The main workspace shows a 3D model of a mechanical part with a green bounding box. A tooltip indicates: '1/2 CPL : 1 : Geometry: Vertex'. Below the model, a 'Turn 0.83' progress bar is visible. The 'Simulation' section includes a 'Constant' slider and buttons for 'Simulation' and 'Tracking'. At the bottom, the 'Digitise destination point' button is circled in red. The Windows taskbar at the bottom shows the 'Iniciar' button and open applications: 'aula 2', 'Peça 3.epf - Edgcam ...', and 'Disciplina de CAM - Aula ...'.

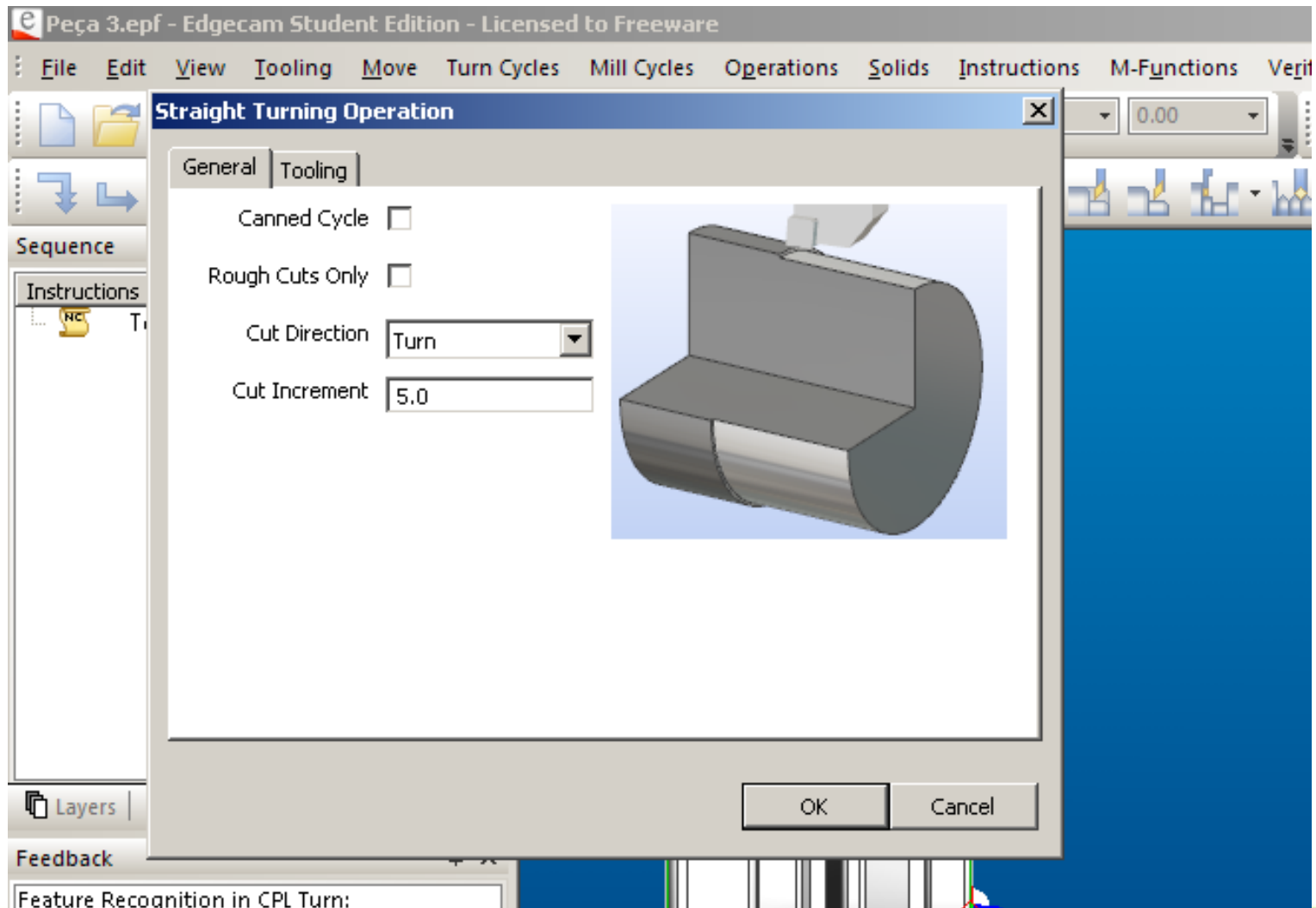
Em seguida aparece uma nova mensagem, solicitando o ponto de destino:

Digitise destination point: Pode ser indicado através de coordenadas ou clicando na tela.

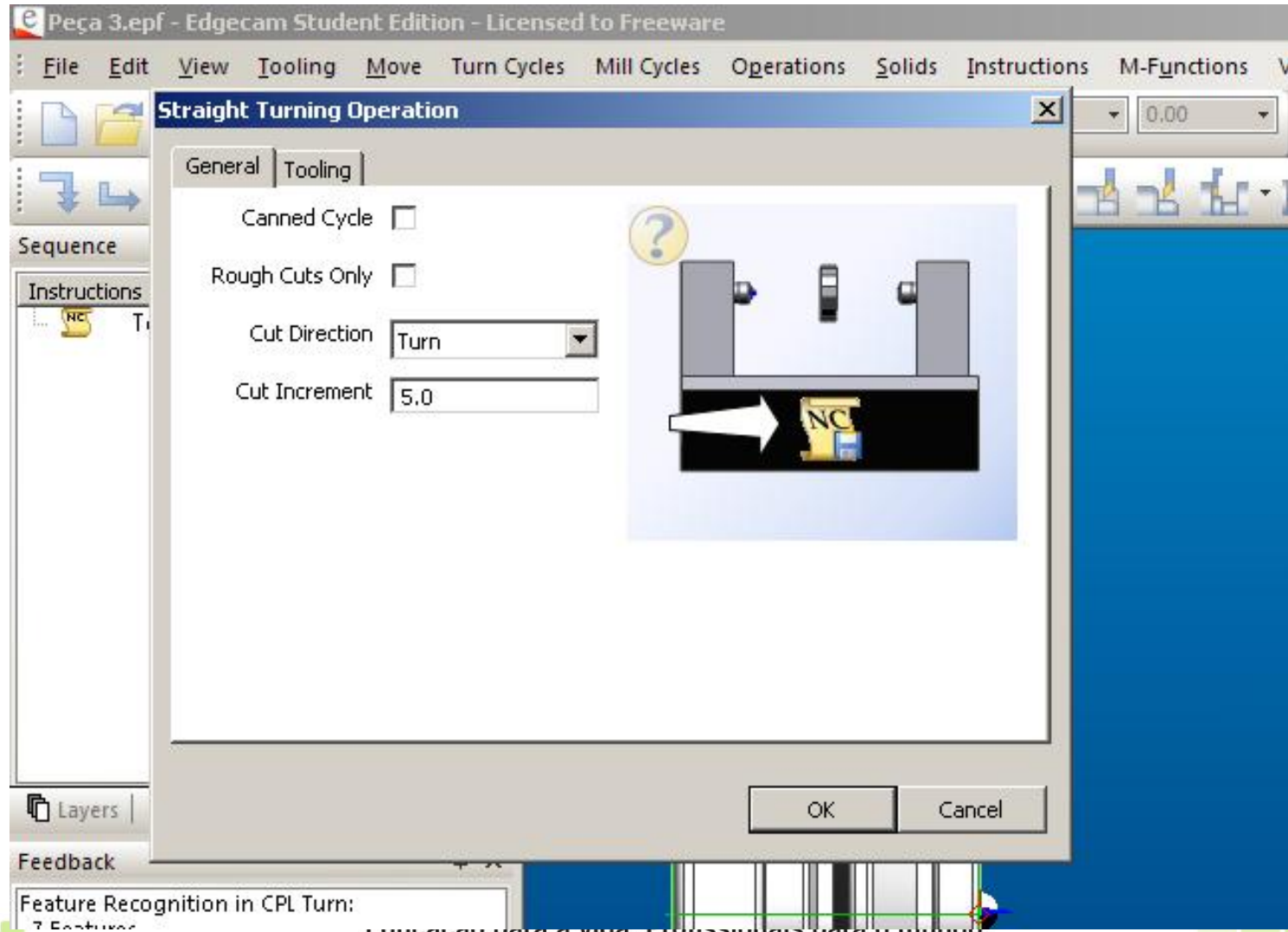


Após o clique
aparece a janela da
operação!

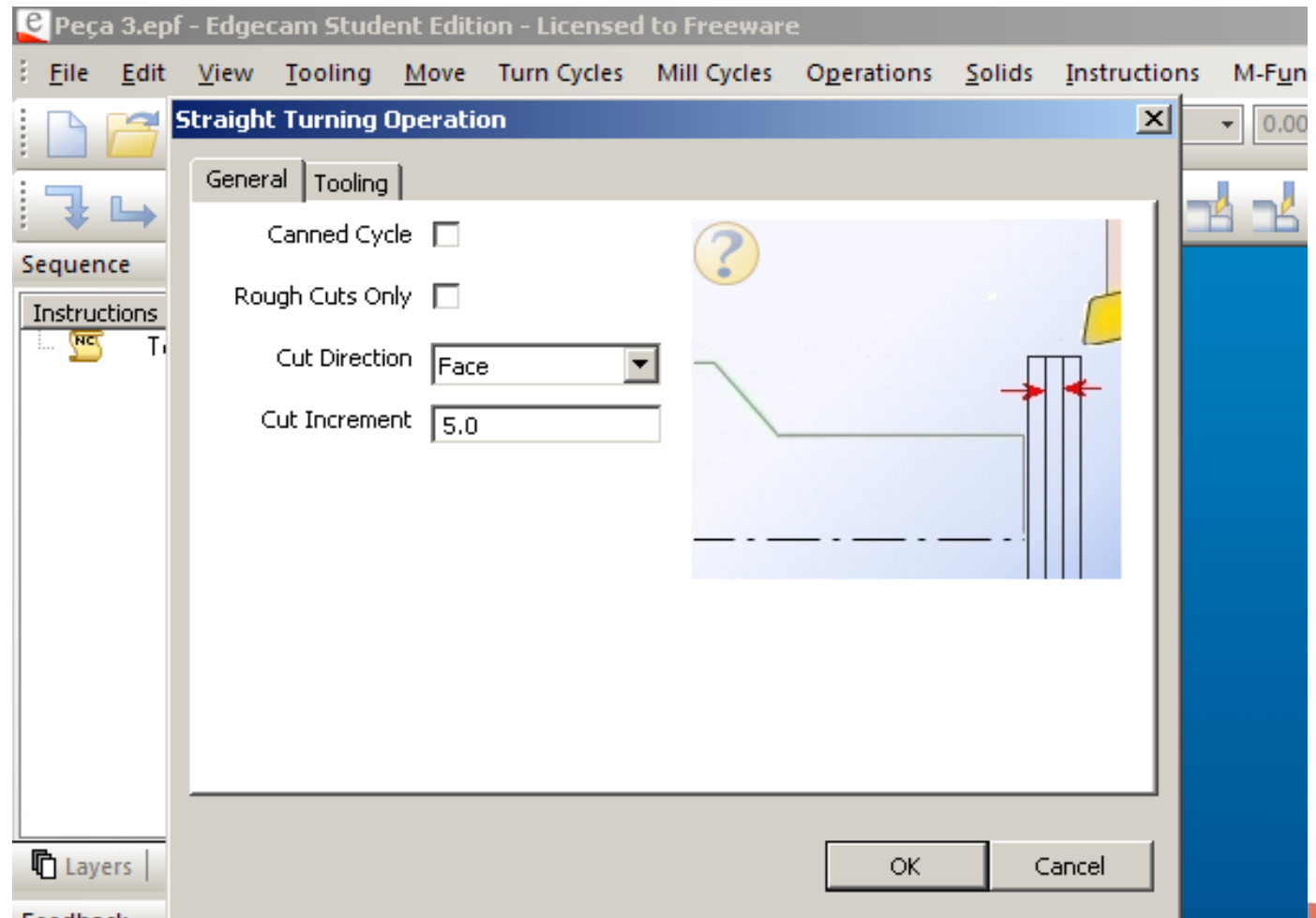
Observe a janela aberta.



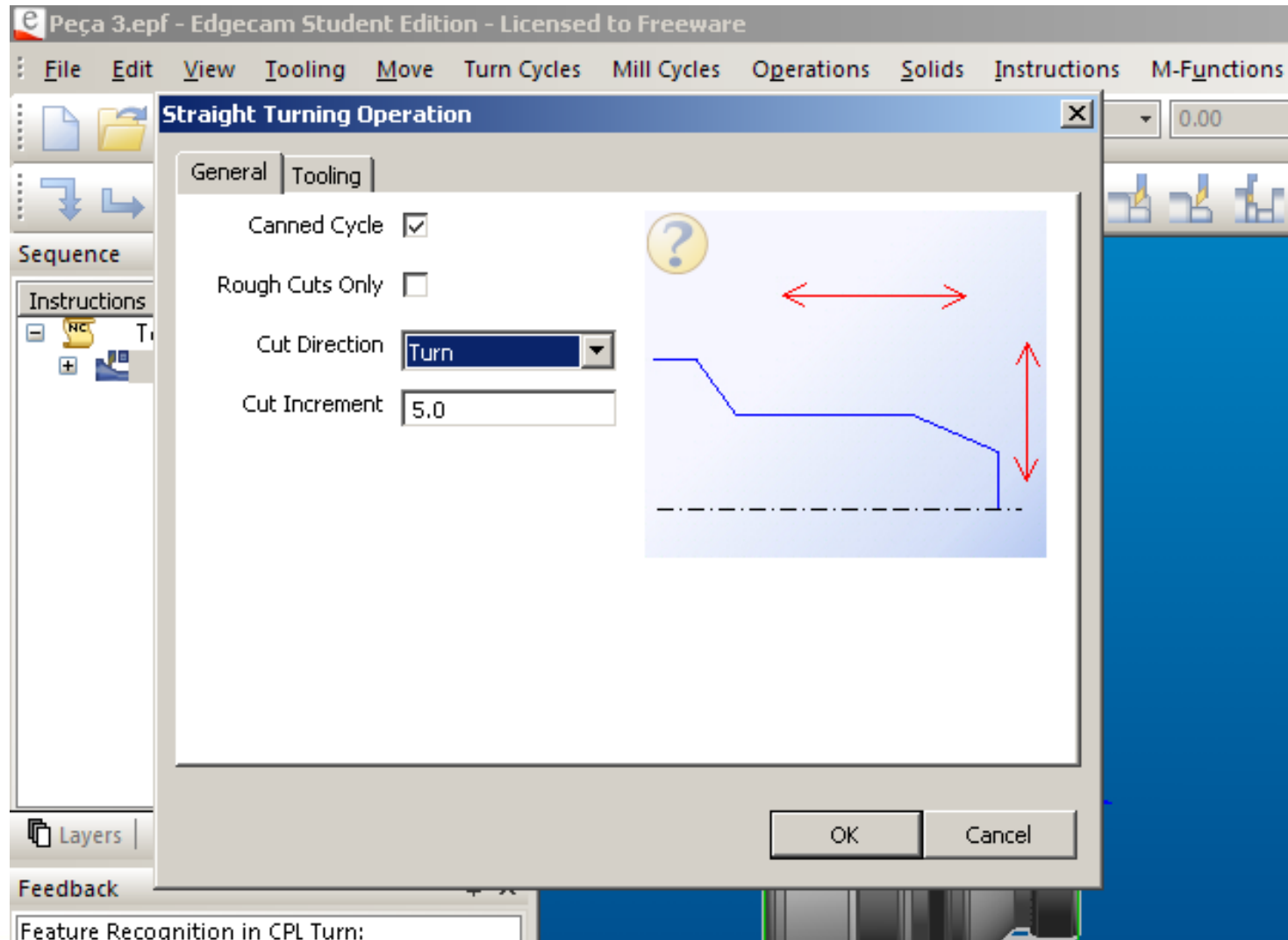
Observe a janela aberta.



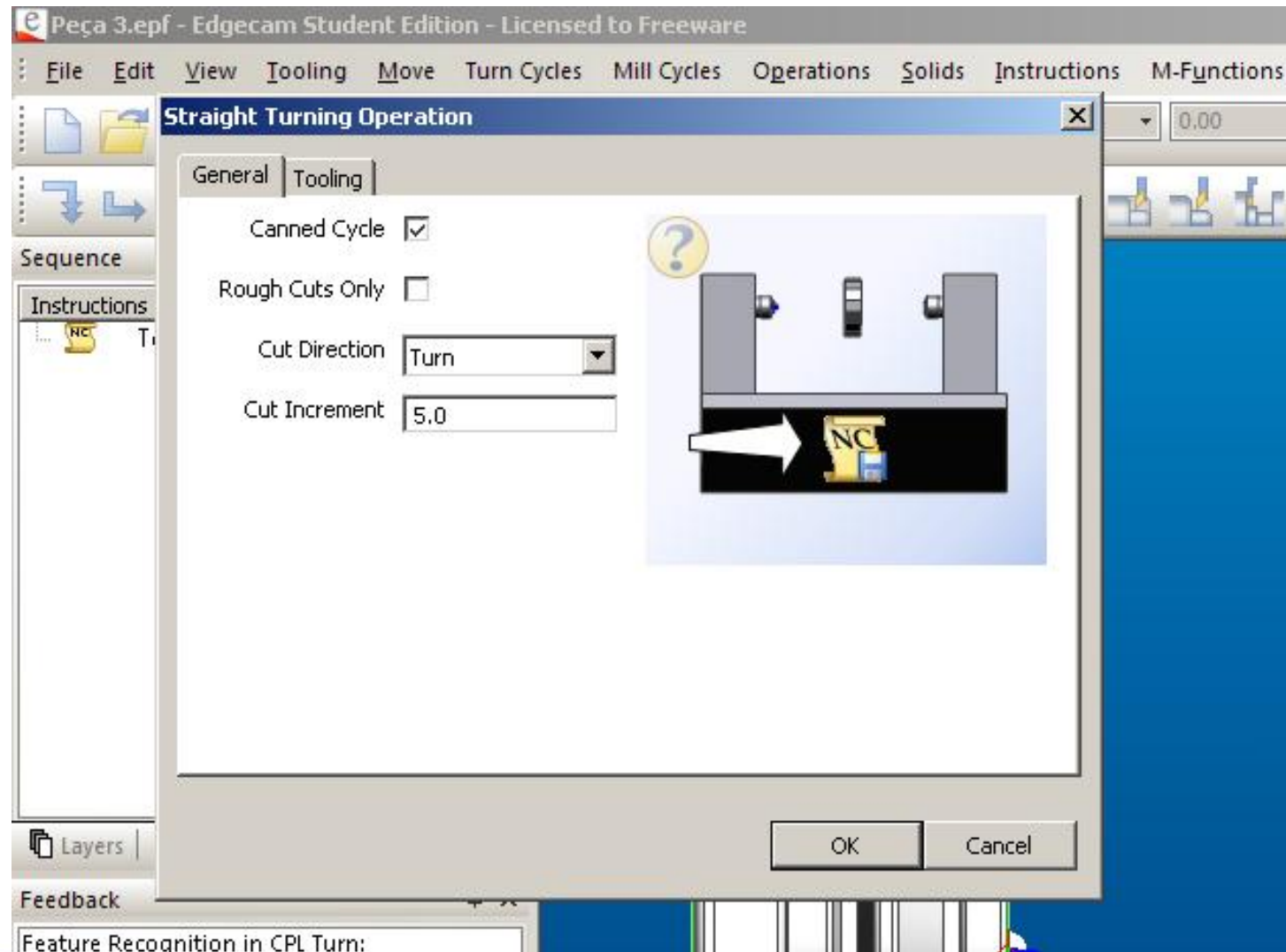
Escolha a profundidade de corte em “cut increment” pode ser 5mm.



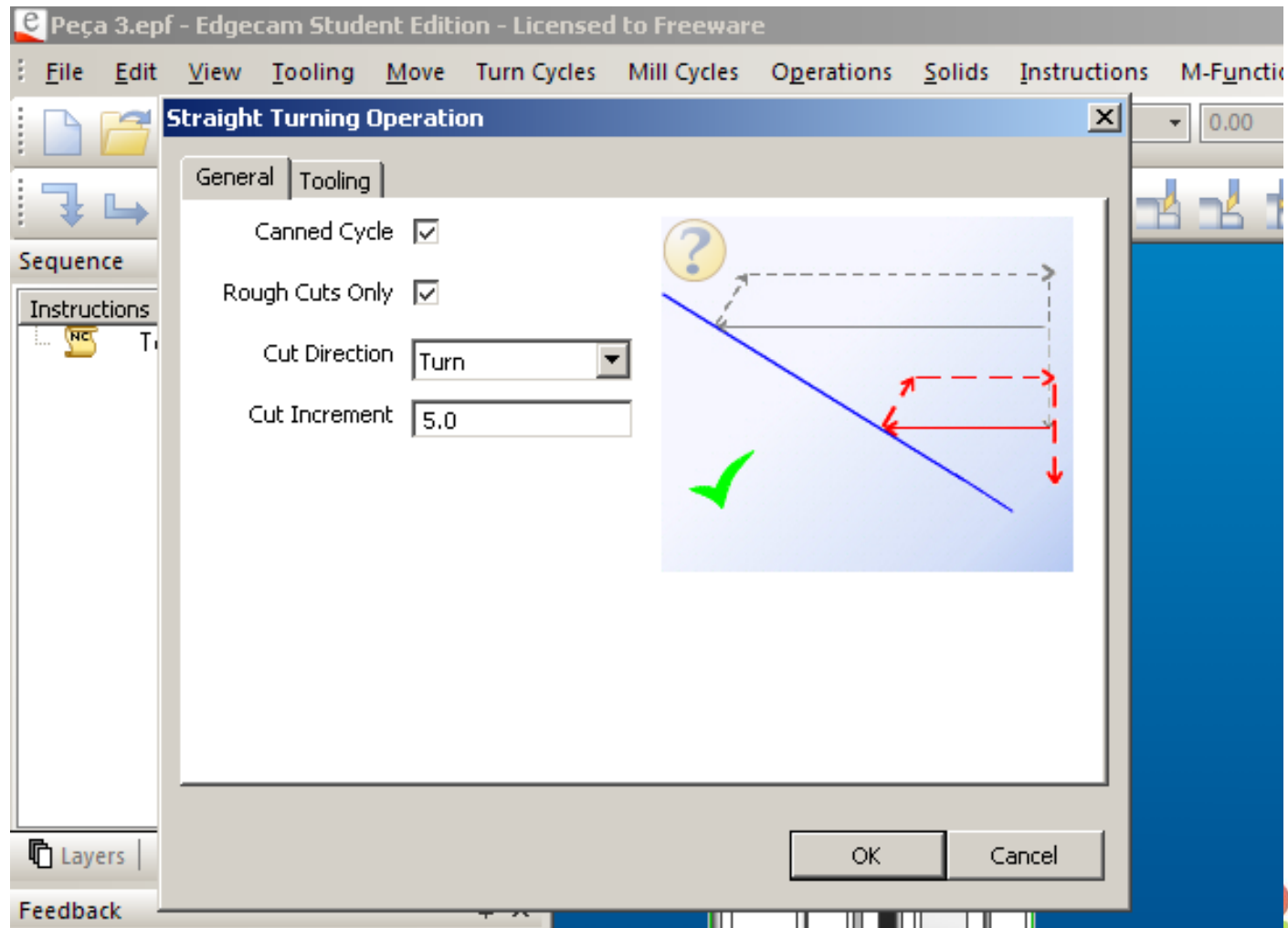
Em “Cut direction” marque Turn.



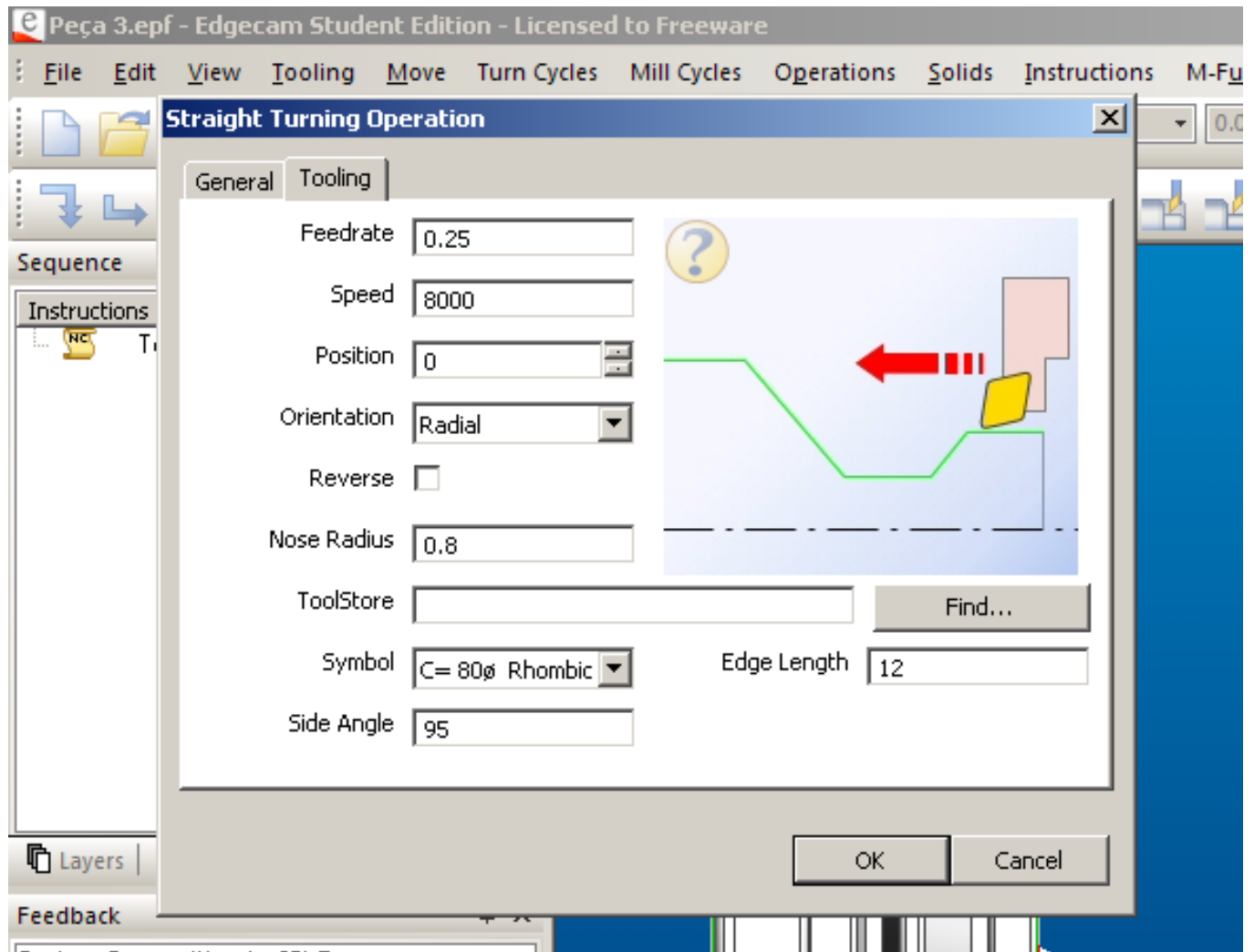
Selecione “Canned Cycle” ciclo fixo.



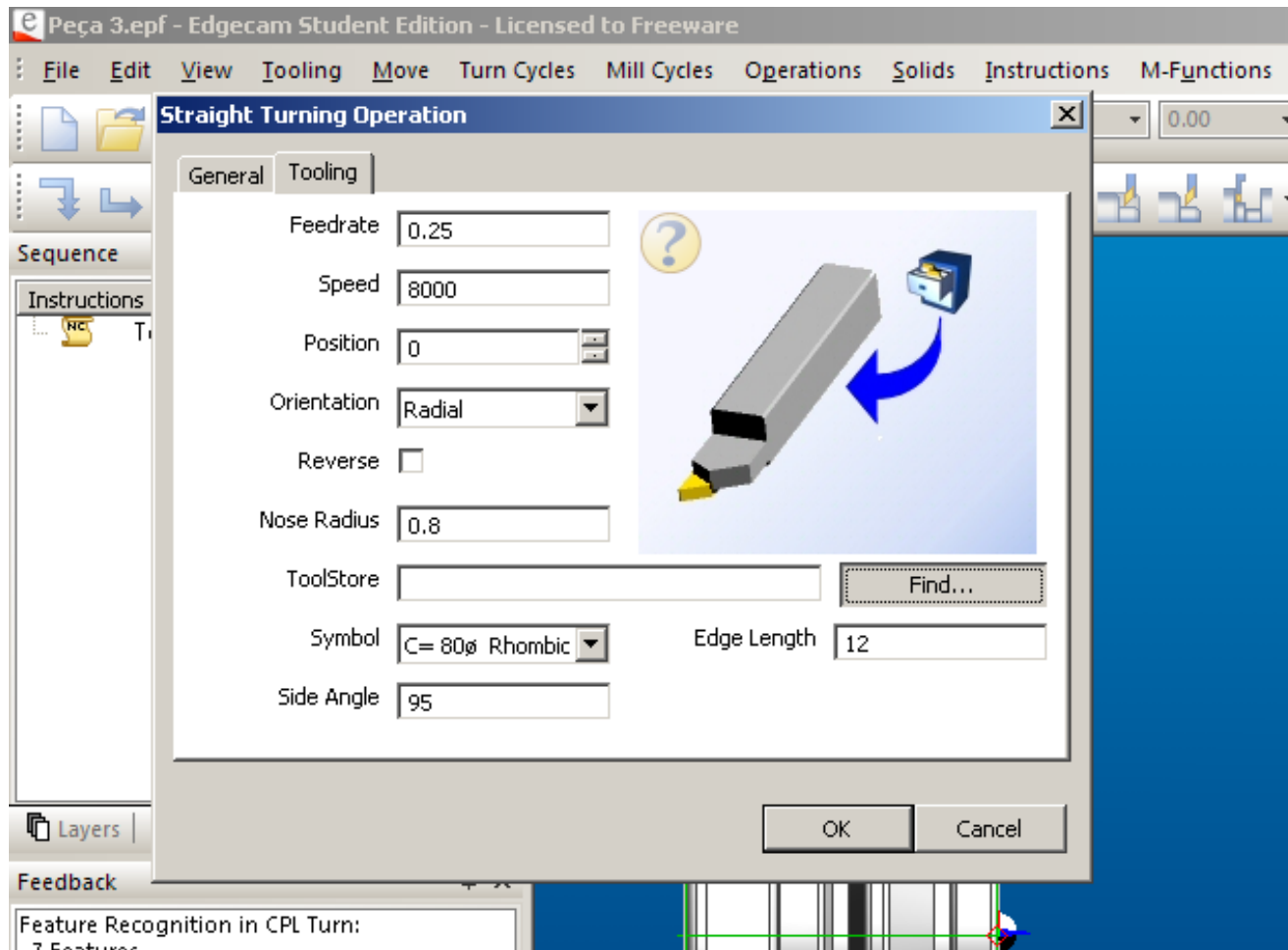
Observe a janela que aparece “rough cuts only” (somente cortes bruscos) não marque.



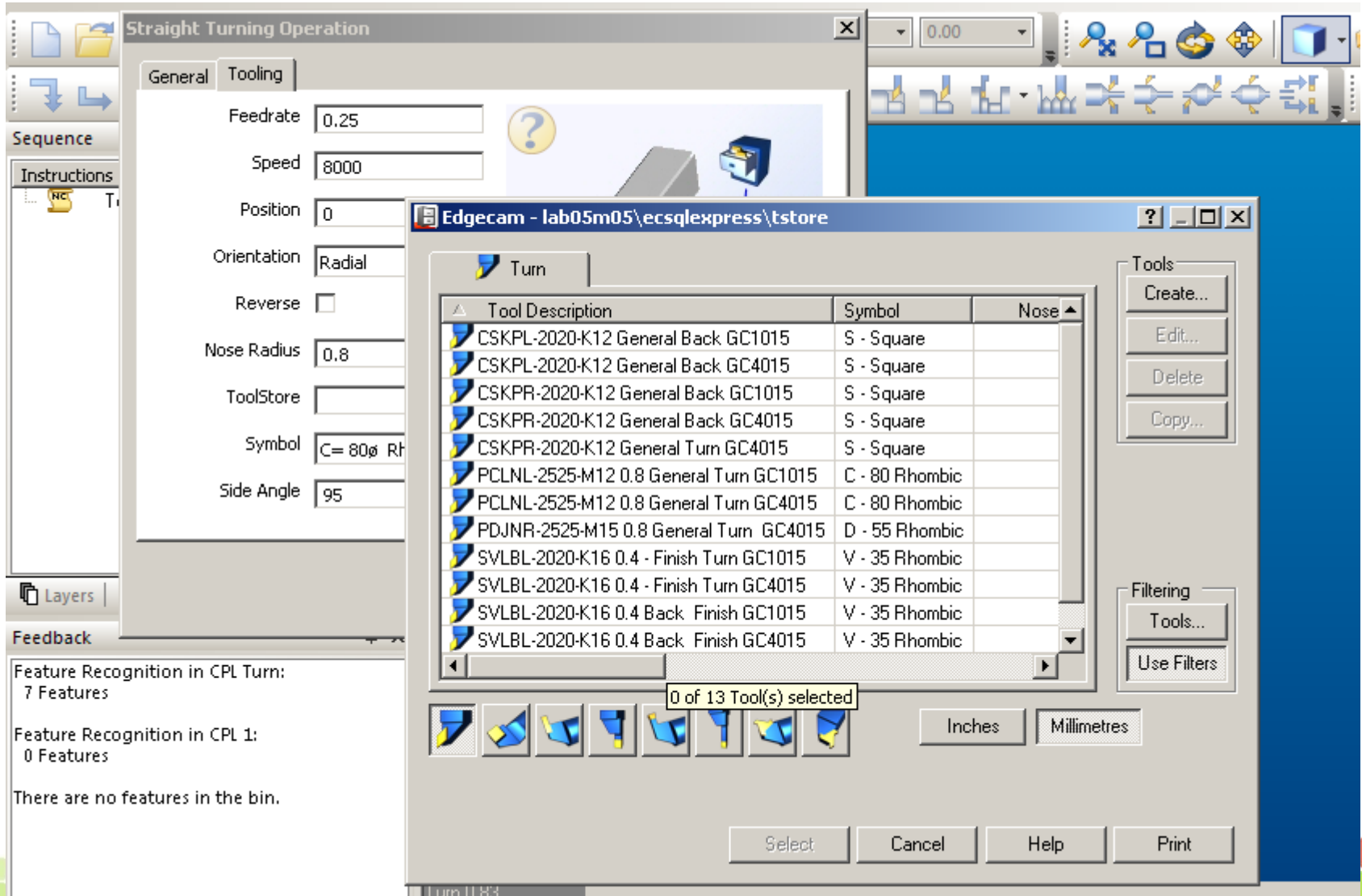
Selecione Tooling.



Primeiramente vá em “Find” encontrar para escolher a ferramenta.



Observe a janela aberta.



The screenshot displays the Edgcam software interface. The main window is titled "Straight Turning Operation" and contains a "Tooling" tab with the following parameters:

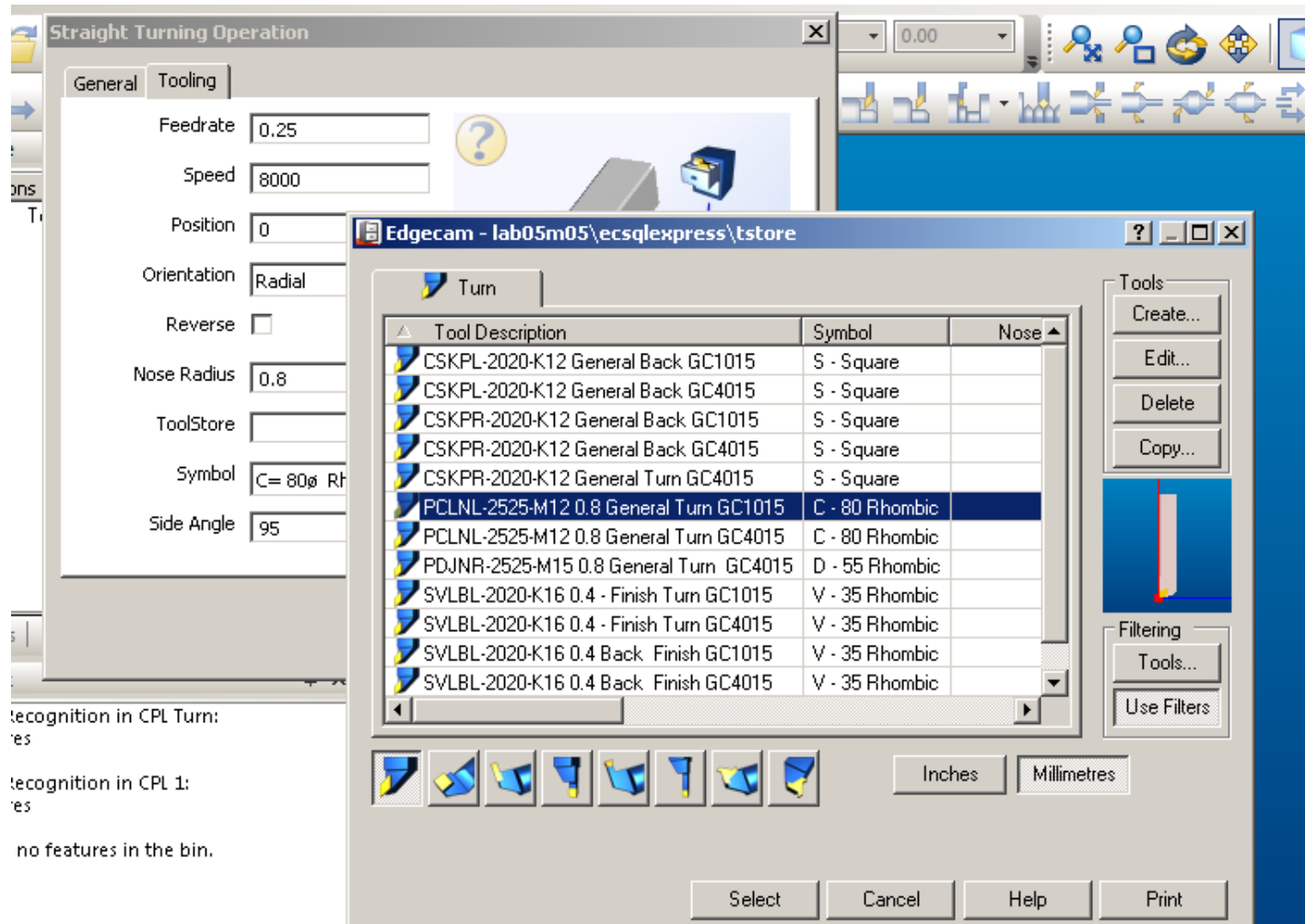
- Feedrate: 0.25
- Speed: 8000
- Position: 0
- Orientation: Radial
- Reverse:
- Nose Radius: 0.8
- ToolStore: [Empty]
- Symbol: C= 80ø R
- Side Angle: 95

A "Turn" dialog box is open in the foreground, showing a list of tools. The dialog box title is "Edgcam - lab05m05\ecsqliexpress\tstore". The "Turn" tab is selected, and the tool list is as follows:

Tool Description	Symbol	Nose
CSKPL-2020-K12 General Back GC1015	S - Square	
CSKPL-2020-K12 General Back GC4015	S - Square	
CSKPR-2020-K12 General Back GC1015	S - Square	
CSKPR-2020-K12 General Back GC4015	S - Square	
CSKPR-2020-K12 General Turn GC4015	S - Square	
PCLNL-2525-M12 0.8 General Turn GC1015	C - 80 Rhombic	
PCLNL-2525-M12 0.8 General Turn GC4015	C - 80 Rhombic	
PDJNR-2525-M15 0.8 General Turn GC4015	D - 55 Rhombic	
SVLBL-2020-K16 0.4 - Finish Turn GC1015	V - 35 Rhombic	
SVLBL-2020-K16 0.4 - Finish Turn GC4015	V - 35 Rhombic	
SVLBL-2020-K16 0.4 Back Finish GC1015	V - 35 Rhombic	
SVLBL-2020-K16 0.4 Back Finish GC4015	V - 35 Rhombic	

At the bottom of the dialog box, it indicates "0 of 13 Tool(s) selected". The dialog box also includes a "Tools" section with buttons for "Create...", "Edit...", "Delete", and "Copy...", and a "Filtering" section with buttons for "Tools..." and "Use Filters". The units are set to "Inches" and "Millimetres".

Escolha a seguinte ferramenta e clique “select”.



The screenshot displays the Edgecam software interface. The 'Straight Turning Operation' dialog box is open, showing the 'Tooling' tab with parameters: Feedrate (0.25), Speed (8000), Position (0), Orientation (Radial), Reverse (unchecked), Nose Radius (0.8), ToolStore, Symbol (C= 80ø Rh), and Side Angle (95). The 'Turn' tool selection dialog box is also open, showing a list of tools. The tool 'PCLNL-2525-M12 0.8 General Turn GC1015' is selected, with a 'C - 80 Rhombic' symbol. The 'Tools' panel on the right includes buttons for 'Create...', 'Edit...', 'Delete', and 'Copy...'. The 'Filtering' panel includes 'Tools...' and 'Use Filters' buttons. The 'Inches' and 'Millimetres' units are visible at the bottom of the tool selection dialog.

Tool Description	Symbol	Nose
CSKPL-2020-K12 General Back GC1015	S - Square	
CSKPL-2020-K12 General Back GC4015	S - Square	
CSKPR-2020-K12 General Back GC1015	S - Square	
CSKPR-2020-K12 General Back GC4015	S - Square	
CSKPR-2020-K12 General Turn GC4015	S - Square	
PCLNL-2525-M12 0.8 General Turn GC1015	C - 80 Rhombic	
PCLNL-2525-M12 0.8 General Turn GC4015	C - 80 Rhombic	
PDJNR-2525-M15 0.8 General Turn GC4015	D - 55 Rhombic	
SVLBL-2020-K16 0.4 - Finish Turn GC1015	V - 35 Rhombic	
SVLBL-2020-K16 0.4 - Finish Turn GC4015	V - 35 Rhombic	
SVLBL-2020-K16 0.4 Back Finish GC1015	V - 35 Rhombic	
SVLBL-2020-K16 0.4 Back Finish GC4015	V - 35 Rhombic	

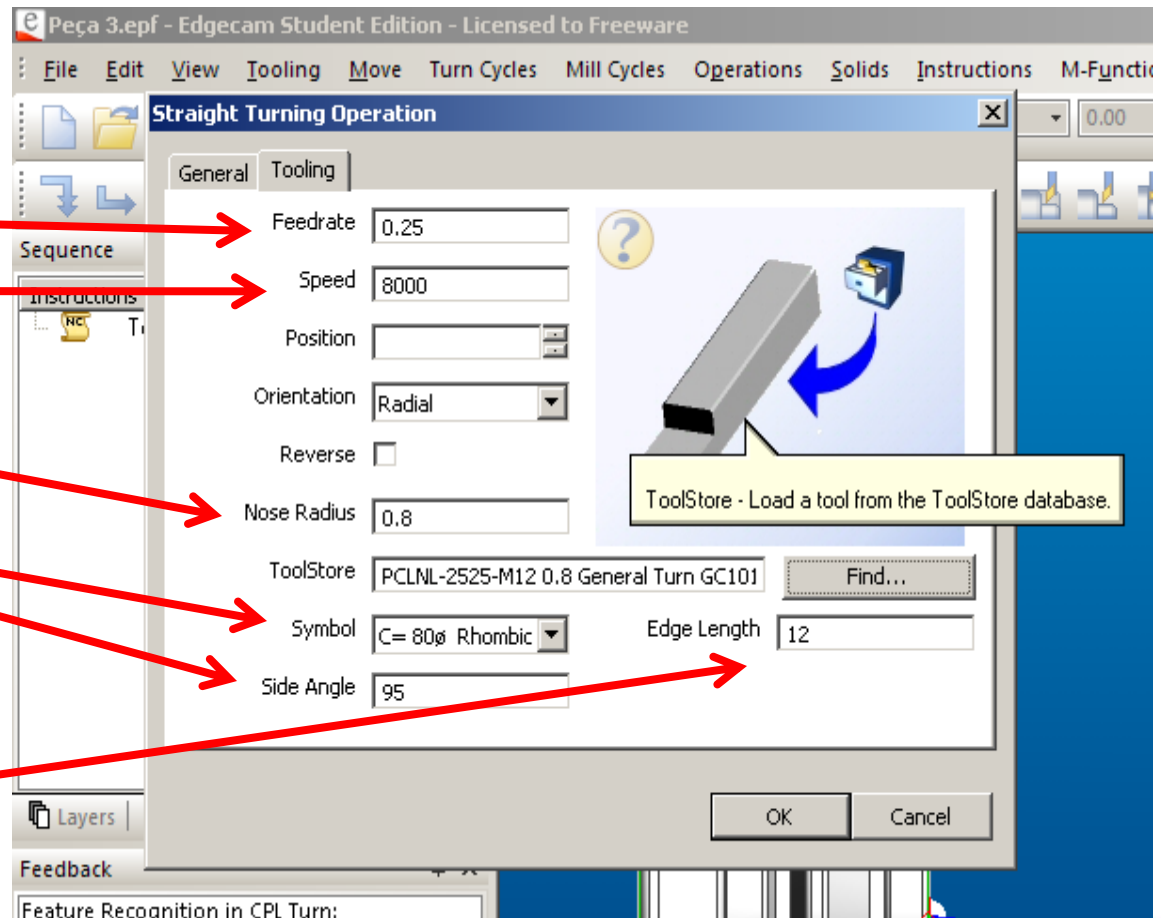
Recognition in CPL Turn:
es

Recognition in CPL 1:
es

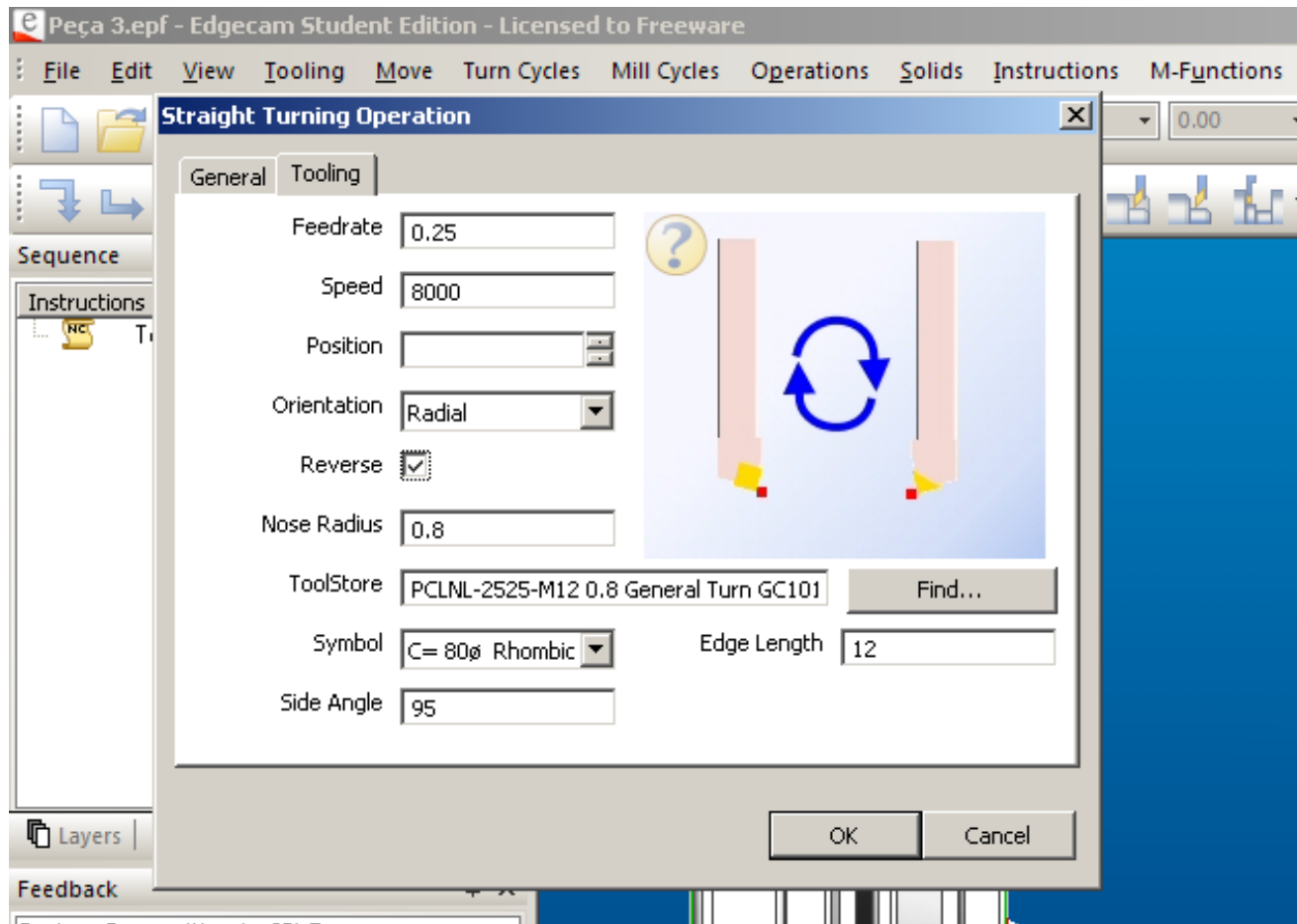
no features in the bin.

Observe que a ferramenta apareceu em Toolstore e que apareceu valores indicados pelo software.

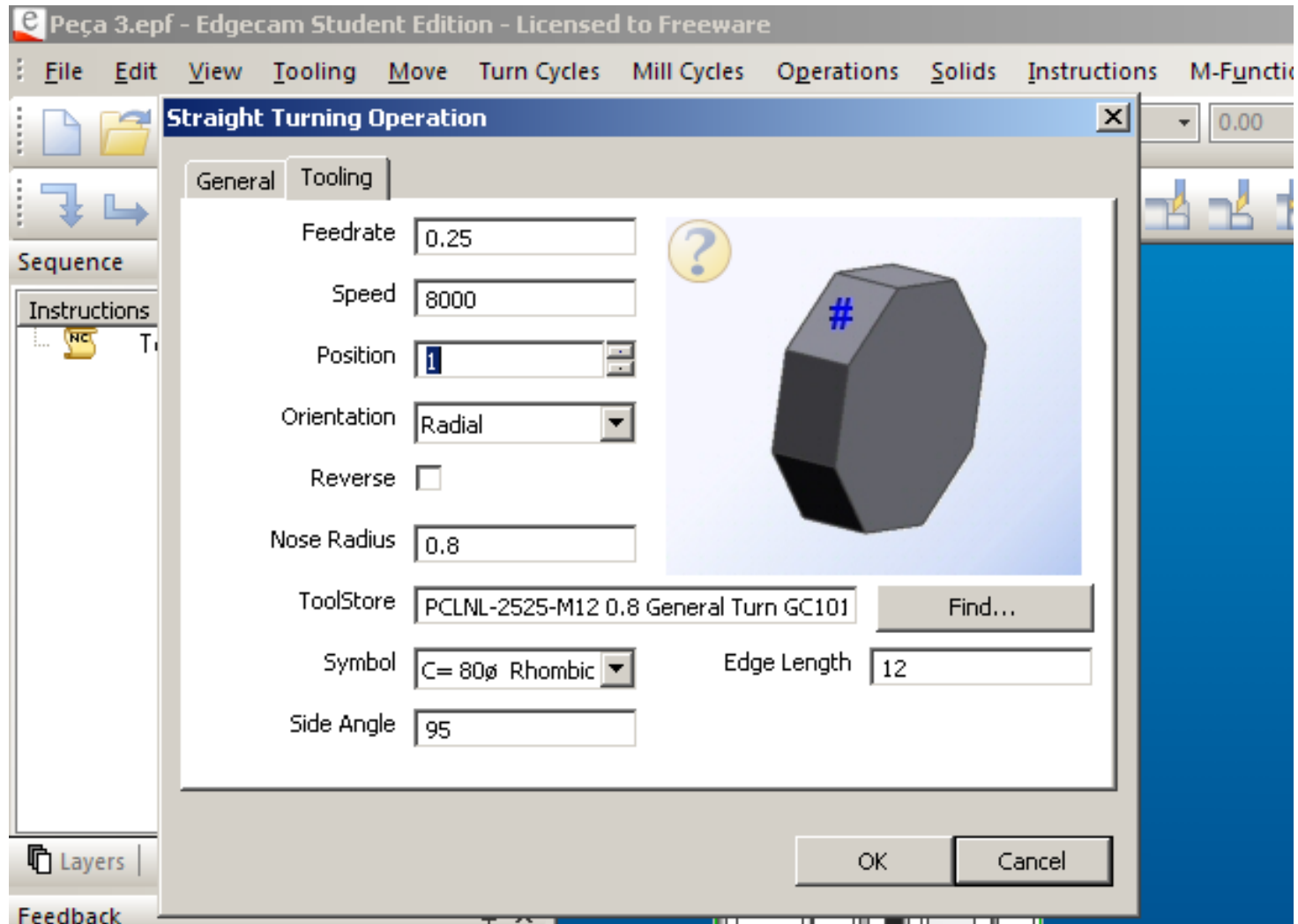
Avanço
Rotação
Raio da ponta da ferramenta
Símbolo
Ângulo da pastilha
Comprimento da pastilha



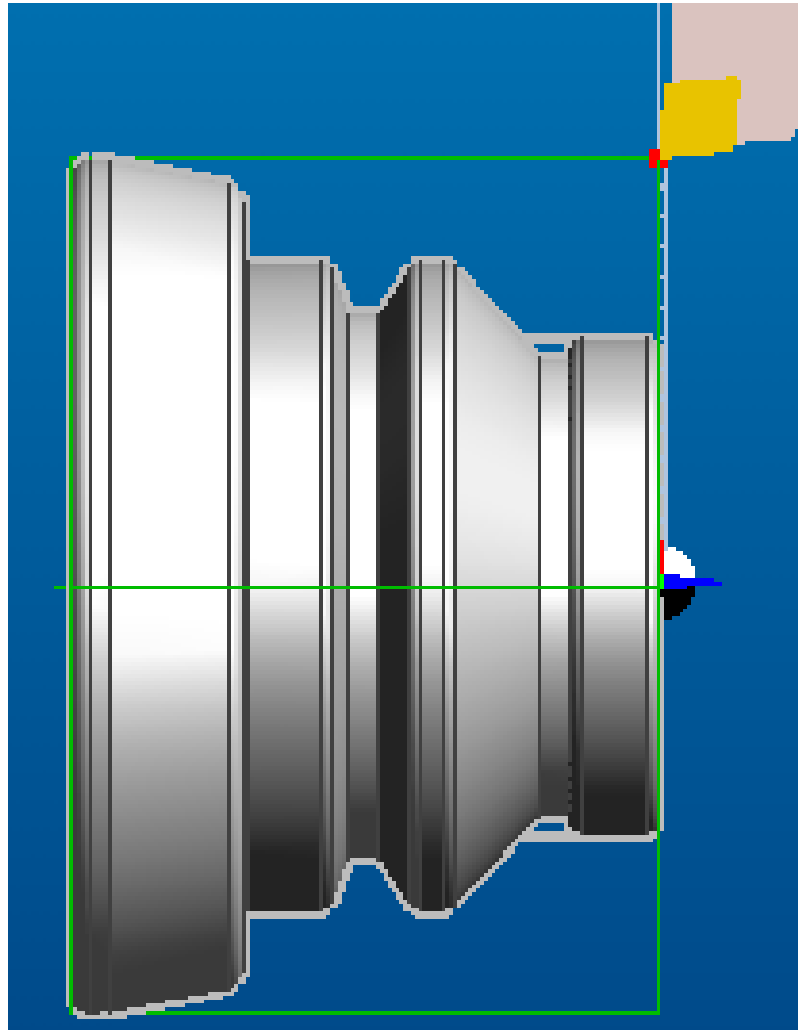
Observe que “reverse” muda a direção da ferramenta. Não selecione apenas visualize.



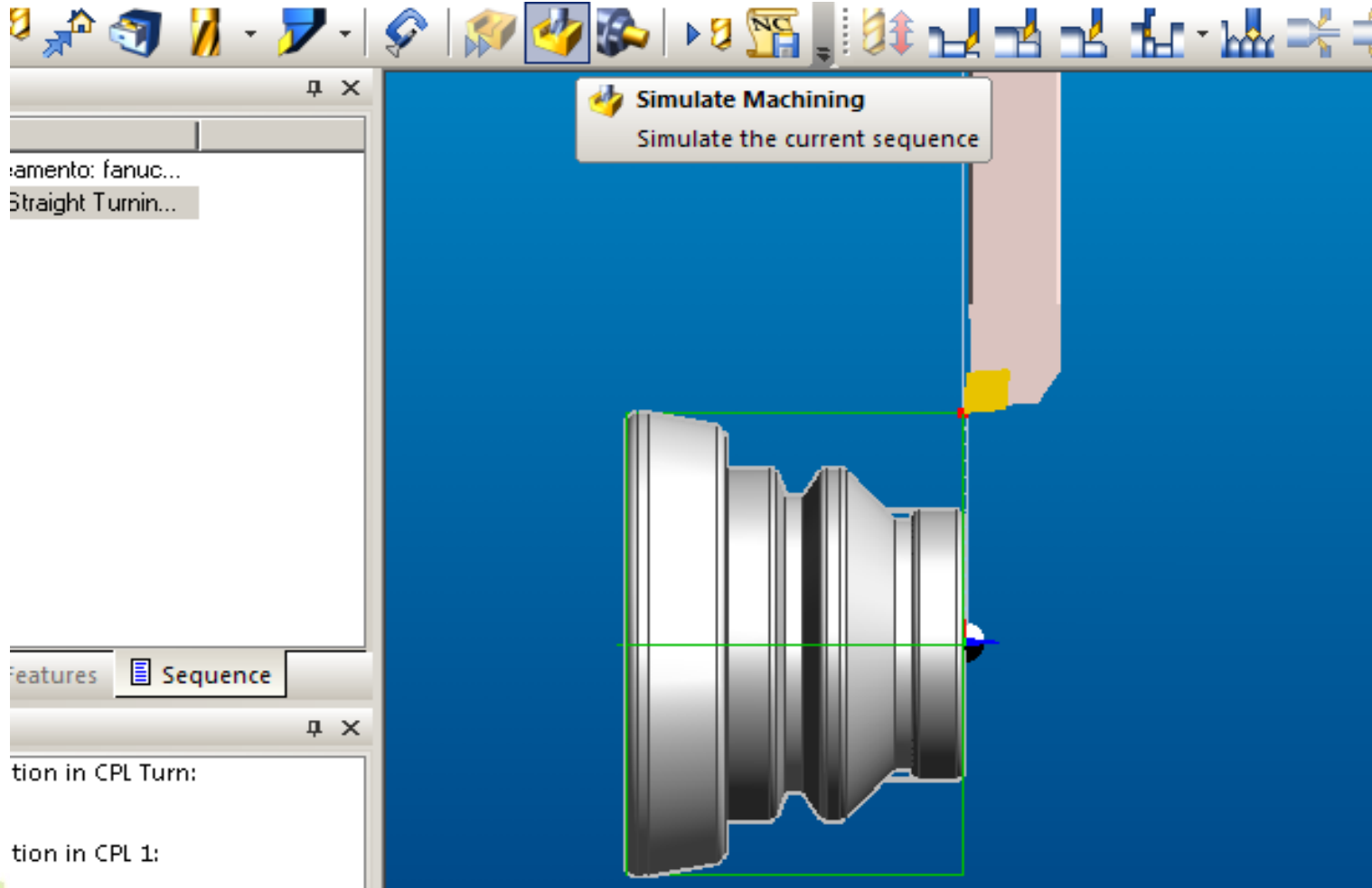
Escolha a posição 1 para a ferramenta.



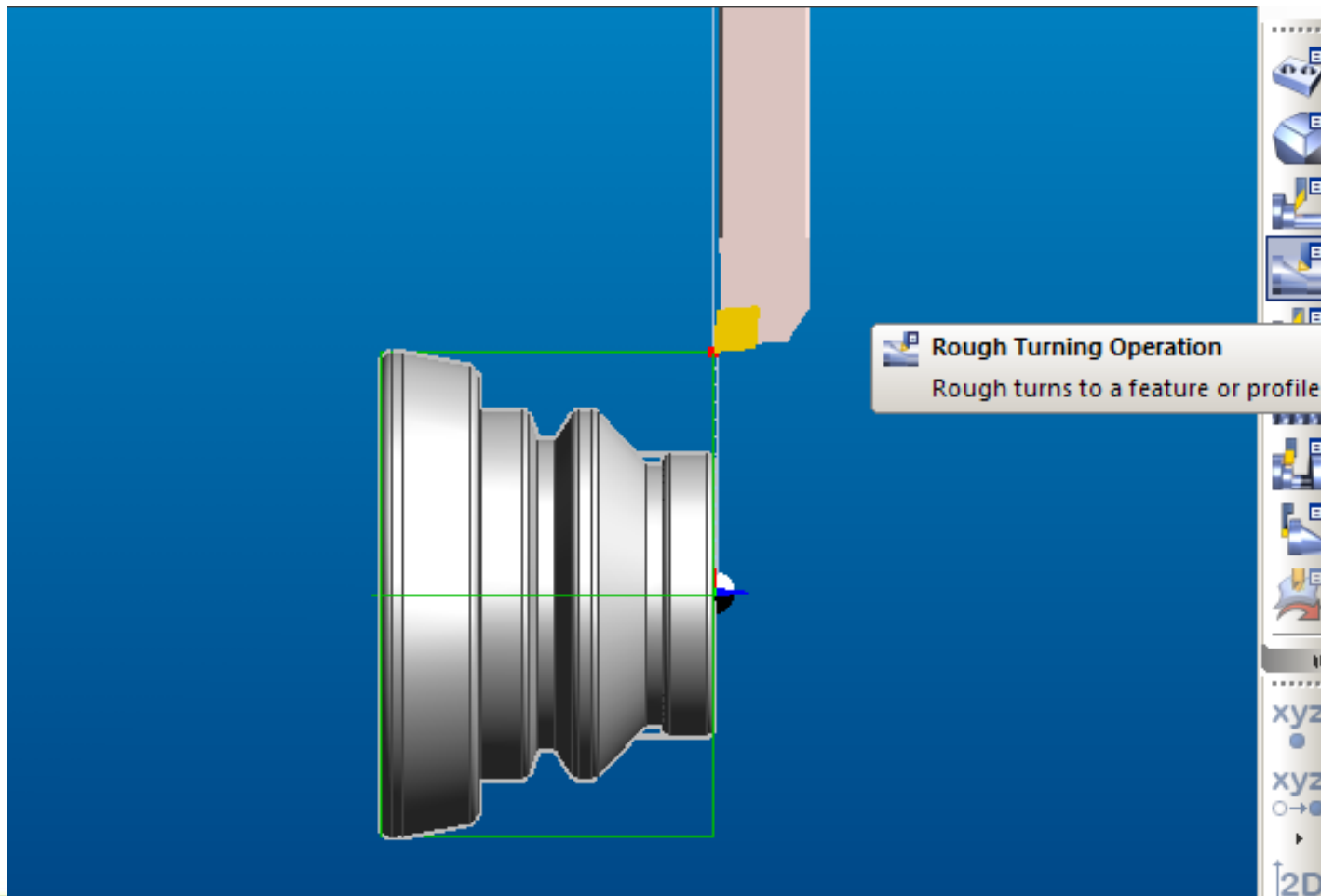
Observe que apareceu a ferramenta.



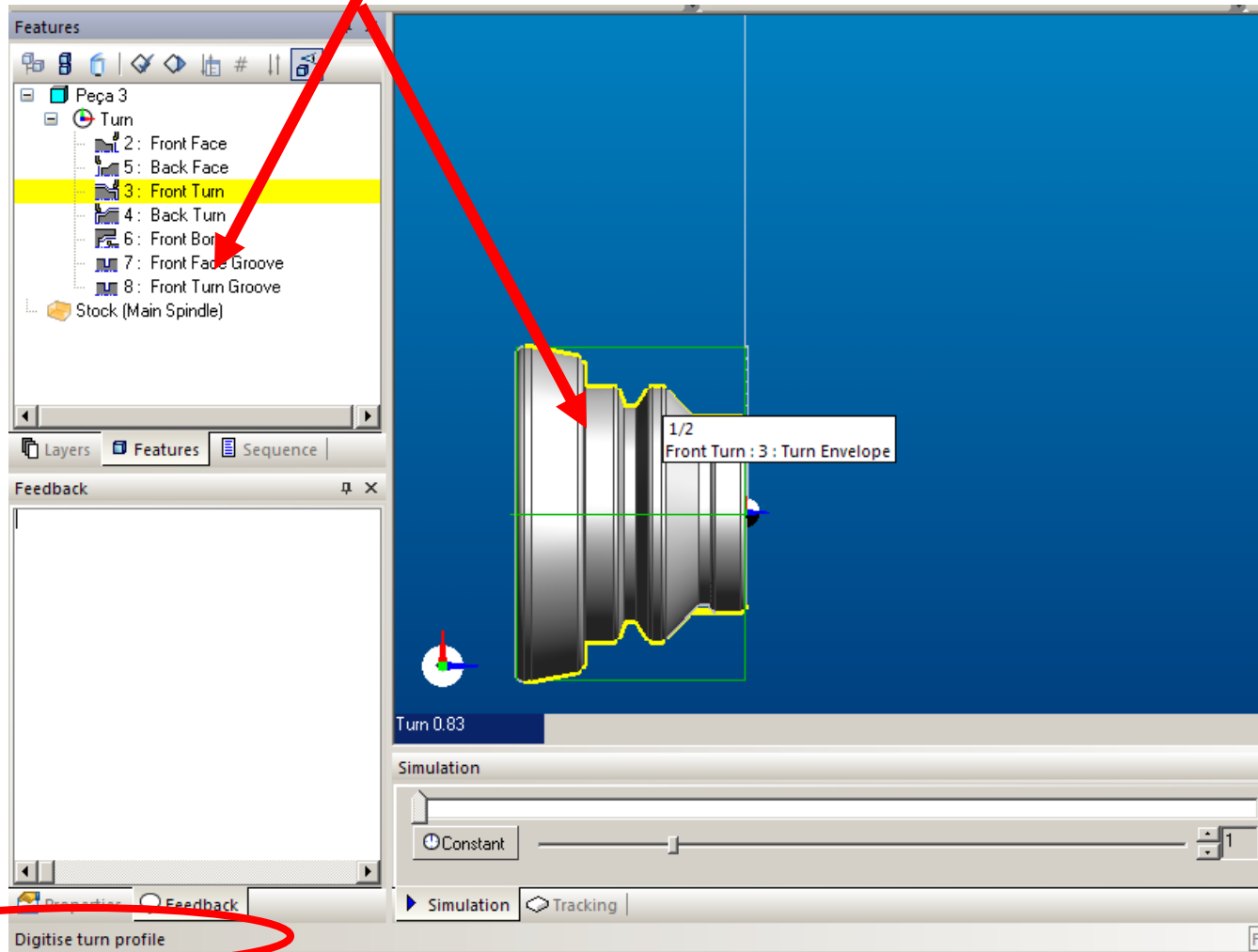
Pode se desejar simular em todas as operações (escolha pessoal).



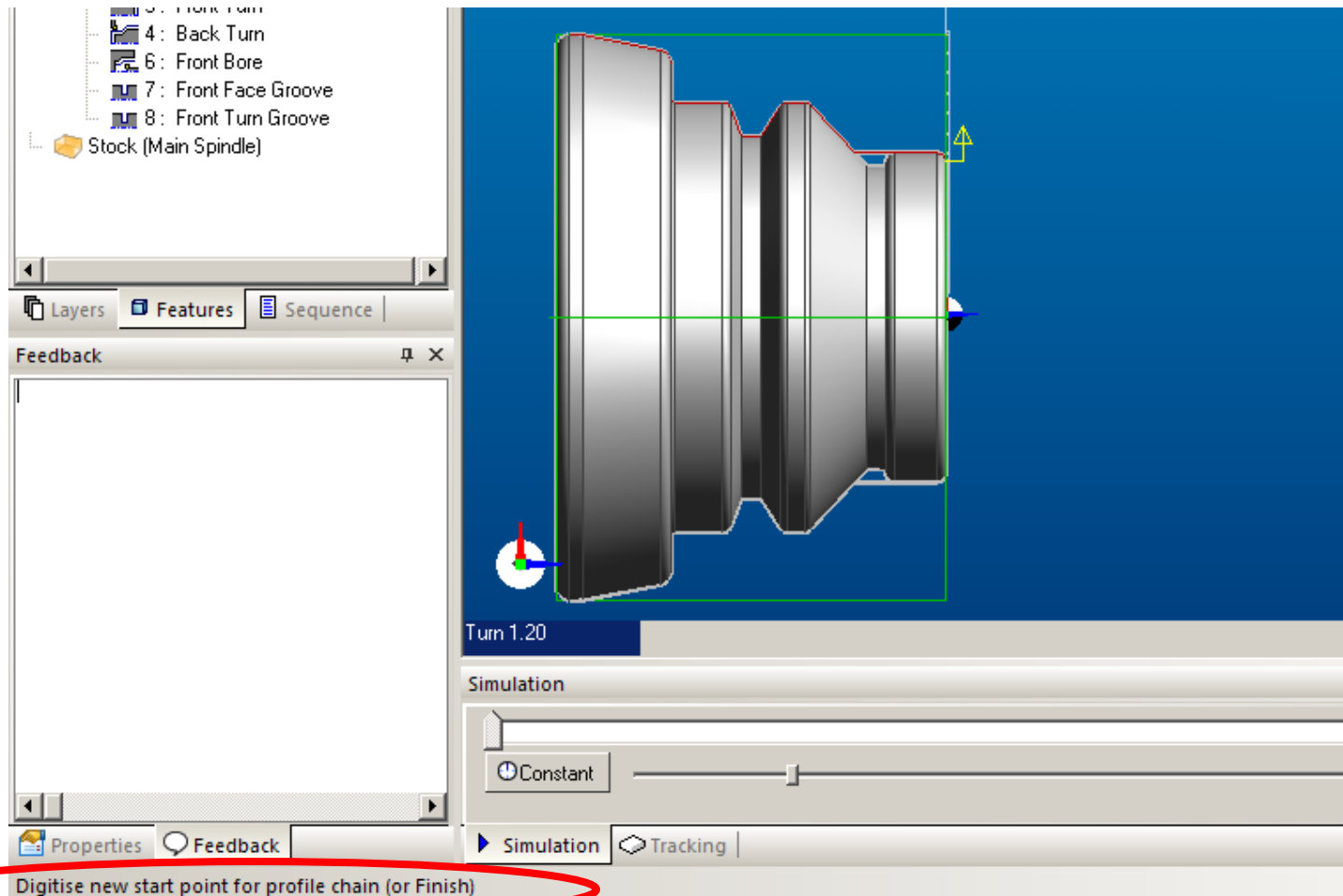
Agora vamos Desbastar com o **Torneamento Externo** e acabar o perfil externo da peça. Na barra de ferramentas clique em **Rough Turning Operation**.



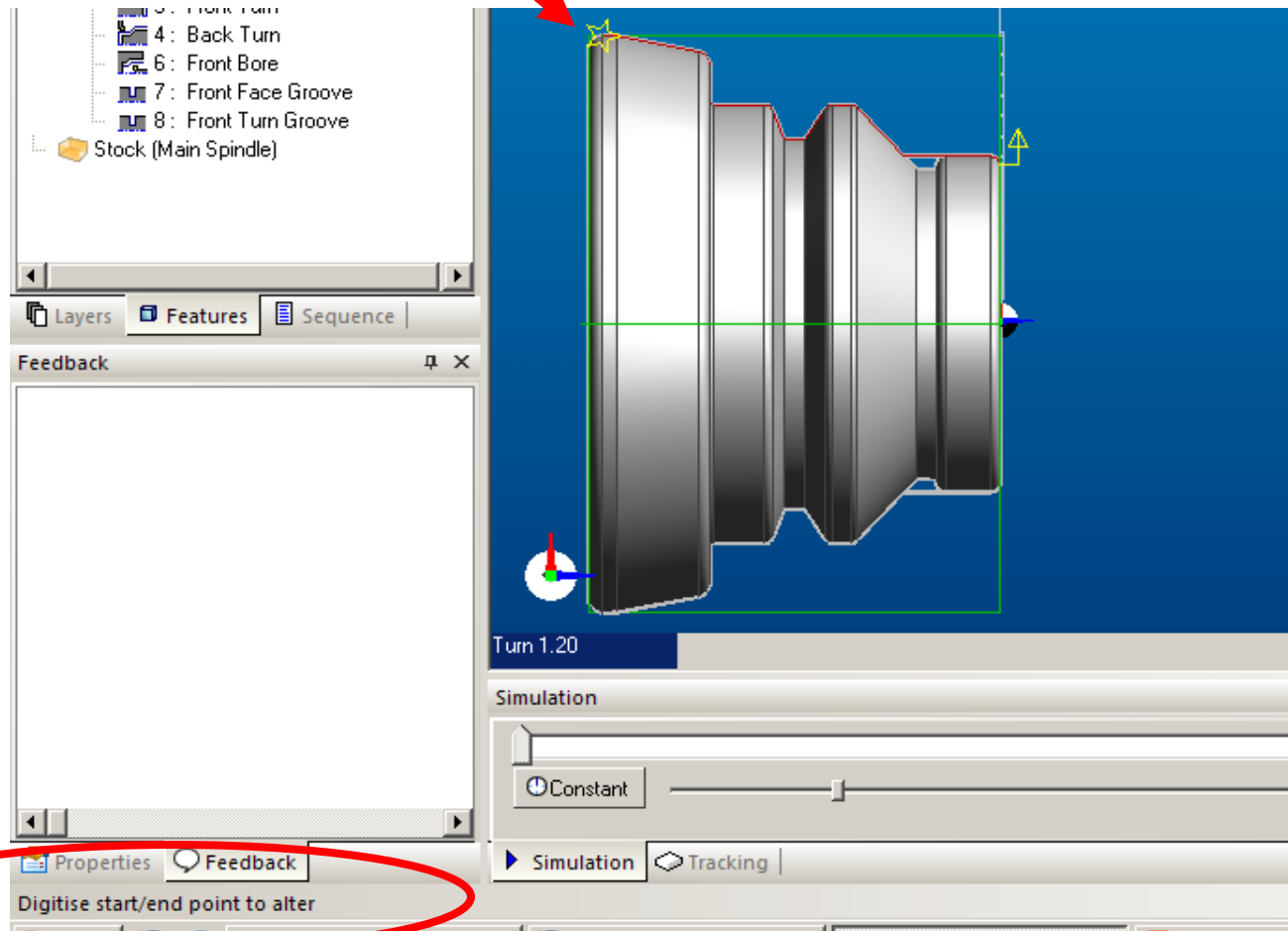
Digitalize o perfil de torneamento. "Digitise Turn Profile". Selecione o perfil e confirme com o botão direito.



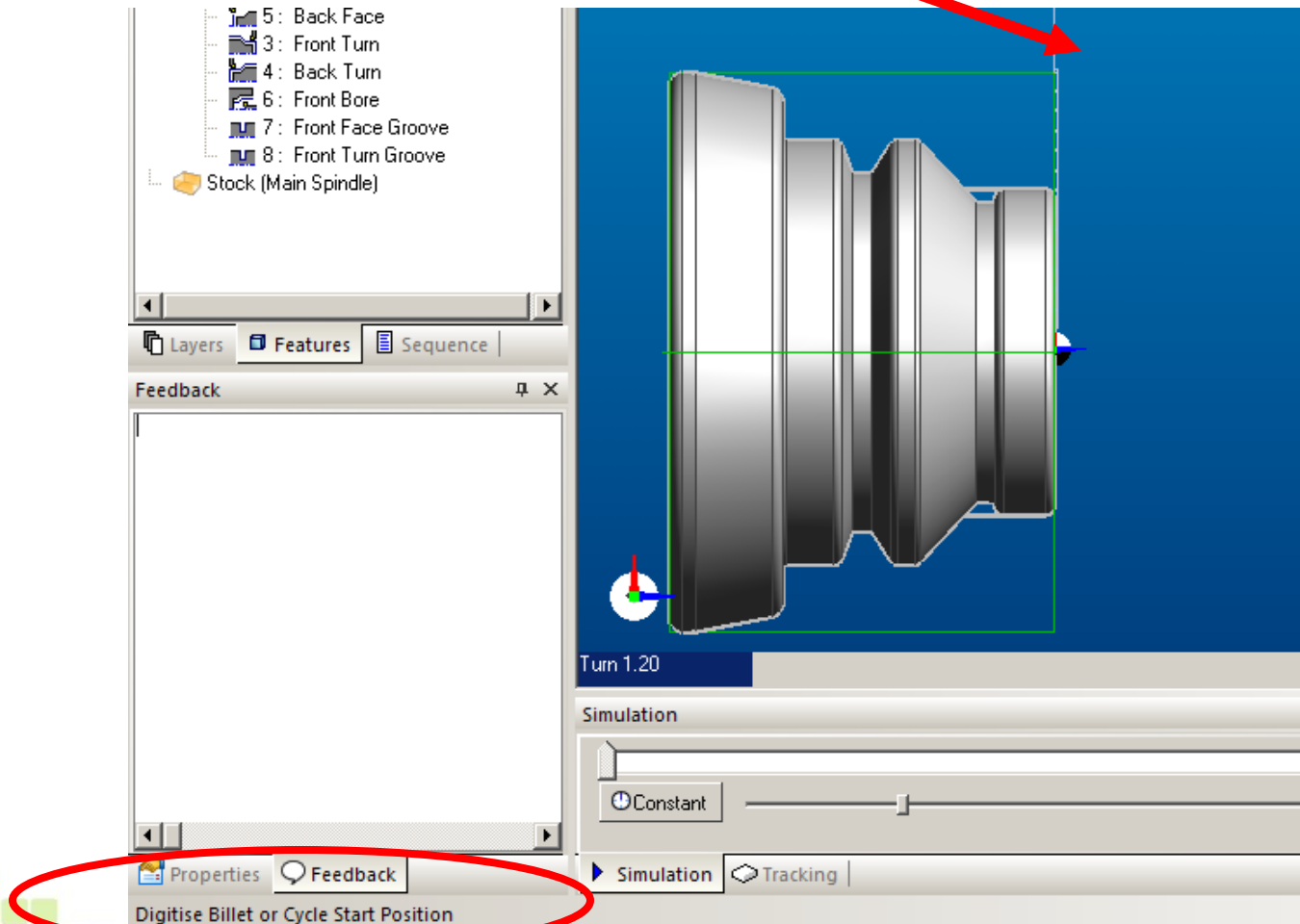
A barra de Status agora aparece “Digitise new cycle start point for profile”. Selecione um ponto qualquer conforme figura. E confirme com o botão direito.



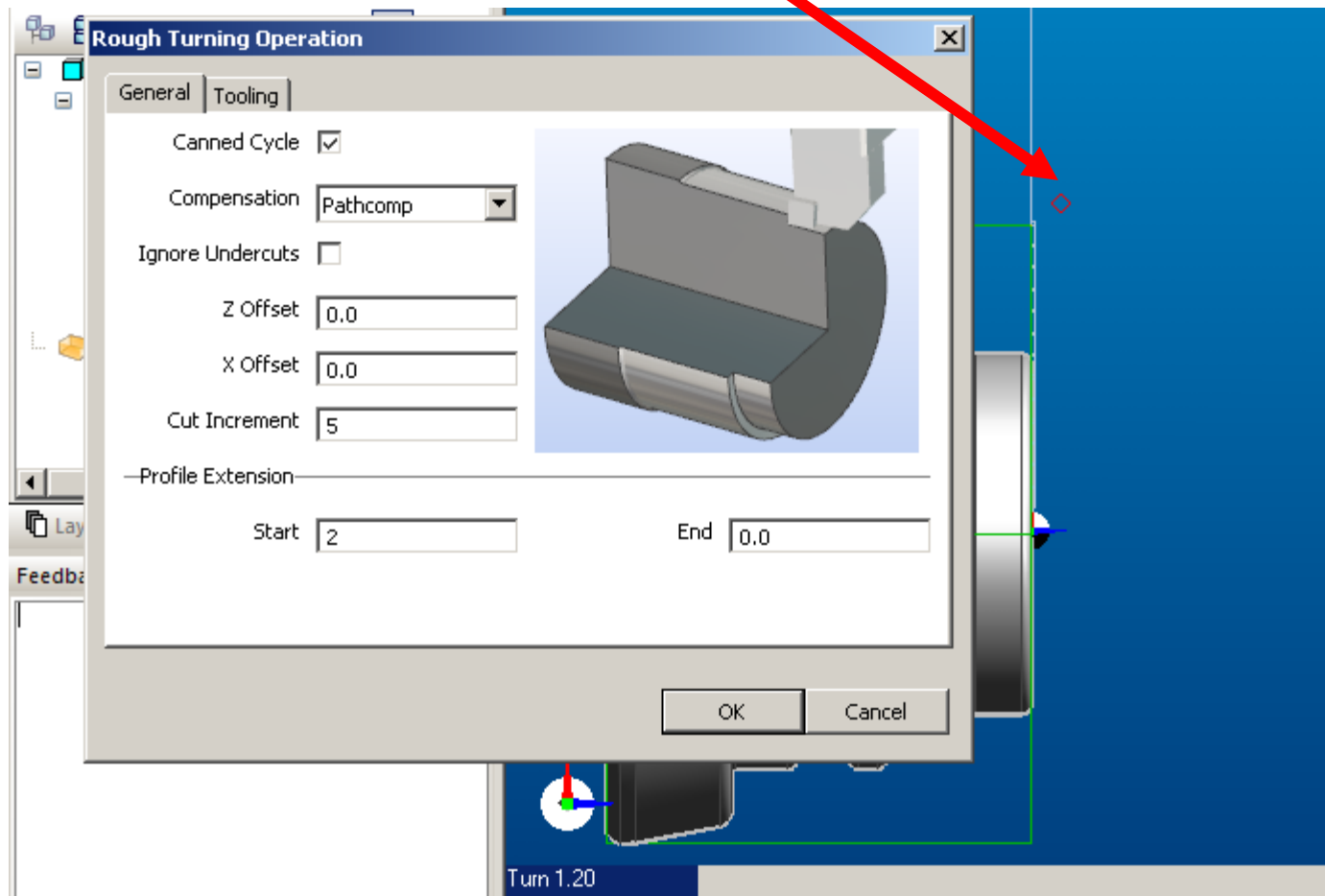
Na barra de Status agora aparece “Digitise star/end point to after”. Selecione o ponto final conforme figura. E confirme com o botão direito.



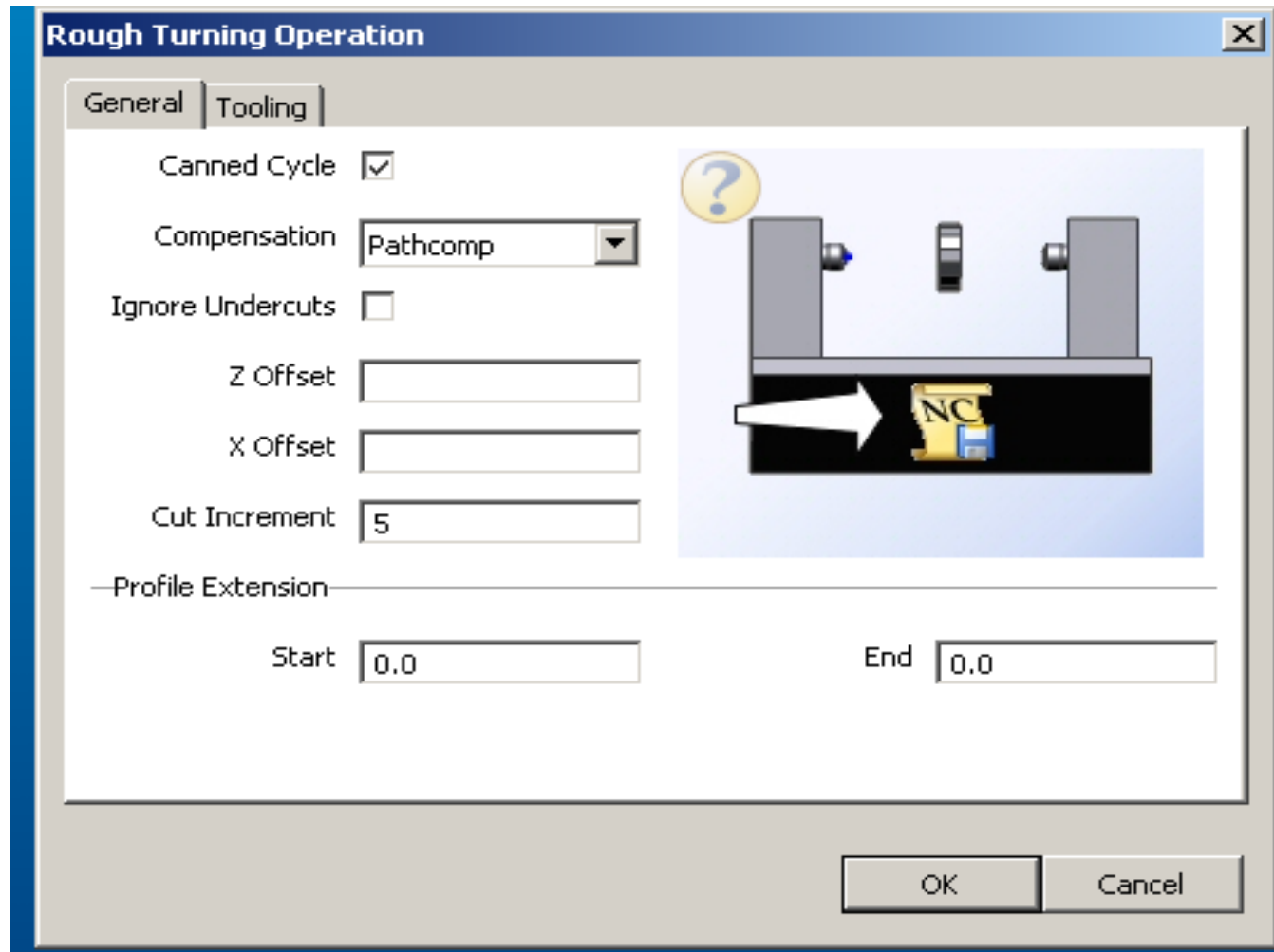
No exato momento aparece a na barra de status para selecionar o início da posição (onde vai ser colocada o inicio da usinagem neste billet).



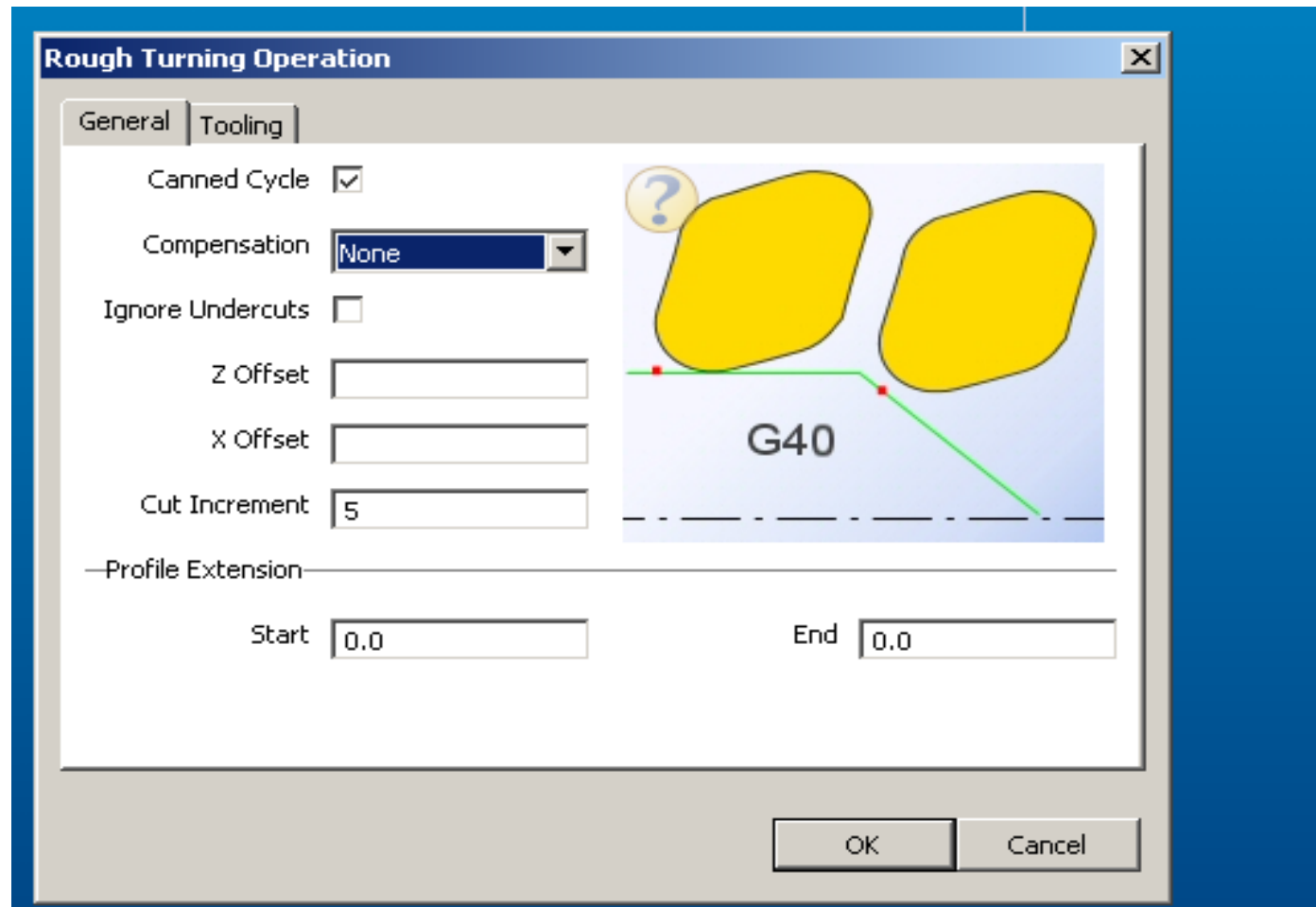
Observe onde o ponto ficou marcado (será onde a ferramenta muda de de avanço máquina para avanço programado para usinar.



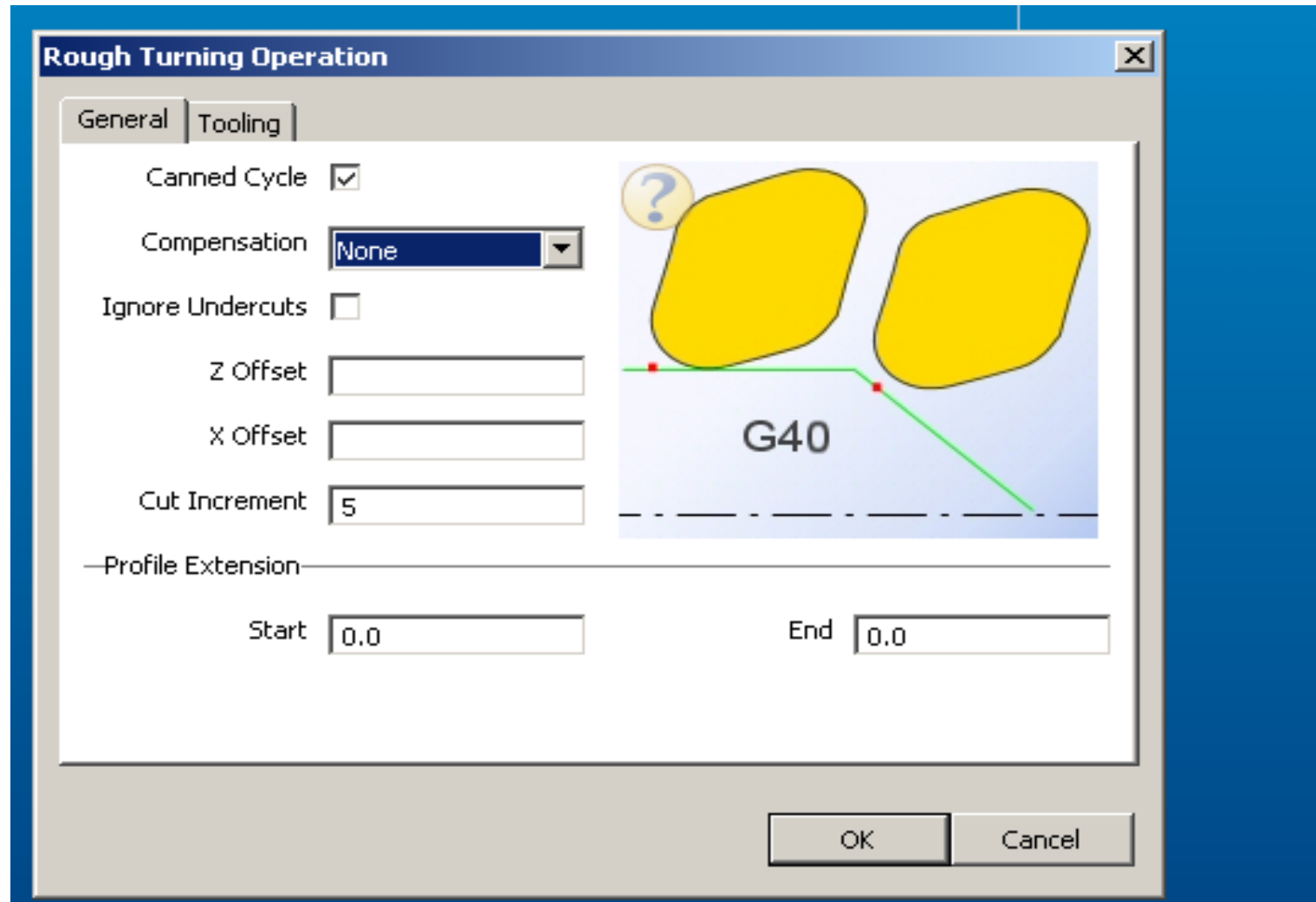
Na ícone Canned cycle (ciclo fixo) selecione, não coloque sobre metal.



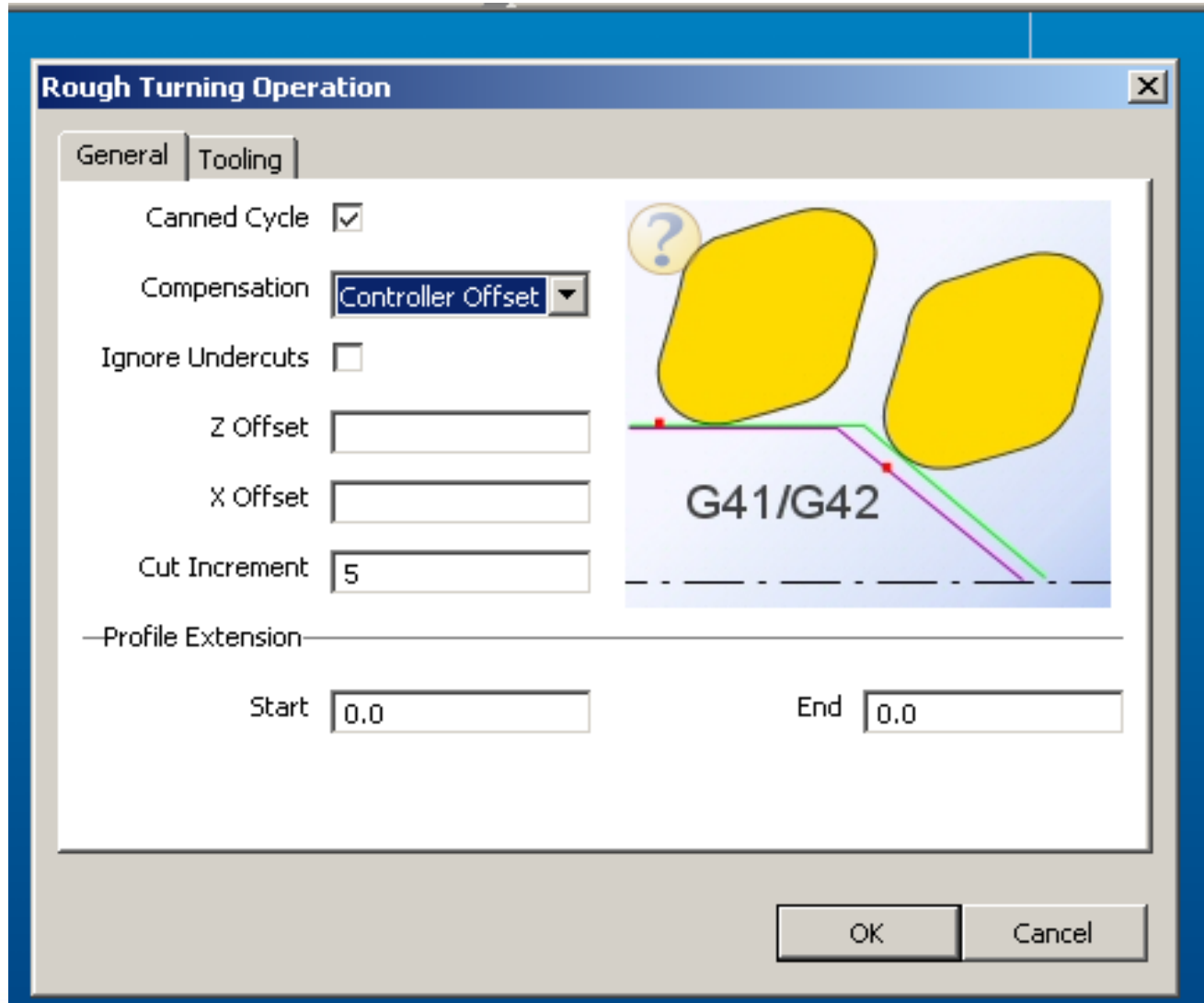
Na ícone compensation (compensação) observe a opções.



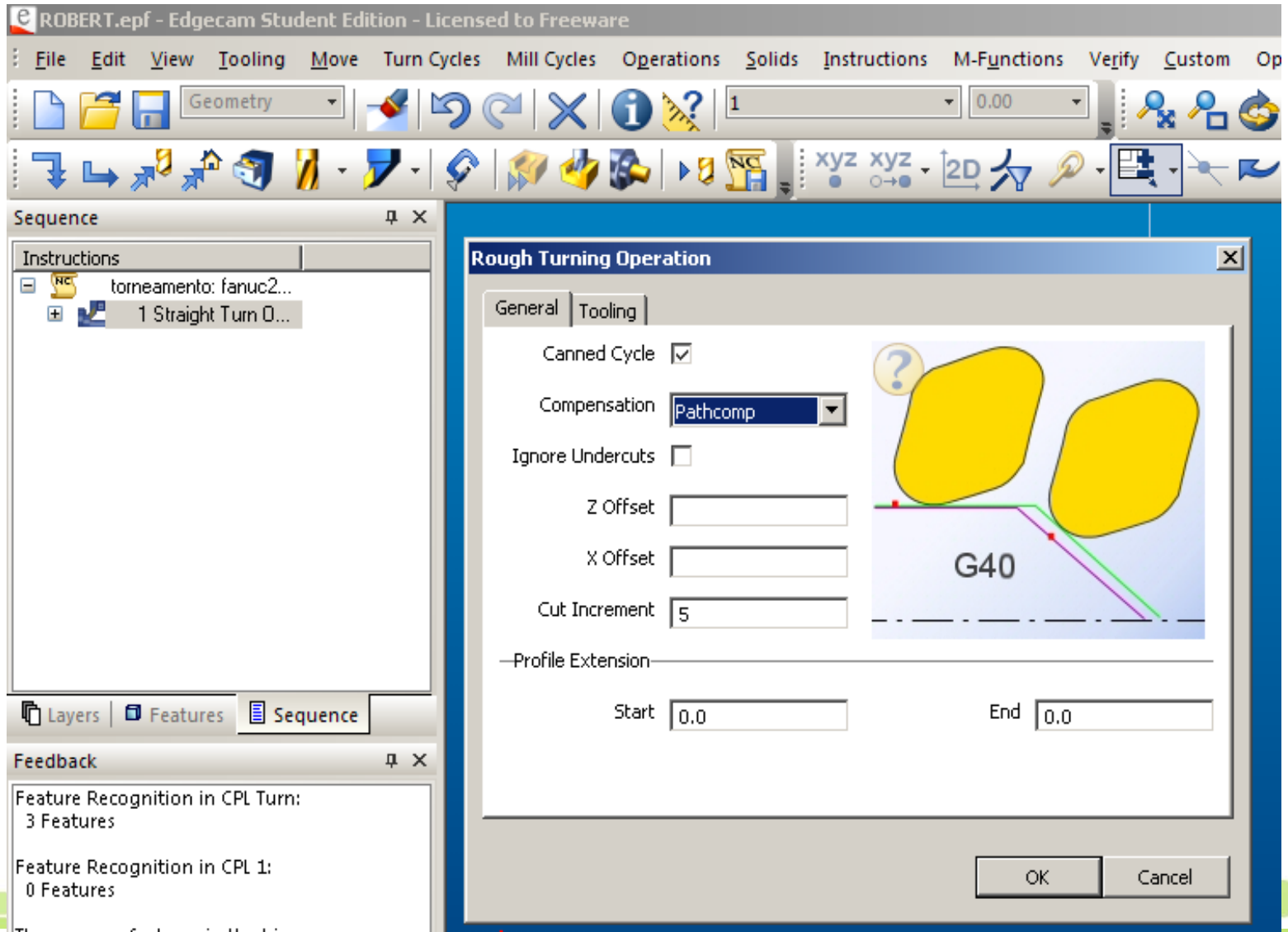
Em None (não há compensação) de raio.



Observe o Controle da compensação.



Observe o caminho de compensação.

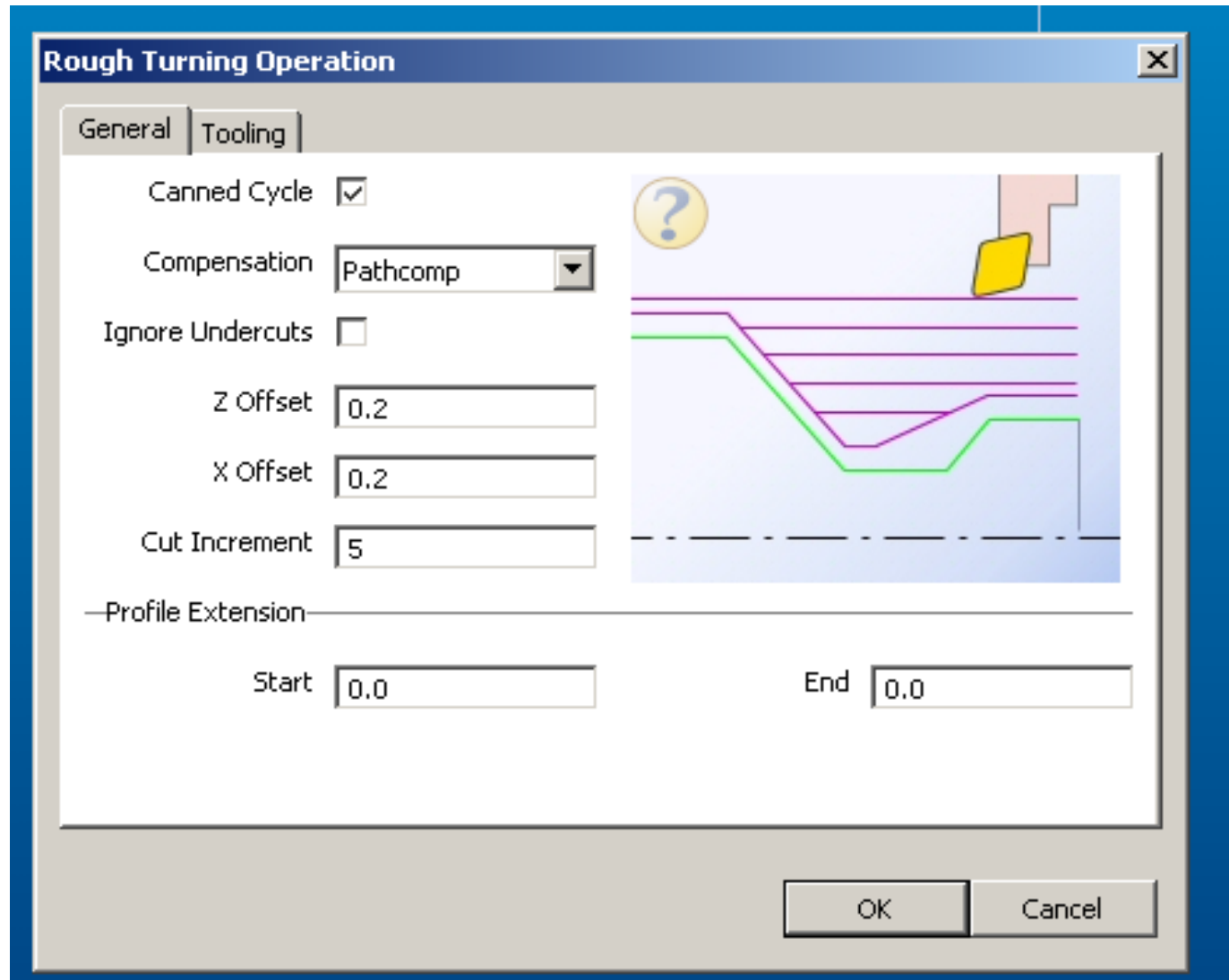


The screenshot displays the Edgcam Student Edition software interface. The main window shows a menu bar (File, Edit, View, Tooling, Move, Turn Cycles, Mill Cycles, Operations, Solids, Instructions, M-Functions, Verify, Custom, Op) and a toolbar with various icons. The 'Sequence' window on the left lists instructions: 'torneamento: fanuc2...' and '1 Straight Turn O...'. The 'Feedback' window at the bottom left shows 'Feature Recognition in CPL Turn: 3 Features' and 'Feature Recognition in CPL 1: 0 Features'. The 'Rough Turning Operation' dialog box is open, showing the 'Tooling' tab. It includes the following settings:

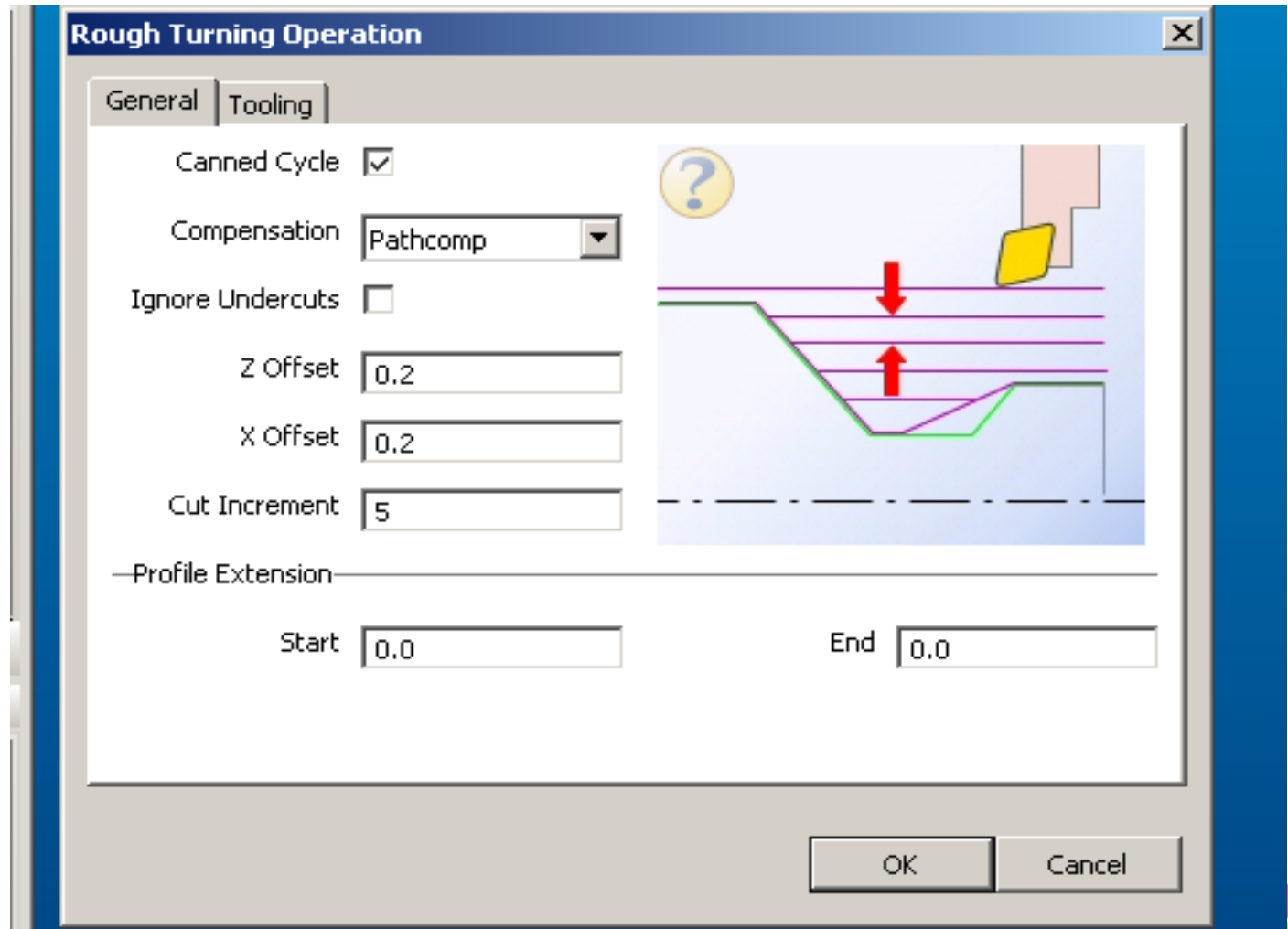
- Canned Cycle:
- Compensation: Pathcomp
- Ignore Undercuts:
- Z Offset: [Empty field]
- X Offset: [Empty field]
- Cut Increment: 5
- Profile Extension: [Empty field]
- Start: 0.0
- End: 0.0

The dialog box also features a preview window showing a 3D model of a part with a tool path (G40) and a compensation path (green line) around it. The 'OK' and 'Cancel' buttons are visible at the bottom right of the dialog.

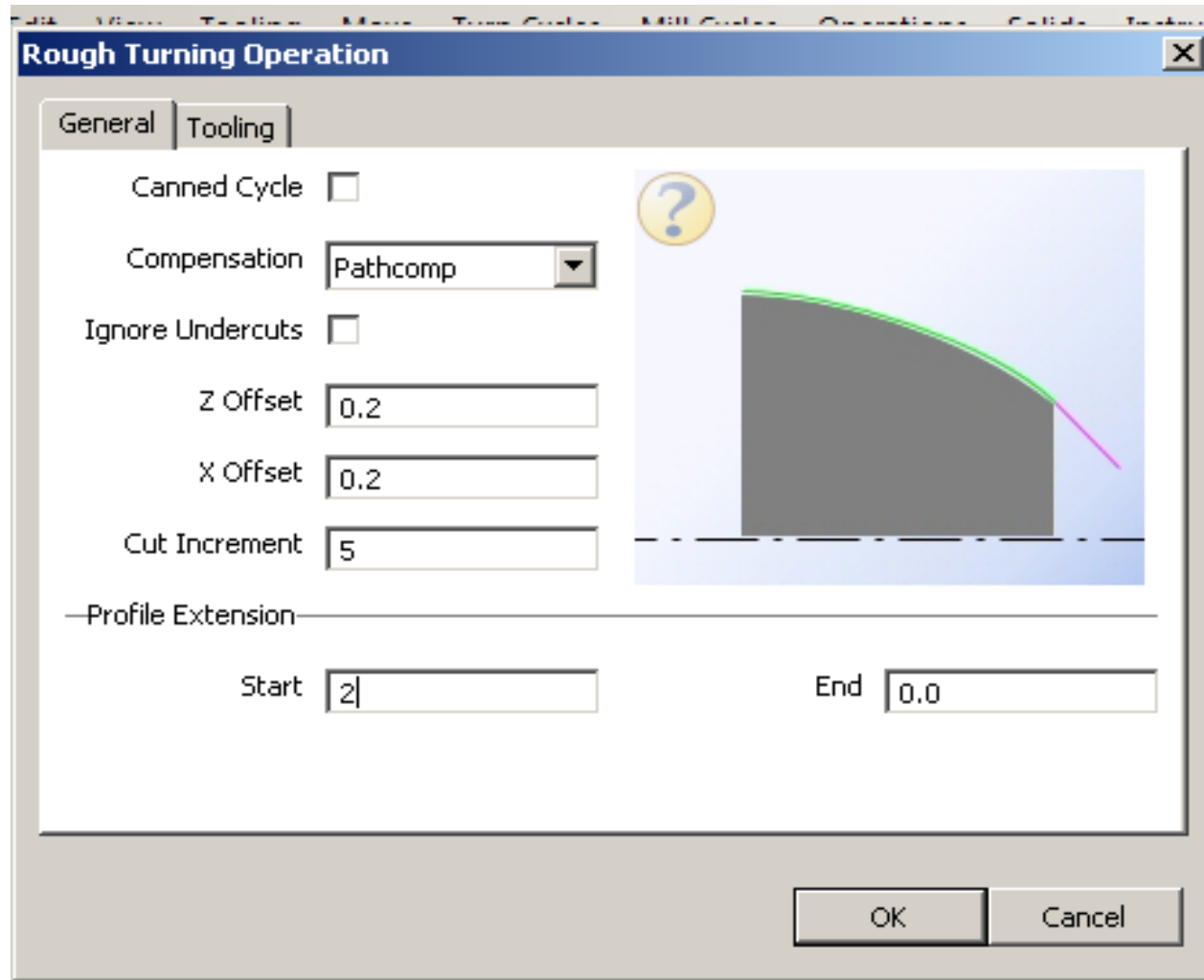
Colocar "offset" sobremetal de 0,2 mm no eixo
X e Z



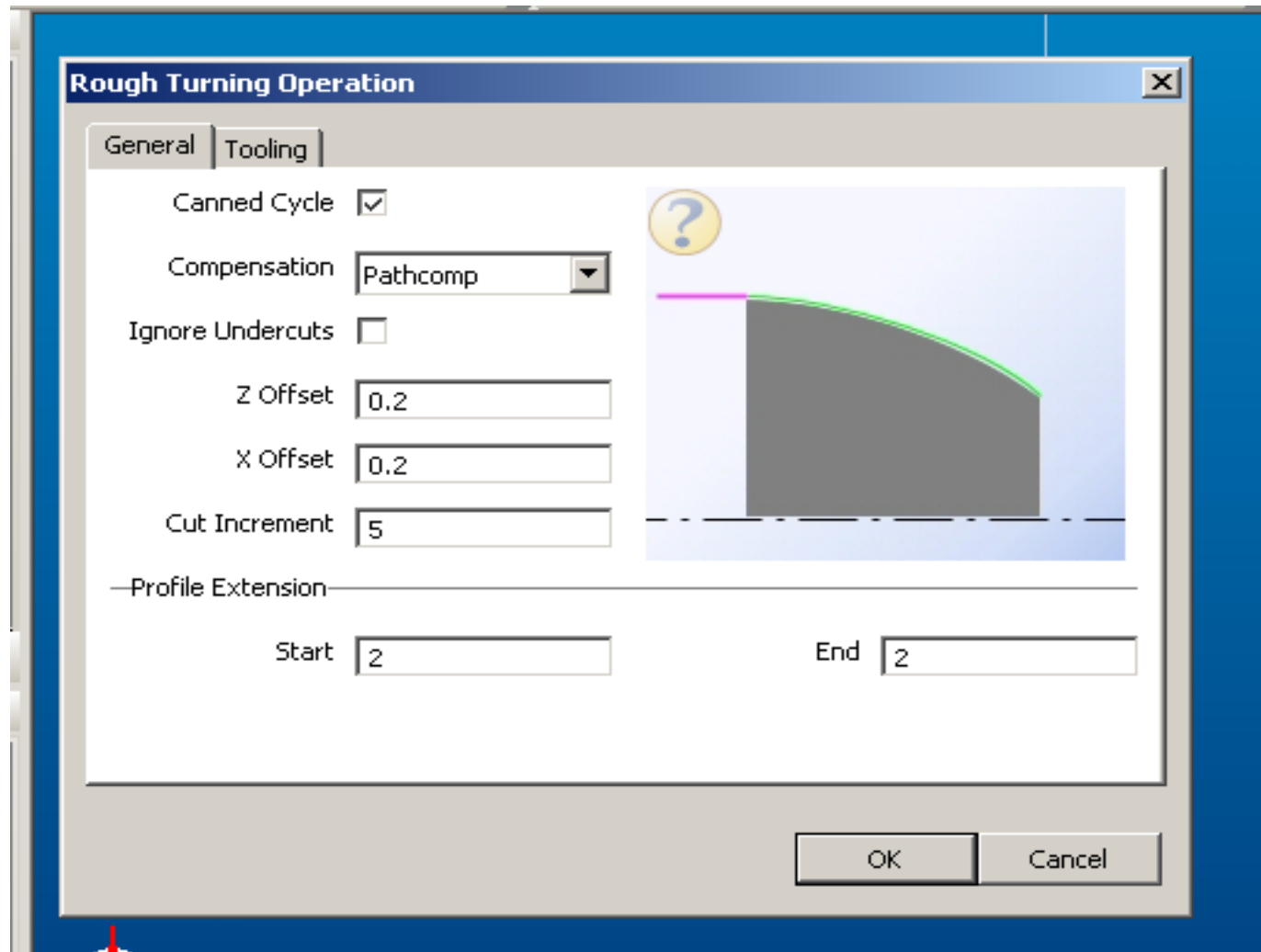
Coloque o profundidade de corte de 5mm em
“Cut Increment”.



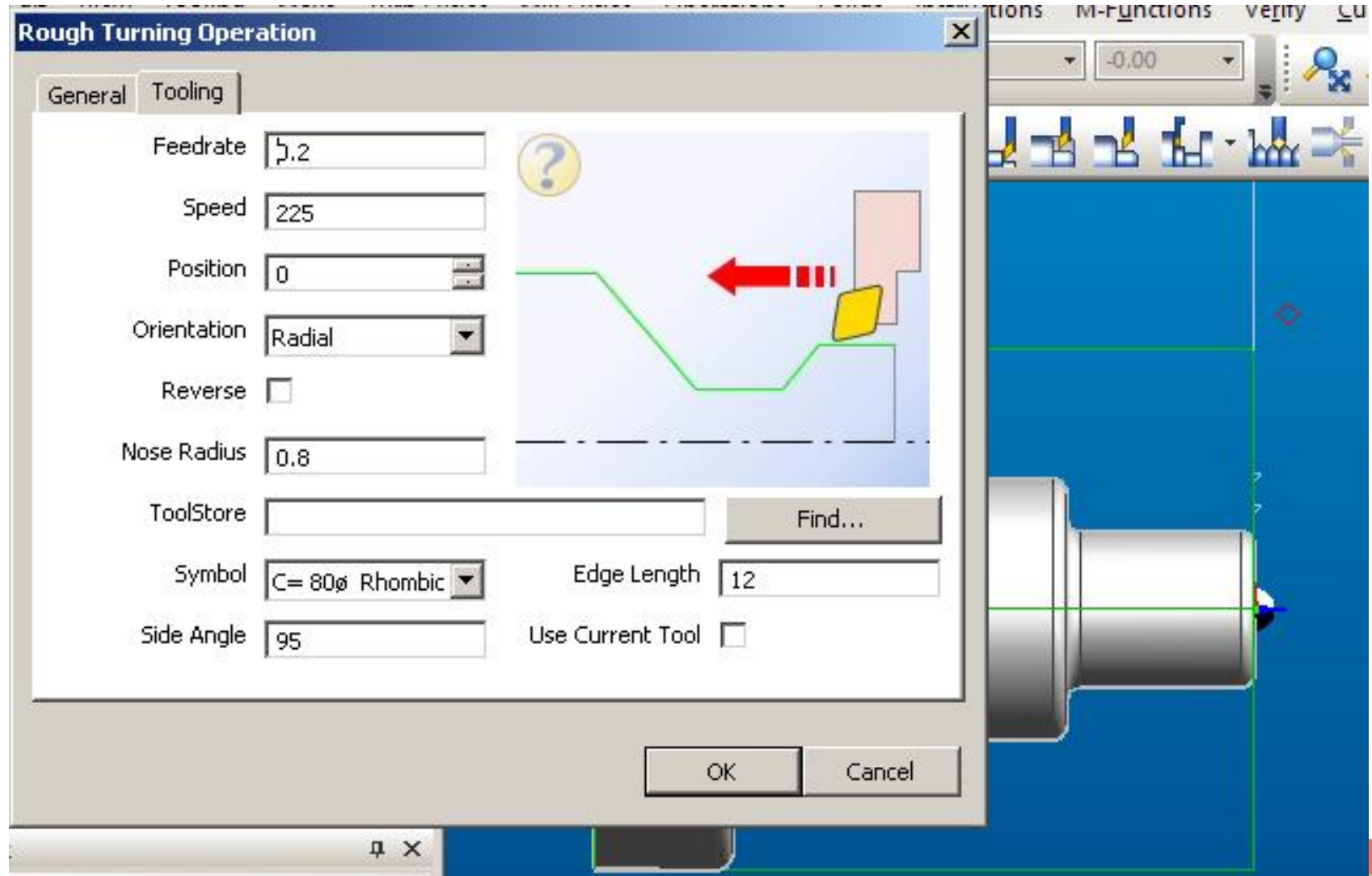
Coloque 2 mm na entrada para a ferramenta não entrar direto.



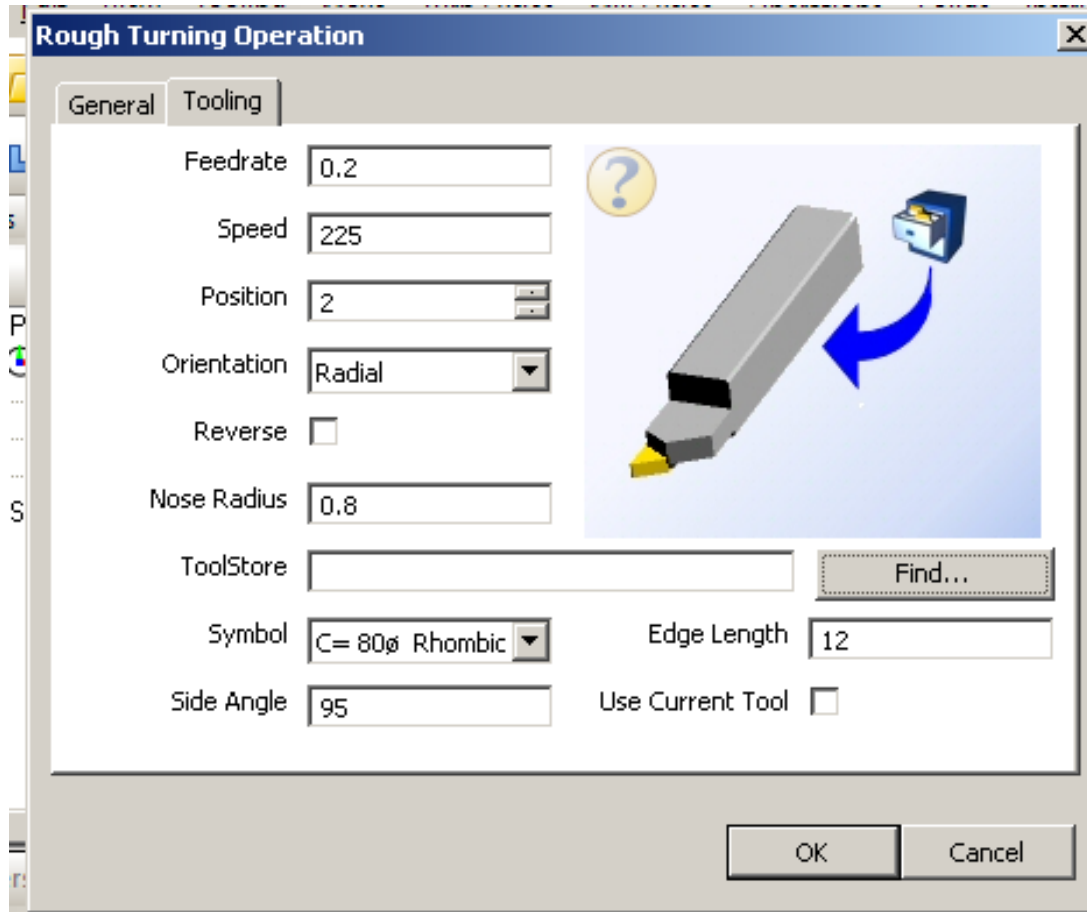
Coloque 2 mm na saída para a ferramenta se distanciar em avanço programado.



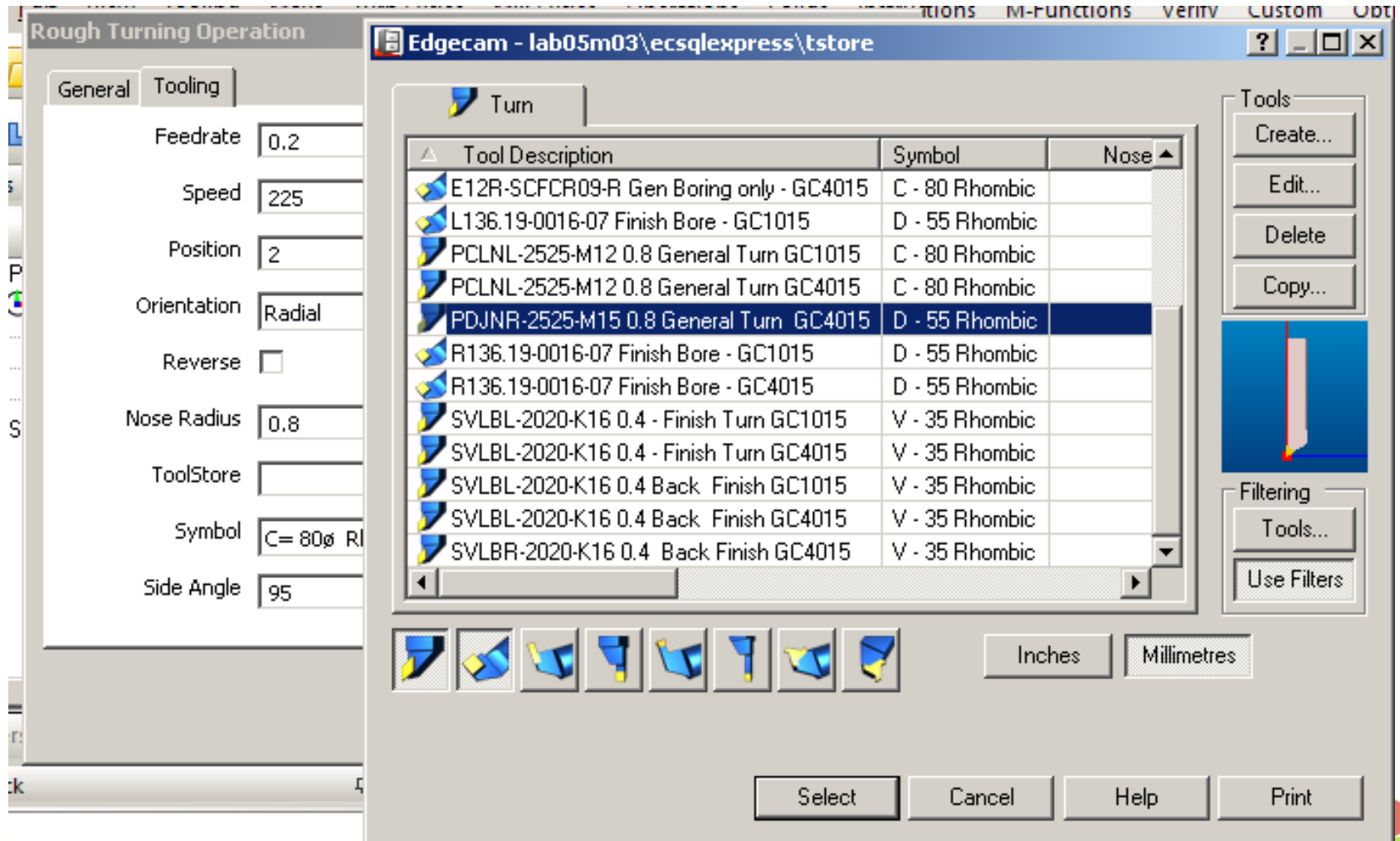
Em tooling é as características para a ferramenta.



Em "ToolStore" Biblioteca de ferramentas, clique em "Find"



Na biblioteca de ferramenta escolher a indicada na figura.



Rough Turning Operation

General Tooling

Feedrate 0.2

Speed 225

Position 2

Orientation Radial

Reverse

Nose Radius 0.8

ToolStore

Symbol C= 80° R

Side Angle 95

Edgecam - lab05m03\ecslexpress\tstore

Turn

Tool Description	Symbol	Nose
E12R-SCFCR09-R Gen Boring only - GC4015	C - 80 Rhombic	
L136.19-0016-07 Finish Bore - GC1015	D - 55 Rhombic	
PCLNL-2525-M12 0.8 General Turn GC1015	C - 80 Rhombic	
PCLNL-2525-M12 0.8 General Turn GC4015	C - 80 Rhombic	
PDJNR-2525-M15 0.8 General Turn GC4015	D - 55 Rhombic	
R136.19-0016-07 Finish Bore - GC1015	D - 55 Rhombic	
R136.19-0016-07 Finish Bore - GC4015	D - 55 Rhombic	
SVLBL-2020-K16 0.4 - Finish Turn GC1015	V - 35 Rhombic	
SVLBL-2020-K16 0.4 - Finish Turn GC4015	V - 35 Rhombic	
SVLBL-2020-K16 0.4 Back Finish GC1015	V - 35 Rhombic	
SVLBL-2020-K16 0.4 Back Finish GC4015	V - 35 Rhombic	
SVLBR-2020-K16 0.4 Back Finish GC4015	V - 35 Rhombic	

Tools

Create...

Edit...

Delete

Copy...

Filtering

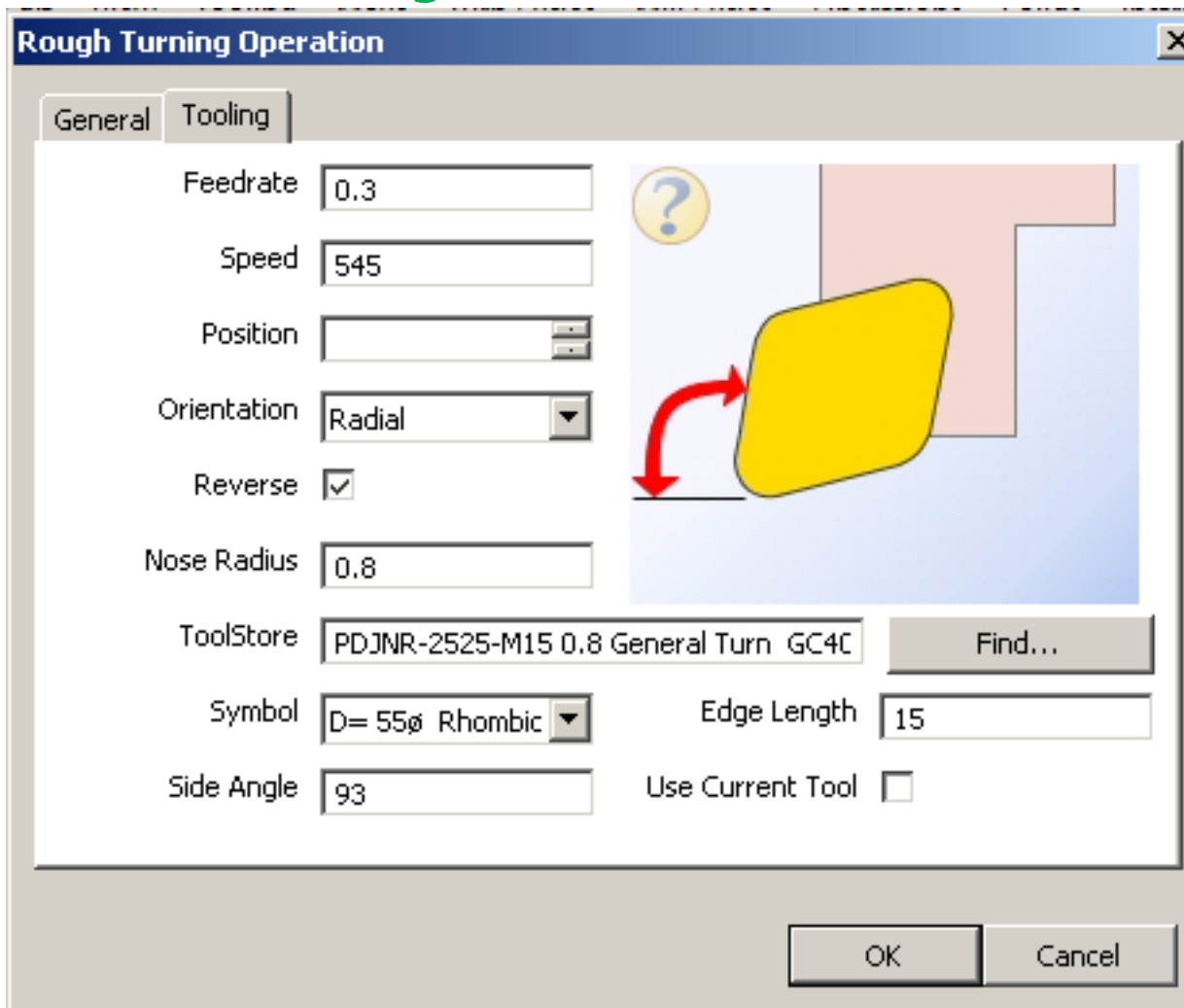
Tools...

Use Filters

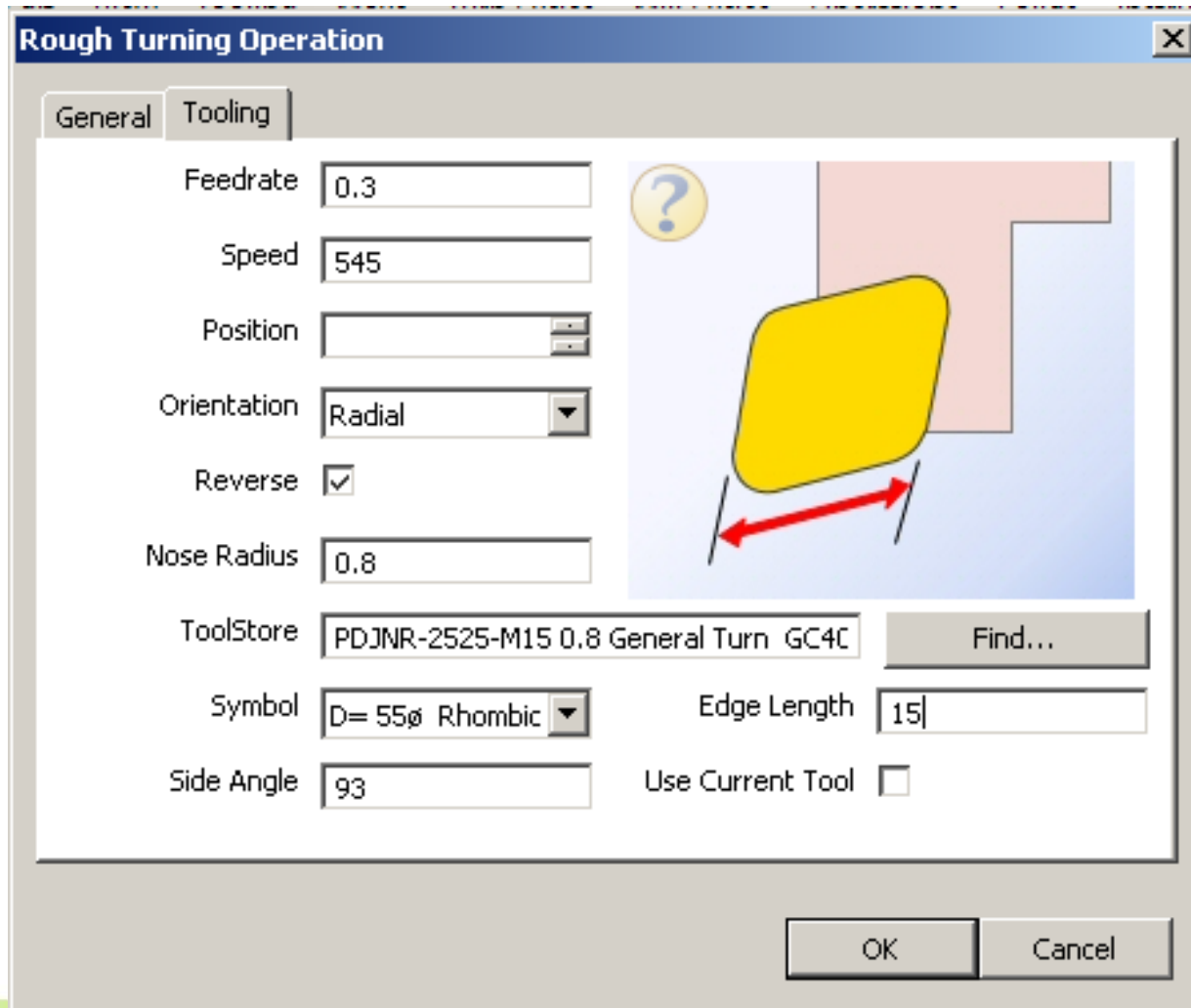
Inches Millimetres

Select Cancel Help Print

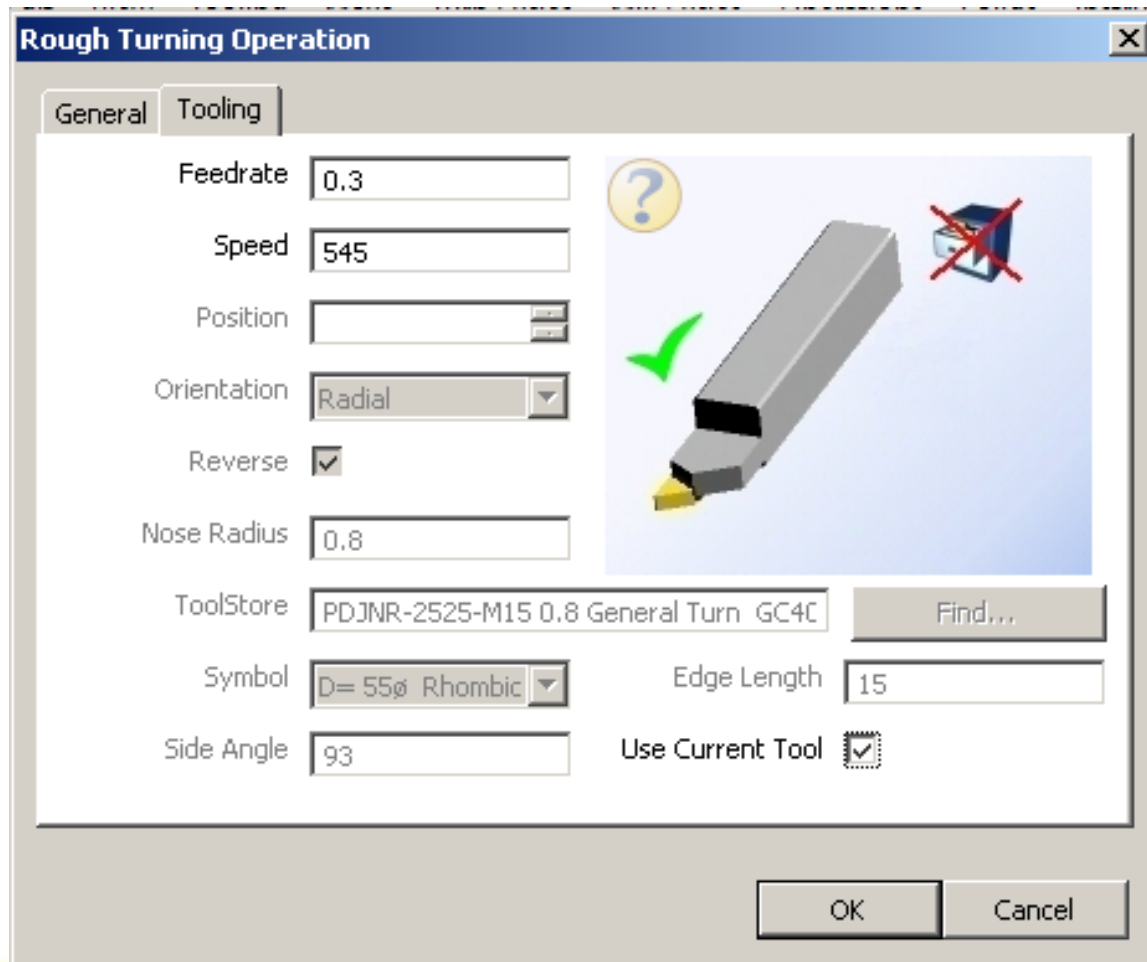
Em "Side Angle" ângulo da ferramenta pode se visualizar o ângulo da mesma.



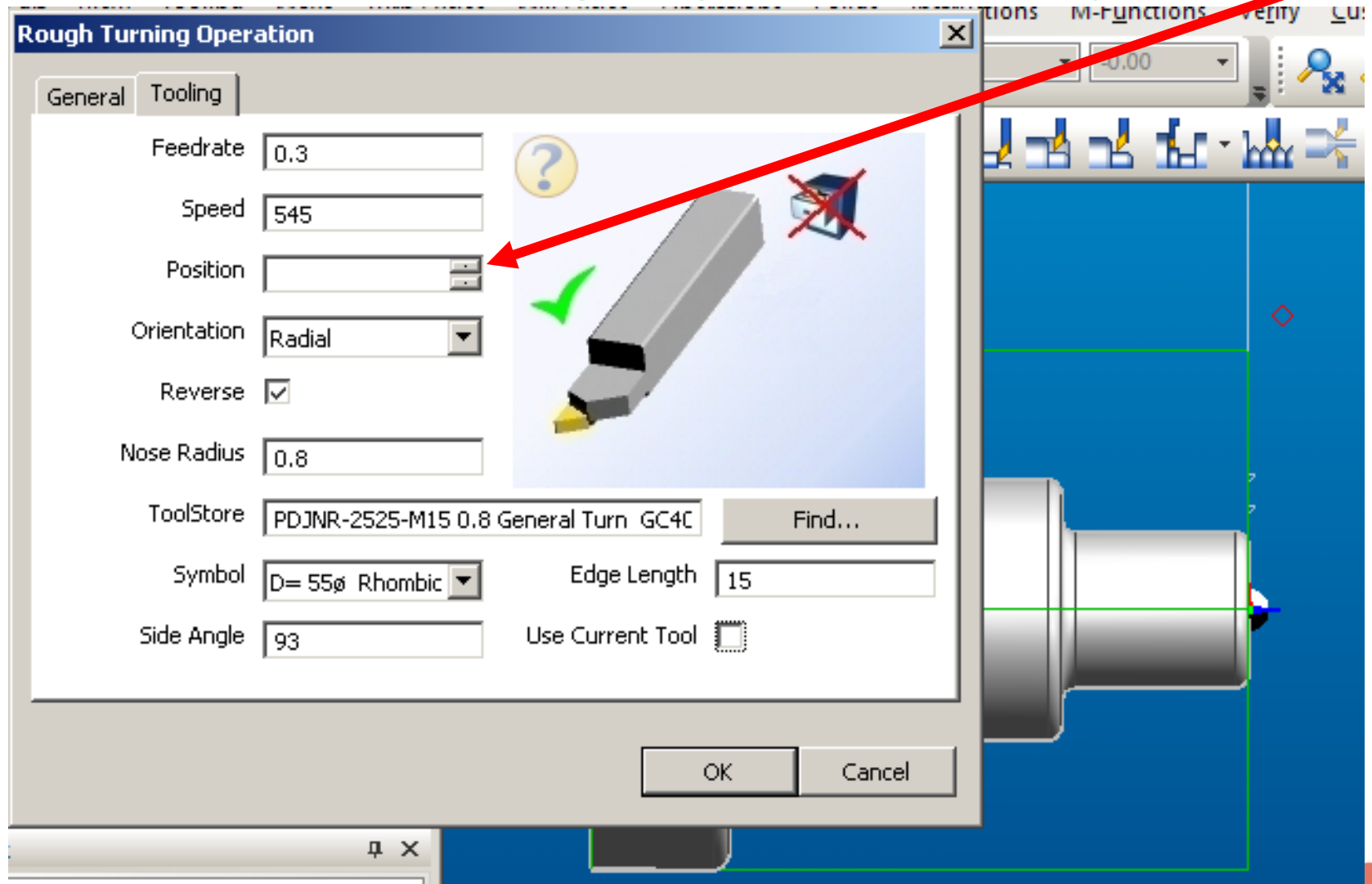
Em "Edge Length" comprimento da aresta pode se visualizar o comprimento da aresta da ferramenta.



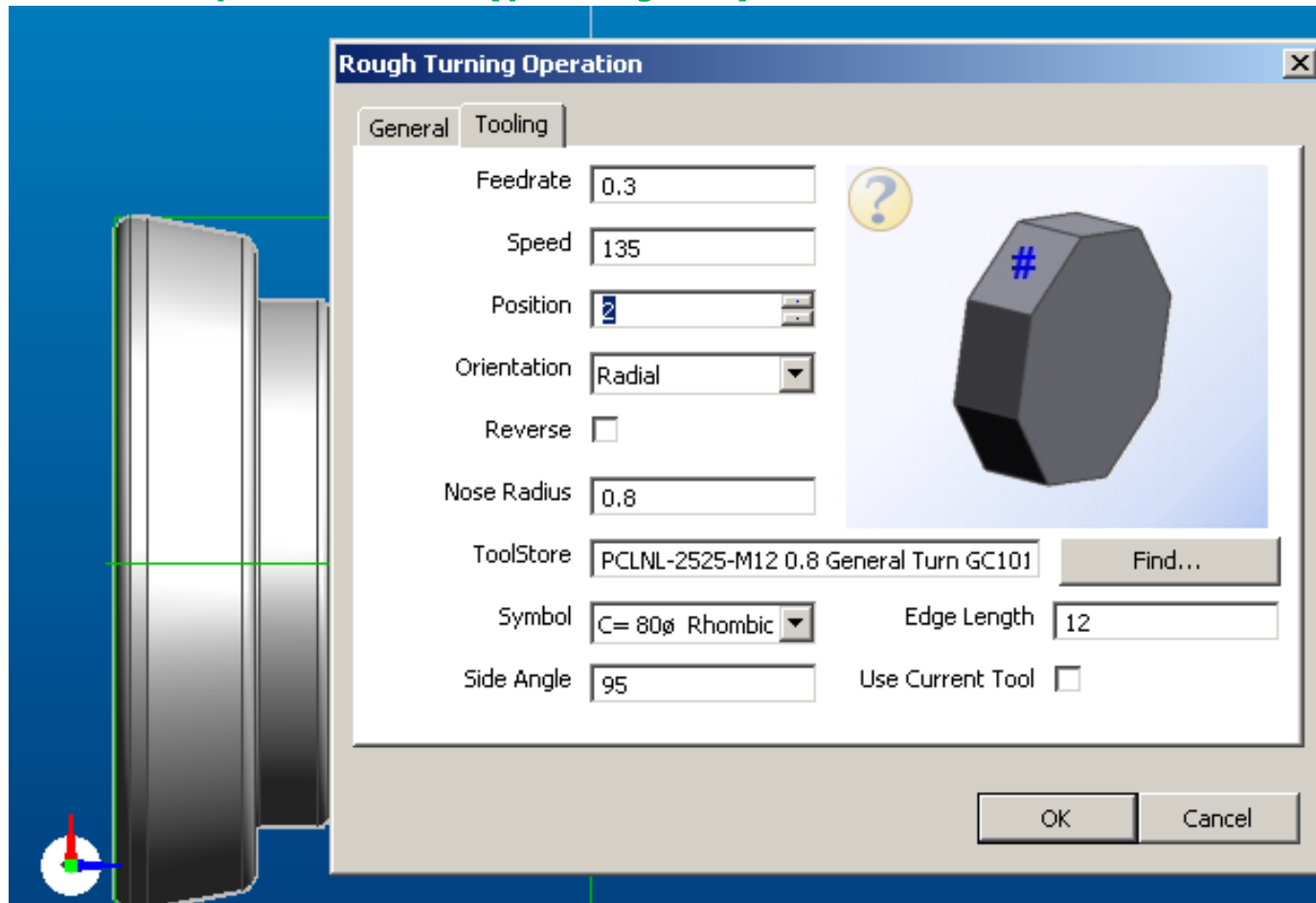
Se for selecionado “Use current tool” usar ferramenta corrente significa utilizar a mesma da operação anterior.



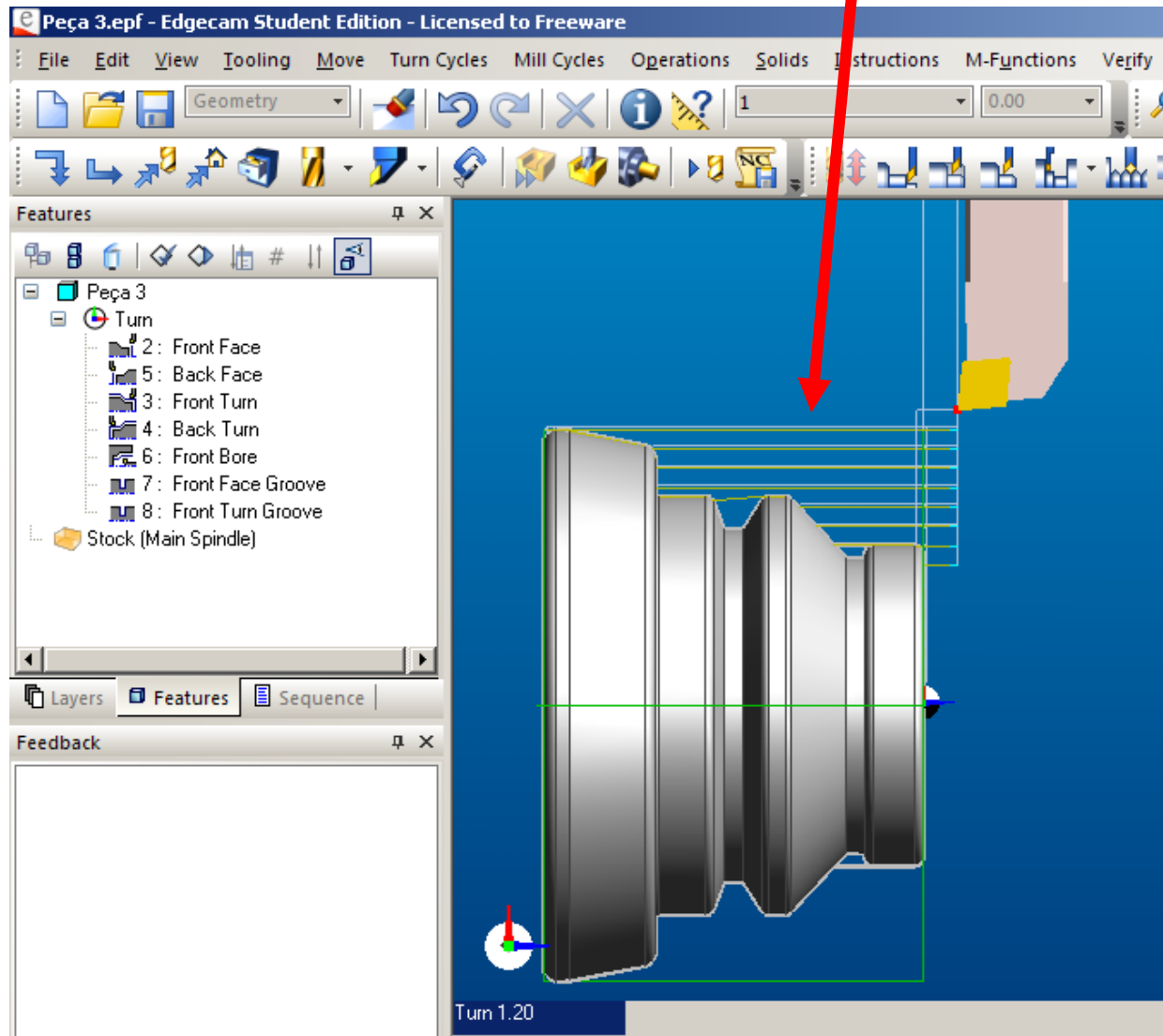
Manter esta configuração com a posição em 2.



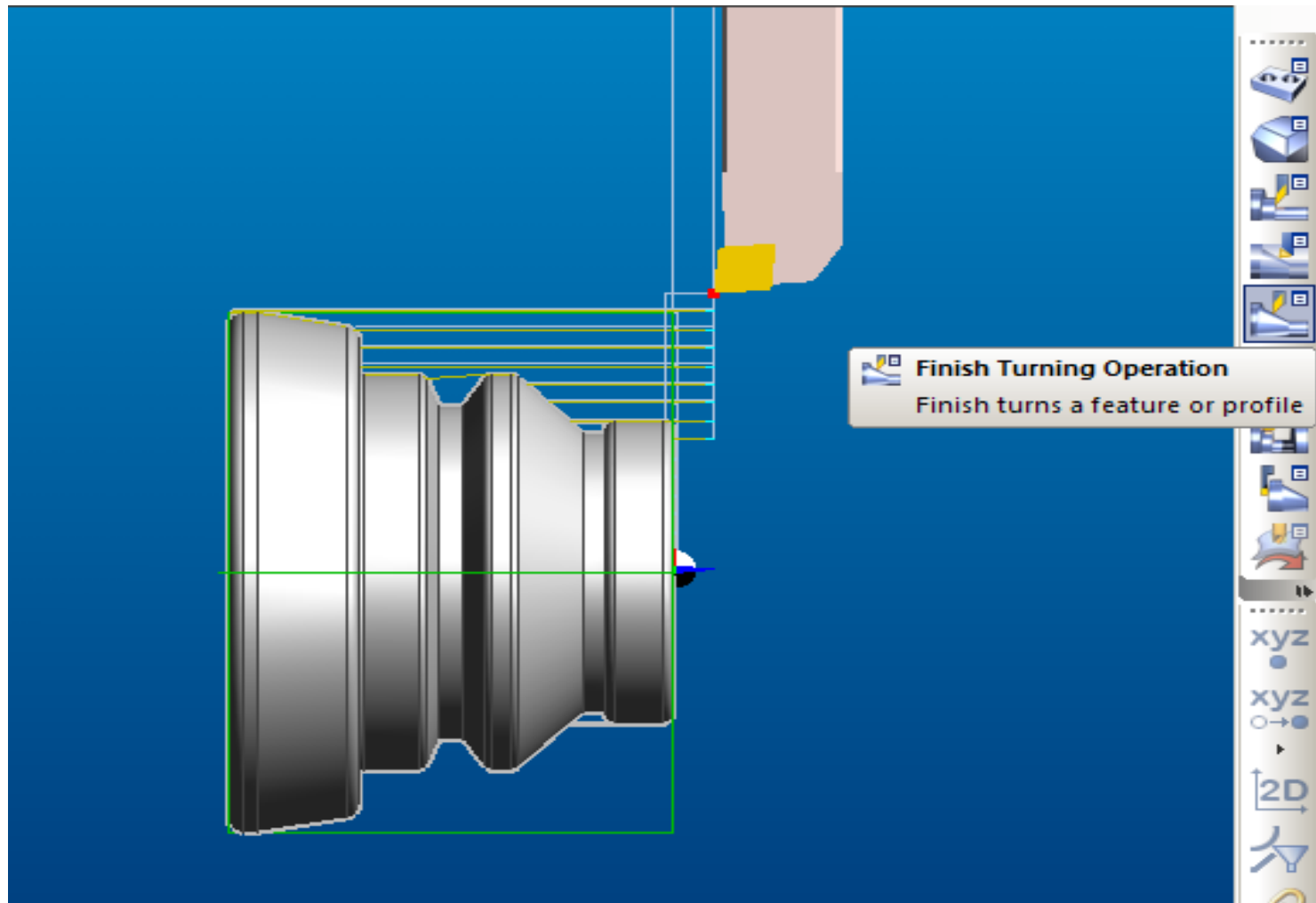
Observe que o edgecam indica avanço e rotação para a ferramenta, mantenha-os e coloque 3 em position (posição).



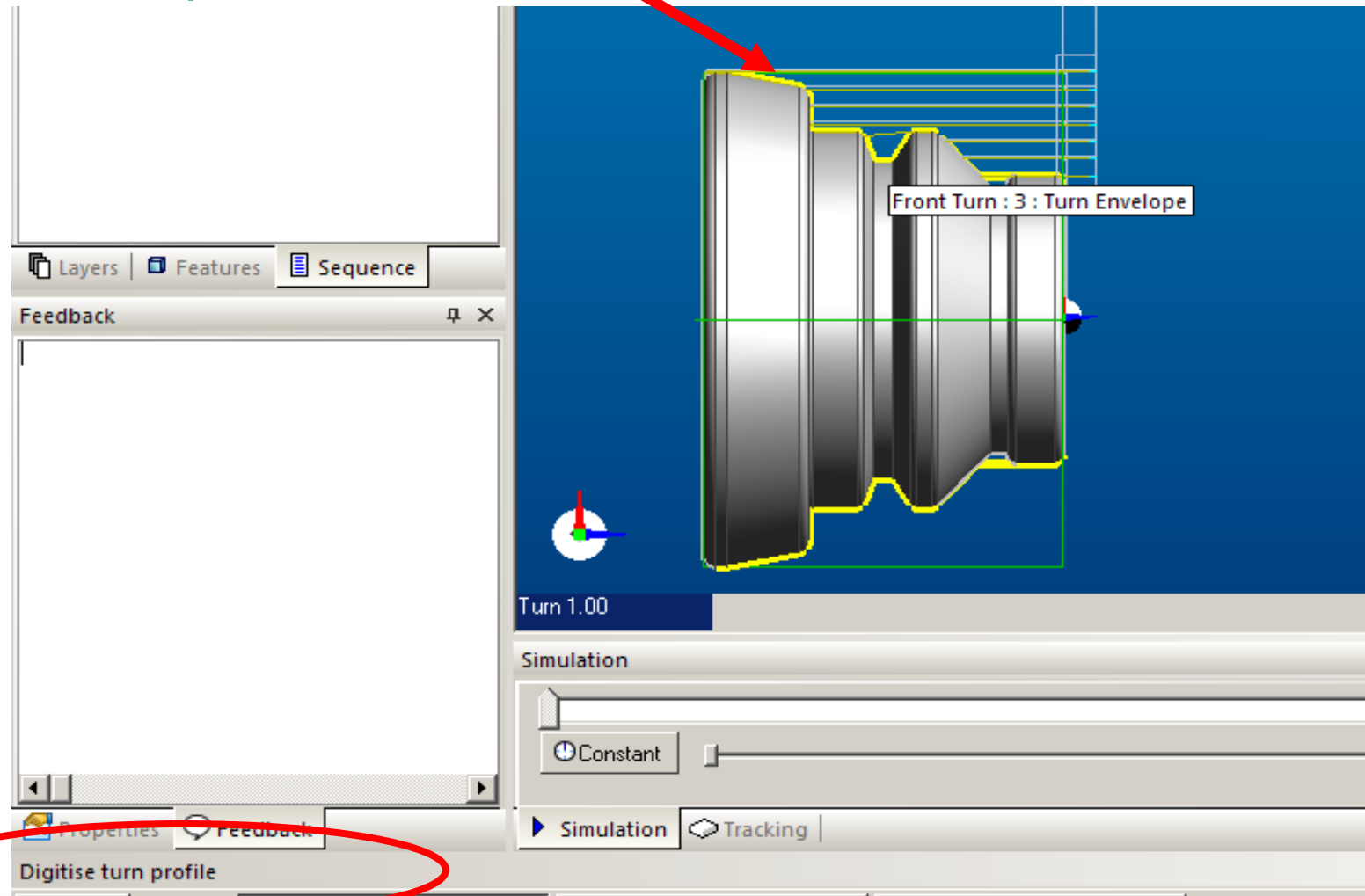
Observe a operação realizada.



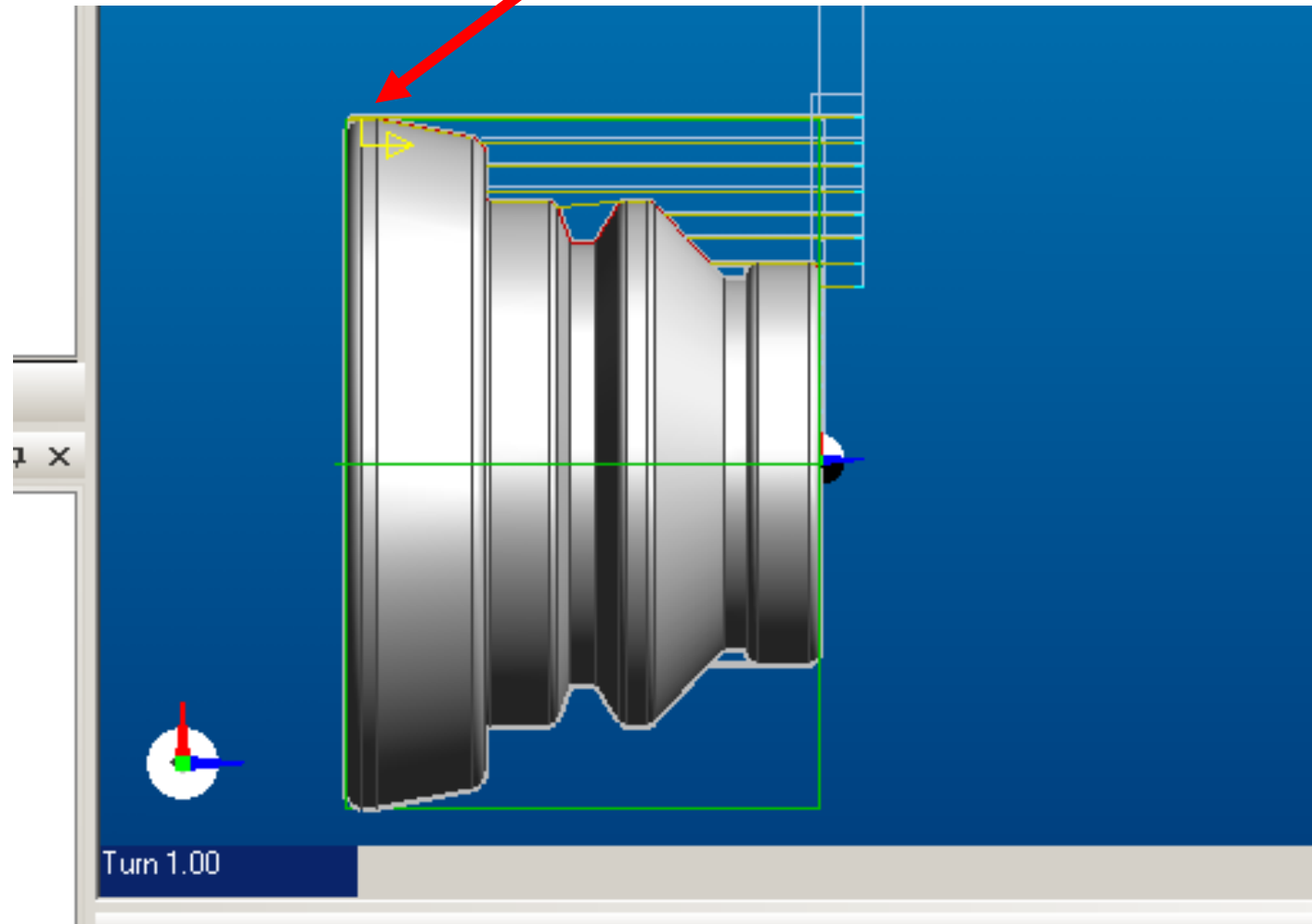
Escolha o ícone “Finish Turning Operation” para acabamento do perfil.



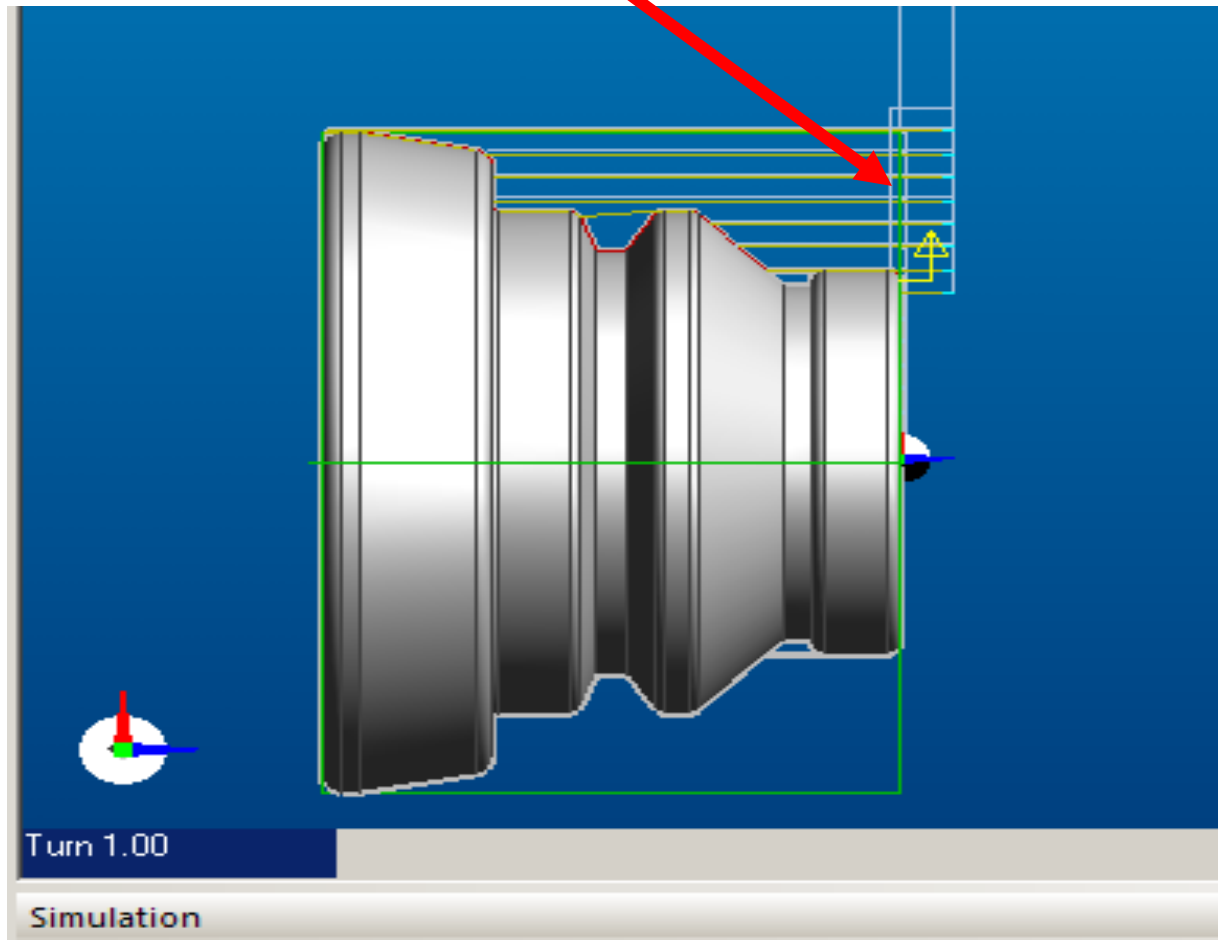
Digitalise o perfil de torneamento da Peça e clique OK.



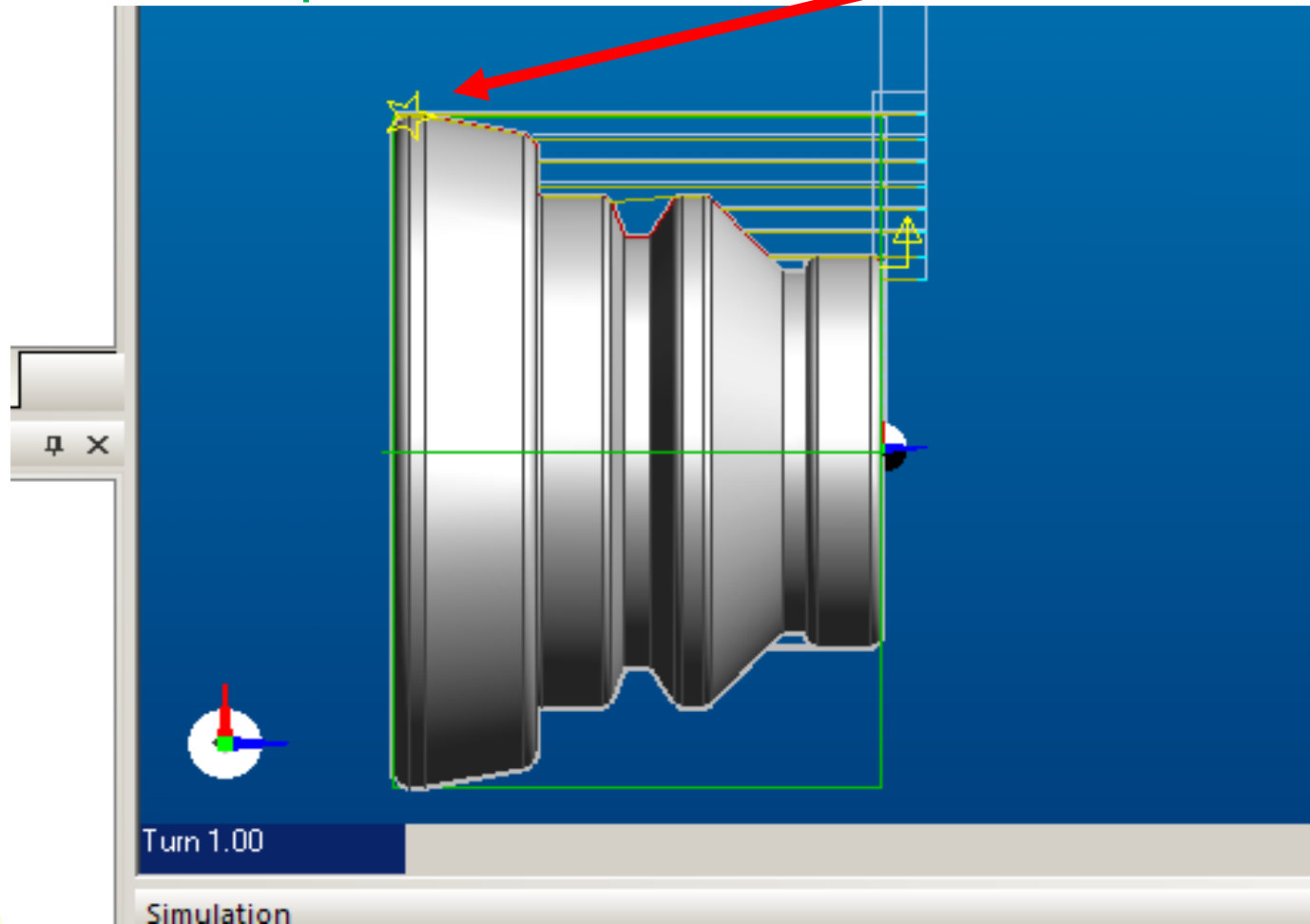
Observe que aparece a seta indicando o início do torneamento.



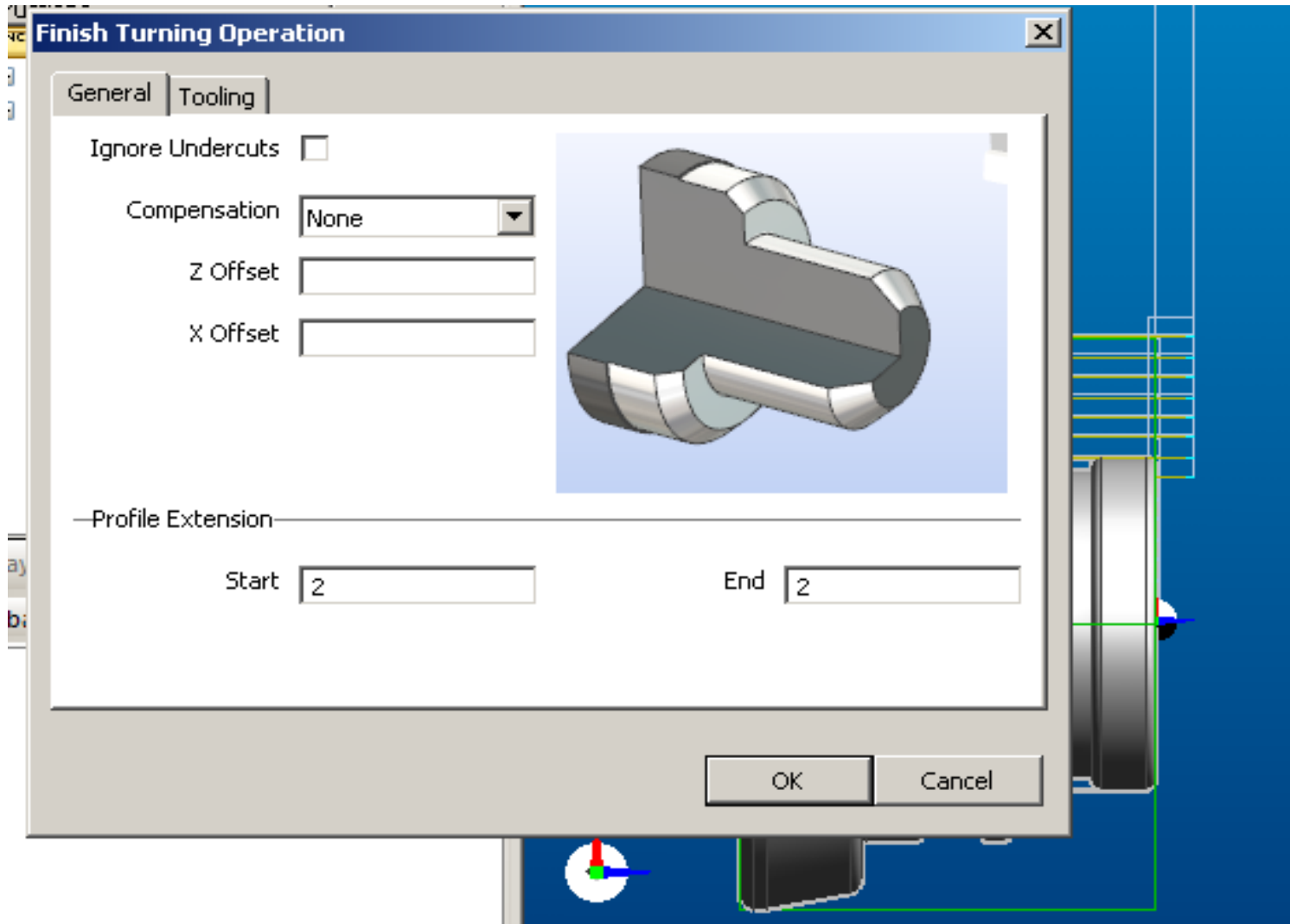
Clique com o botão direito no outro lado para colocar o início da usinagem e confirme com o botão direito sobre o perfil.



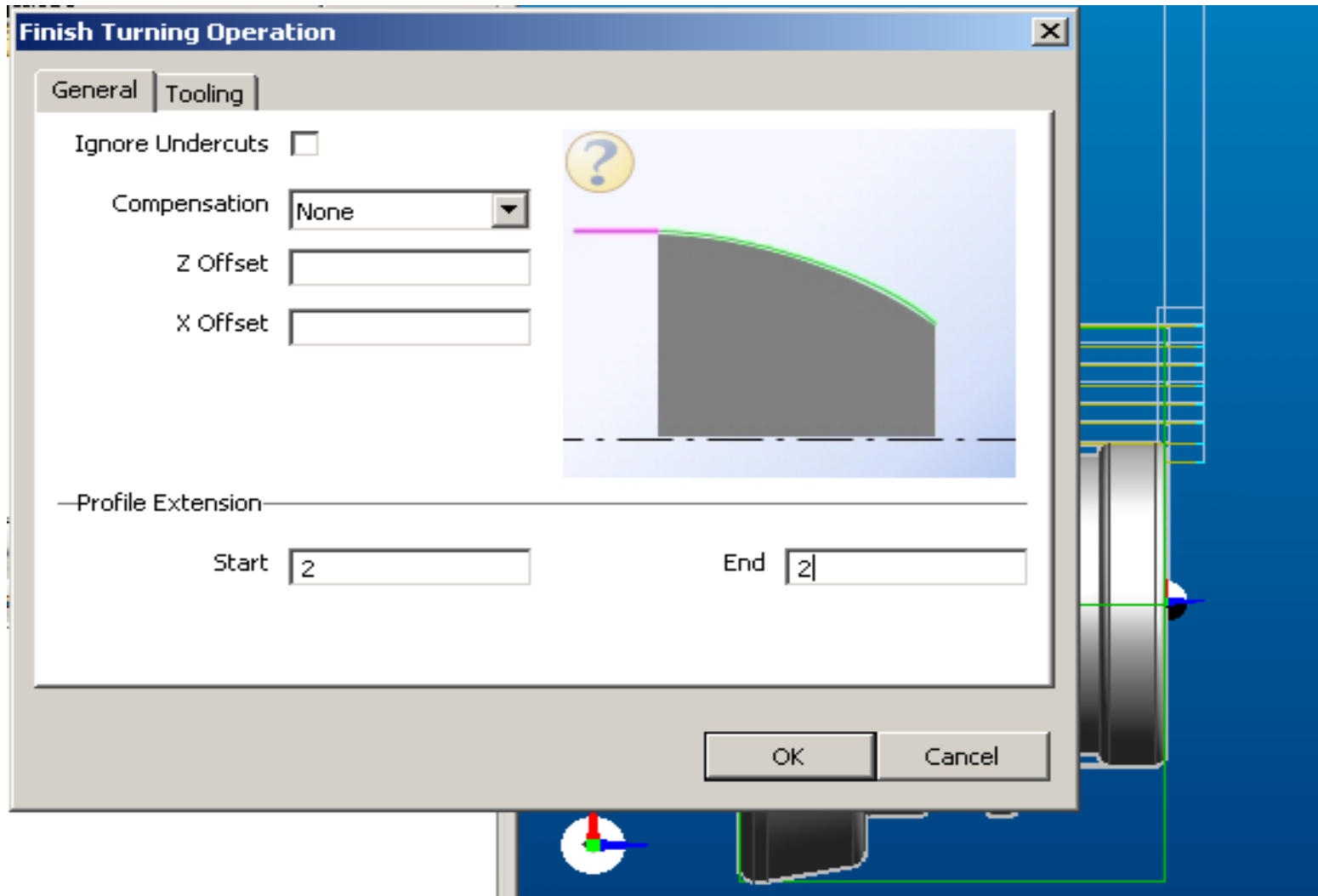
Observe que aparece um estrela indicando o fim do torneamento da peça e clique com o botão direito para confirmar.



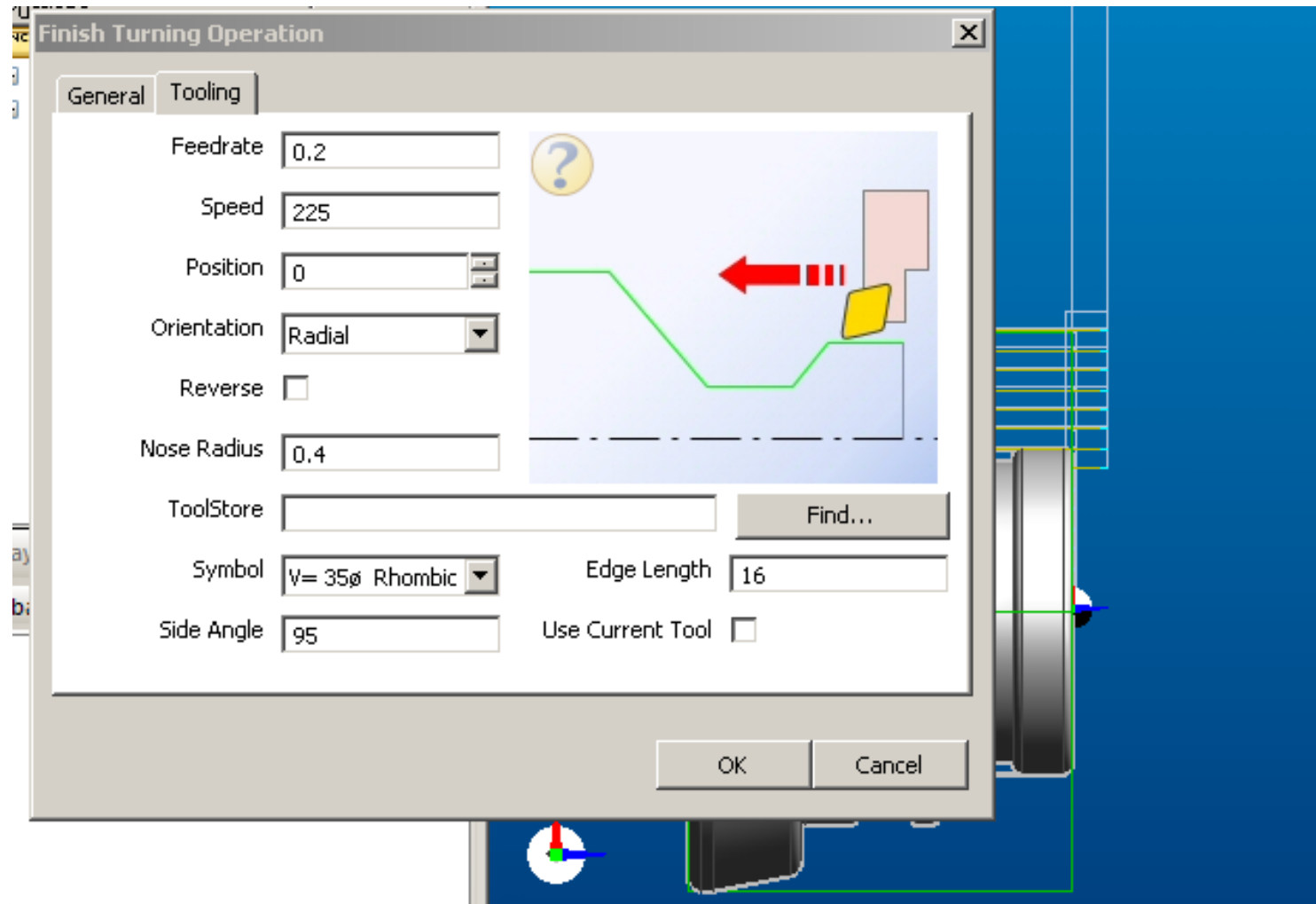
Observe a janela que aparece do acabamento.



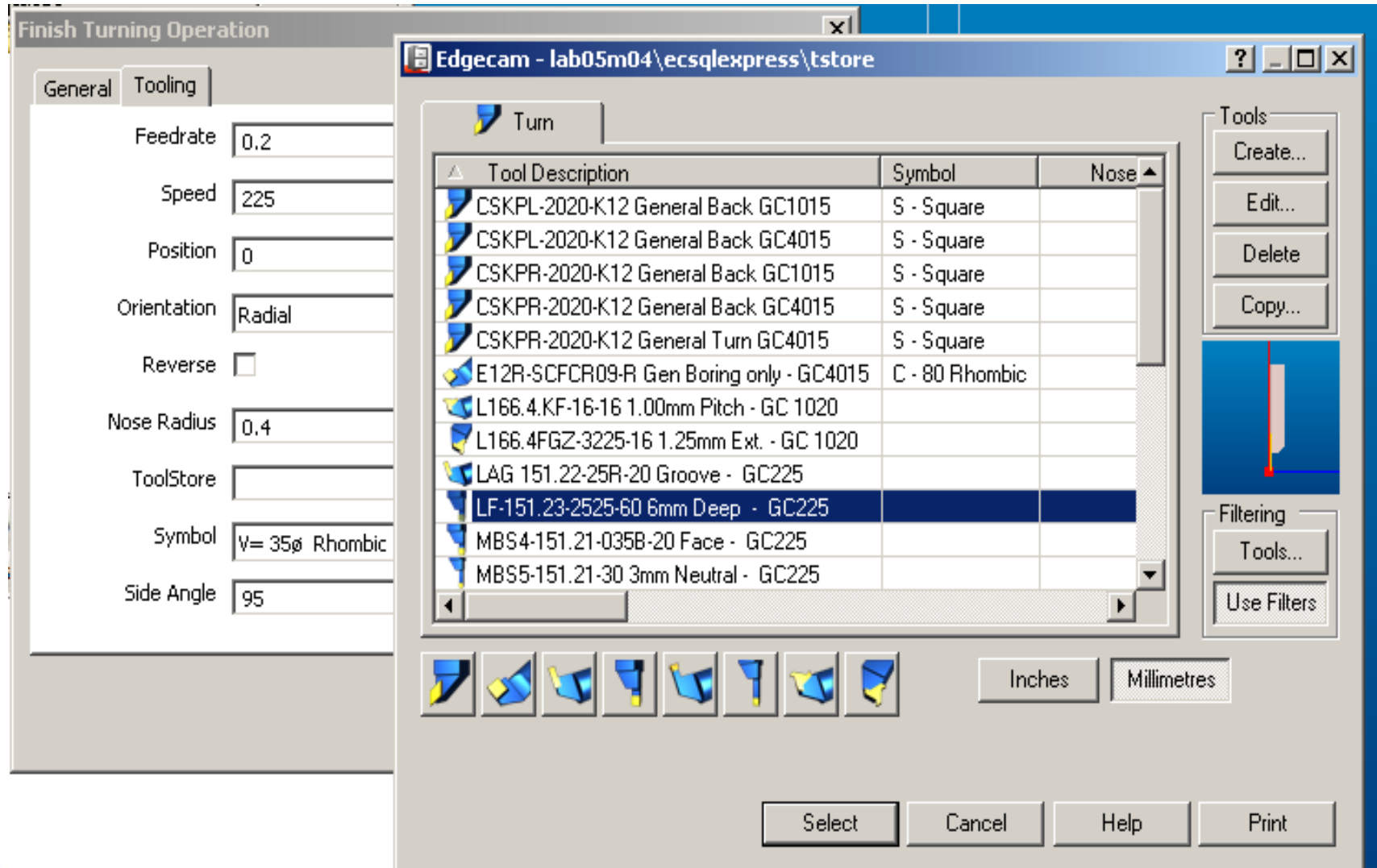
Faça a seguinte configuração e vá para tooling.



Vá em "ToolStore" e clique em "Find" para encontrar a ferramenta.



Escolha a ferramenta LF151 conforme a figura.



The screenshot displays the Edgecam software interface. On the left, the 'Finish Turning Operation' dialog box is open, showing the 'Tooling' tab with various parameters:

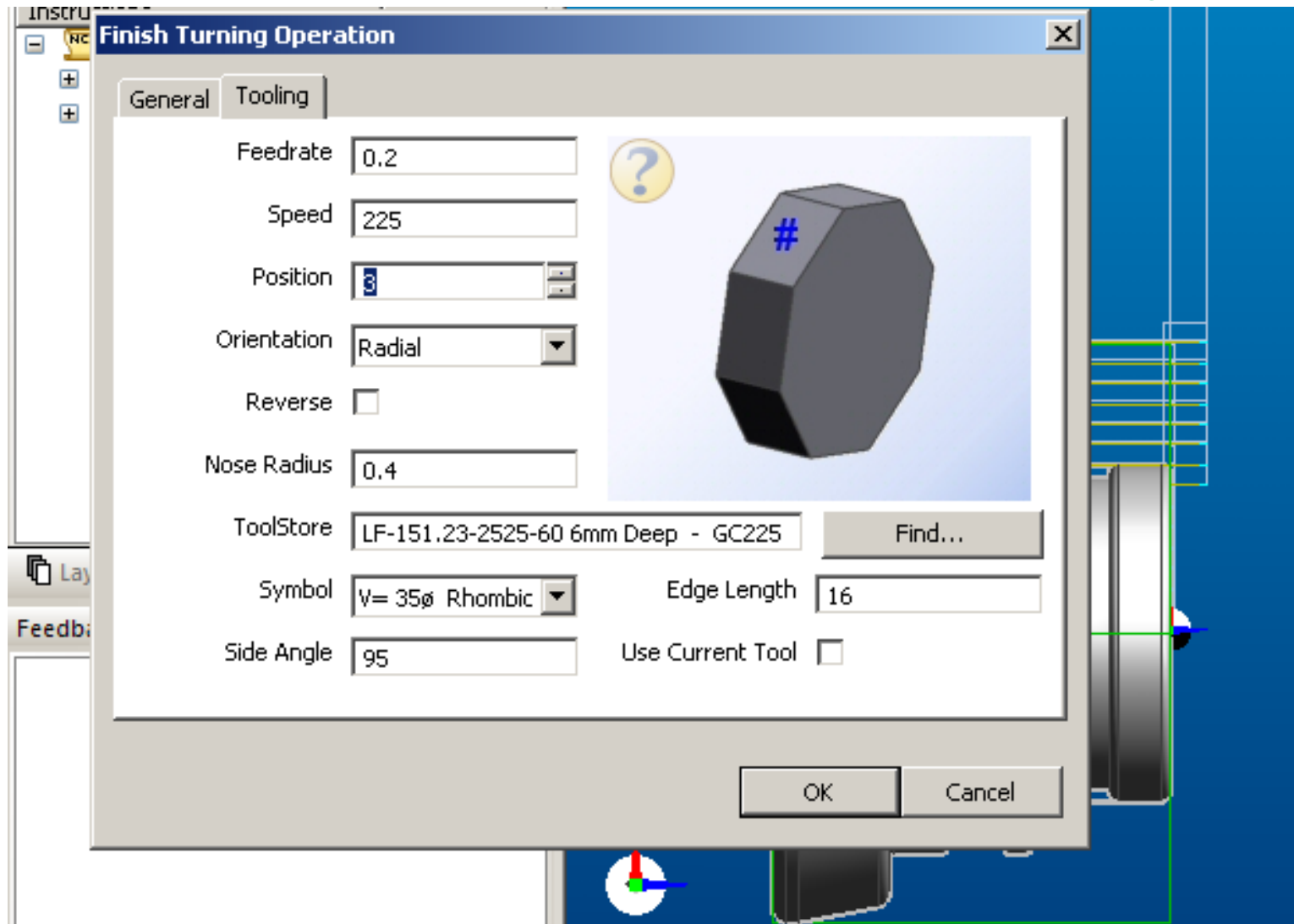
- Feedrate: 0.2
- Speed: 225
- Position: 0
- Orientation: Radial
- Reverse:
- Nose Radius: 0.4
- ToolStore: (empty)
- Symbol: V= 35° Rhombic
- Side Angle: 95

The main window shows a 'Turn' operation with a tool selection table:

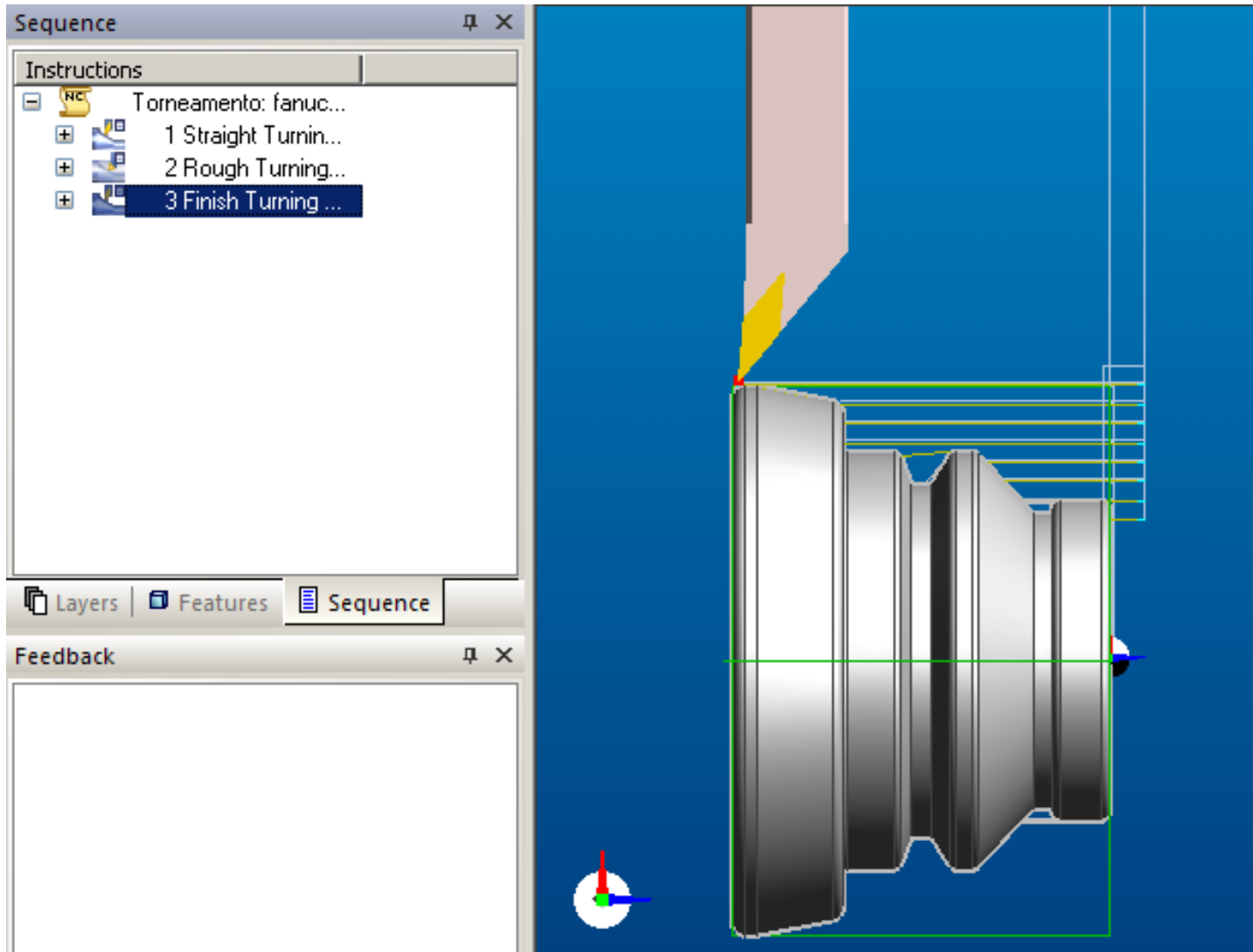
Tool Description	Symbol	Nose
CSKPL-2020-K12 General Back GC1015	S - Square	
CSKPL-2020-K12 General Back GC4015	S - Square	
CSKPR-2020-K12 General Back GC1015	S - Square	
CSKPR-2020-K12 General Back GC4015	S - Square	
CSKPR-2020-K12 General Turn GC4015	S - Square	
E12R-SCFCR09-R Gen Boring only - GC4015	C - 80 Rhombic	
L166.4.KF-16-16 1.00mm Pitch - GC 1020		
L166.4FGZ-3225-16 1.25mm Ext. - GC 1020		
LAG 151.22-25R-20 Groove - GC225		
LF-151.23-2525-60 6mm Deep - GC225		
MBS4-151.21-035B-20 Face - GC225		
MBS5-151.21-30 3mm Neutral - GC225		

At the bottom of the tool selection window, there are icons for different tool types and unit selection buttons for 'Inches' and 'Millimetres'. The 'Select' button is highlighted.

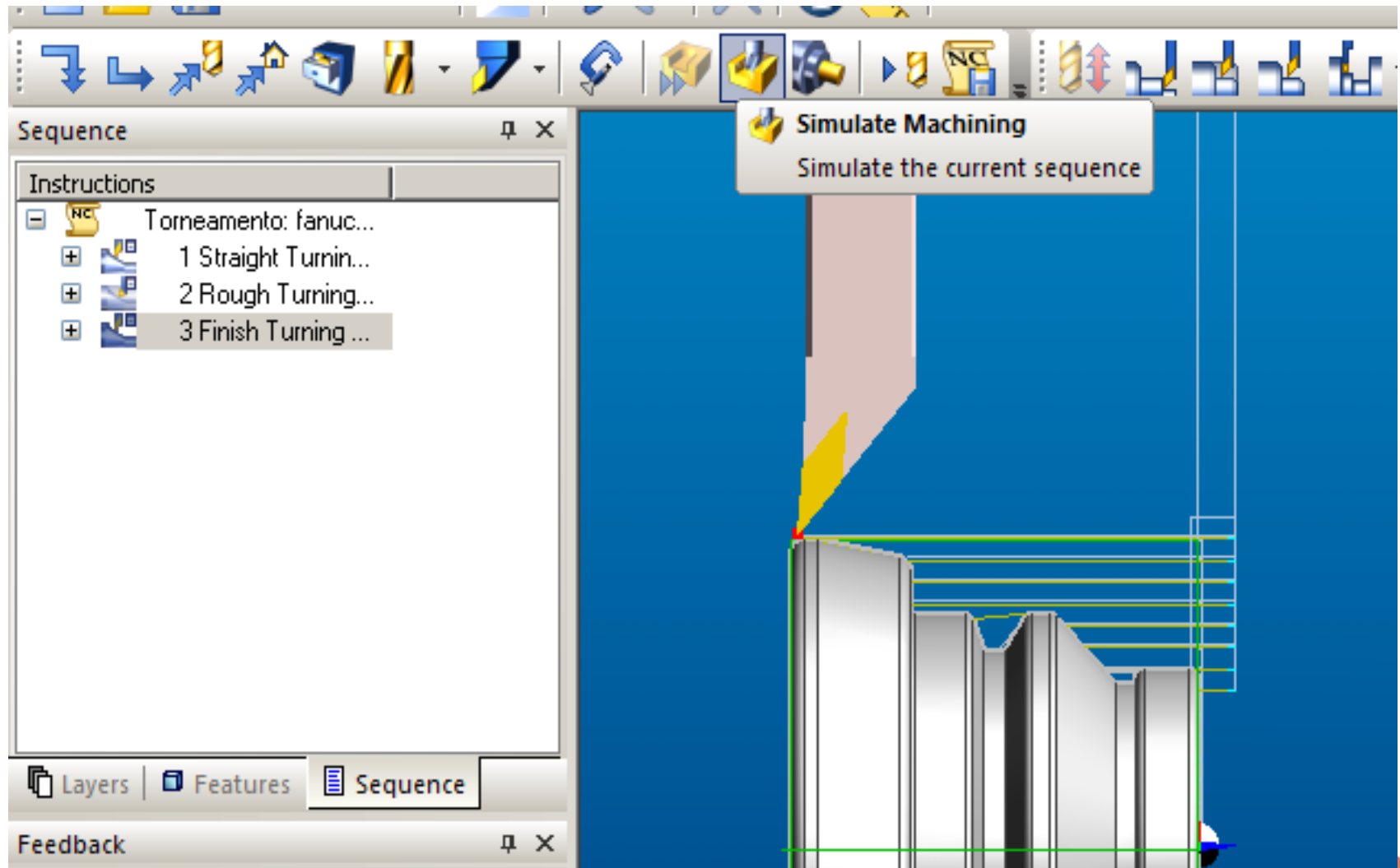
Observe os parâmetros e escolha a posição 3.



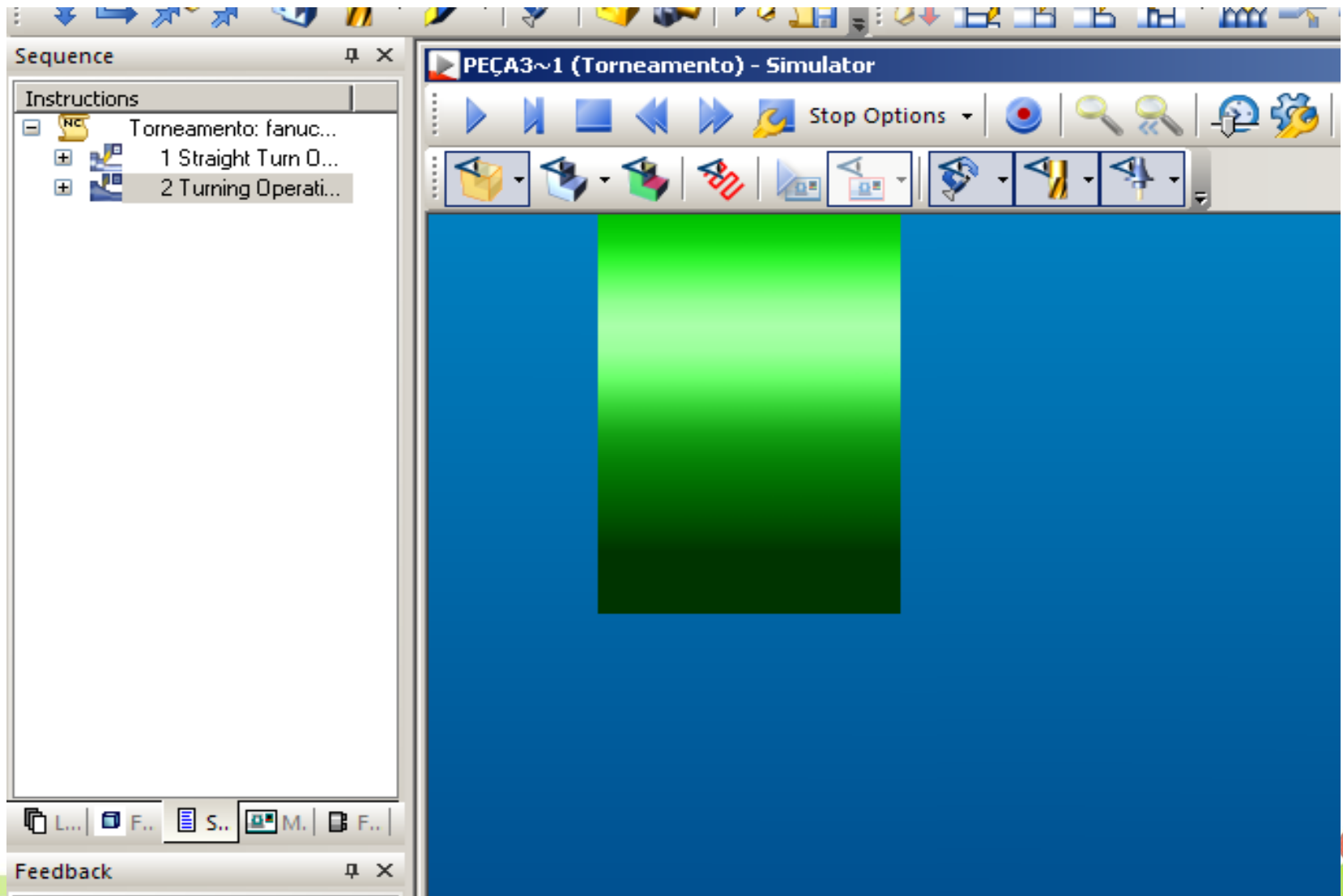
Observe a operação realizada.



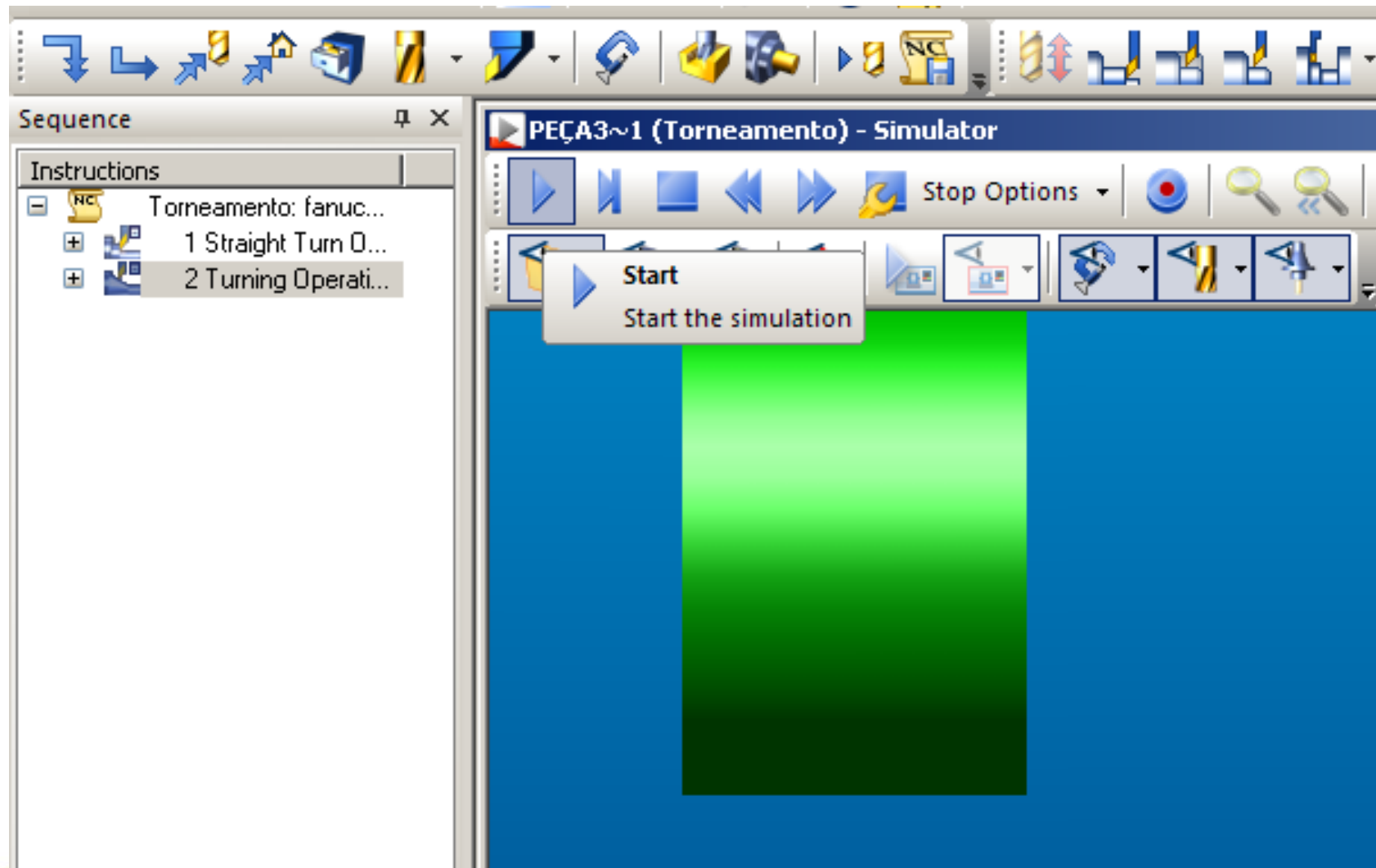
Vamos simular as operações de usinagem.



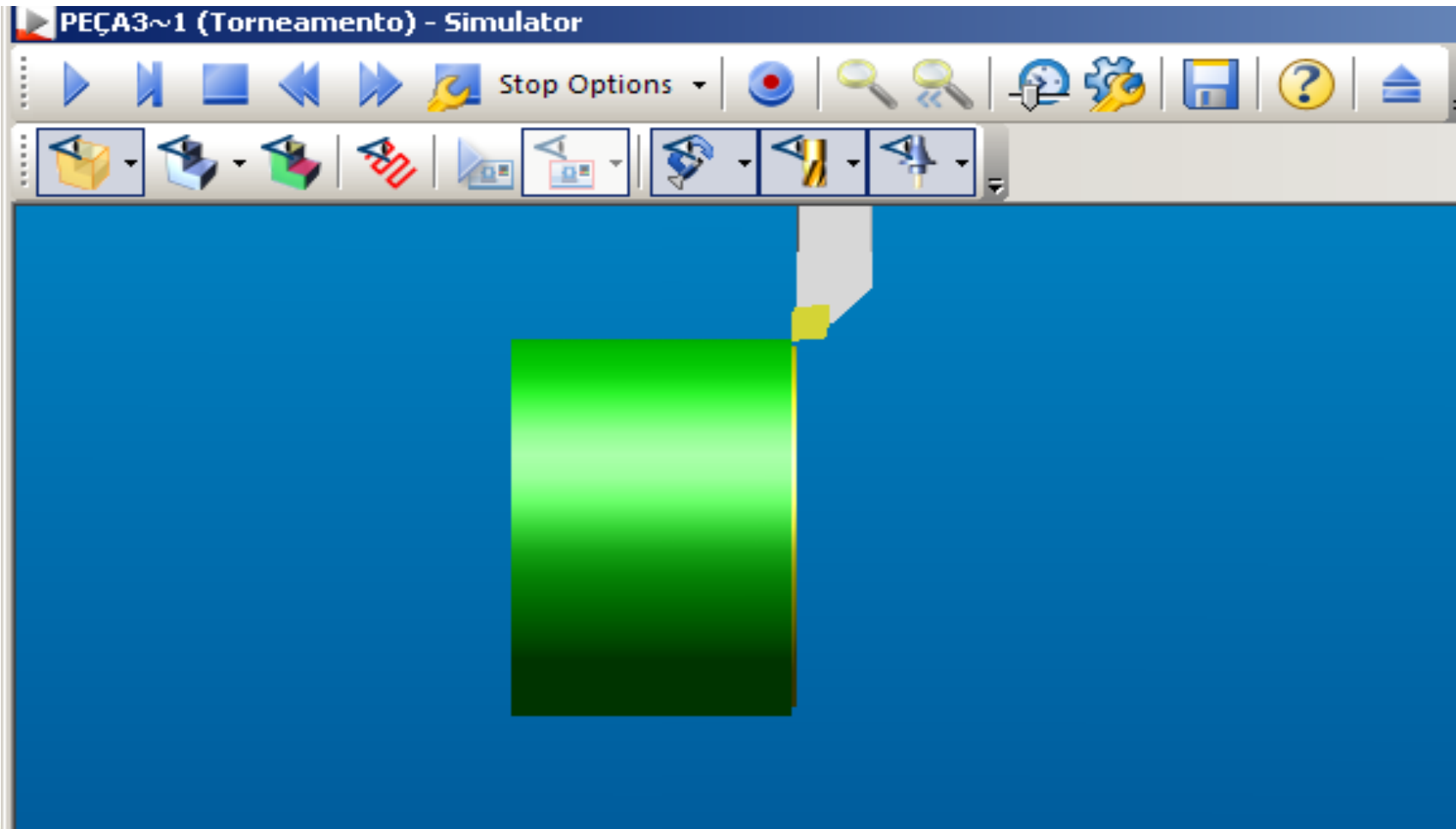
Esta é a aparência do simulador.



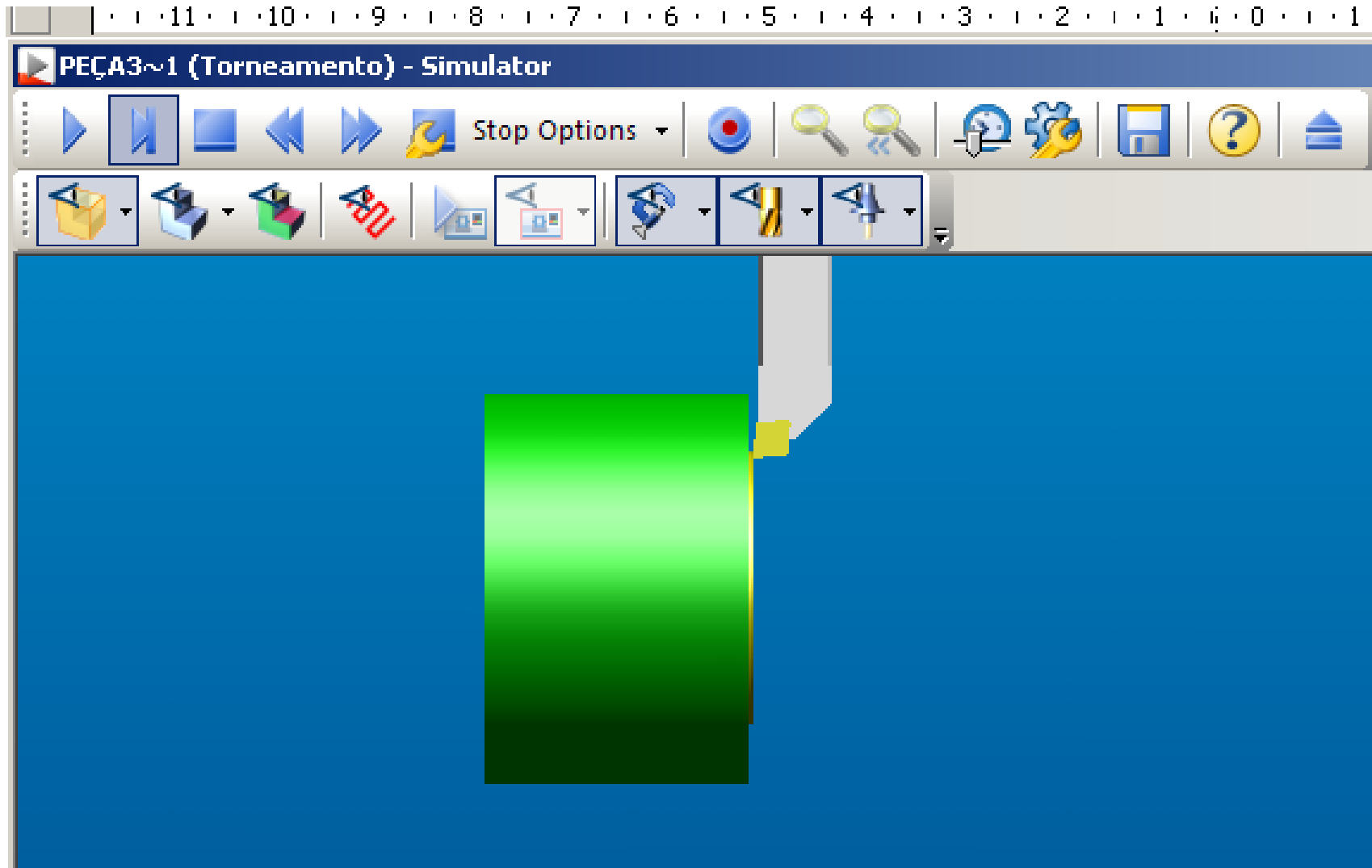
Clique em start para iniciar a simulação.



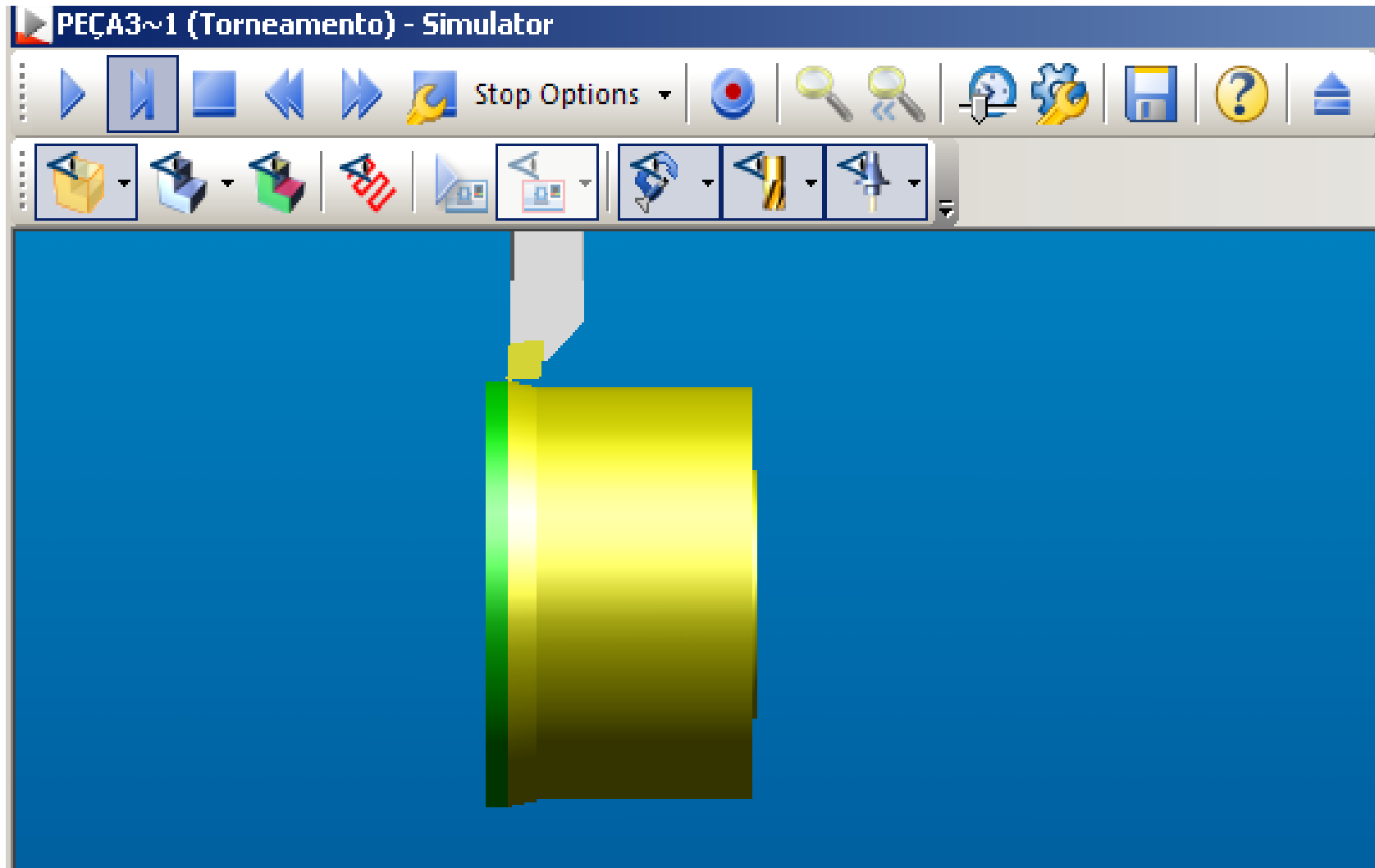
Observe o avanço da simulação. Serve para observar algum erro.



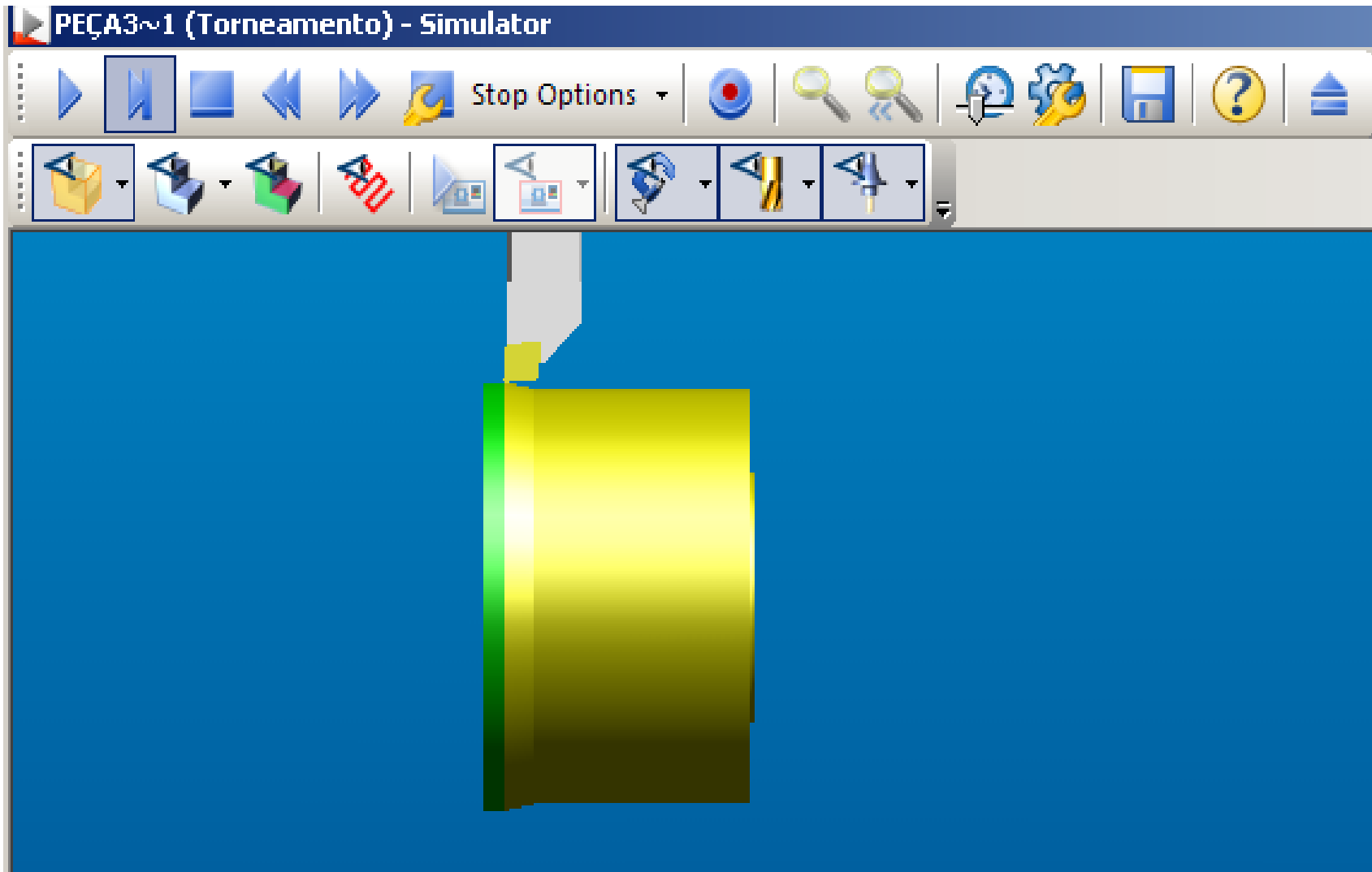
Observe o avanço da simulação.



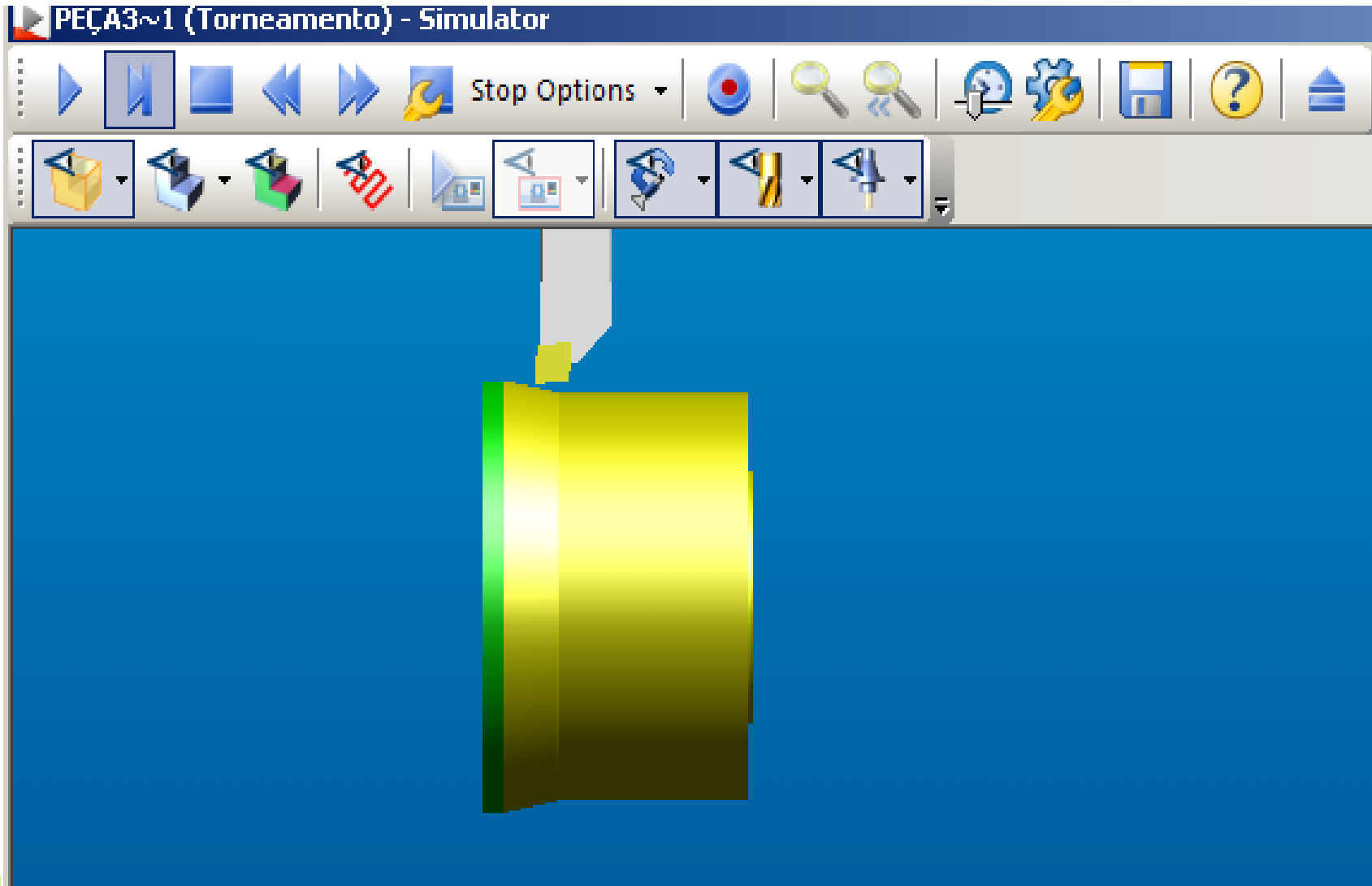
Observe o avanço da simulação.



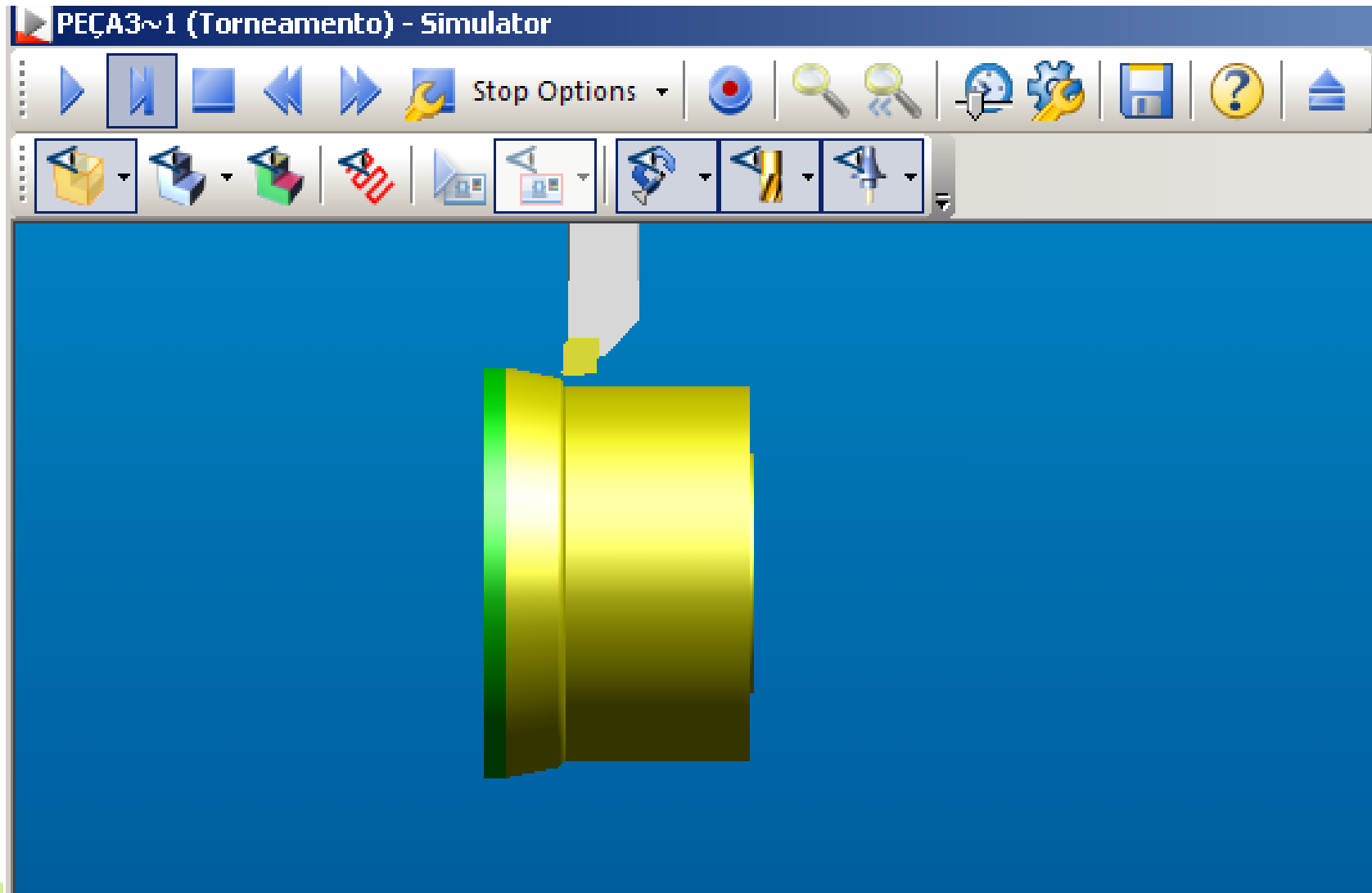
Observe o avanço da simulação.



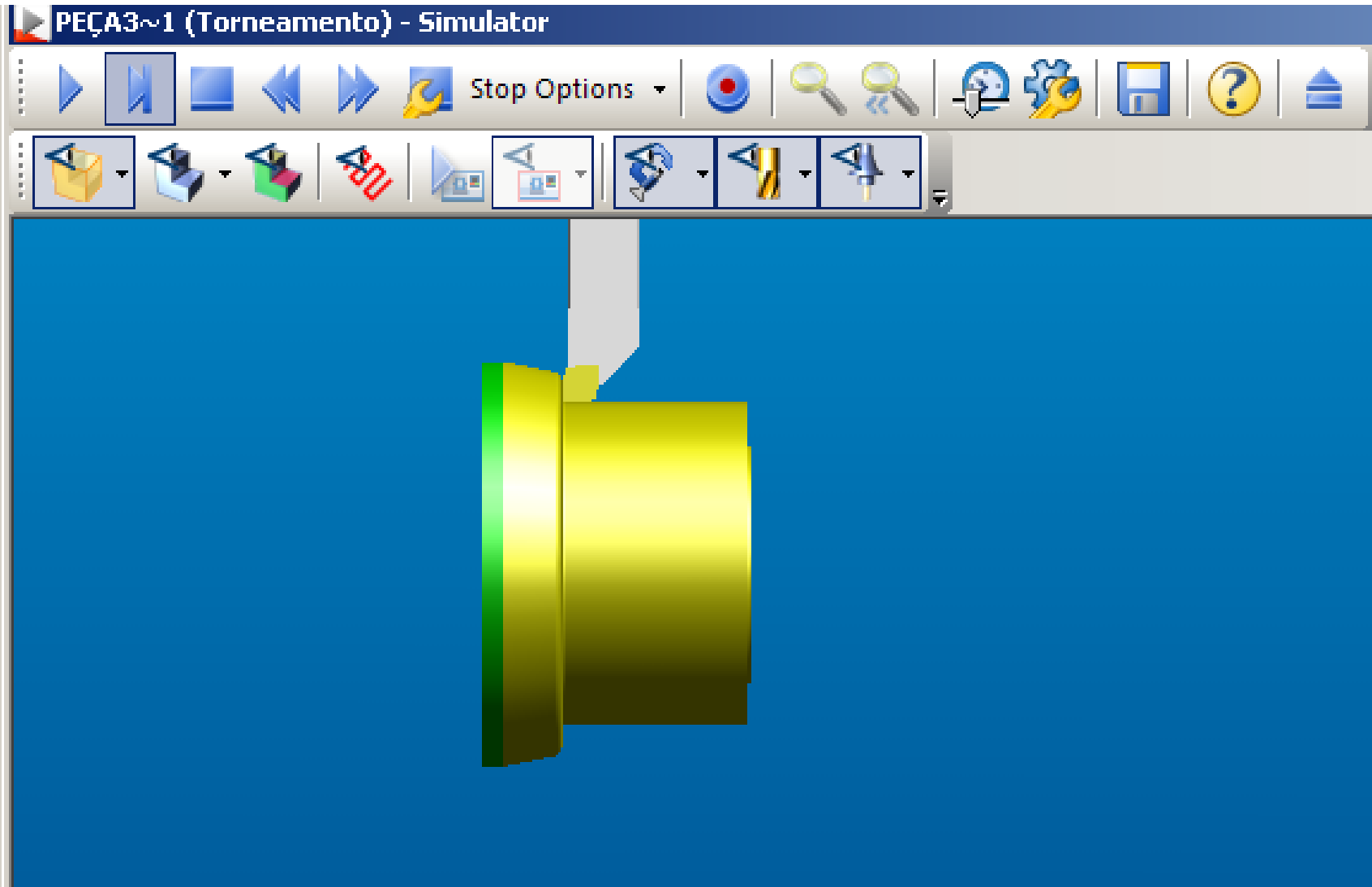
Observe o avanço da simulação.



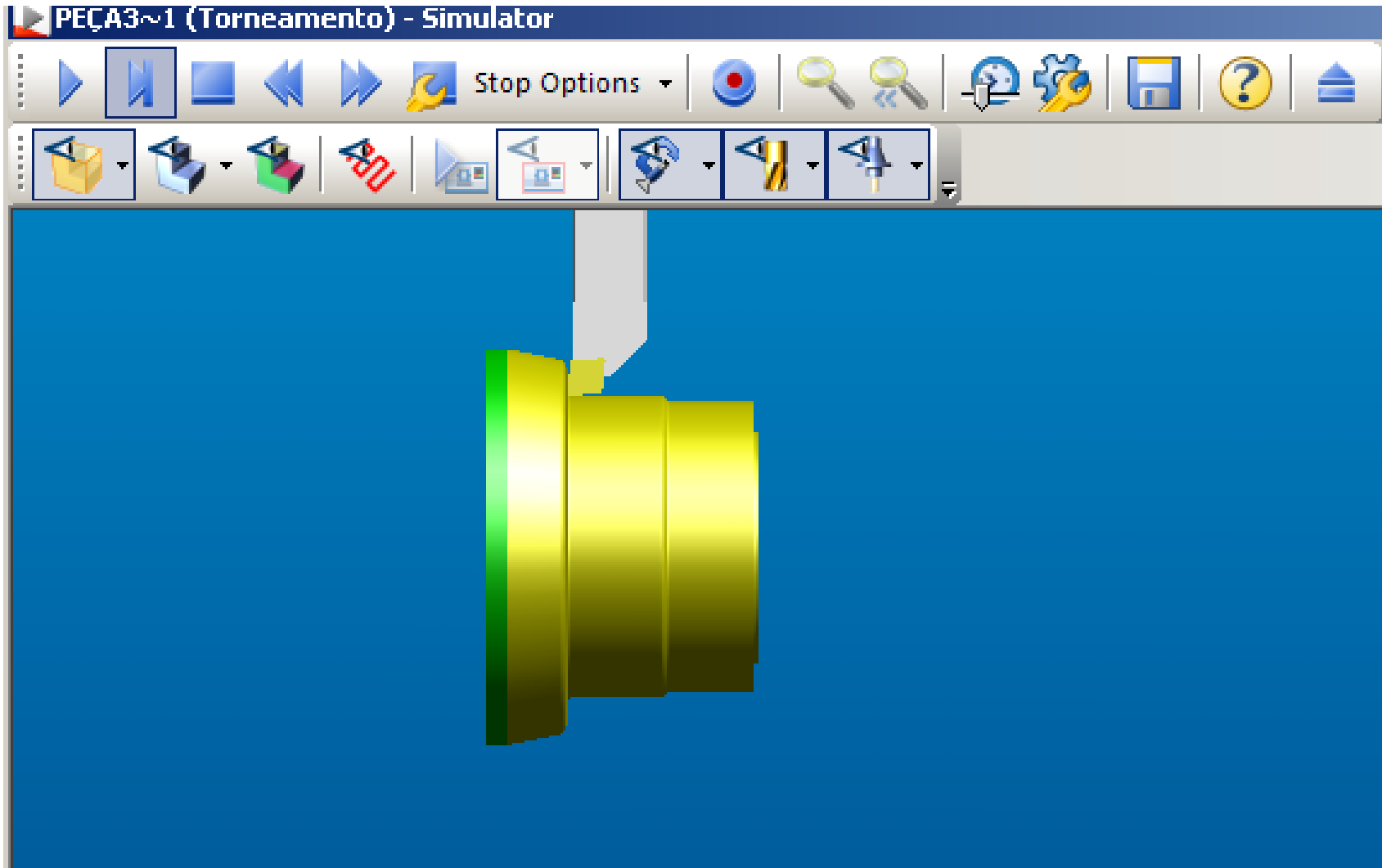
Observe o avanço da simulação.



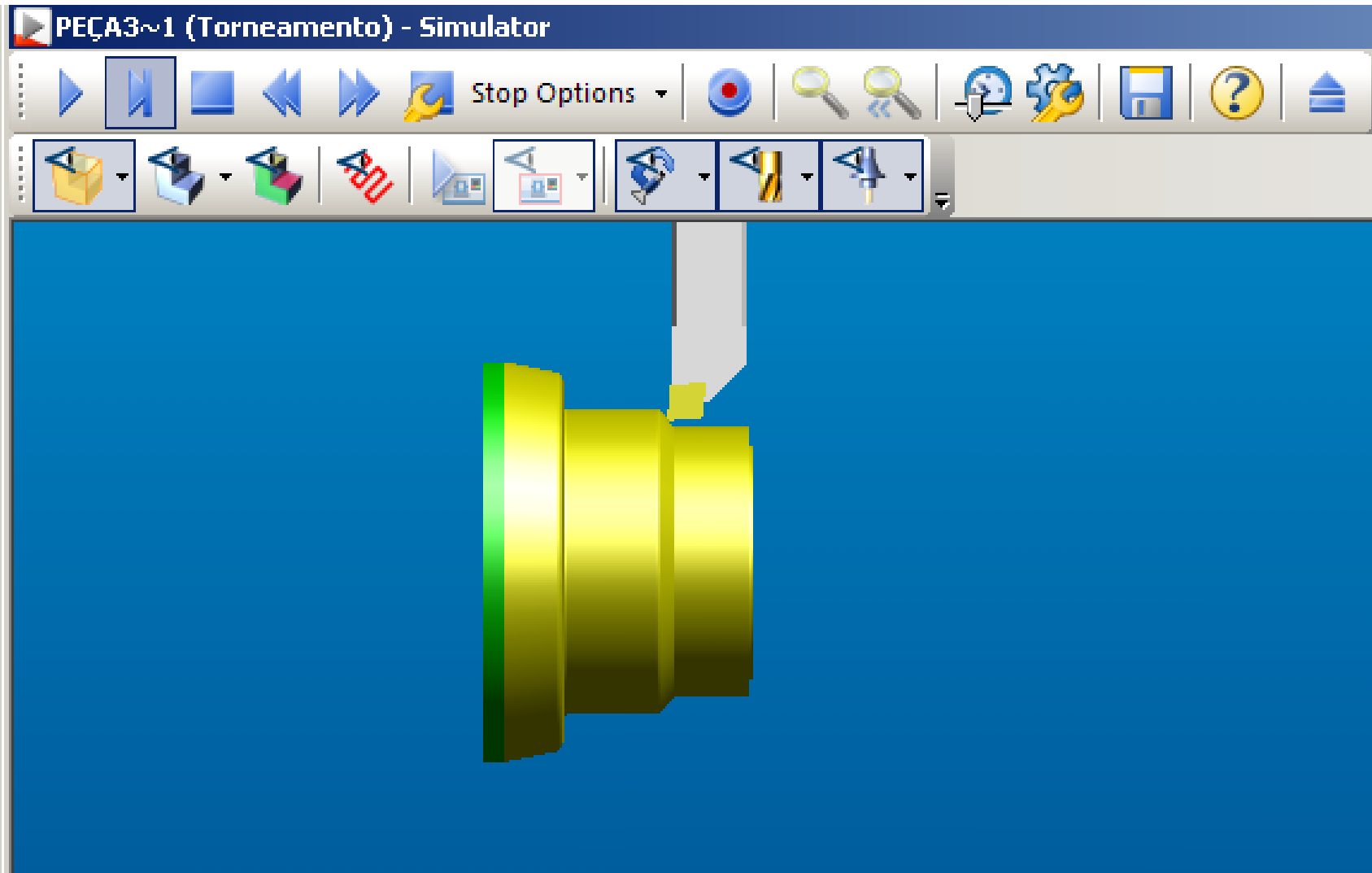
Observe o avanço da simulação.



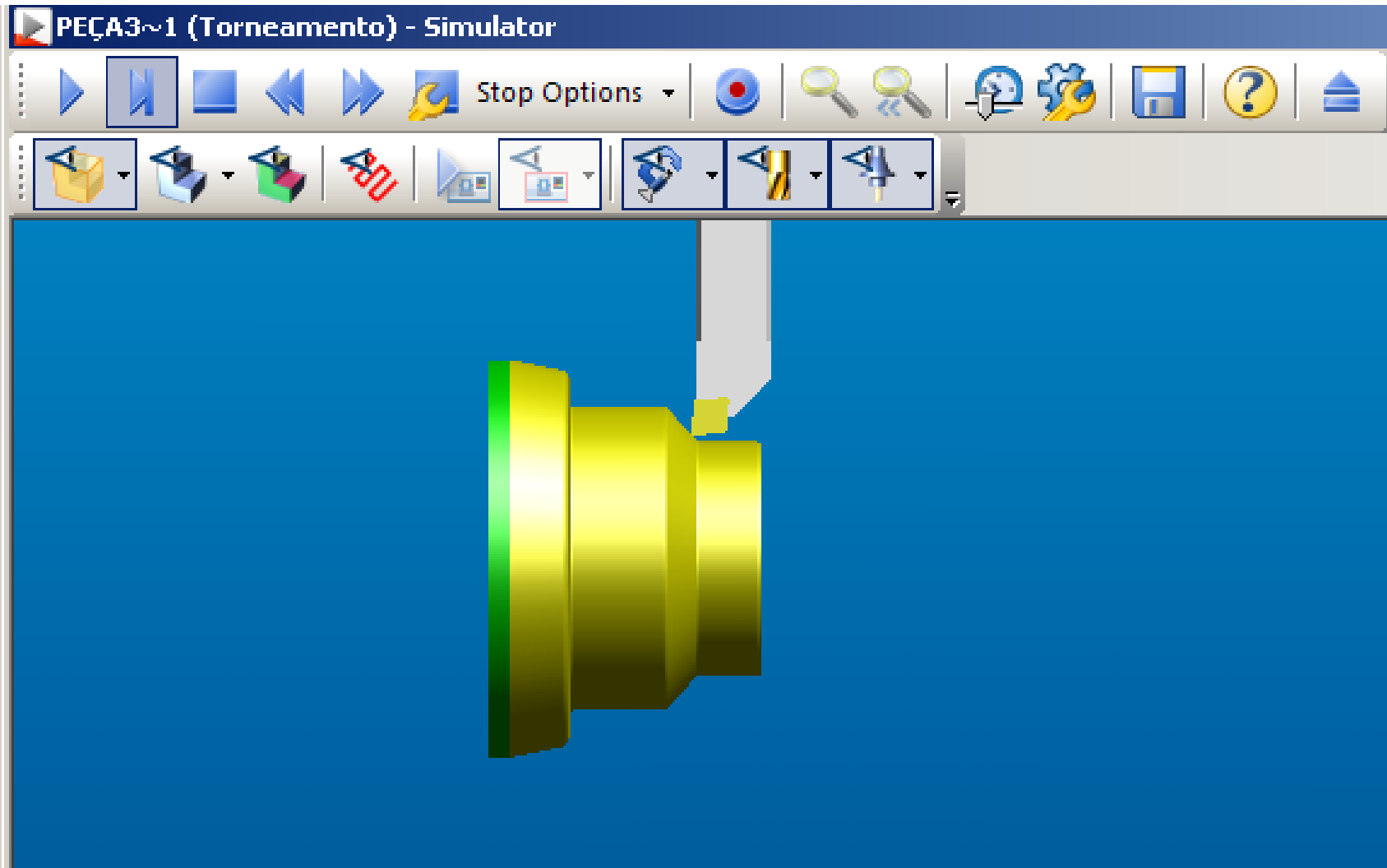
Observe o avanço da simulação.



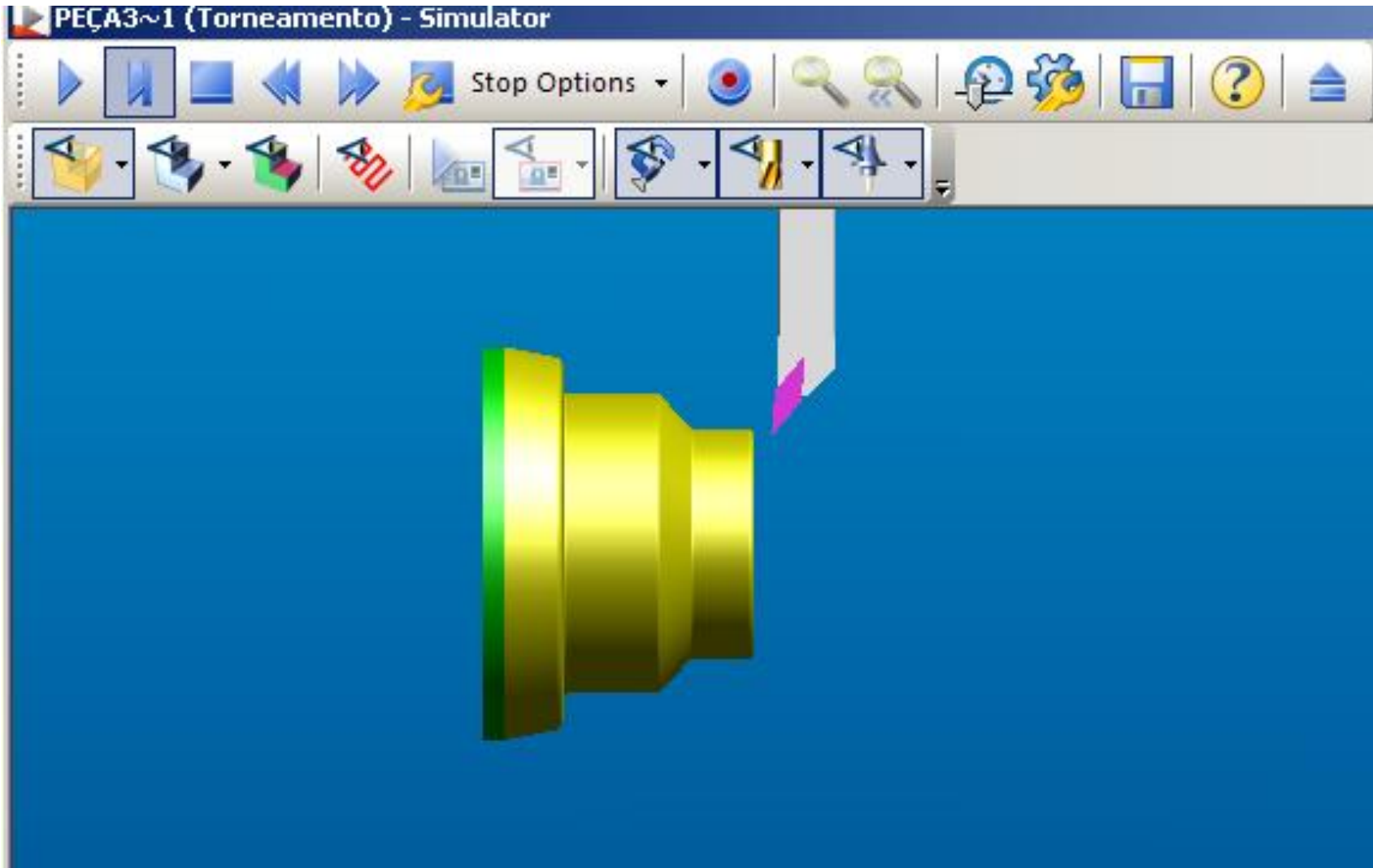
Observe o avanço da simulação.



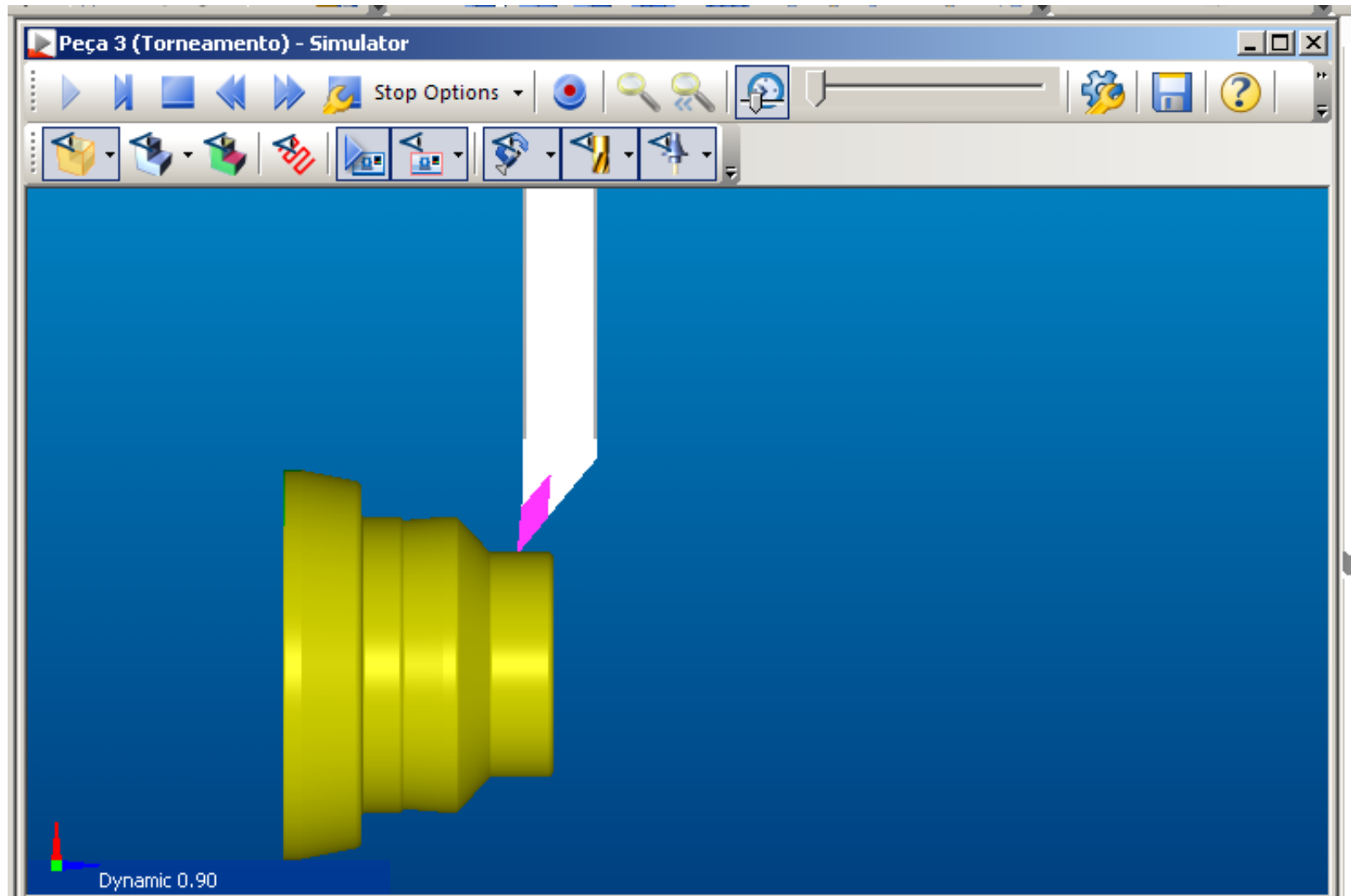
Observe o avanço da simulação.



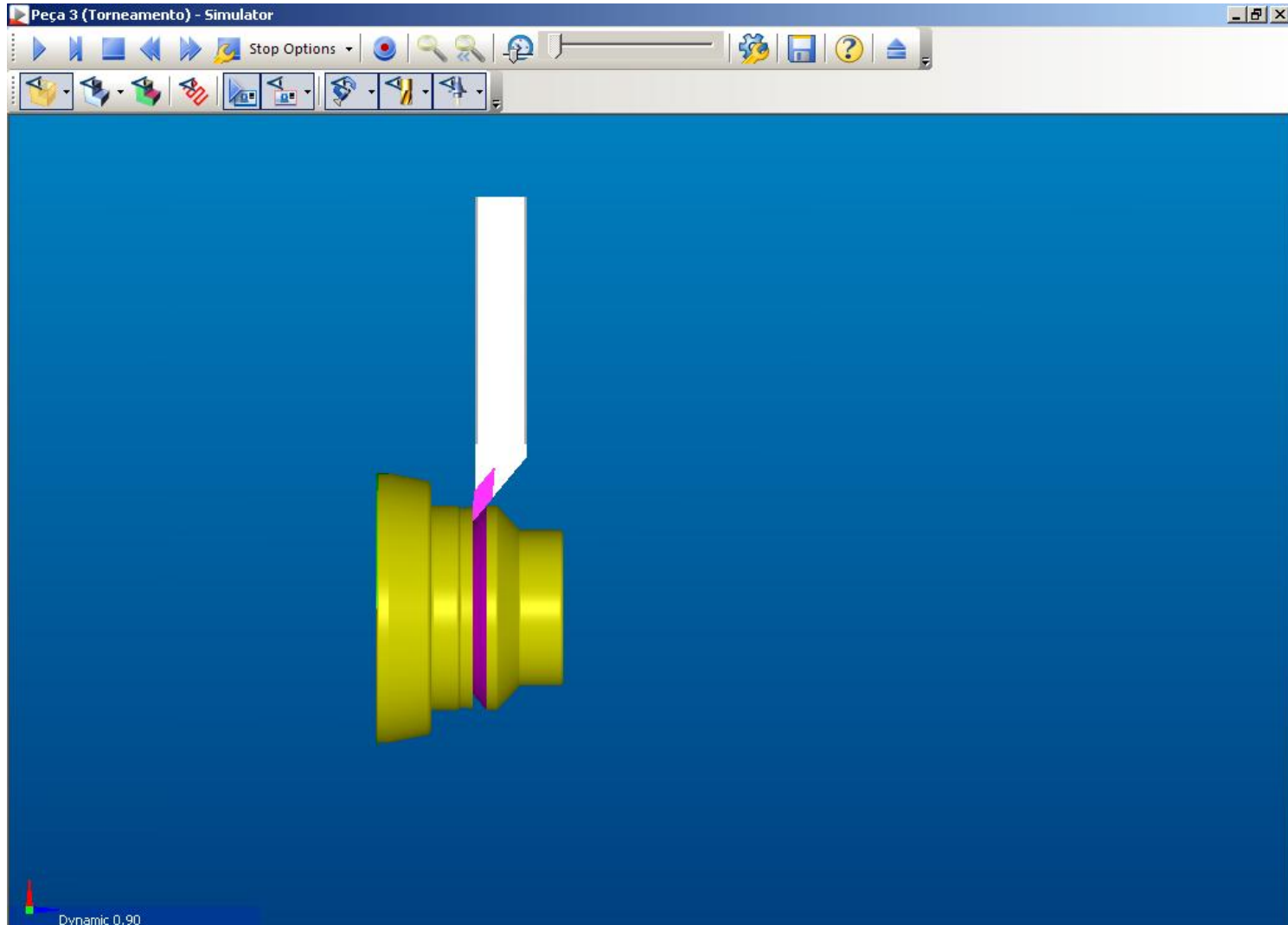
Observe o avanço da simulação.



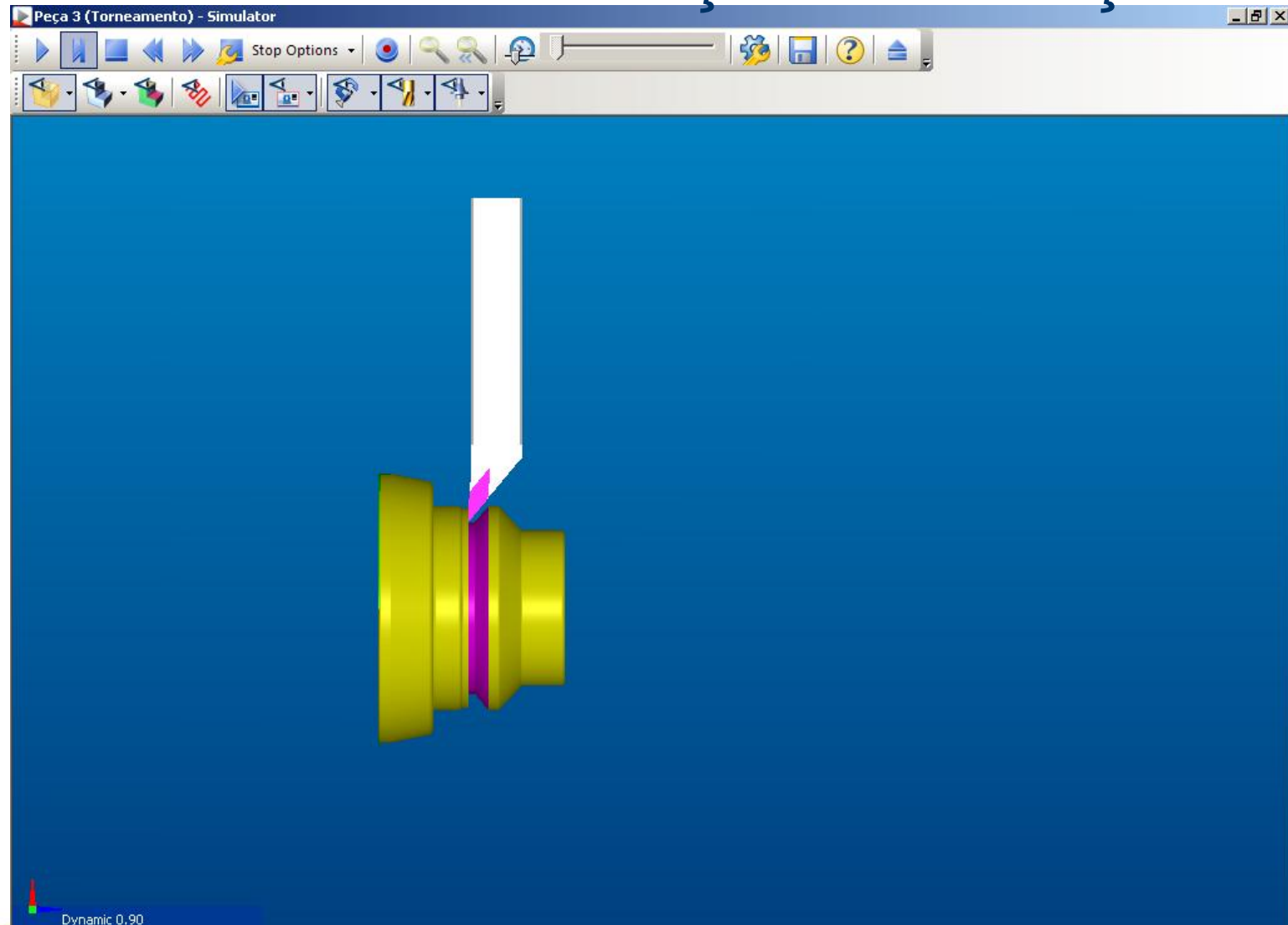
Observe o avanço da simulação.



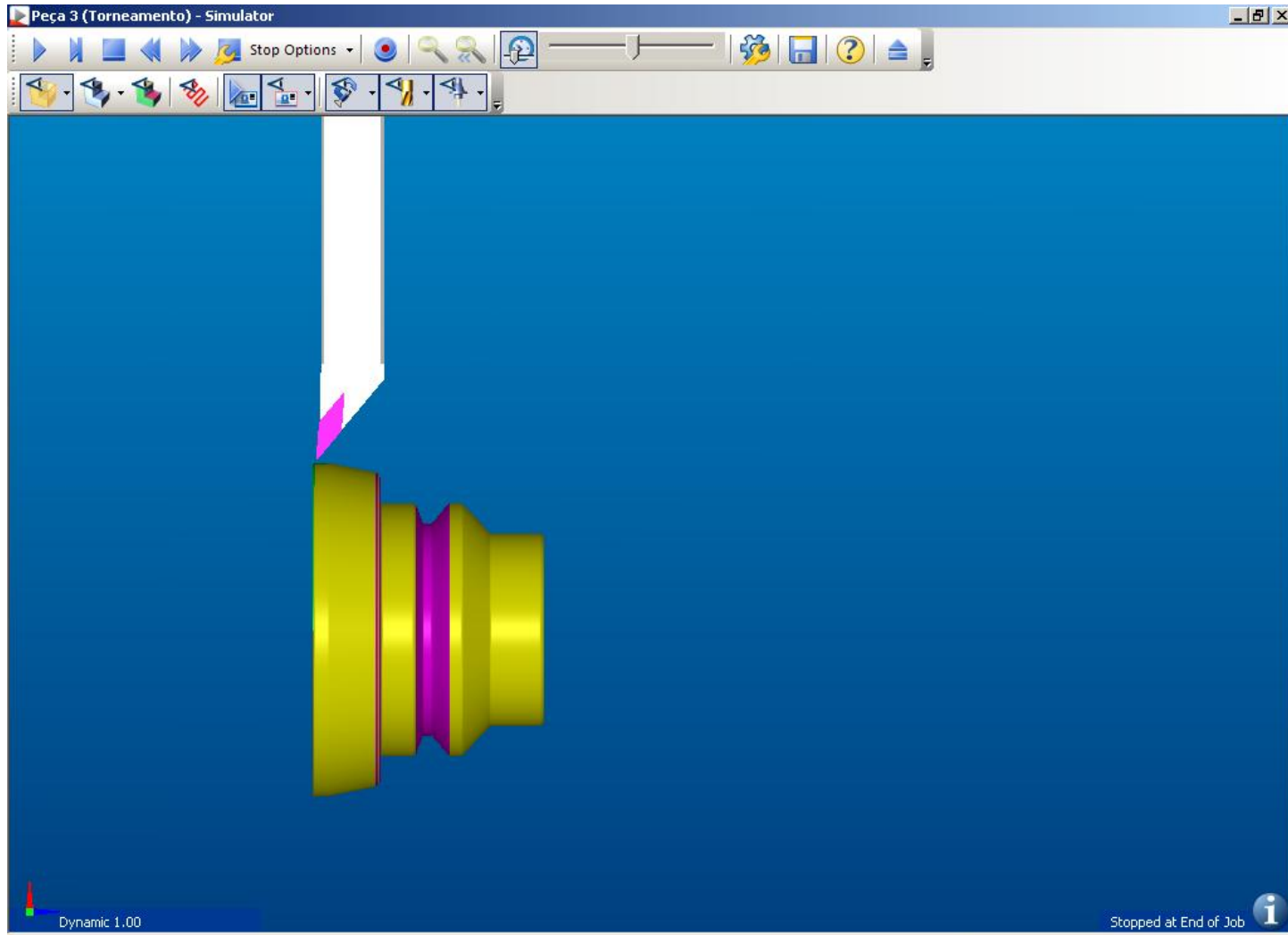
Observe o avanço da simulação.



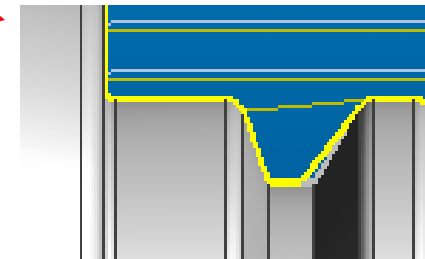
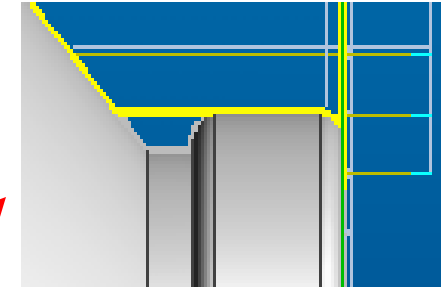
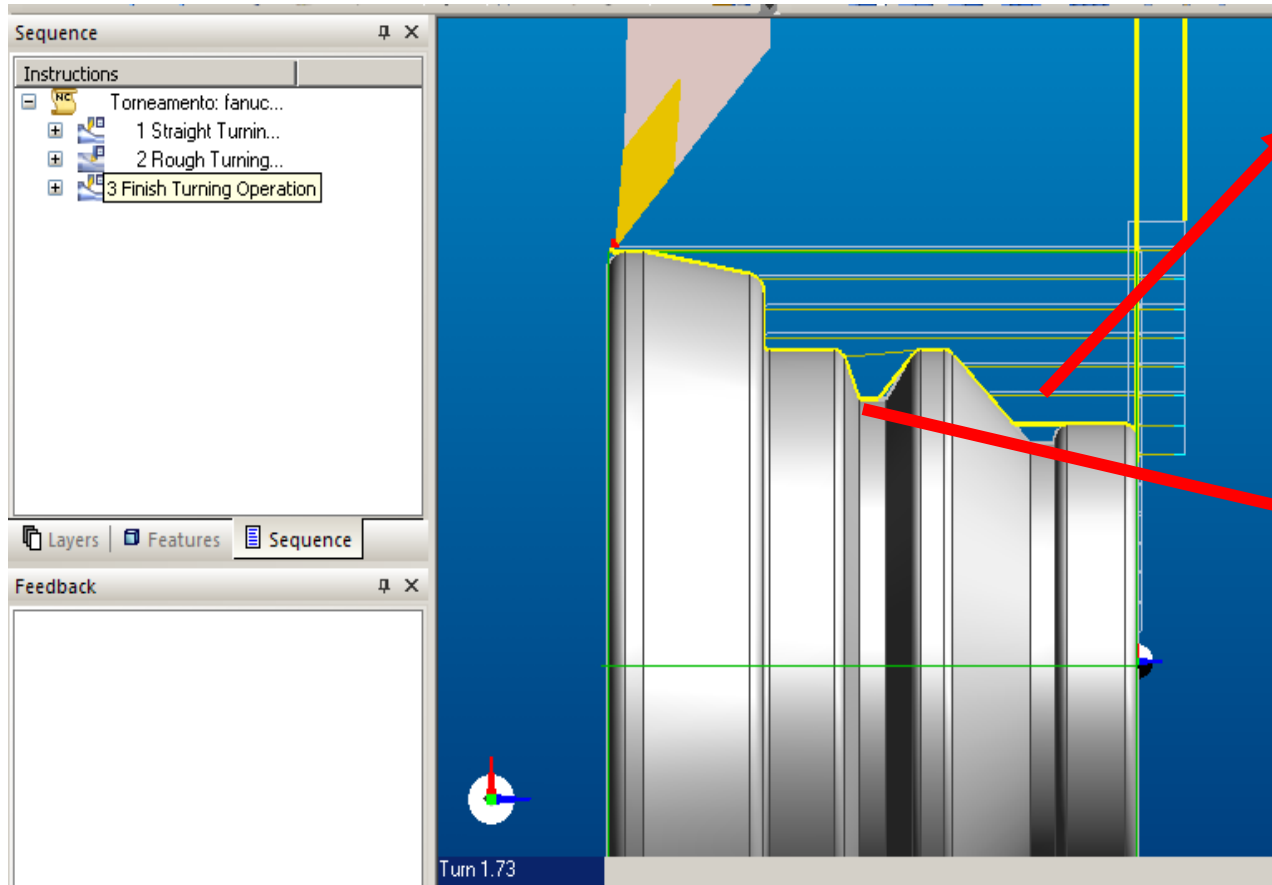
Observe o avanço da simulação.



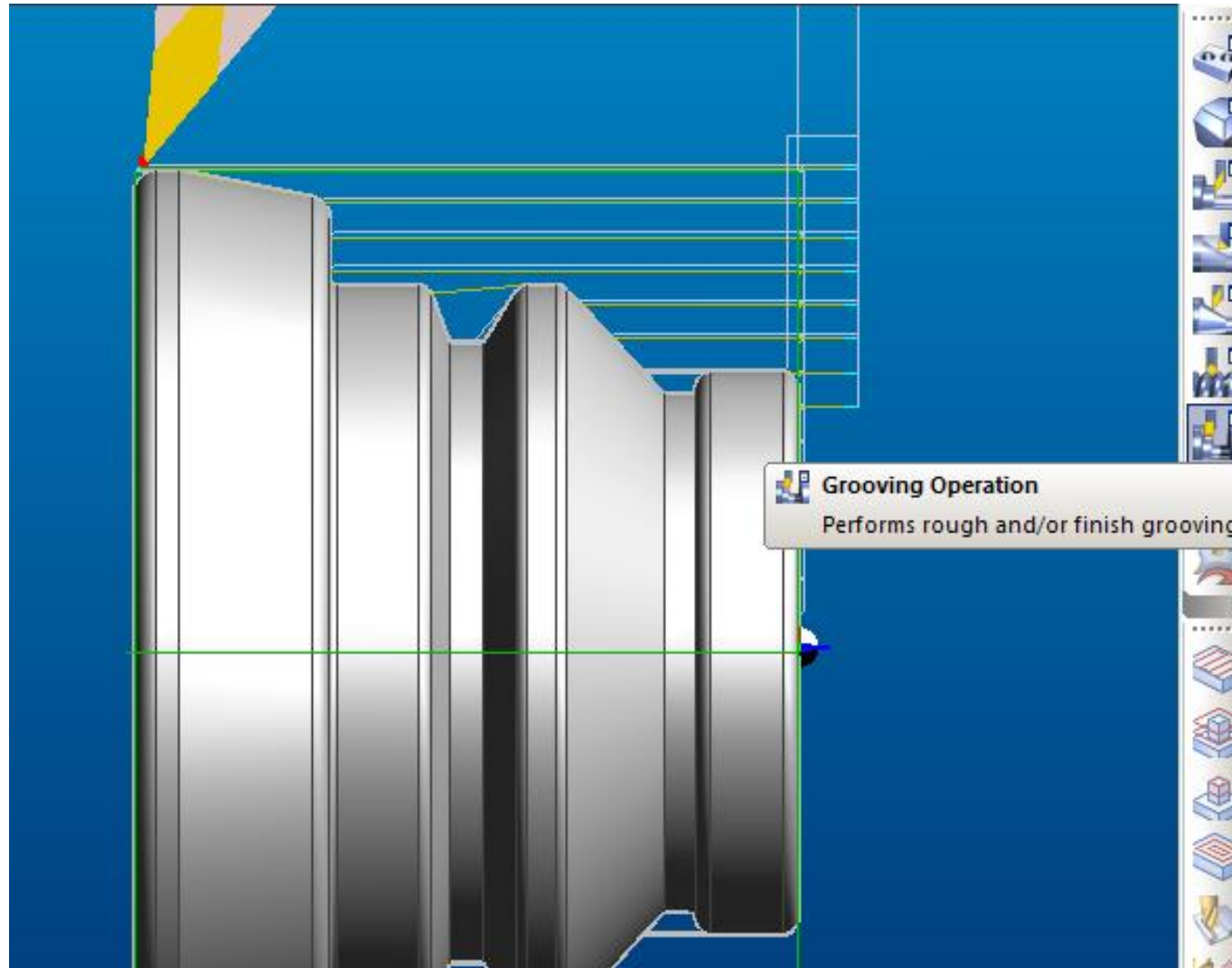
Observe o avanço da simulação.



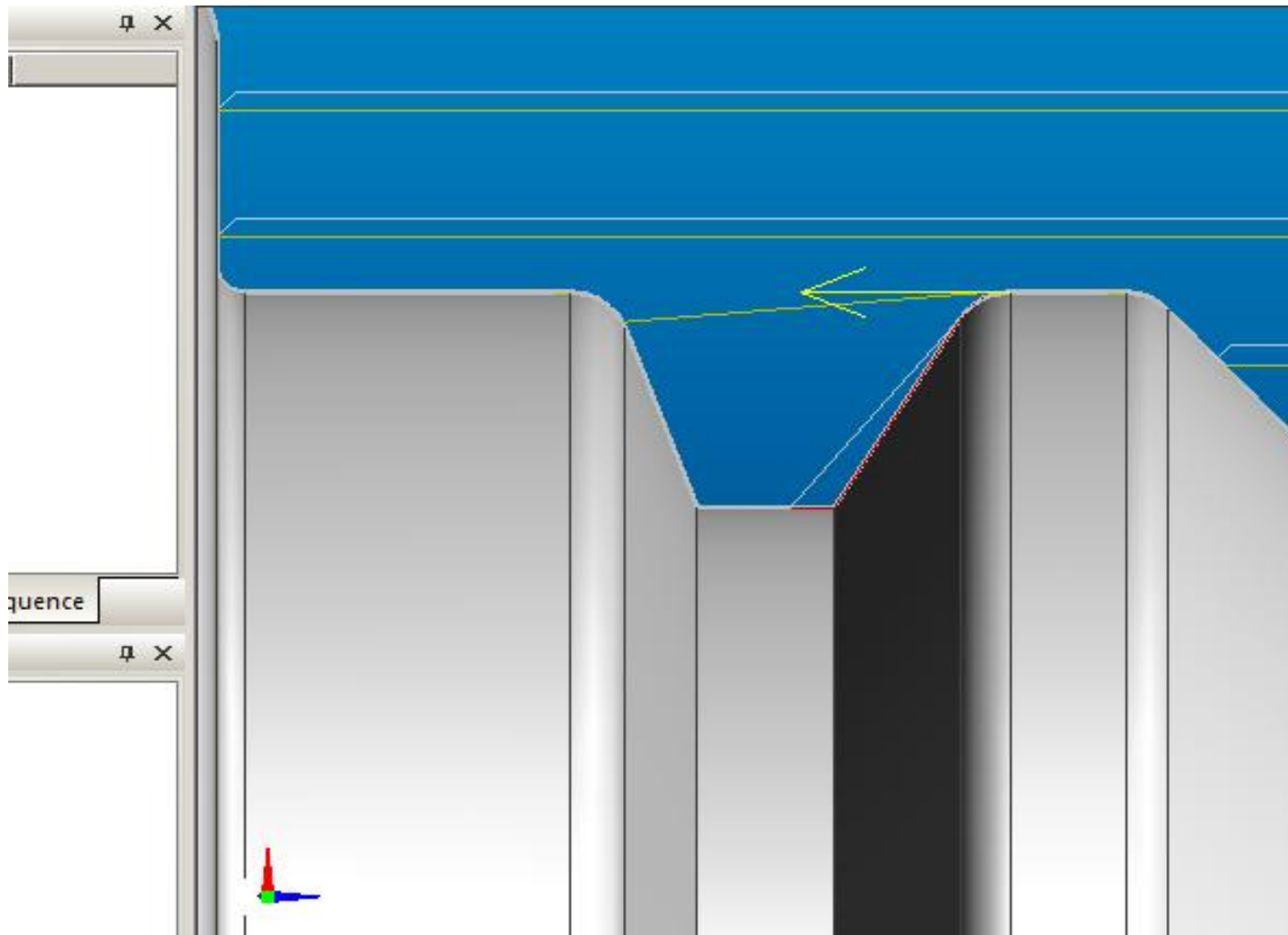
Observe que com o perfil de acabamento não foi removido todo o material



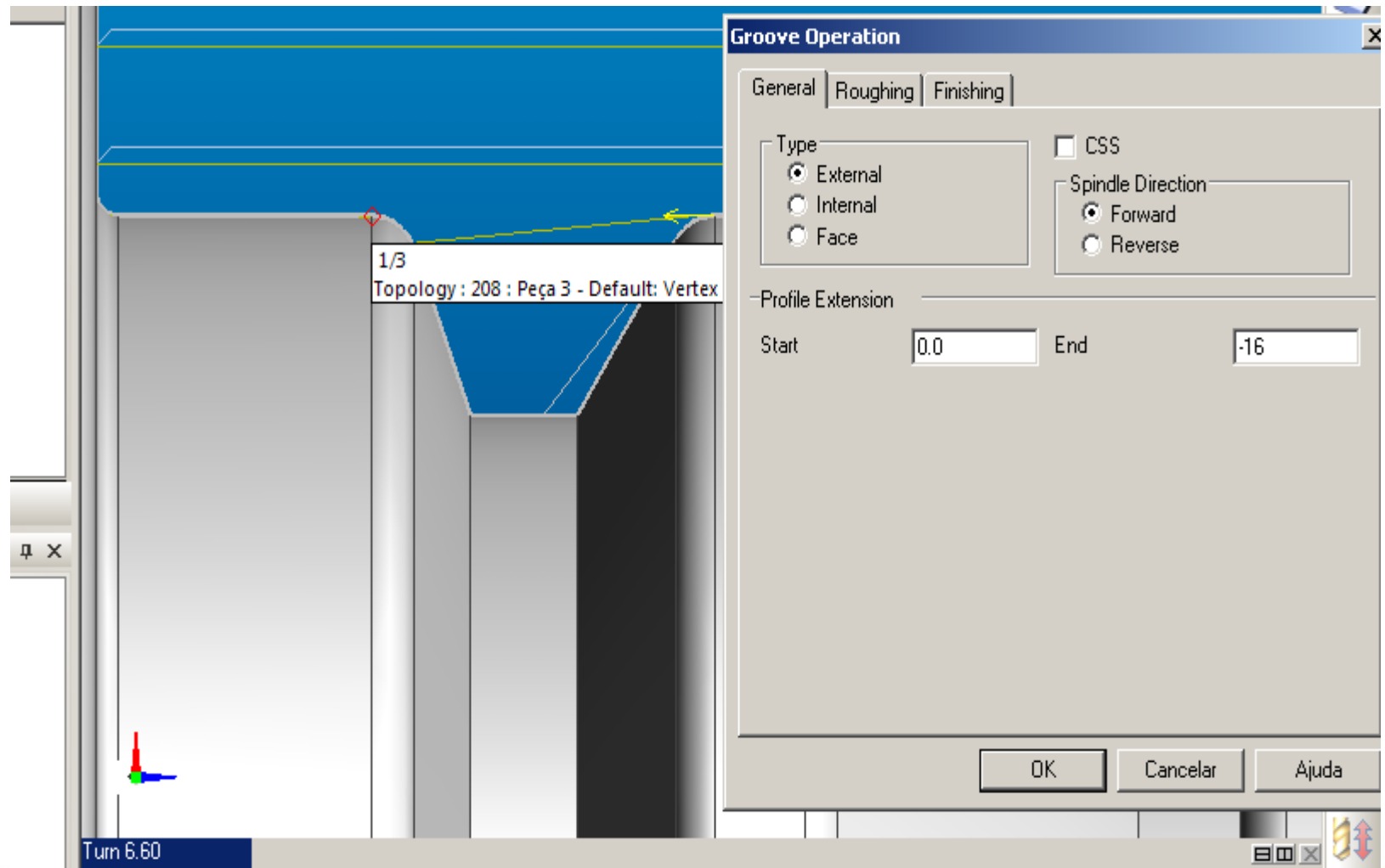
Clique no ícone “Grooving Operation” Ranhura



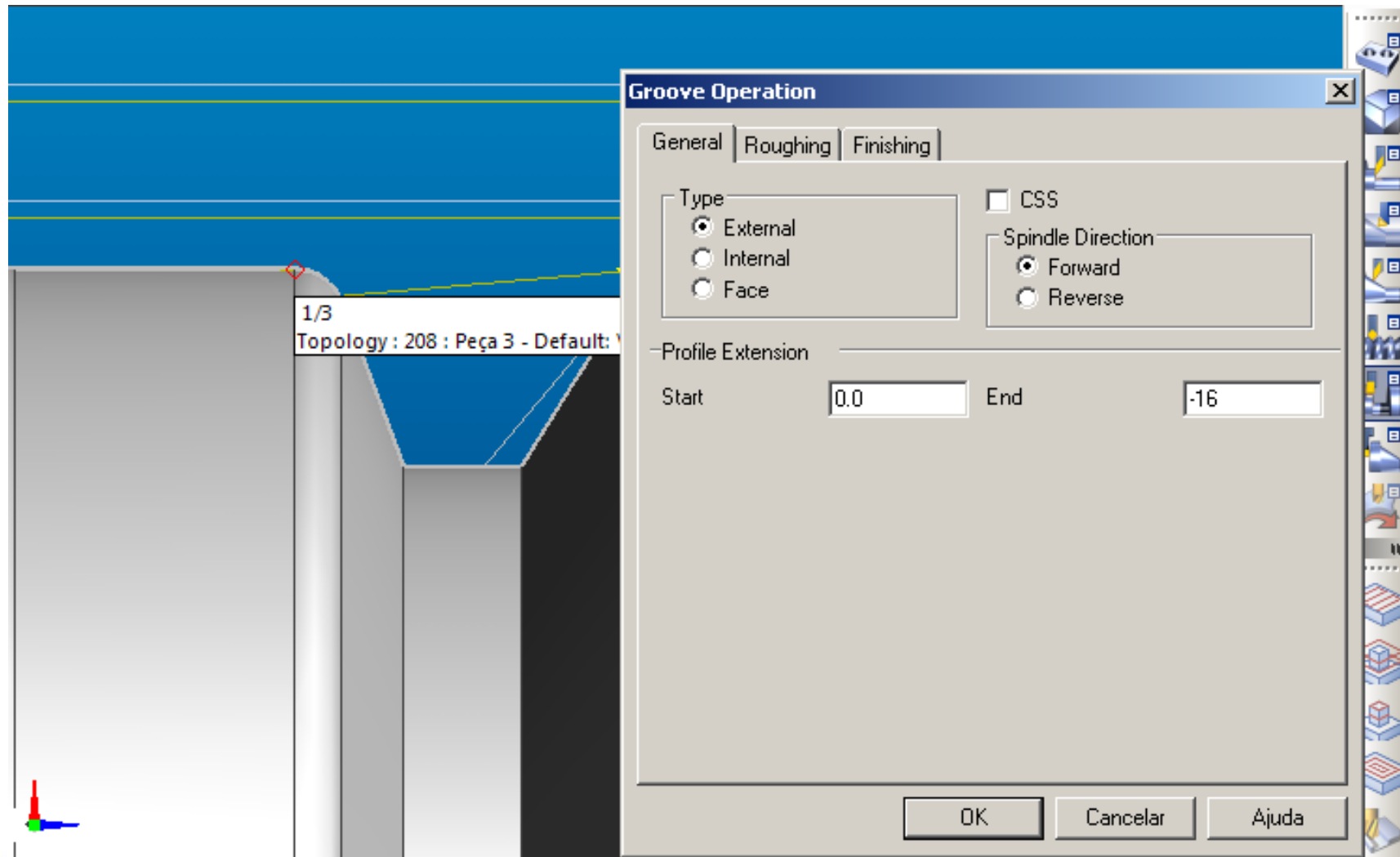
Clique no canto do rasgo conforme a figura e confirme.



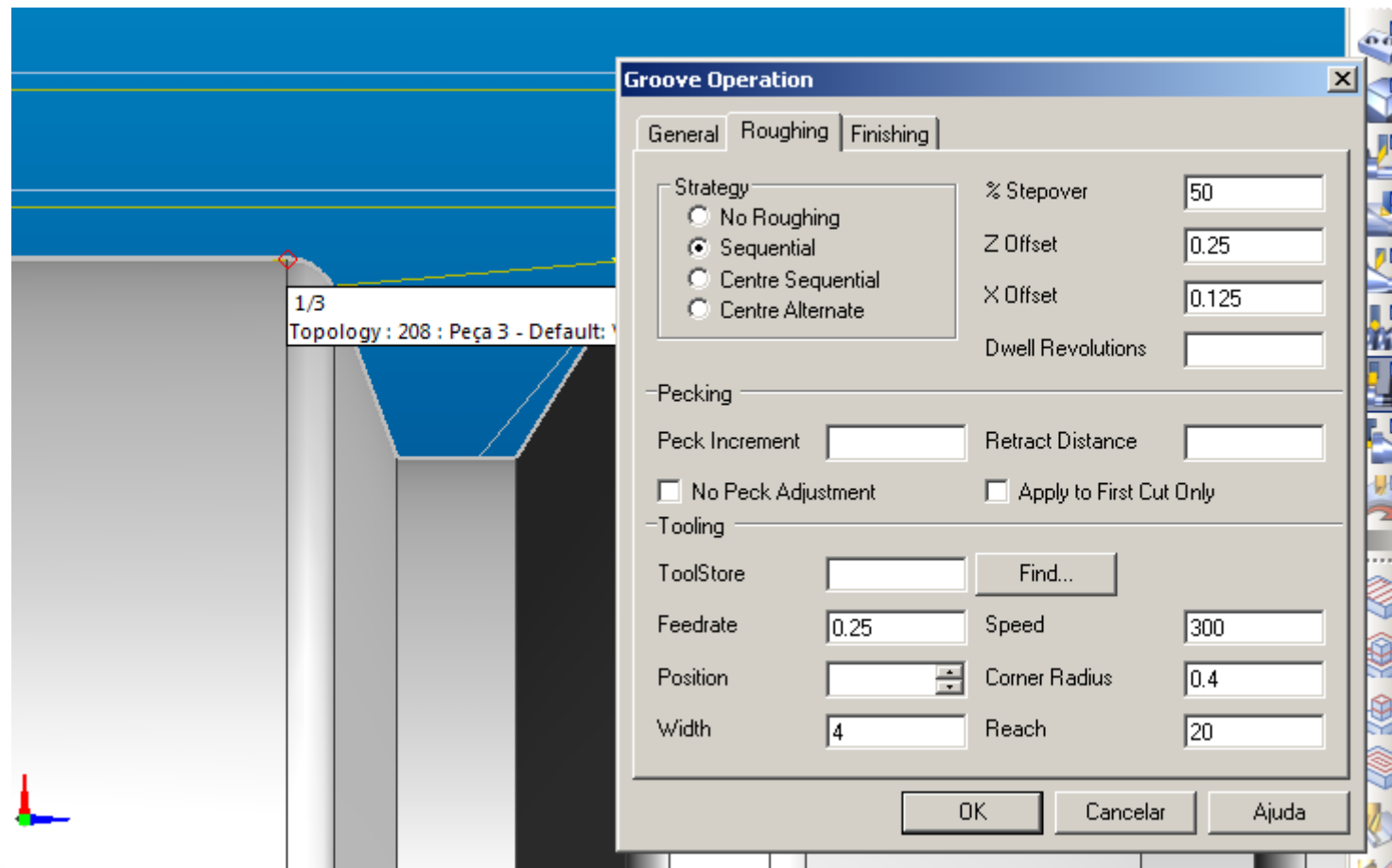
Clique no canto do rasgo conforme a figura e confirme.



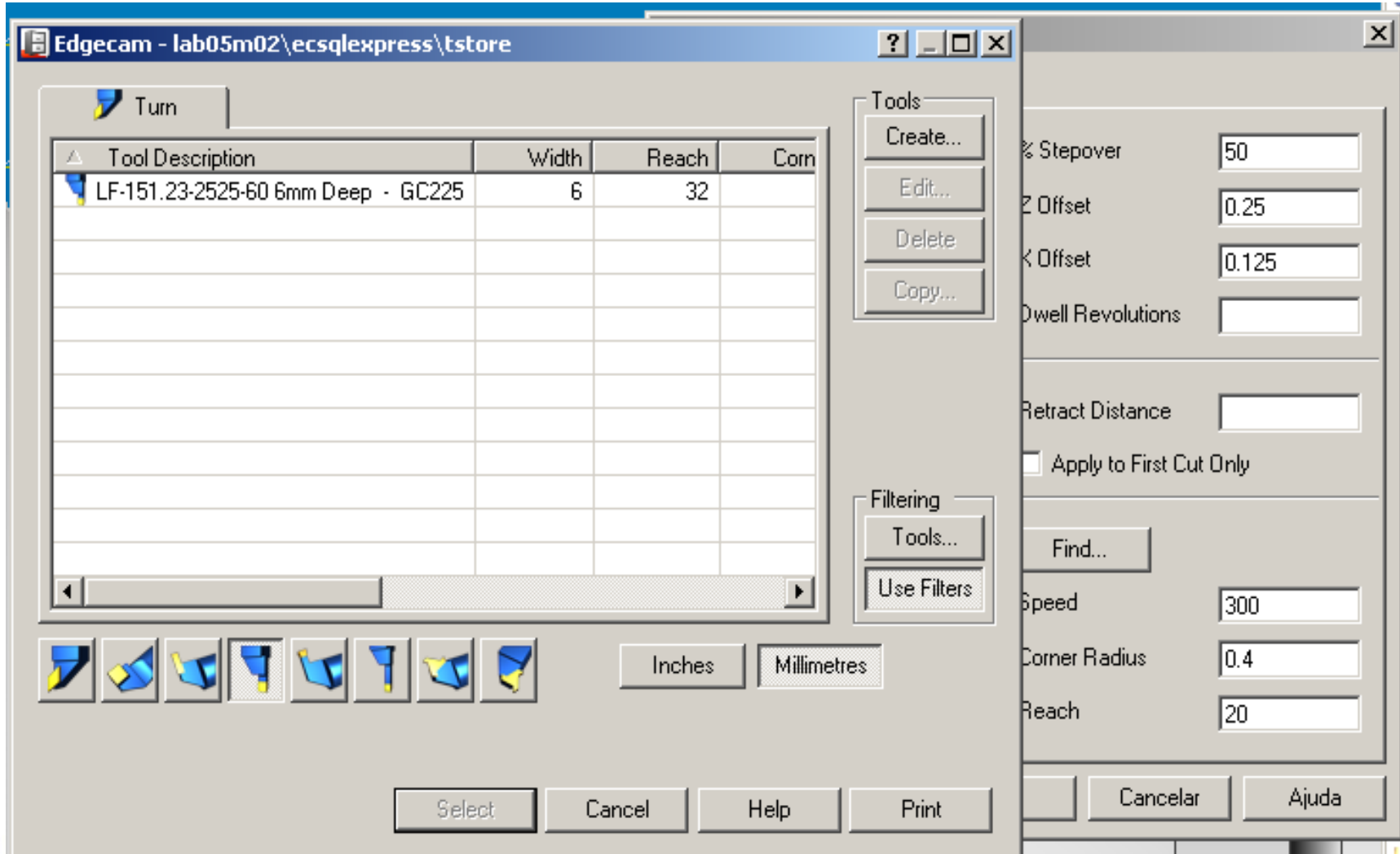
Em General mantenha esta configuração.



Em **Roughing** mantenha esta configuração e selecione em ToolStore o ícone Find para encontrar nova ferramenta.



Selecione a ferramenta indicada.



Edgecam - lab05m02\ecsqliexpress\tstore

Turn

Tool Description	Width	Reach	Corn
LF-151.23-2525-60 6mm Deep - GC225	6	32	

Tools

Create...
Edit...
Delete
Copy...

Filtering

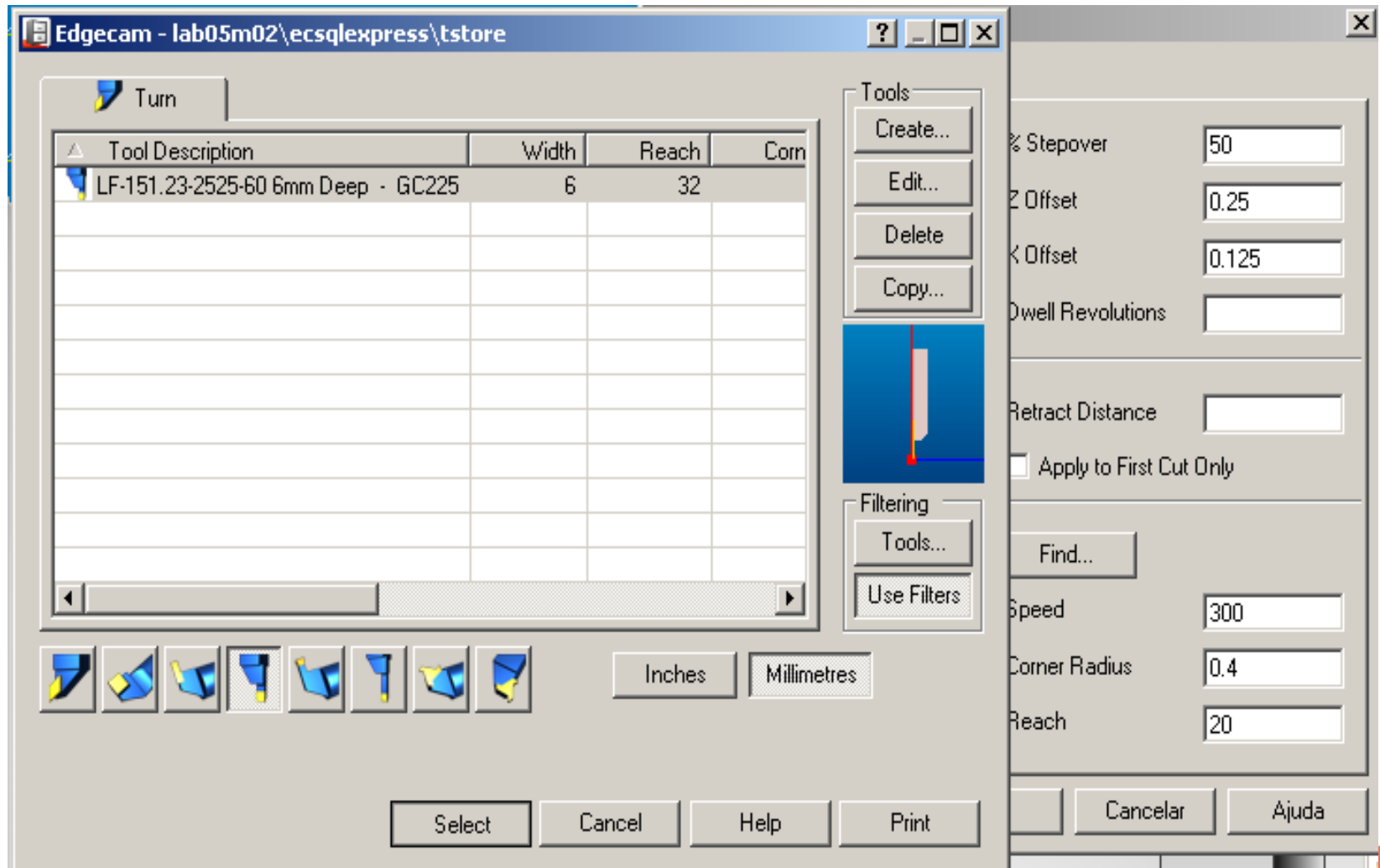
Tools...
Use Filters

Inches Millimetres

Select Cancel Help Print

% Stepover 50
Z Offset 0.25
X Offset 0.125
Dwell Revolutions
Retract Distance
 Apply to First Cut Only
Find...
Speed 300
Corner Radius 0.4
Reach 20
Cancelar Ajuda

Após a ferramenta escolhida clique em Select.





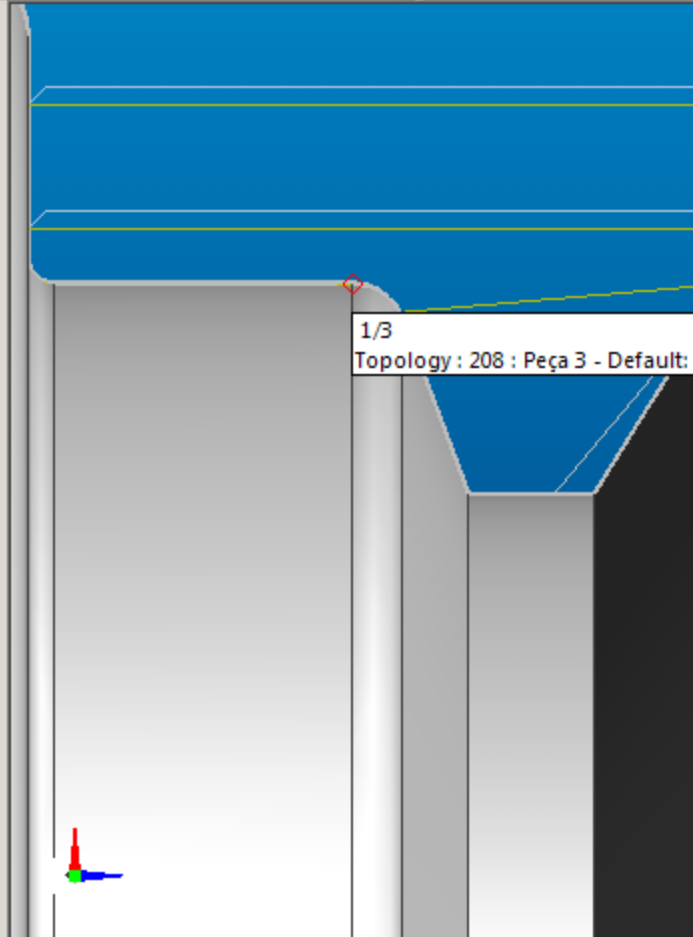
Sequence

Instructions

- [-] N/C Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...

Layers | Features | Sequence

Feedback



Groove Operation

General | Roughing | Finishing

Strategy	% Stepper	50
<input type="radio"/> No Roughing	Z Offset	0.25
<input checked="" type="radio"/> Sequential	X Offset	0.125
<input type="radio"/> Centre Sequential	Dwell Revolutions	
<input type="radio"/> Centre Alternate		

Pecking

Peck Increment		Retract Distance	
<input type="checkbox"/> No Peck Adjustment		<input type="checkbox"/> Apply to First Cut Only	

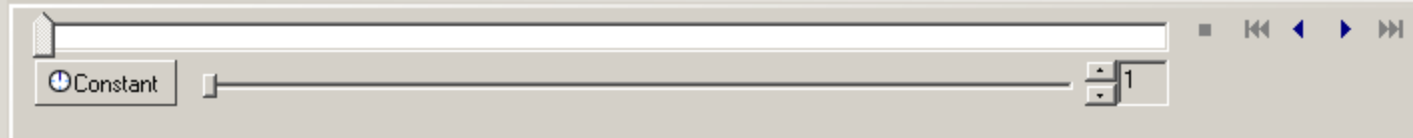
Tooling

ToolStore	LF-151.23-252	Find...	
Feedrate	0.3	Speed	135
Position	4	Corner Radius	0.4
Width	6	Reach	32

OK Cancelar Ajud

Turn 6.60

Simulation



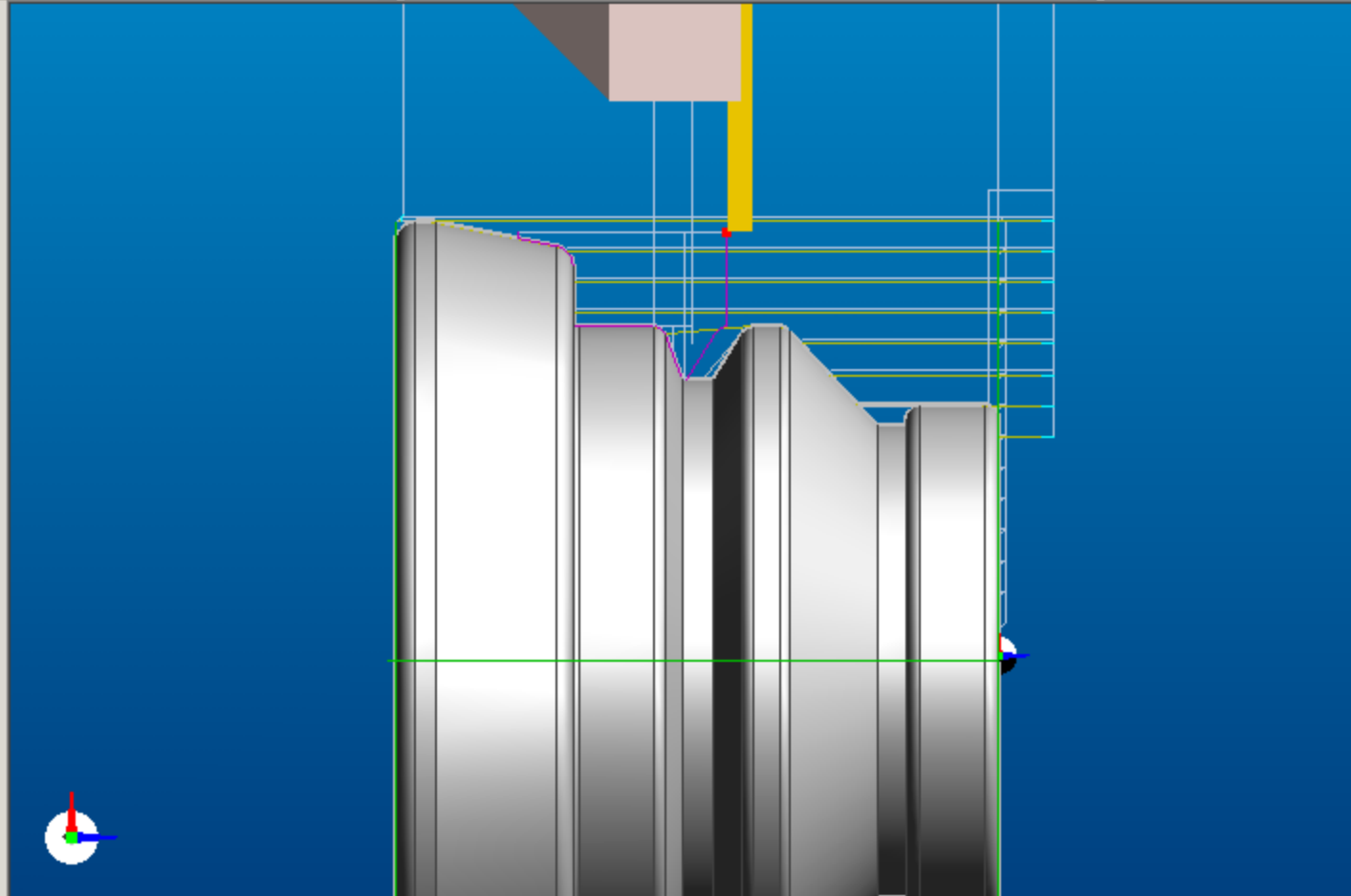


Sequence

Instructions

- [-] N/C Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...

Layers | Features | Sequence



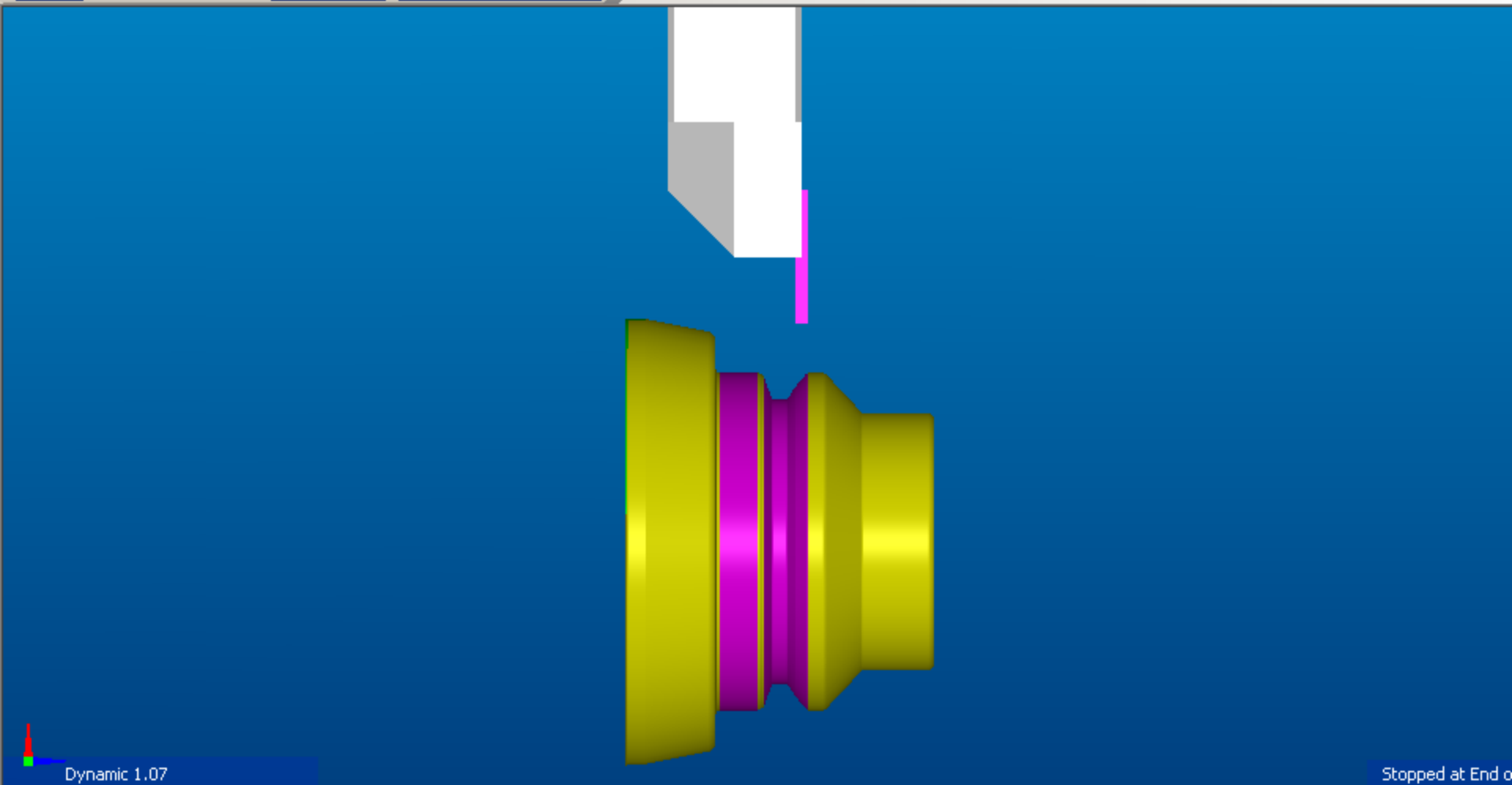
Feedback

Properties | Feedback

Turn 1.71

Simulation

Constant 1 Move to



Output

- 3.03 Move to Toolchange
- 3.07 Finish Turning
- 4.03 Move to Toolchange
- 4.07 Rough Grooving
- 4.10 Move to Toolchange
- 4.14 Finish Grooving

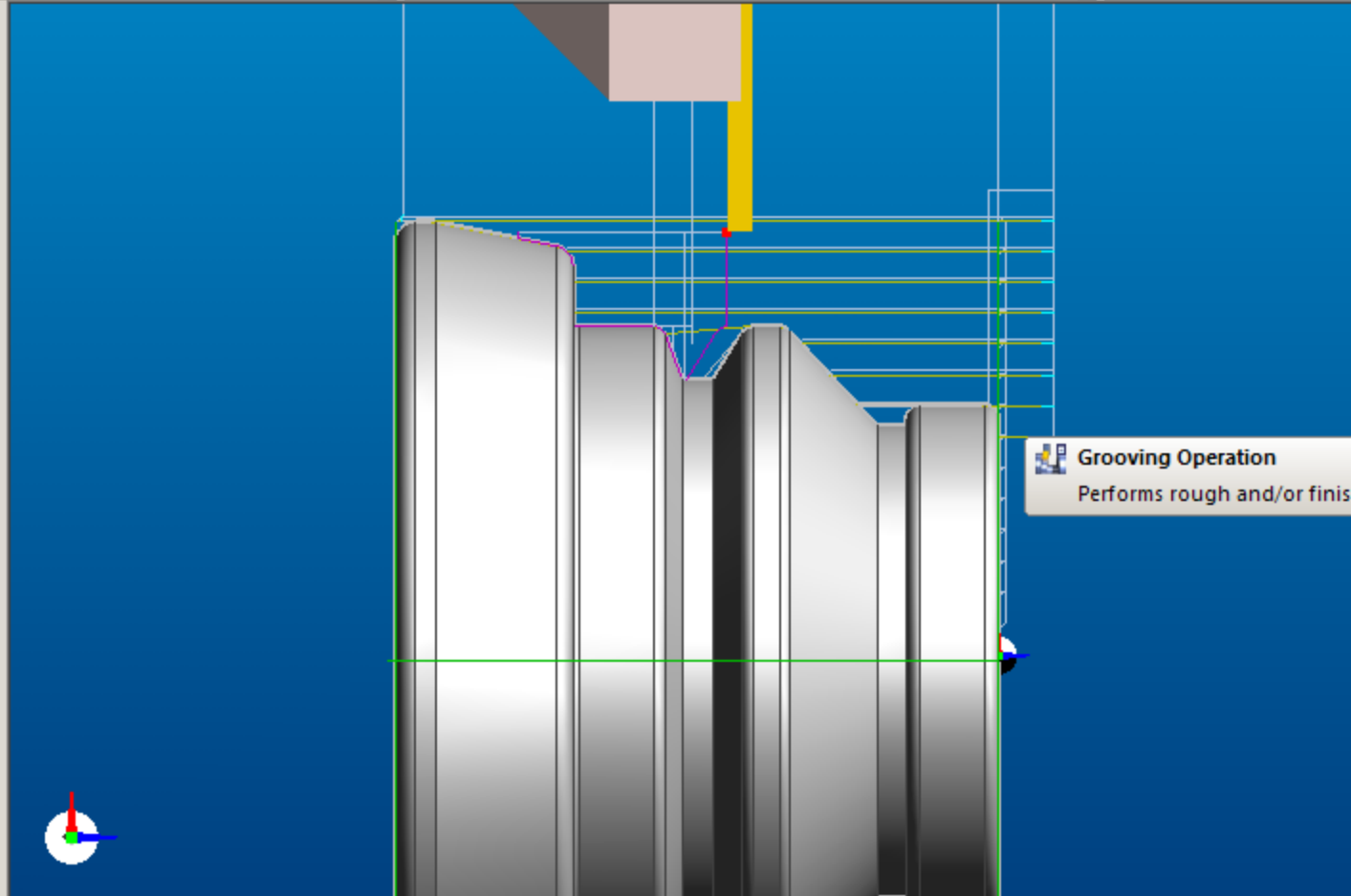


Sequence

Instructions

- [-] N/C Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...

Layers | Features | Sequence



Feedback

Properties | Feedback

Turn 1.71

Simulation

Constant 1 Move to



Sequence

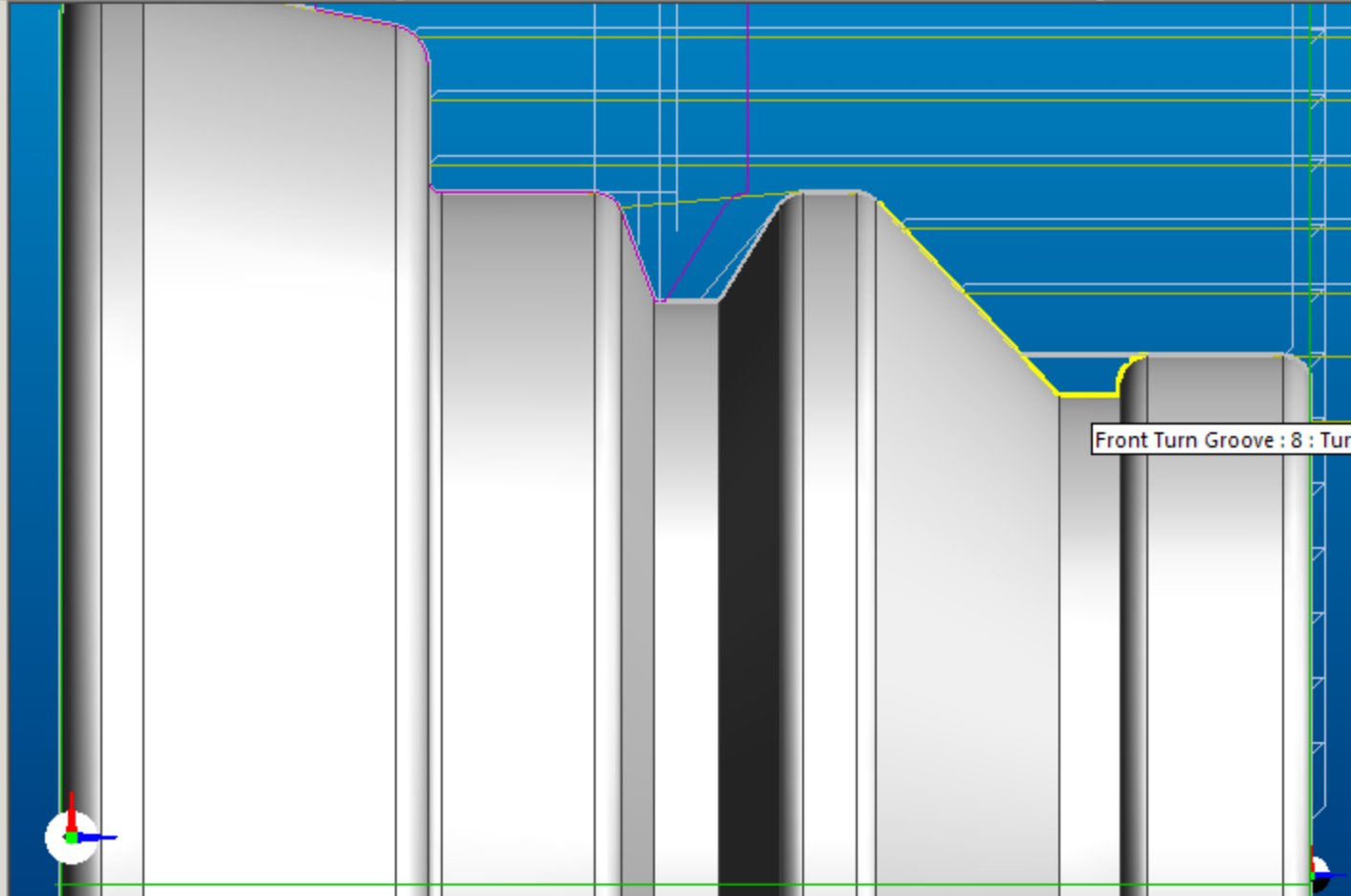
Instructions

- NC Tomeamento: fanuc...
- + 1 Straight Turnin...
- + 2 Rough Turning...
- + 3 Finish Turning ...
- + 4 Groove Operati...

Layers | Features | Sequence

Feedback

Properties | Feedback



Turn 3.55

Simulation

Constant 1 Move to

Simulation | Tracking



Sequence

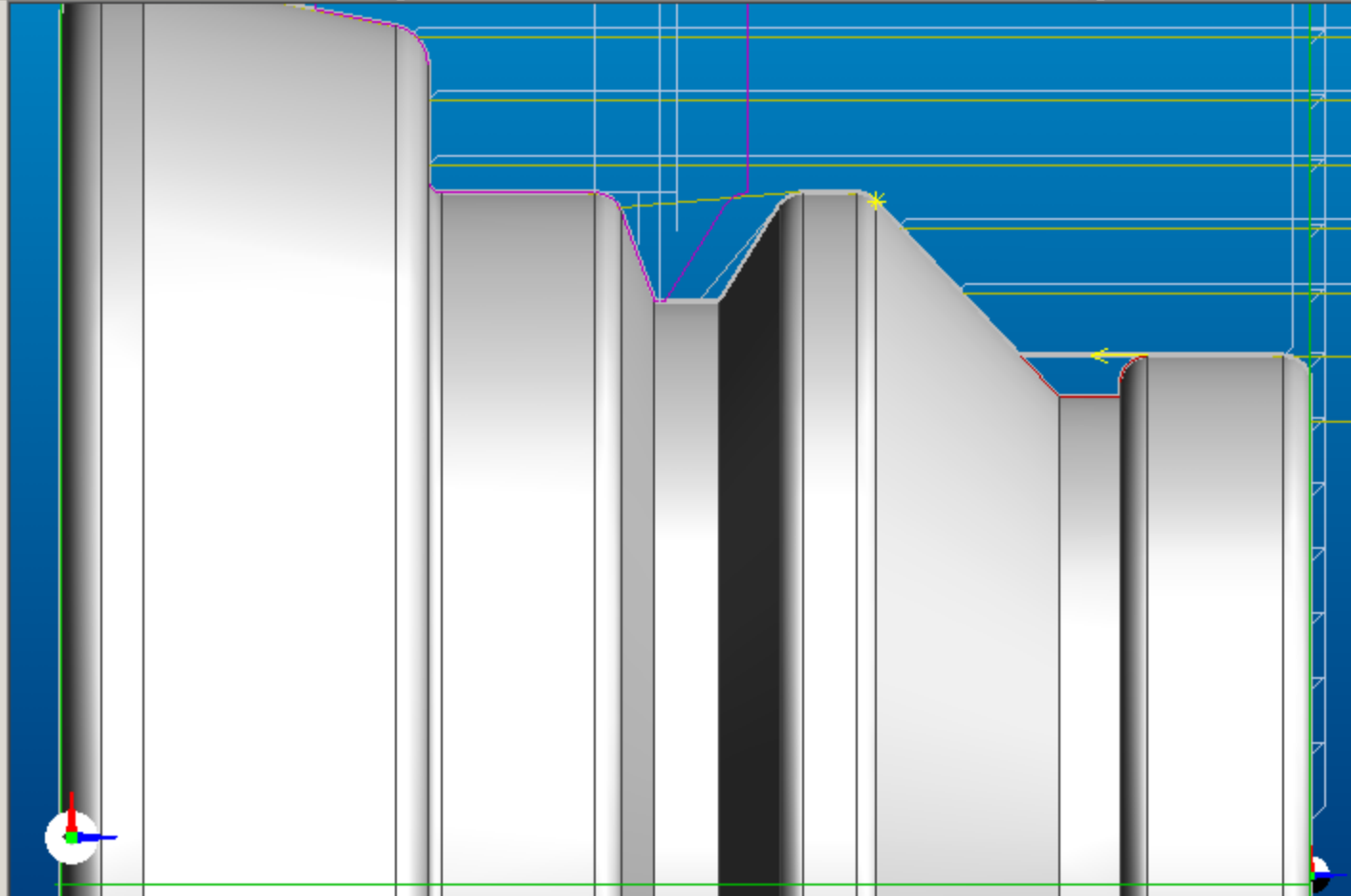
Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...

Layers | Features | Sequence

Feedback

Properties | Feedback



Turn 3.55

Simulation

Constant 1 Move to

Simulation | Tracking



Sequence [Maximize] [Close]

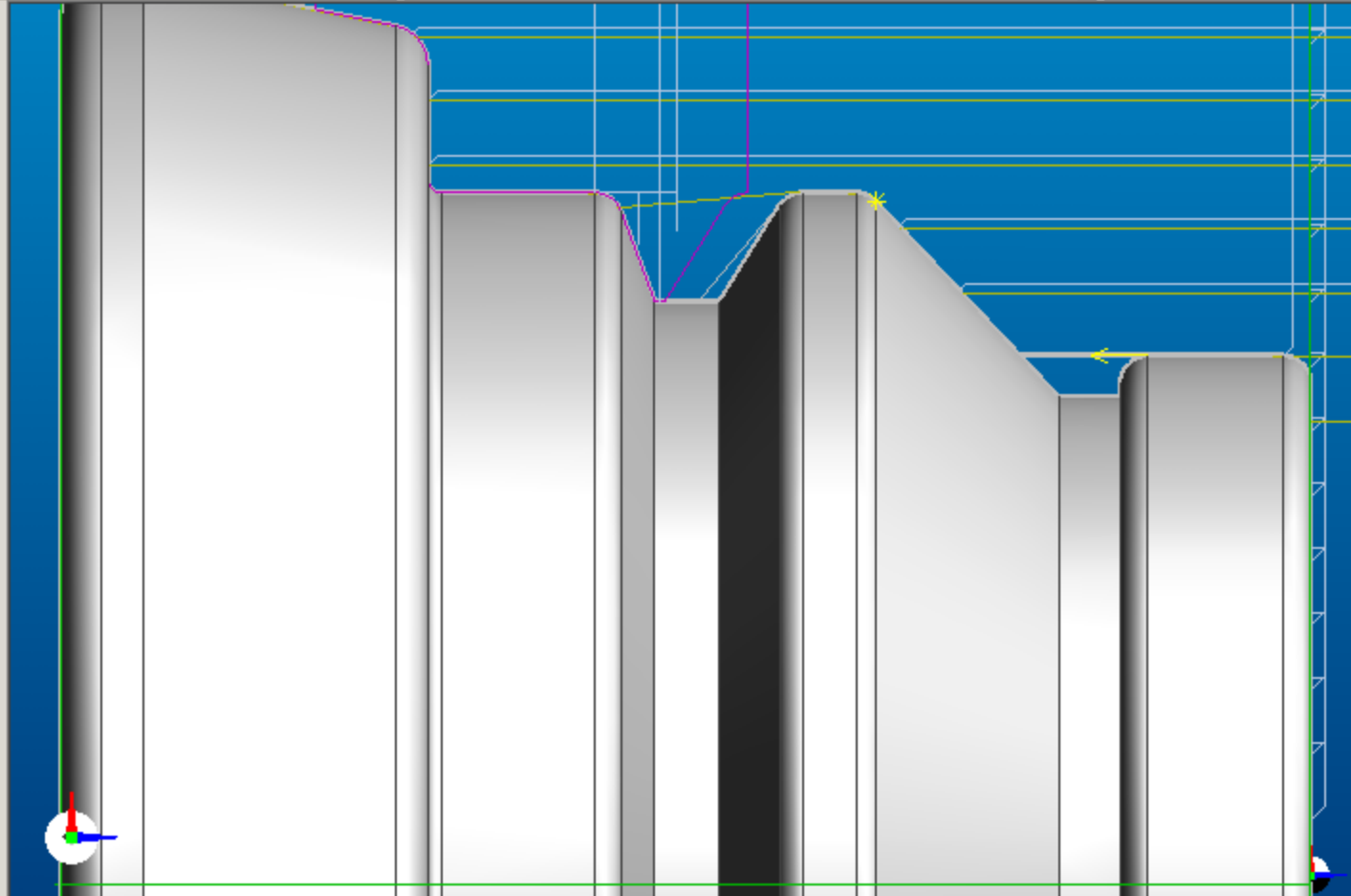
Instructions

- [-] NC Tomeamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...

Layers | Features | **Sequence**

Feedback [Maximize] [Close]

Properties | **Feedback**



Turn 3.55

Simulation

[Play] [Stop] [Step Back] [Step Forward] [Full Stop]

Constant [Slider] 1 Move to



Sequence

Instructions

- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...

Layers | Features | Sequence

Groove Operation

General | Roughing | Finishing

Type

- External
- Internal
- Face

CSS

Spindle Direction

- Forward
- Reverse

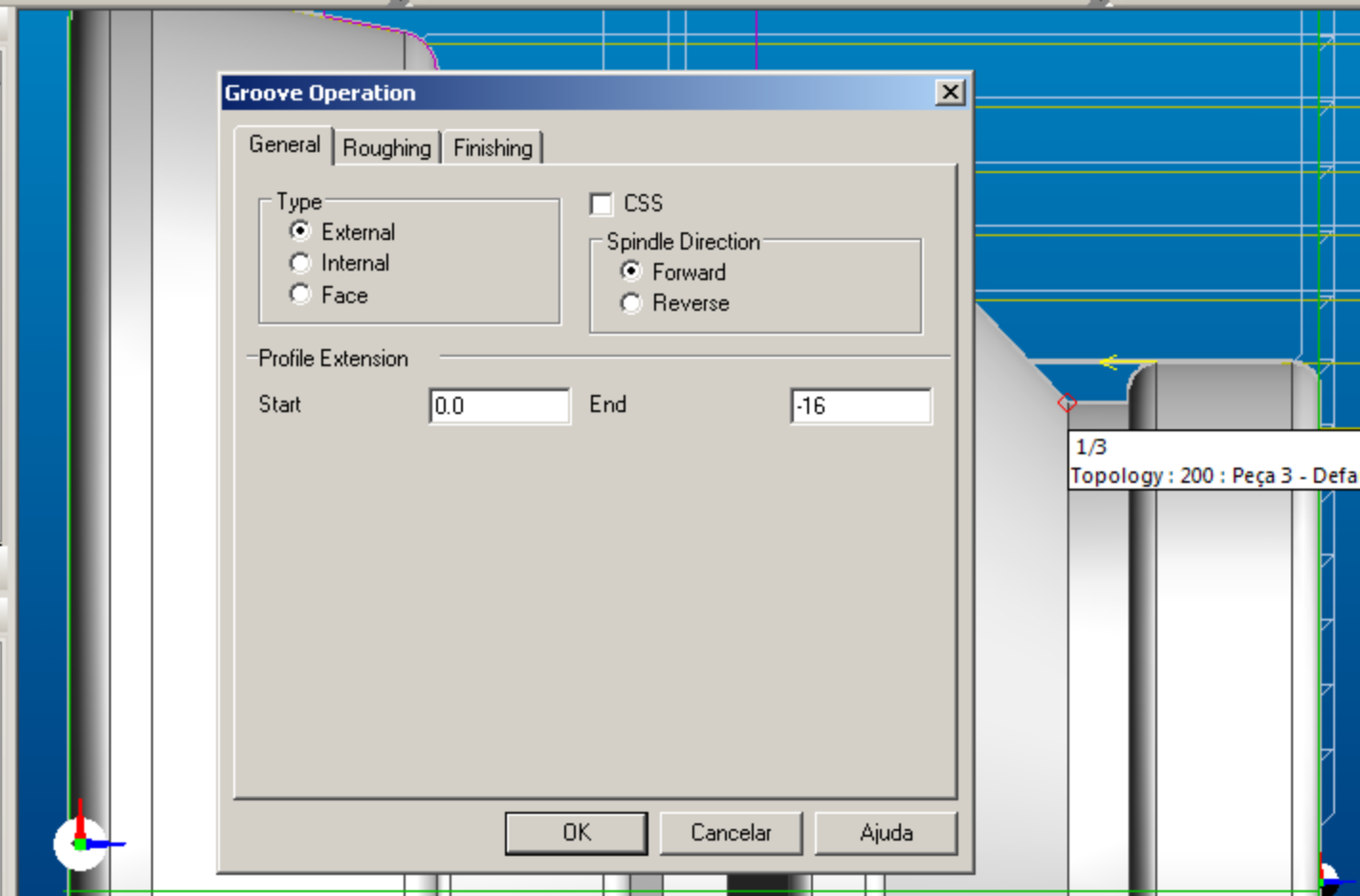
Profile Extension

Start: 0.0 End: -16

OK Cancelar Ajuda

Feedback

Properties | Feedback



Turn 3.55

Simulation

Constant 1 Move to



Sequence

Instructions

- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...

Layers | Features | Sequence

Groove Operation

General | Roughing | Finishing

Type

- External
- Internal
- Face

CSS

Spindle Direction

- Forward
- Reverse

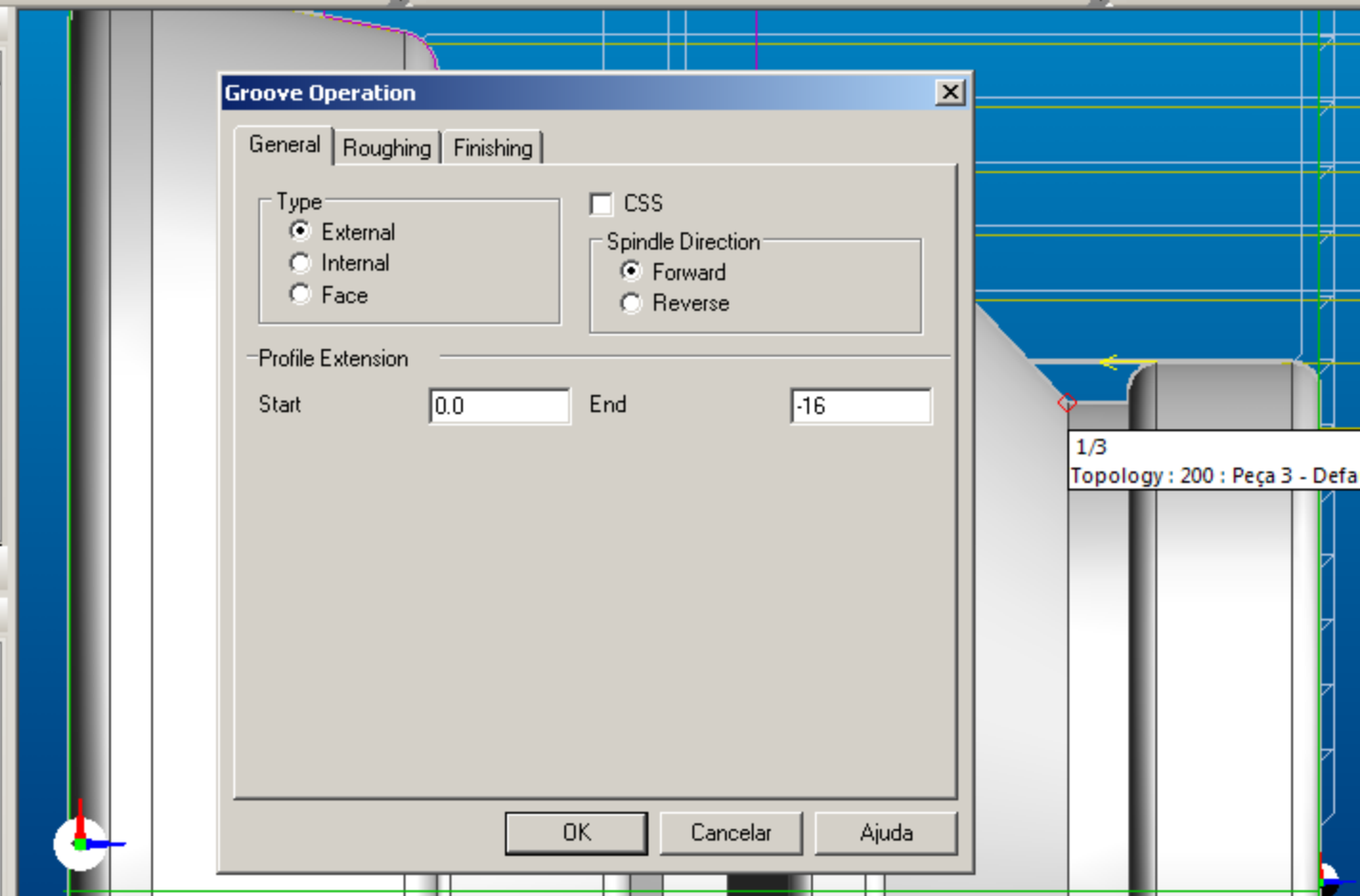
Profile Extension

Start: 0.0 End: -16

OK Cancelar Ajuda

Feedback

Properties | Feedback



Turn 3.55

Simulation

Constant 1 Move to

Simulation | Tracking



Sequence

Instructions

- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...

Layers Features Sequence

Feedback

Groove Operation

General Roughing Finishing

Strategy

- No Roughing
- Sequential
- Centre Sequential
- Centre Alternate

% Stepover: 50

Z Offset: 0.25

X Offset: 0.125

Dwell Revolutions: []

Pecking

Peck Increment: [] Retract Distance: []

No Peck Adjustment Apply to First Cut Only

Tooling

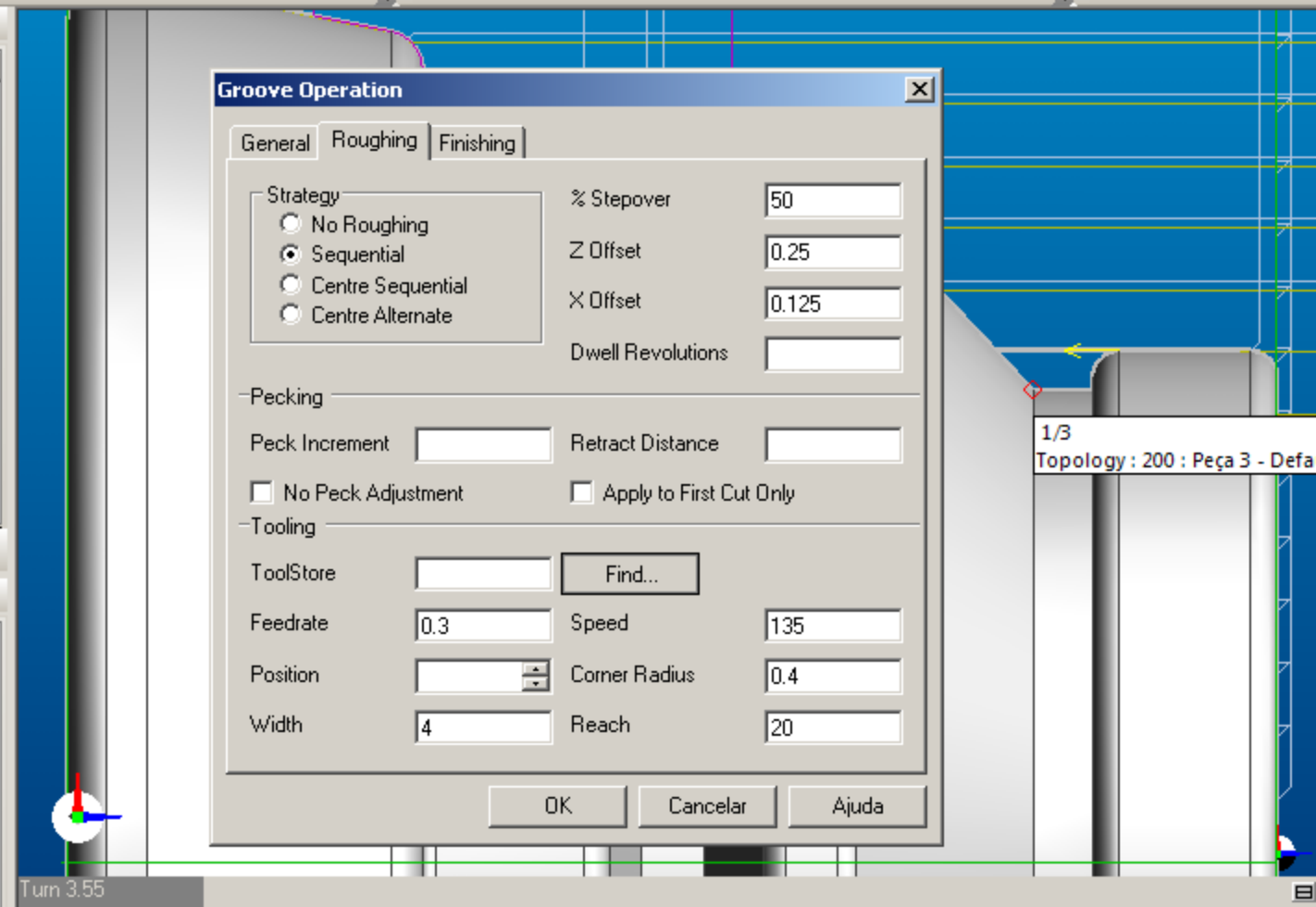
ToolStore: [] Find...

Feedrate: 0.3 Speed: 135

Position: [] Corner Radius: 0.4

Width: 4 Reach: 20

OK Cancel Ajuda



Simulation

Constant [] Move to 1



Sequence

Instructions

- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...

Layers Features Sequence

Feedback

Edgcam - lab05m02\ecsqliexpress\tstore

Turn

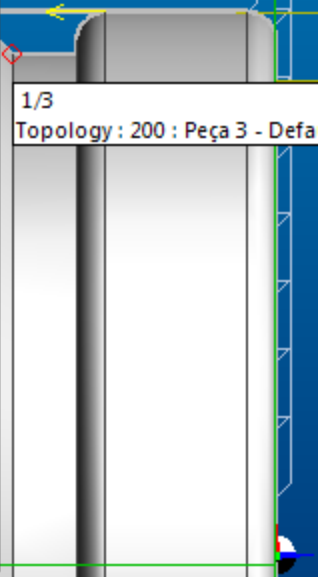
Tool Description	Width	Reach	Corn
LF-151.23-2525-60 6mm Deep - GC225	6	32	

Tools: Create... Edit... Delete... Copy...

Filtering: Tools... Use Filters

Inches Millimetres

Select Cancel Help Print



Turn 3.55

Simulation

Constant 1 Move to

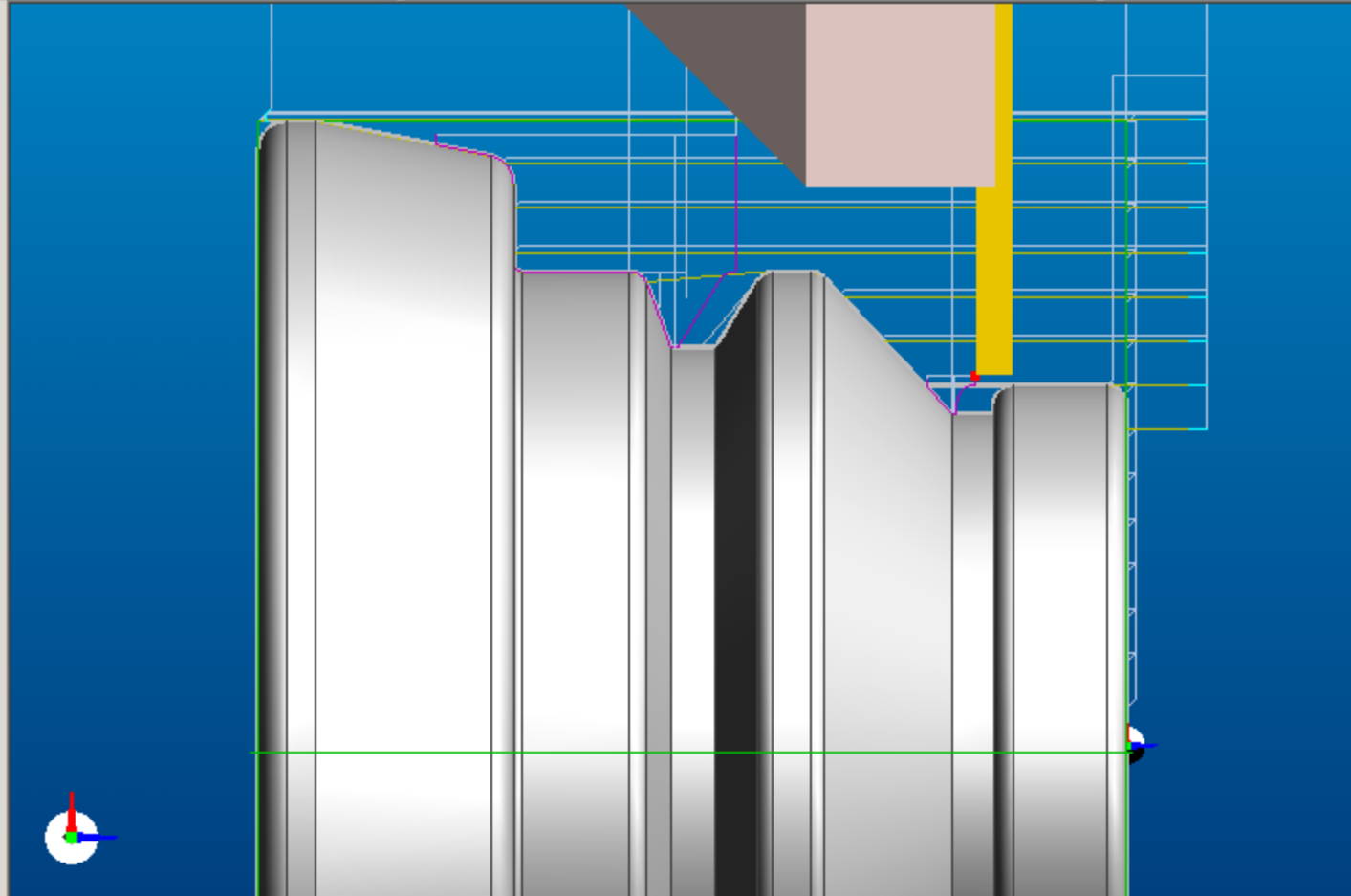


Sequence

Instructions

- [-] Nc
- [-] Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...

Layers | Features | Sequence



Feedback

Properties | Feedback

Turn 2.47

Simulation

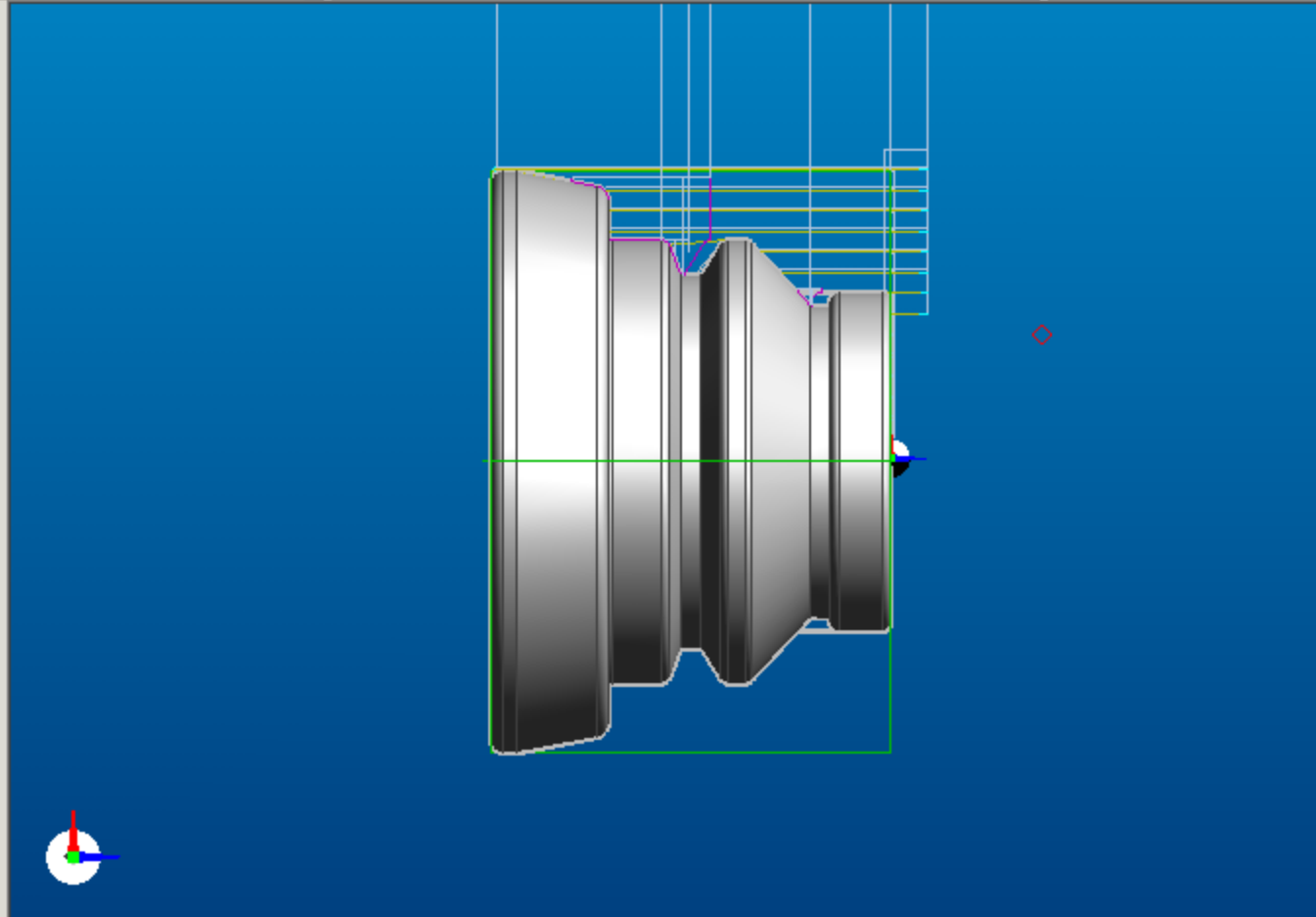
Constant 1 Move to



Sequence

Instructions

- [-] NC Tomeamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...

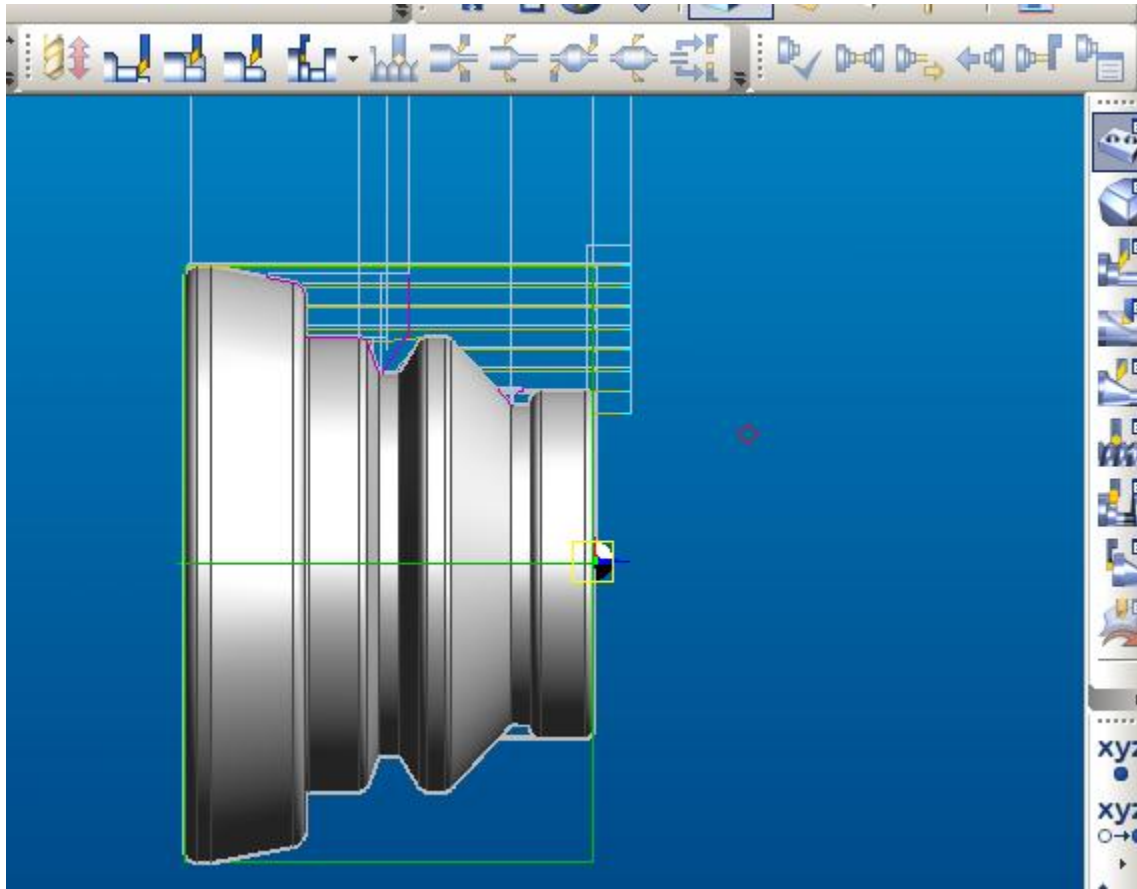


Turn 1.11

Simulation

Constant 1 Move to

e confirme com o botão direito sobre o ponto da furação





Sequence

- Instructions
- [-] NC Tomeamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance

Associated to

Retract

Level

Termination

Spindle Direction

Optimise Path

Tool Orientation

Use Current Index Datum

—Safety Zone—

Clearance Type

Distance

Mill Mode

Tool Mode

OK Cancel

Turn 1.11

Simulation

Progress bar: []

Constant []

1 Move to



Sequence

- Instructions
- [-] NC
- [-] Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...

Hole Operation

General Centre/Spot Preparation Roughing Finishing

Clearance 5

Associated to Feature

Retract |

Level 0.0

Termination Blind

Spindle Direction Forward

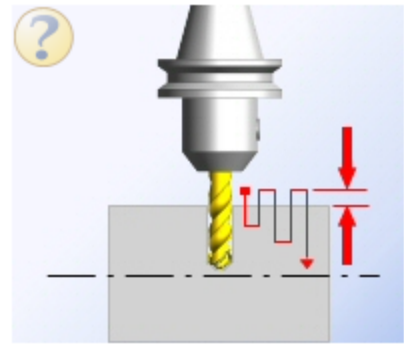
Optimise Path None

Tool Orientation Axial

Use Current Index Datum

—Safety Zone—

Clearance Type None



Mill Mode Planar

Tool Mode Fixed

OK Cancel

Turn 1.11

Simulation

Simulation playback controls including a progress bar, a 'Constant' button, a '1' value field, and 'Move to' text.



Sequence

- Instructions
- [-] NC
 - [-] Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance

Associated to

Retract

Level

Termination

Spindle Direction

Optimise Path

Tool Orientation

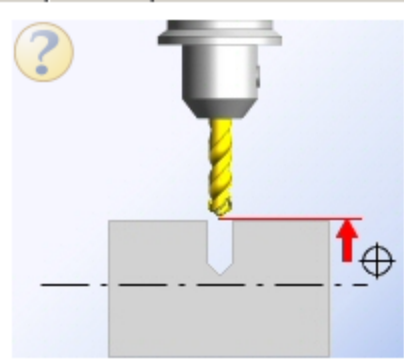
Use Current Index Datum

—Safety Zone—

Clearance Type Distance

Mill Mode

Tool Mode



OK Cancel

Turn 1.11

Simulation

Progress bar with play, stop, and step icons.

Constant Move to



Sequence

Instructions

- [-] N1 Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...

Hole Operation

General Centre/Spot Preparation Roughing Finishing

Clearance

Associated to

Retract

Level

Termination

Spindle Direction

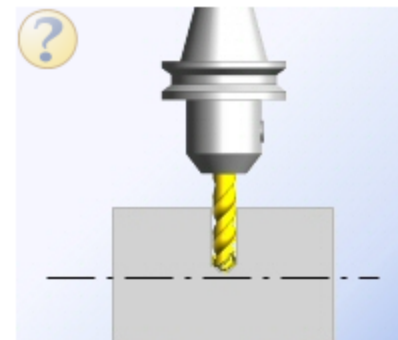
Optimise Path

Tool Orientation

Use Current Index Datum

—Safety Zone—

Clearance Type



Mill Mode

Tool Mode

OK

Cancel

Turn 1.11

Simulation





Sequence

- Instructions
- [-] NC
- [-] Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance: 5

Associated to: Feature

Retract:

Level: 0.0

Termination: Through

Spindle Direction: Forward

Optimise Path: None

Tool Orientation: Axial

Use Current Index Datum:

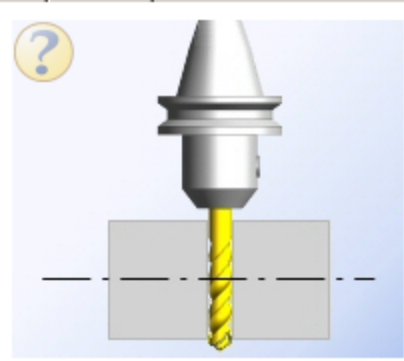
—Safety Zone—

Clearance Type: None

Distance:

Mill Mode: Planar

Tool Mode: Fixed



OK Cancel

Turn 1.11

Simulation

Simulation playback controls including a progress bar, a 'Constant' button, a 'Move to' field with the value '1', and navigation buttons (Play, Stop, Previous, Next).



Sequence

- Instructions
- NC
 - Torneamento: fanuc...
 - 1 Straight Turnin...
 - 2 Rough Turning...
 - 3 Finish Turning ...
 - 4 Groove Operati...
 - 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance

Associated to

Retract

Level

Termination

Spindle Direction

Optimise Path

Tool Orientation

Use Current Index Datum

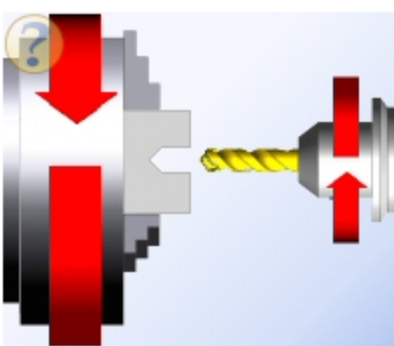
—Safety Zone—

Clearance Type

Distance

Mill Mode

Tool Mode



OK Cancel

Turn 1.11

Simulation

Progress bar with play, stop, and step icons.

Constant Move to



Sequence

- Instructions
- NC
- Torneamento: fanuc...
- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance: 5

Associated to: Feature

Retract:

Level: 0.0

Termination: Through

Spindle Direction: Forward

Optimise Path: None

Tool Orientation: Axial

Use Current Index Datum:

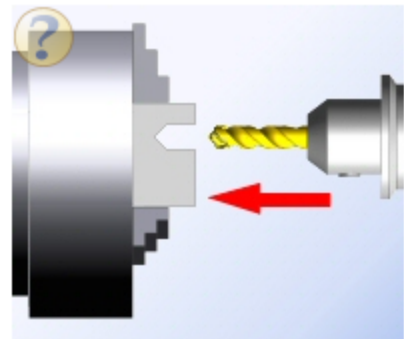
—Safety Zone—

Clearance Type: None

Distance:

Mill Mode: Planar

Tool Mode: Fixed



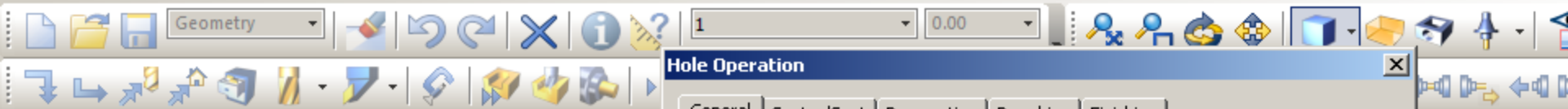
OK Cancel

Turn 1.11

Simulation

Progress bar with play, stop, and step icons.

Constant: 1 Move to



Sequence

Instructions

- [-] N/C Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance: 5

Associated to: Feature

Retract:

Level: 0.0

Termination: Through

Spindle Direction: Forward

Optimise Path: None

Tool Orientation: Radial

Use Current Index Datum:

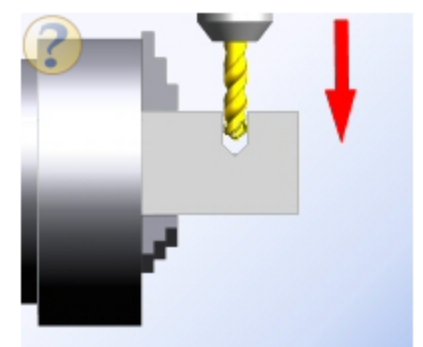
—Safety Zone—

Clearance Type: None

Distance:

Mill Mode: Planar

Tool Mode: Fixed



OK Cancel

Turn 1.11

Simulation

Progress bar: []

Constant: []

1 Move to



Sequence

Instructions

- NC
- Torneamento: fanuc...
- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance: 5

Associated to: Feature

Retract:

Level: 0.0

Termination: Through

Spindle Direction: Forward

Optimise Path: None

Tool Orientation: Reverse Axial

Use Current Index Datum:

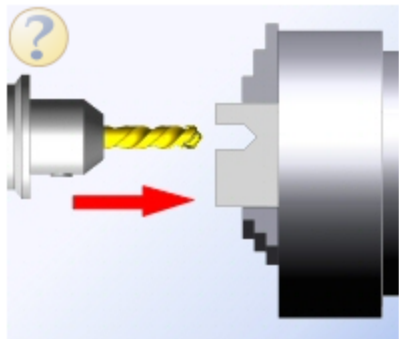
—Safety Zone—

Clearance Type: None

Distance:

Mill Mode: Planar

Tool Mode: Fixed



OK Cancel

Turn 1.11

Simulation

Constant

1 Move to

The simulation bar shows a progress indicator and a 'Constant' button. Below it is a 'Move to' input field with the value '1'.



Sequence

- Instructions
- [-] NC Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance: 5

Associated to: Feature

Retract:

Level: 0.0

Termination: Through

Spindle Direction: Forward

Optimise Path: None

Tool Orientation: Axial

Use Current Index Datum:

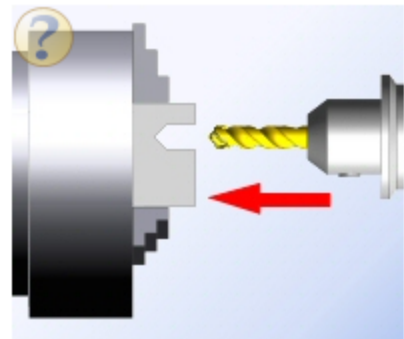
—Safety Zone—

Clearance Type: None

Distance:

Mill Mode: Planar

Tool Mode: Fixed

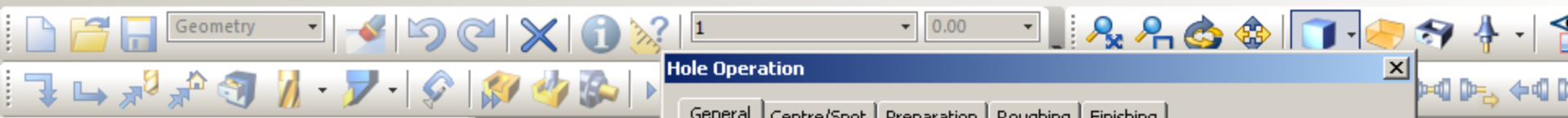


OK Cancel

Turn 1.11

Simulation

Simulation playback controls including a progress bar, a 'Constant' button, a '1' value field, and 'Move to' text.



Sequence

Instructions

- NC Torneamento: fanuc...
- + 1 Straight Turnin...
- + 2 Rough Turning...
- + 3 Finish Turning ...
- + 4 Groove Operati...
- + 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance: 5

Associated to: Feature

Retract:

Level: 0.0

Termination: Through

Spindle Direction: Forward

Optimise Path: None

Tool Orientation: Axial

Use Current Index Datum:

—Safety Zone—

Clearance Type: None

Distance:

Mill Mode: Planar

Tool Mode: Fixed (selected), Fixed, Driven

OK Cancel

Turn 1.11

Simulation

Constant 1 Move to



Sequence

- Instructions
- [-] NC
 - [-] Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance

Associated to

Retract

Level

Termination

Spindle Direction

Optimise Path

Tool Orientation

Use Current Index Datum

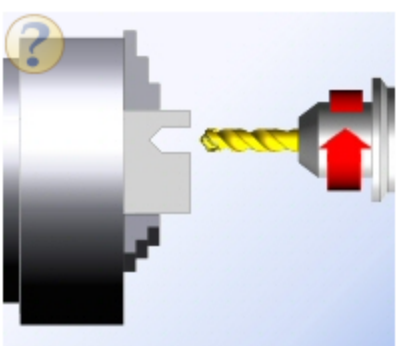
—Safety Zone—

Clearance Type

Distance

Mill Mode

Tool Mode

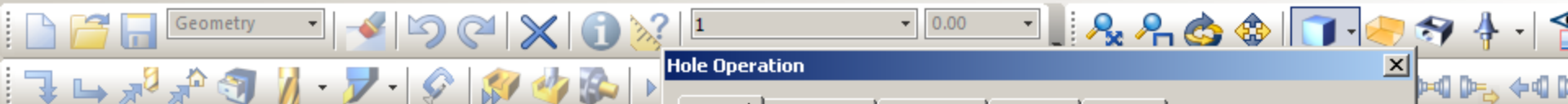


OK Cancel

Turn 1.11

Simulation

Simulation progress bar with play, stop, and refresh buttons. A 'Constant' button is visible. A 'Move to' field contains the value '1'.



Sequence

Instructions

- NC Torneamento: fanuc...
- + 1 Straight Turnin...
- + 2 Rough Turning...
- + 3 Finish Turning ...
- + 4 Groove Operati...
- + 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance: 5

Associated to: Feature

Retract: []

Level: 0.0

Termination: Through

Spindle Direction: Forward

Optimise Path: None

Tool Orientation: Axial

Use Current Index Datum:

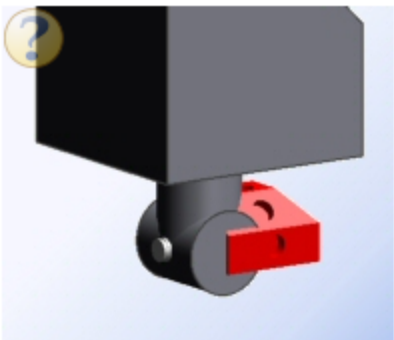
—Safety Zone—

Clearance Type: None

Distance: []

Mill Mode: Planar

Tool Mode: Fixed



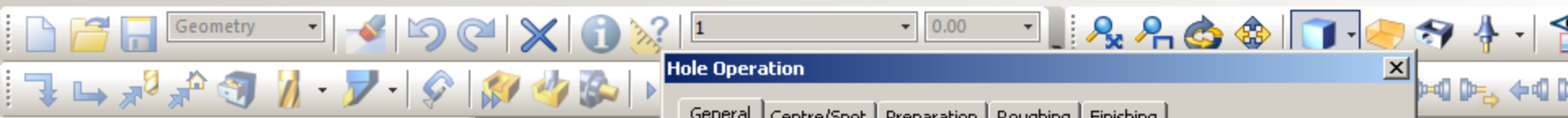
OK Cancel

Turn 1.11

Simulation

Constant [] Move to [1]

The simulation bar shows a progress indicator and playback controls (Play, Stop, Step, Step Back, Step Forward). A 'Constant' button and a 'Move to' input field with the value '1' are also present.



Sequence

Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance: 5

Associated to: Feature

Retract:

Level: 0.0

Termination: Through

Spindle Direction: Forward

Optimise Path: None

Tool Orientation: Axial

Use Current Index Datum:

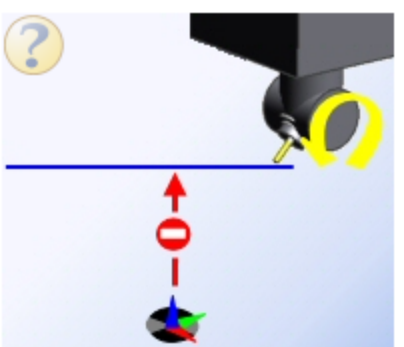
—Safety Zone—

Clearance Type: Level

Distance:

Mill Mode: Planar

Tool Mode: Fixed



OK Cancel

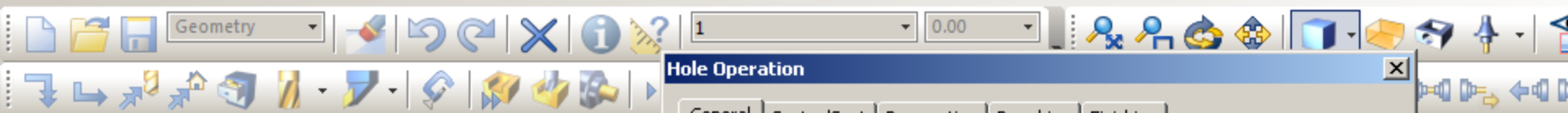
Turn 1.11

Simulation

Constant

1 Move to

The simulation control panel includes a progress bar, a 'Constant' button, and playback controls (Play, Stop, Step, Step Back, Step Forward). A 'Move to' field is set to '1'.



Sequence

Instructions

- NC Torneamento: fanuc...
- + 1 Straight Turnin...
- + 2 Rough Turning...
- + 3 Finish Turning ...
- + 4 Groove Operati...
- + 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance: 5

Associated to: Feature

Retract:

Level: 0.0

Termination: Through

Spindle Direction: Forward

Optimise Path: None

Tool Orientation: Axial

Use Current Index Datum:

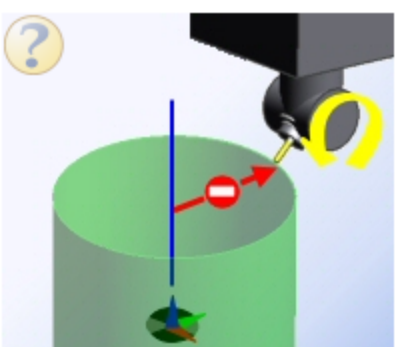
—Safety Zone—

Clearance Type: Radius

Distance:

Mill Mode: Planar

Tool Mode: Fixed



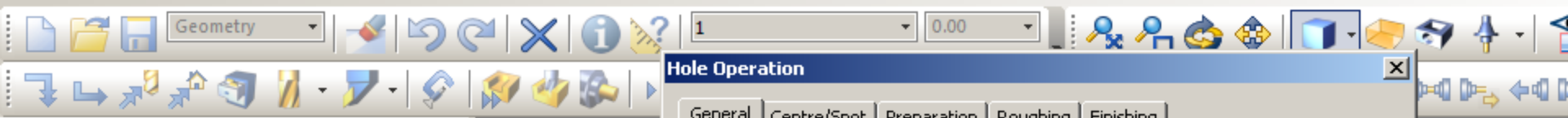
OK Cancel

Turn 1.11

Simulation

Constant

1 Move to



Sequence

Instructions

- NC Torneamento: fanuc...
- + 1 Straight Turnin...
- + 2 Rough Turning...
- + 3 Finish Turning ...
- + 4 Groove Operati...
- + 5 Groove Operati...

Hole Operation

General | Centre/Spot | Preparation | Roughing | Finishing

Clearance: 5

Associated to: Feature

Retract:

Level: 0.0

Termination: Through

Spindle Direction: Forward

Optimise Path: None

Tool Orientation: Axial

Use Current Index Datum:

—Safety Zone—

Clearance Type: Sphere

Distance:

Mill Mode: Planar

Tool Mode: Fixed

OK Cancel

A 3D visualization showing a drill bit cutting into a green sphere. A yellow arrow indicates the direction of the drill bit's movement.

Turn 1.11

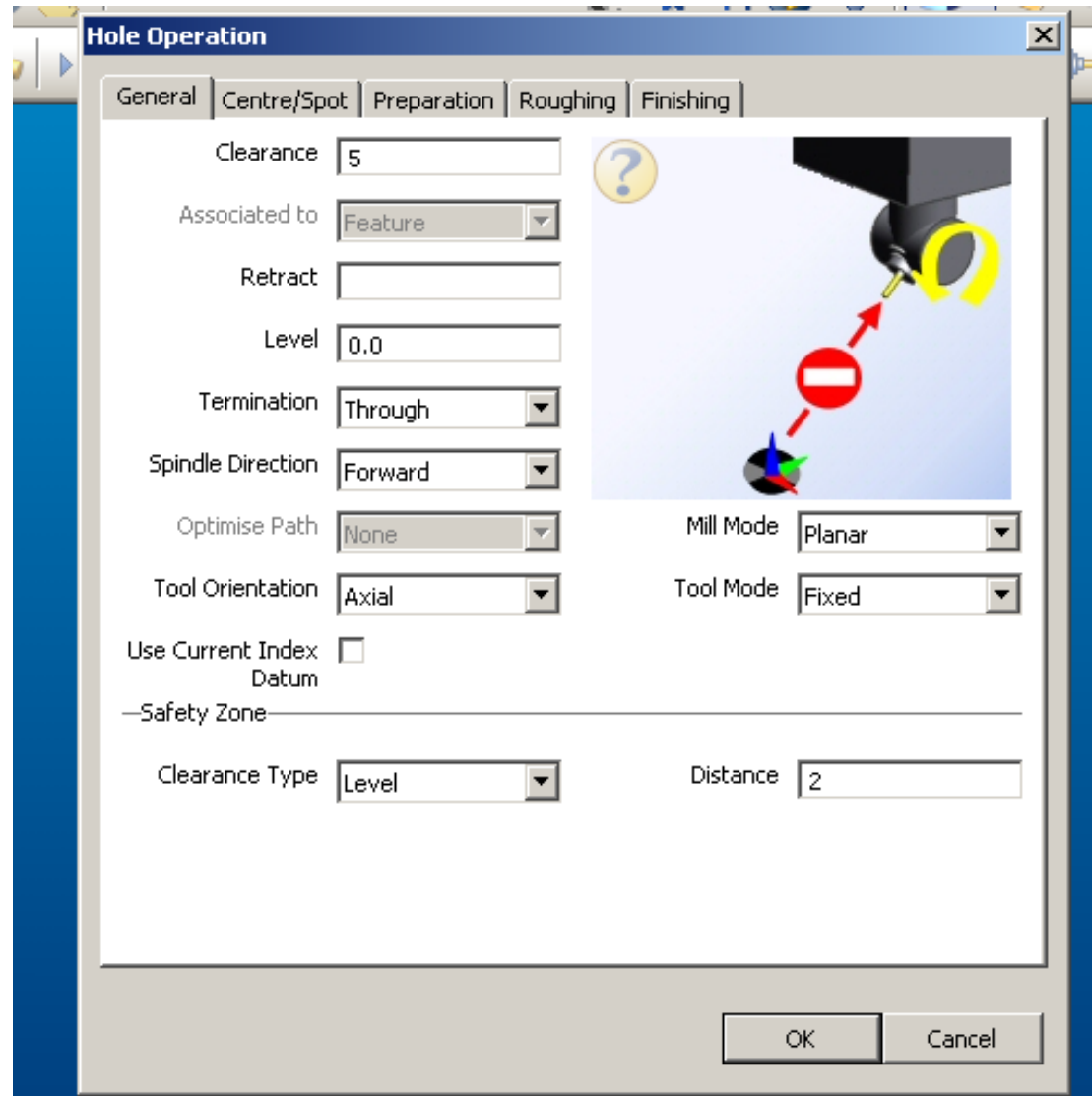
Simulation

Constant

1 Move to

The simulation control panel includes a progress bar, a 'Constant' button, and playback controls (Play, Stop, Step, Step Back, Step Forward).

Faça esta configuração





Sequence

- Instructions
- [-] N/C Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...

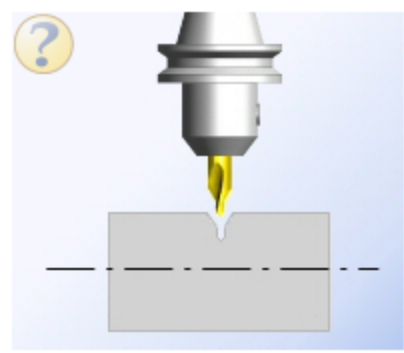
Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy **Centre Drill**

Depth

Diameter



—Tooling—

ToolStore

Plunge Feed Speed

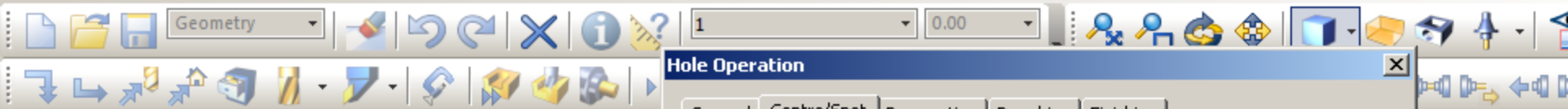
Position Sort Priority

Diameter

Turn 1.11

Simulation

Simulation playback controls including a progress bar, a 'Constant' button, a 'Move to' input field with the value '1', and standard media control icons (play, stop, back, forward).



Sequence

Instructions

- NC
- Torneamento: fanuc...
- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...

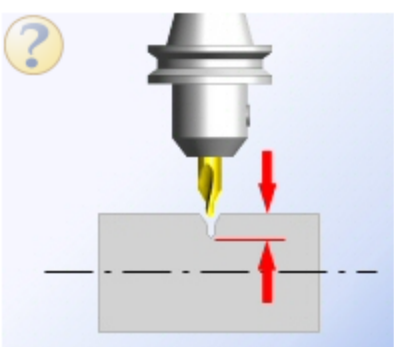
Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy: Centre Drill

Depth: 3

Diameter:



—Tooling—

ToolStore: Find...

Plunge Feed: 0.16 Speed: 2475.74

Position: 0 Sort Priority: 0

Diameter: 18

OK Cancel

Turn 1.11

Simulation

Constant 1 Move to



Sequence

Instructions

- Torneamento: fanuc...
- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...

Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy: Centre Drill

Depth: 3

Diameter:

Edgecam

No Tool matches found - Do you wish to Add a new Tool?

Sim Não

Position: 0 Sort Priority: 0

Diameter: 18

OK Cancel

Turn 1.11

Simulation

Constant 1 Move to

Simulation Tracking

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...

Edgcam - New Tool2 - lab05m01\ecsqliexpress\tstore

Allocation	Notes	Technology	Additional
General	Geometry	Mounting	Angled Head

Tool Description:

Comment:

Units: Inches Millimetres

Tool Type:

Specification:

Turret Position:

Tool Offset:

Group Code:

Code ID:

Radius Offset:

Default Priority:

Roughing Tool

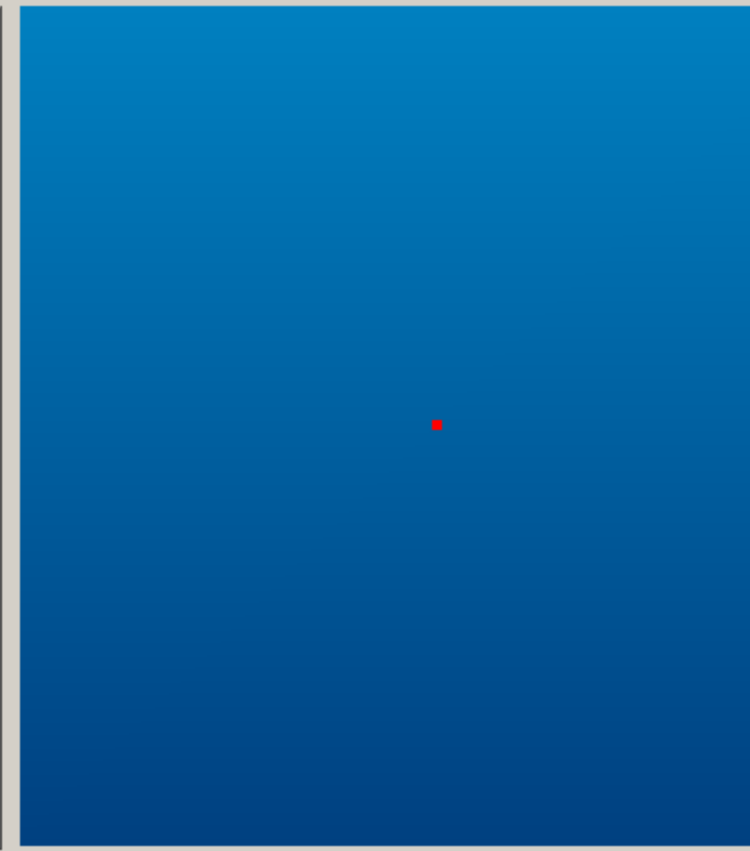
Finishing Tool

Visible in list

Jobs:

Spindle Direction:

OK Cancelar Ajuda



Simulation

Constant Move to

Simulation Tracking

Sequence

Instructions

- Torneamento: fanuc...
- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...

Edgcam - New Tool2 - lab05m01\ecsqliexpress\tstore

Allocation	Notes	Technology	Additional
General	Geometry	Mounting	Angled Head

Tool Description: Broca de centro

Comment: [Empty]

Units: Inches Millimetres

Tool Type: [Icons for various tool types]

Specification: [Empty]

Turret Position: [Empty]

Tool Offset: [Empty]

Group Code: [Empty]

Code ID: [Empty]

Radius Offset: [Empty]

Default Priority: [Empty]

Roughing Tool

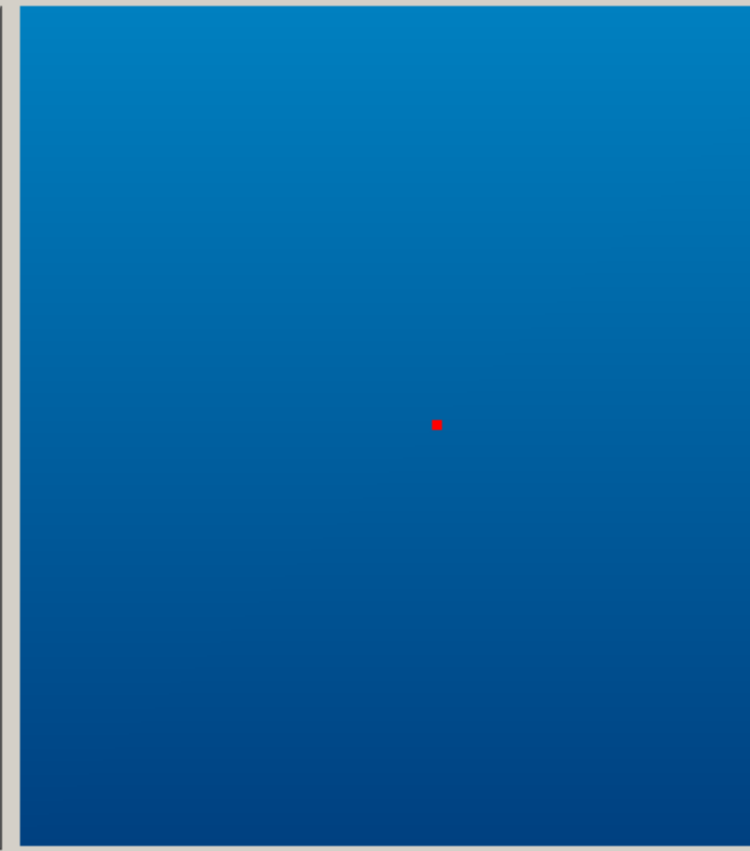
Finishing Tool

Visible in list

Jobs: <All Kit>

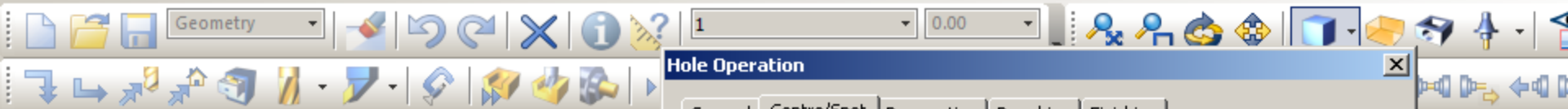
Spindle Direction: [Icons for spindle directions]

OK Cancelar Ajuda



Simulation

Constant [Slider] 1 Move to



Sequence

Instructions

- NC
- Torneamento: fanuc...
- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...

Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy: Centre Drill

Depth: 3

Diameter:

—Tooling—

ToolStore: Find...

Plunge Feed: 0.16 Speed: 2475.74

Position: 0 Sort Priority: 0

Diameter: 18

OK Cancel

Turn 1.11

Simulation

Constant 1 Move to

Geometry

ence

uctions

Torneamento: fanuc...

- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...

Edgecam - New Tool2 - lab05m01\ecslexpress\tstore

Allocation	Notes	Technology	Additional
General	Geometry	Mounting	Angled Head

Diameter Through Coolant

Tip Angle



Flute Length

Small Diameter

Teeth/Flutes

Included Angle



Hand Of Tool

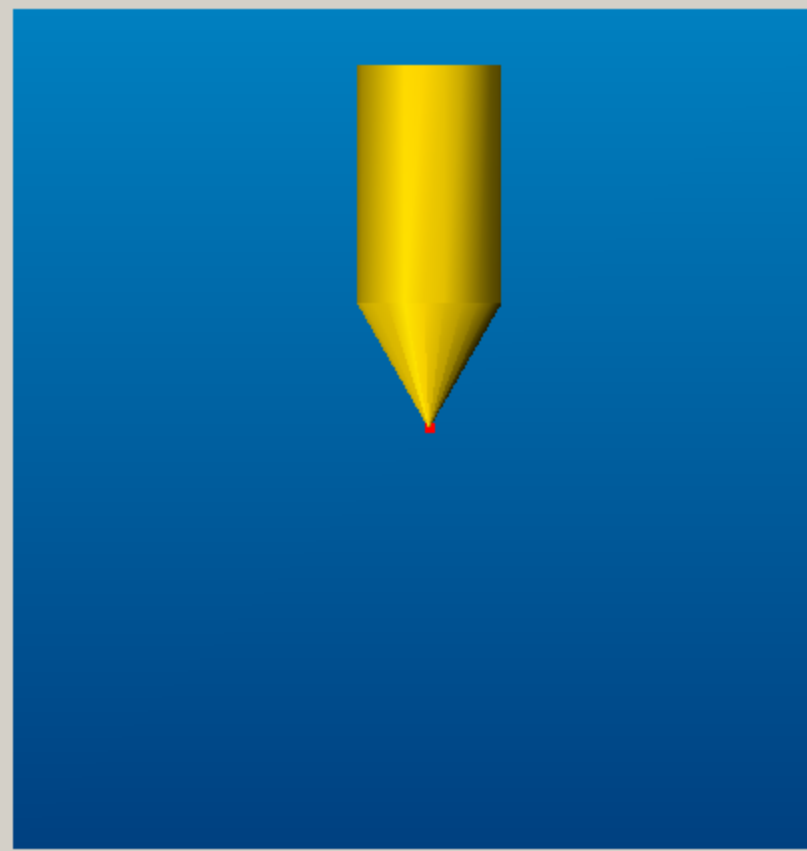
Shank

Length

Diameter

Graphic  

OK Cancelar Ajuda



Simulation

Constant Move to

Simulation Tracking



Sequence

- Instructions
- [-] N/C Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...

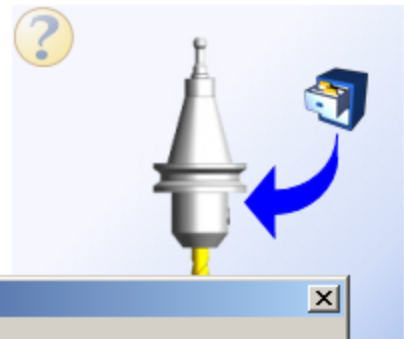
Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy

Depth

Diameter



Edgcam

-Toolin

Defined Tool cannot be listed due to current filter settings

OK

Position Sort Priority

Diameter

OK Cancel

Turn 1.11

Simulation

Simulation progress bar and controls

Constant Move to

- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...

Edgecam - lab05m01\ecsqlexpress\tstore

Hole

No matches found

Tools: Create... Edit... Delete Copy...

Filtering: Tools... Use Filters

Inches Millimetres

Select Cancel Help Print

Turn 1.11

Simulation

Constant 1 Move to



Sequence

Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...

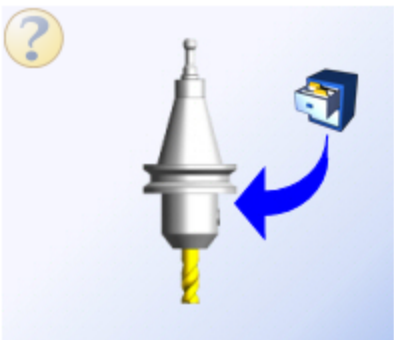
Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy: Centre Drill

Depth: 3

Diameter:



—Tooling—

ToolStore: 3mm x 60 Centredrill - 13A F30M Find...

Plunge Feed: 0.12 Speed: 15662.9

Position: Sort Priority:

Diameter: 3.15

OK Cancel

Turn 1.11

Simulation

Constant 1 Move to

The simulation control panel includes a progress bar, a 'Constant' button, a 'Move to' input field with the value '1', and standard playback controls (Play, Stop, Step, etc.).



Sequence

- Instructions
- [-] N/C Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...

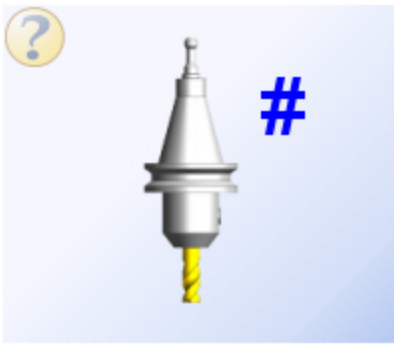
Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy ?

Depth

Diameter



—Tooling—

ToolStore Find...

Plunge Feed Speed

Position Sort Priority

Diameter

OK Cancel

Turn 1.11

Simulation

Progress bar with play, stop, and refresh icons.

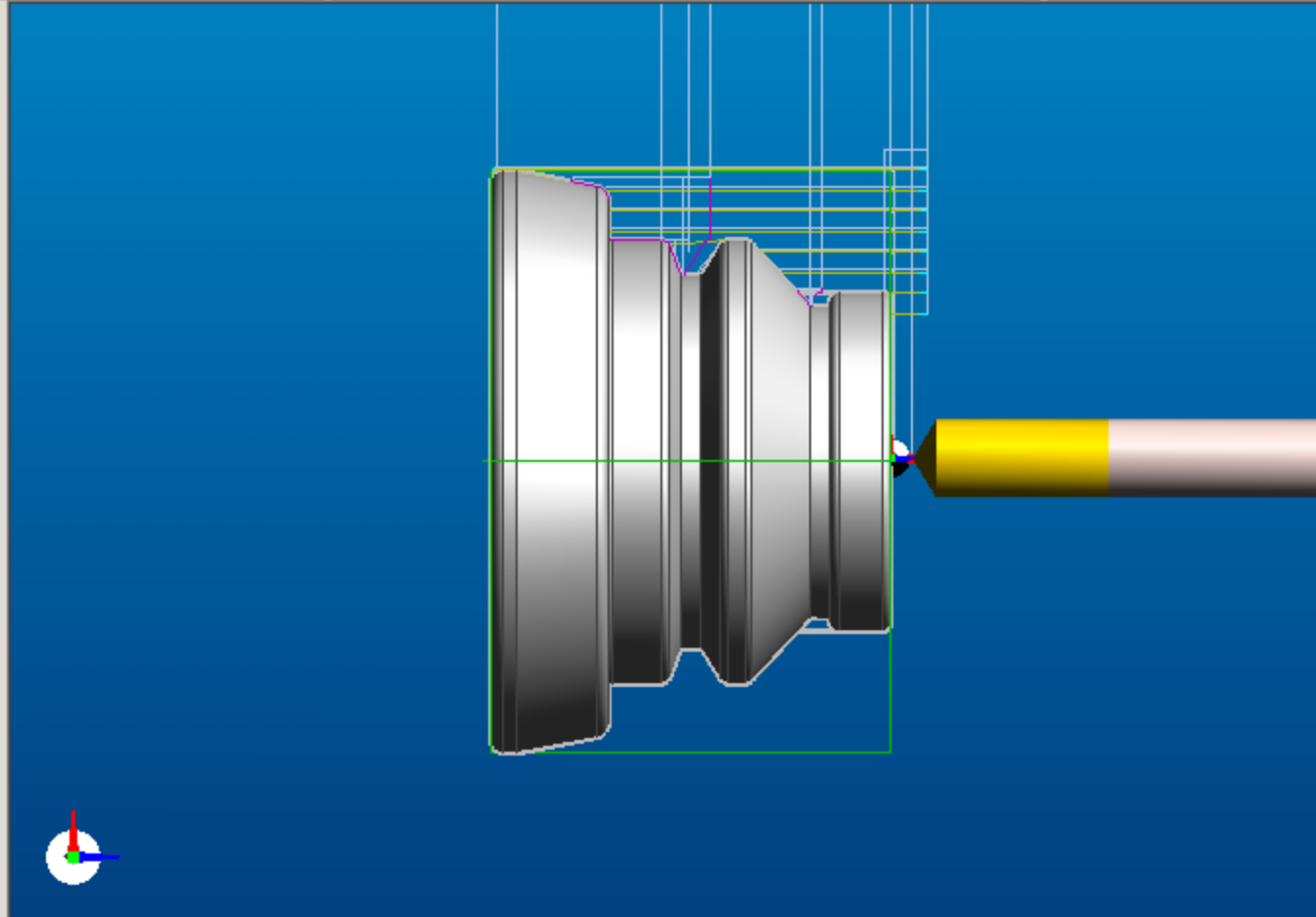
Constant Move to



Sequence

Instructions

- [-] NC Tomeamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...



Turn 1.11

Simulation

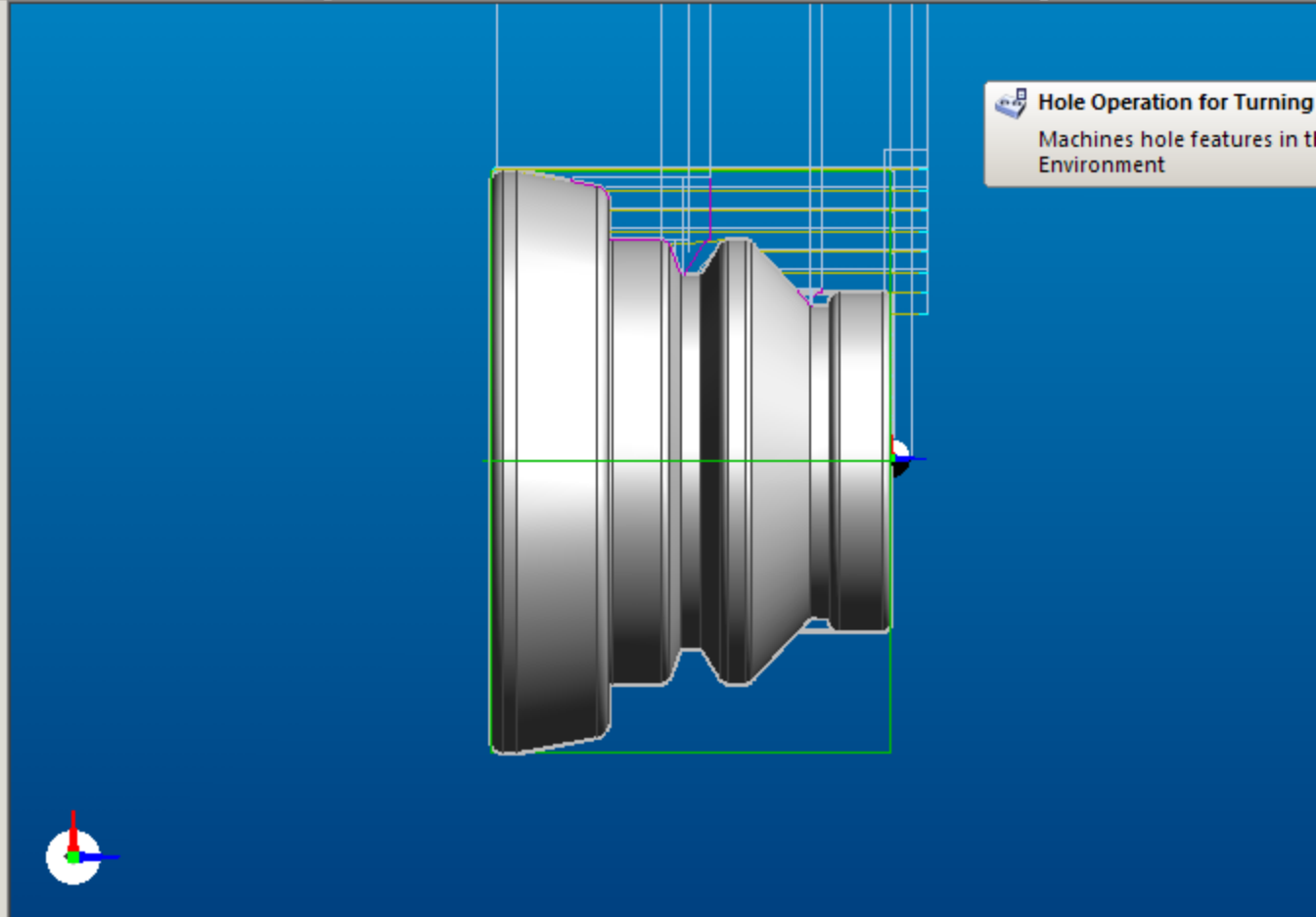
Constant 1 Move to



Sequence

Instructions

- [-] NC Tomeamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...



Hole Operation for Turning
Machines hole features in the Environment

Turn 1.11

Simulation

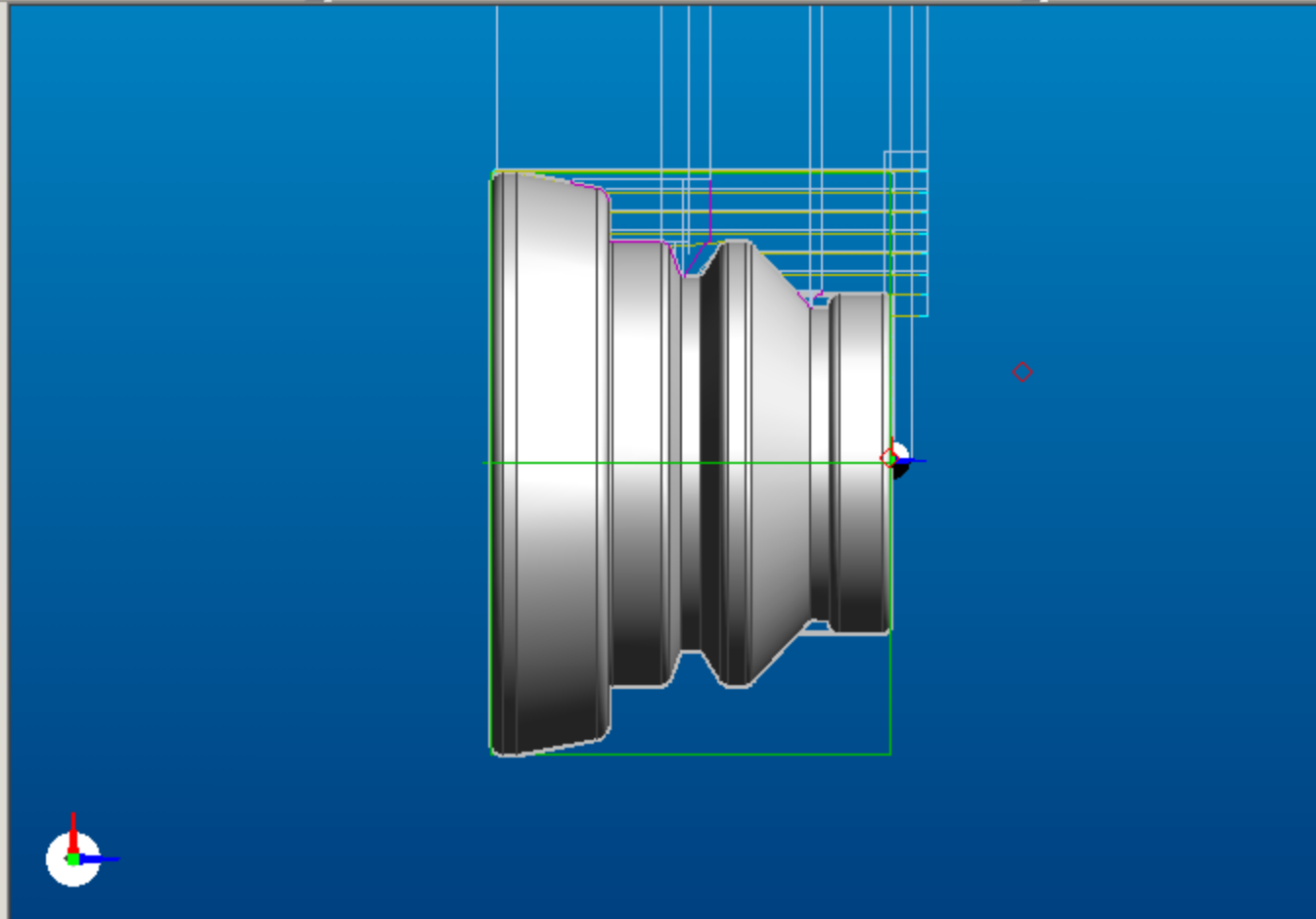
Progress bar: [Slider] [Play] [Stop] [Step Back] [Step Forward]

Constant [Slider] [1] Move to



Sequence

- Instructions
- [-] NC Tomeamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...



Turn 1.11

Simulation

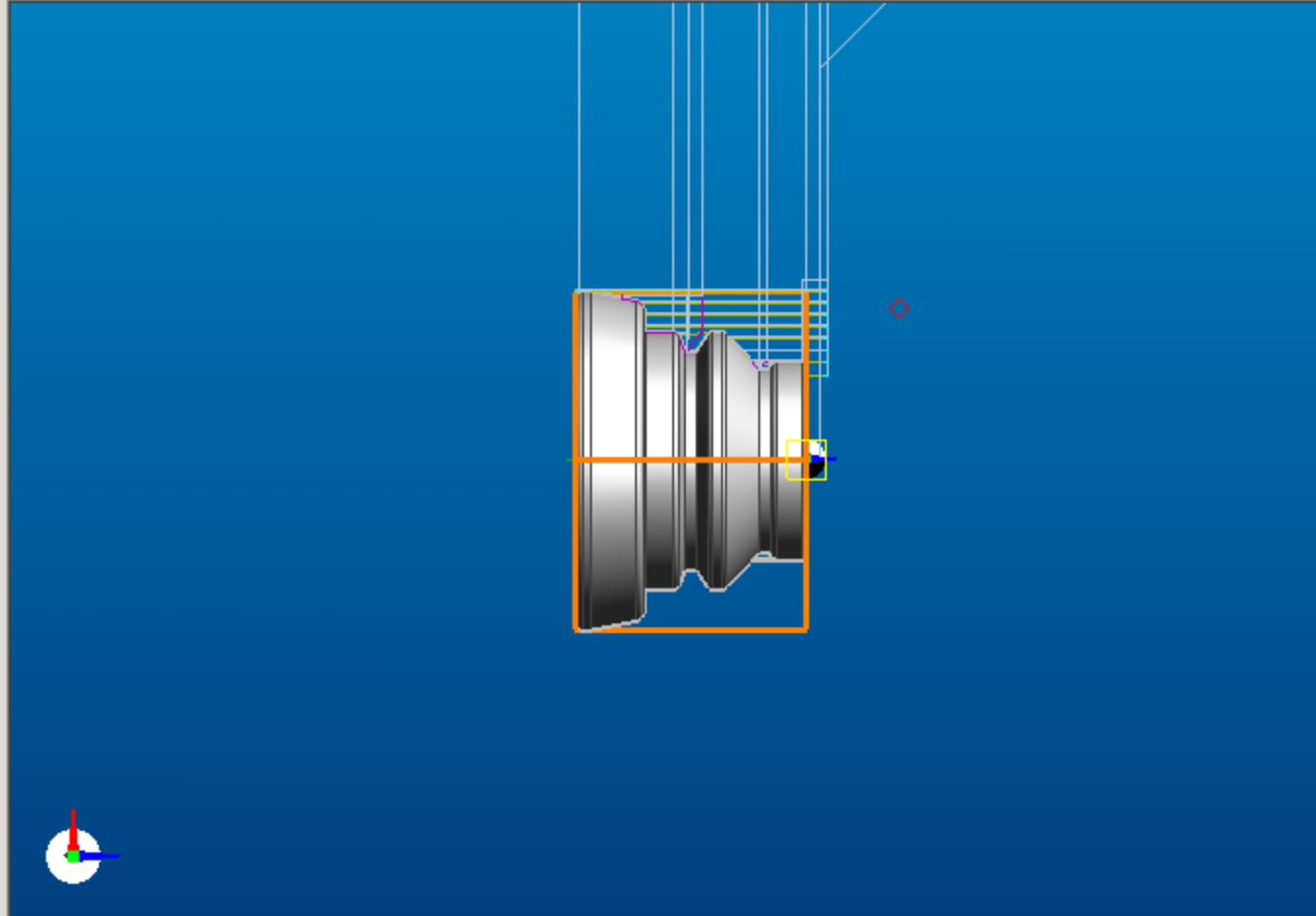
Progress bar with play, stop, and refresh icons.

Constant [Slider] 1 Move to



Sequence

- Instructions
- [-] N/C Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...



Turn 0.64

Simulation

Progress bar with play, stop, and refresh buttons.

Constant [Slider] 1 Move to



Sequence

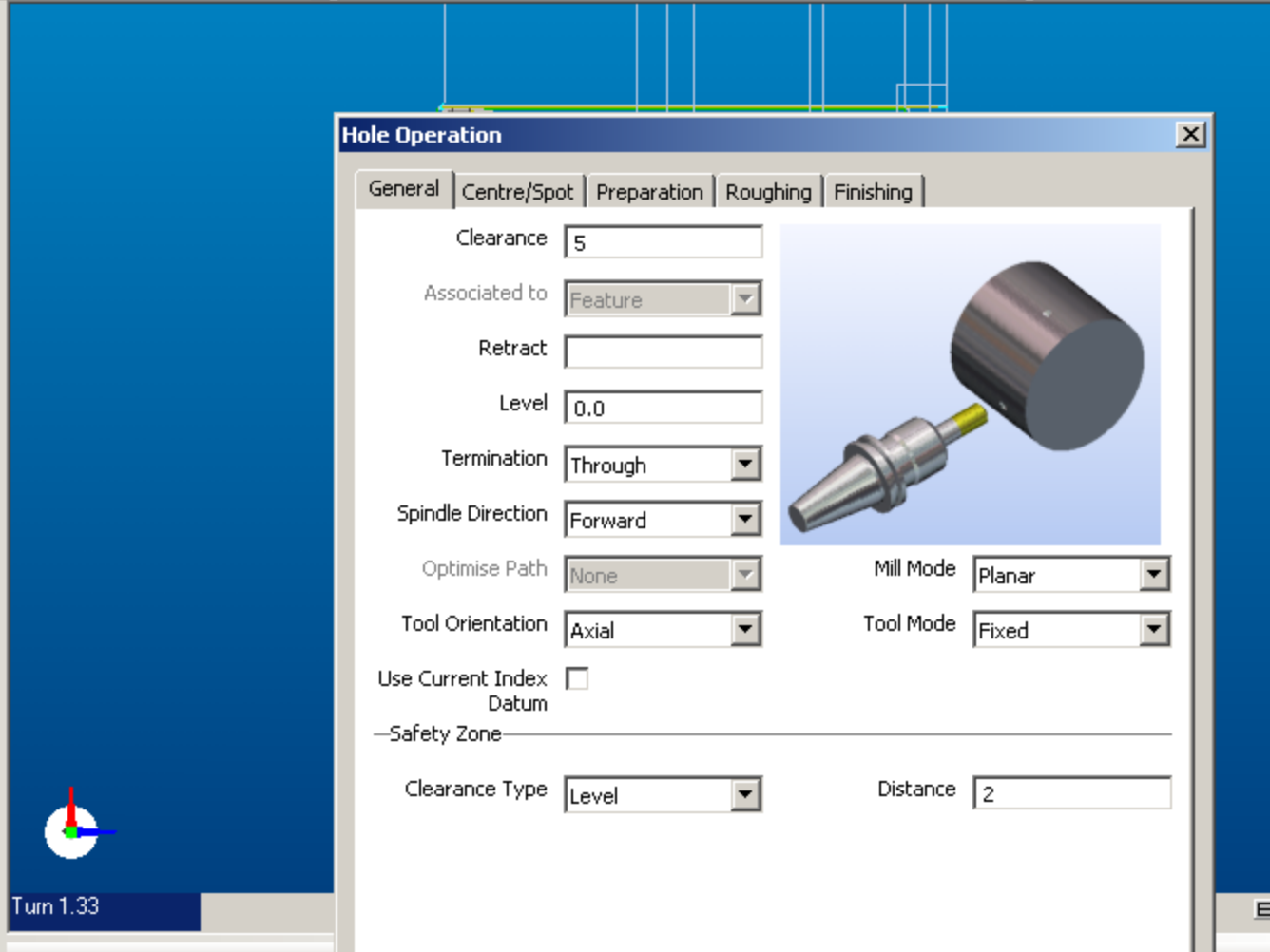
Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/ Defaulting to Right and CLW.
 Warning - Hand of Tool for '20mm Deep Hole Jobber Defaulting to Right and CLW.

Properties Feedback



Turn 1.33

Simulation

Constant

Hole Operation

General Centre/Spot Preparation Roughing Finishing

Clearance 5

Associated to Feature

Retract

Level 0.0

Termination Through

Spindle Direction Forward

Optimise Path None

Tool Orientation Axial

Use Current Index Datum

Safety Zone

Clearance Type Level

Distance 2

Mill Mode Planar

Tool Mode Fixed

OK Cancel



Sequence

Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback

Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy: Drill

Feature Depth: No Roughing

Depth: Drill

Dwell Time: []

Cut Increment: []

Peck Safe Distance: []

—Tooling—

ToolStore: [] Find...

Plunge Feed: 0.16 Speed: 2228.17

Position: 7 Sort Priority: 0

Feature Diameter: 0.0 Diameter: 20

OK Cancel



Sequence

Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback

Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy

Feature Depth

Depth

Dwell Time

Cut Increment

Peck Safe Distance

—Tooling—

ToolStore

Plunge Feed Speed

Position Sort Priority

Feature Diameter Diameter



Sequence

Instructions

- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...
- 6 Turning Hole O...
- 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/ Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber Defaulting to Right and CLW.

Properties Feedback



Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy: Drill

Feature Depth: []

Depth: 100

Dwell Time: []

Cut Increment: []

Peck Sa: []

Position: 7

Sort Priority: 0

Feature Diameter: 0.0

Diameter: 20

OK Cancel

Edgcam

No Tool matches found - Do you wish to Add a new Tool?

Sim Não



Sequence

Instructions

- NC Tormento: fanuc...
- + 1 Straight Turnin...
- + 2 Rough Turning...
- + 3 Finish Turning ...
- + 4 Groove Operati...
- + 5 Groove Operati...
- + 6 Turning Hole O...
- + 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spc
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep H
Defaulting to Right and CLW.

Properties Feedback

Layers Features Sequence

Simulation Tracking

Edgcam - New Tool4 - lab05m01\ecsqliexpress\tstore

Allocation	Notes	Technology	Additional
General	Geometry	Mounting	Angled Head

Tool Description

Comment

Units
 Inches
 Millimetres

Tool Type

Specification ...

Turret Position

Tool Offset

Group Code

Code ID

Radius Offset

Default Priority

Jobs

Spindle Direction

Roughing Tool
 Finishing Tool
 Visible in list

OK Cancelar Ajuda



Sequence

Instructions

- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...
- 6 Turning Hole O...
- 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/ Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber Defaulting to Right and CLW.

Properties Feedback

Turn 1.33

Simulation

Constant

Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy Drill

Feature Depth

Depth 100

Dwell Time

Cut Increment

Peck Se

—Toolin

Position 7 Sort Priority 0

Feature Diameter 0.0 Diameter 20

OK Cancel

Edgcam

Defined Tool cannot be listed due to current filter settings

OK



Sequence

- Instructions
- 1 Straight Turnin...
 - 2 Rough Turning...
 - 3 Finish Turning ...
 - 4 Groove Operati...
 - 5 Groove Operati...
 - 6 Turning Hole O...
 - 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Job Defaulting to Right and CLW.

Edgcam - lab05m01\ecsqliexpress\tstore

Mill Hole

No matches found

Tools: Create... Edit... Delete Copy...

Filtering: Tools... Use Filters

Inches Millimetres

Slot Drill

Select Cancel Help Print

OK Cancel



Find...

2228.17

0

20

OK Cancel



Sequence

- Instructions
- 1 Straight Turnin...
 - 2 Rough Turning...
 - 3 Finish Turning ...
 - 4 Groove Operati...
 - 5 Groove Operati...
 - 6 Turning Hole O...
 - 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Job Defaulting to Right and CLW.

Edgcam - lab05m01\ecsqliexpress\tstore

Mill Hole

No matches found

Tools: Create... Edit... Delete Copy...

Filtering: Tools... Use Filters

Inches Millimetres

Select Cancel Help Print



Find...

2228.17

0

20

OK Cancel



Sequence

- Instructions
- 1 Straight Turnin...
 - 2 Rough Turning...
 - 3 Finish Turning ...
 - 4 Groove Operati...
 - 5 Groove Operati...
 - 6 Turning Hole O...
 - 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Job Defaulting to Right and CLW.

Edgecam - lab05m01\ecsqliexpress\tstore

Mill Hole

Tool Description	Diameter	Flute Length
3mm Deep Hole Jobber - 16A T25M	3	43
4mm Deep Hole Jobber - 16A T25M	4	43
Coromant 4mm	4	20
Coromant 5mm	5	20
Coromant 6mm	6	25
6.5mm Stub Drill - 16A T25M	6.5	85
Coromant 8mm	8	25
8.5mm Stub Drill - 16A T25M	8.5	31
Coromant 9mm	9	25
10mm Stub Drill - 16A T25M	10	43
Coromant 10mm	10	35
Coromant 11mm	11	35

Inches Millimetres

Select Cancel Help Print

Tools

Create... Edit... Delete Copy...

Filtering

Tools... Use Filters

Find...

2228.17

0

20

OK Cancel



Sequence

- Instructions
- 1 Straight Turnin...
 - 2 Rough Turning...
 - 3 Finish Turning ...
 - 4 Groove Operati...
 - 5 Groove Operati...
 - 6 Turning Hole O...
 - 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Job Defaulting to Right and CLW.

Edgecam - lab05m01\ecslexpress\tstore

Mill Hole

Tool Description	Diameter	Flute Length
10mm Stub Drill - 16A T25M	10	43
Coromant 10mm	10	35
Coromant 11mm	11	35
12mm Stub Drill - 16A T25M	12	43
Coromant 12mm	12	40
Coromant 15mm	15	40
16mm Deep Hole Jobber - 16A T25M	16	90
Coromant 16mm	16	50
18mm Deep Hole Jobber - 16A T25M	18	85
20mm Deep Hole Jobber - 16A T25M	20	90
Coromant 20mm	20	50
25mm Deep Hole Jobber - 16A T25M	25	90

Inches Millimetres

Select Cancel Help Print

Tools

Create... Edit... Delete Copy...

Filtering

Tools... Use Filters

Find...

2228.17

0

20

OK Cancel



Sequence

Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback

Turn 1.33

Simulation

Constant

Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy ?

Feature Depth

Depth

Dwell Time

Cut Increment

Peck Safe Distance

—Tooling—

ToolStore Find...

Plunge Feed Speed

Position

Sort Priority

Feature Diameter Diameter

OK Cancel



Sequence

Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback

Hole Operation

General Centre/Spot Preparation Roughing Finishing

Strategy

Feature Depth

Depth

Dwell Time

Cut Increment

Peck Safe Distance

—Tooling—

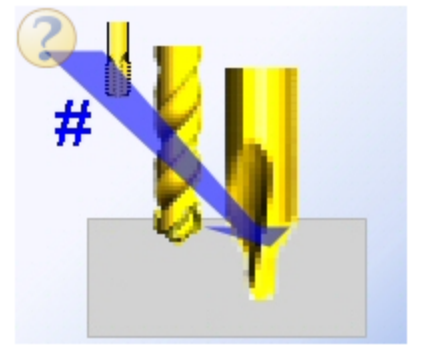
ToolStore Find...

Plunge Feed Speed

Position Sort Priority

Feature Diameter Diameter

OK Cancel



Turn 1.33

Simulation

Constant

Simulation Tracking



Sequence

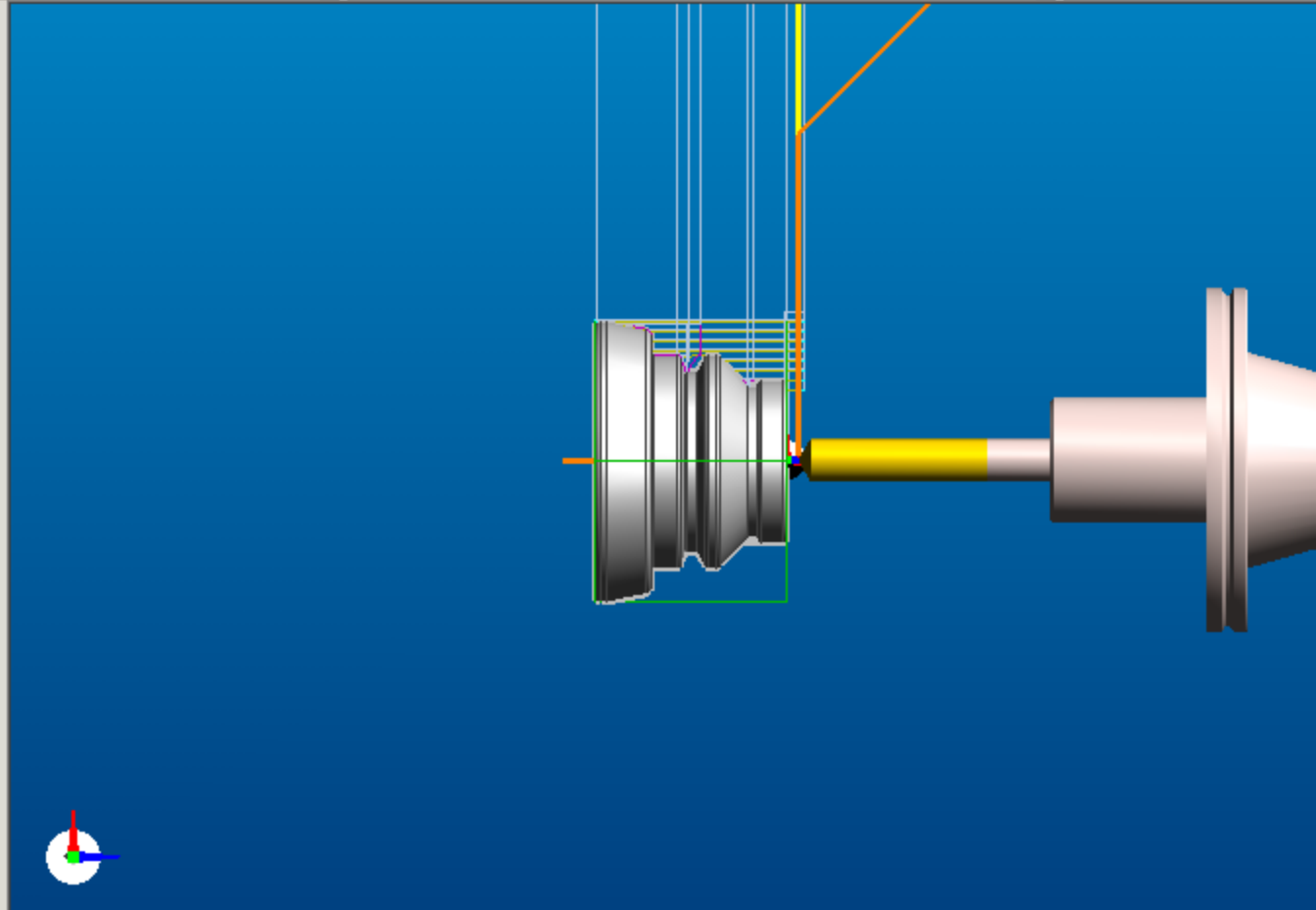
Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole Operation

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Turn 0.54

Simulation

Constant 1 Hole : Drill



Sequence

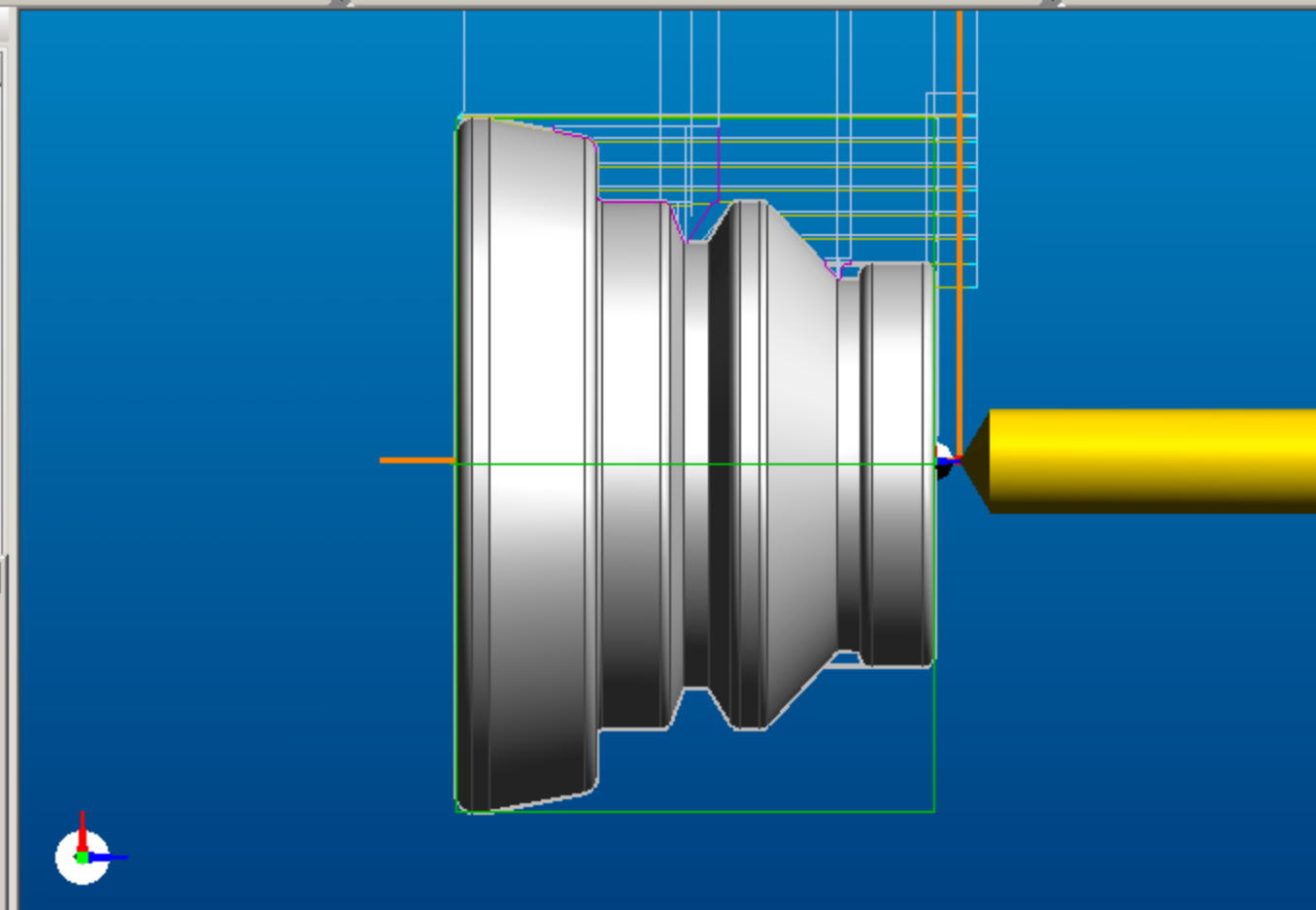
Instructions

- NC Tomeamento: fanuc...
- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...
- 6 Turning Hole O...
- 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Turn 1.33

Simulation

Constant [Slider] 1 Hole : Drill

Simulation Tracking



Sequence

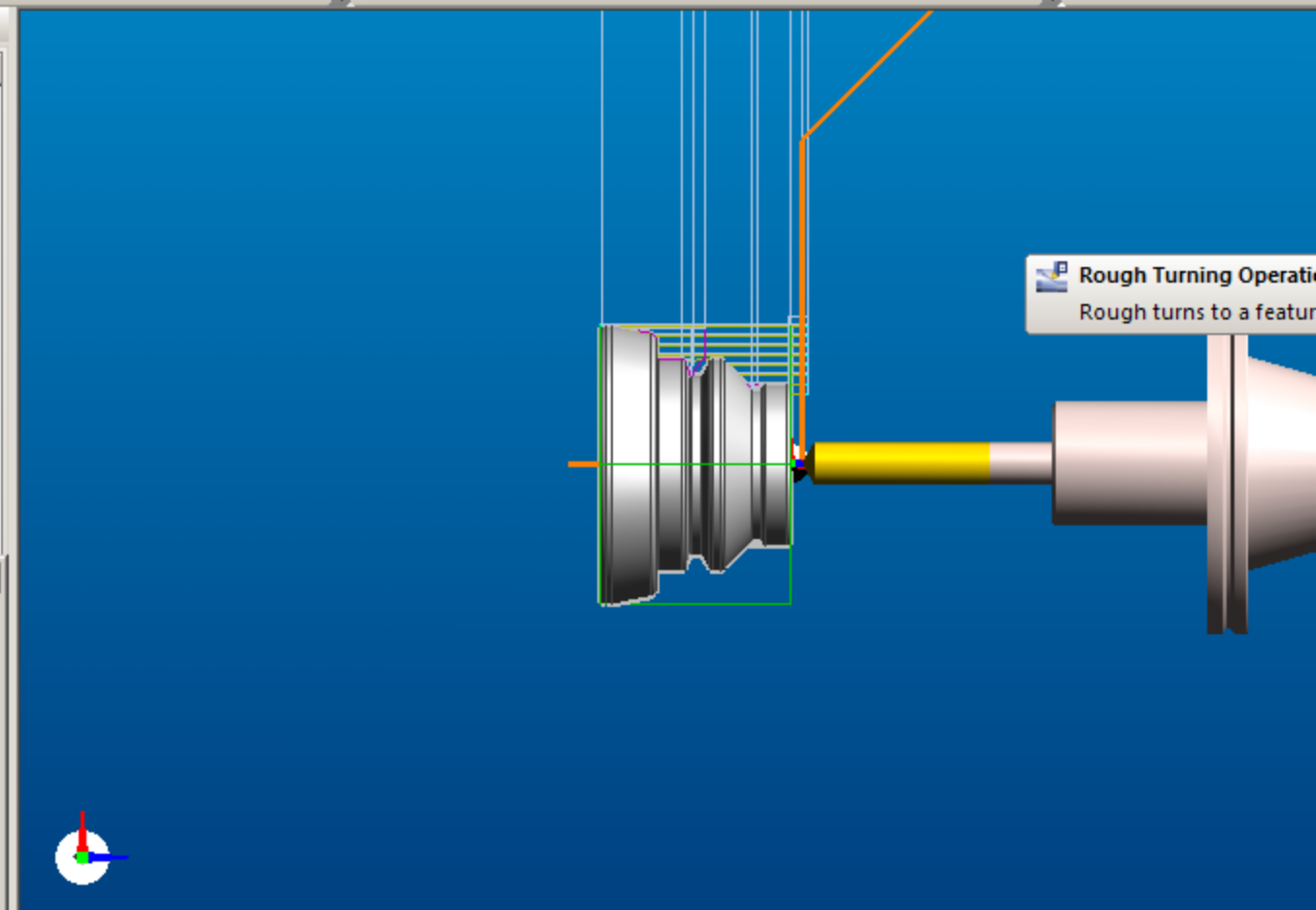
Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Turn 0.54

Simulation

Constant [Slider] 1 Hole : Drill

Simulation Tracking



Sequence

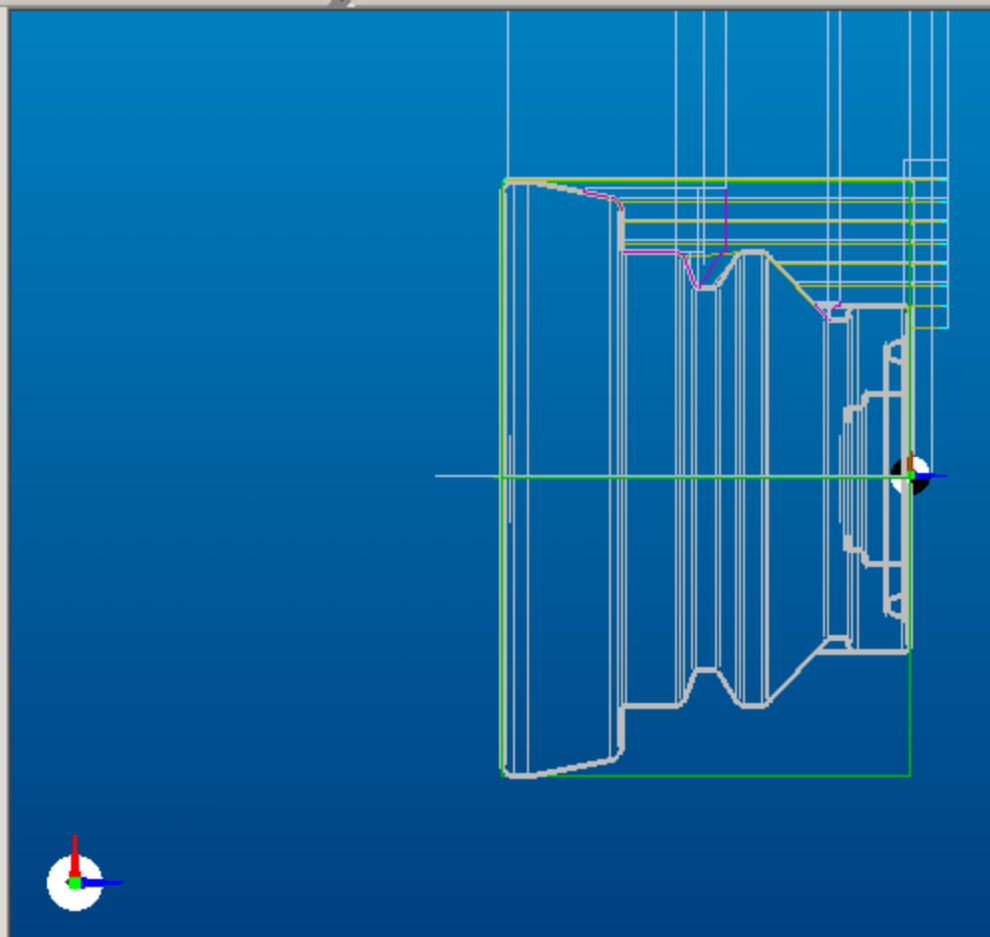
Instructions

- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...
- 6 Turning Hole O...
- 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Rendered

Wireframe

Hidden Line Wireframe

Render by Slope

Render by Type

Render by Spin Type

Turn 1.11

Simulation

Constant 1 Hole : Drill



Sequence

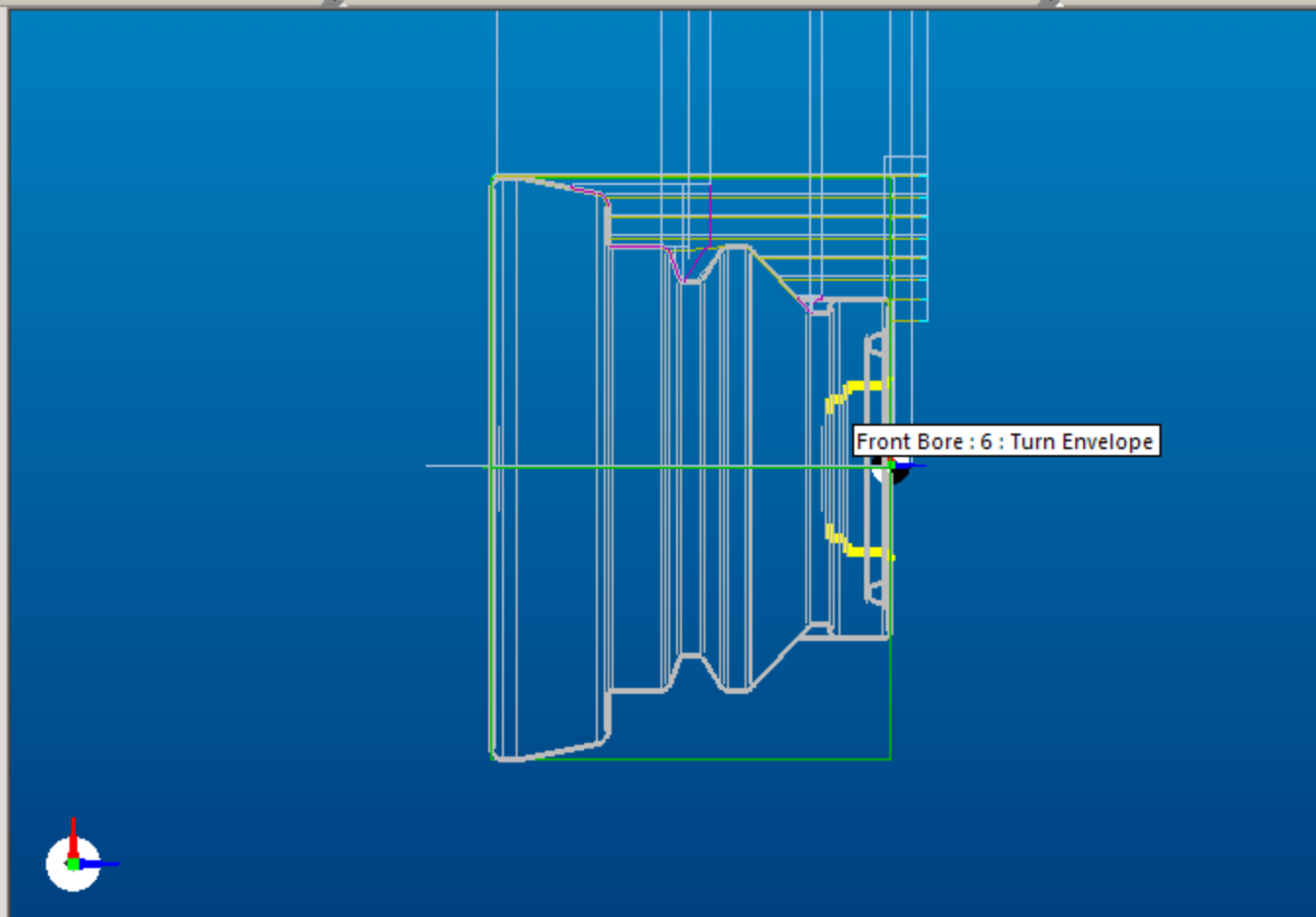
Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Turn 1.11

Simulation

Constant [Slider] 1 Hole : Drill



Sequence

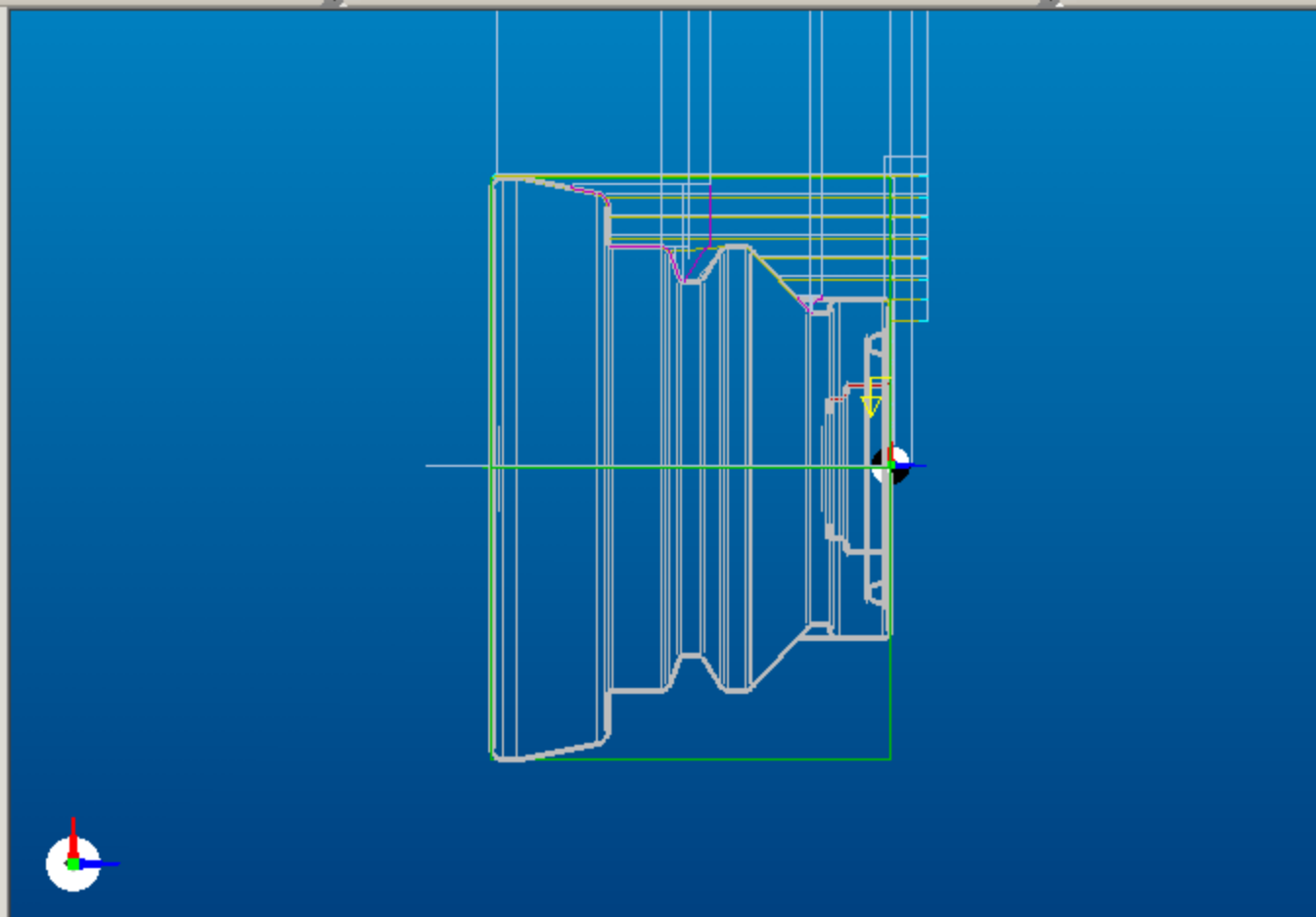
Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Turn 1.11

Simulation

Constant [Slider] 1 Hole : Drill

Simulation Tracking



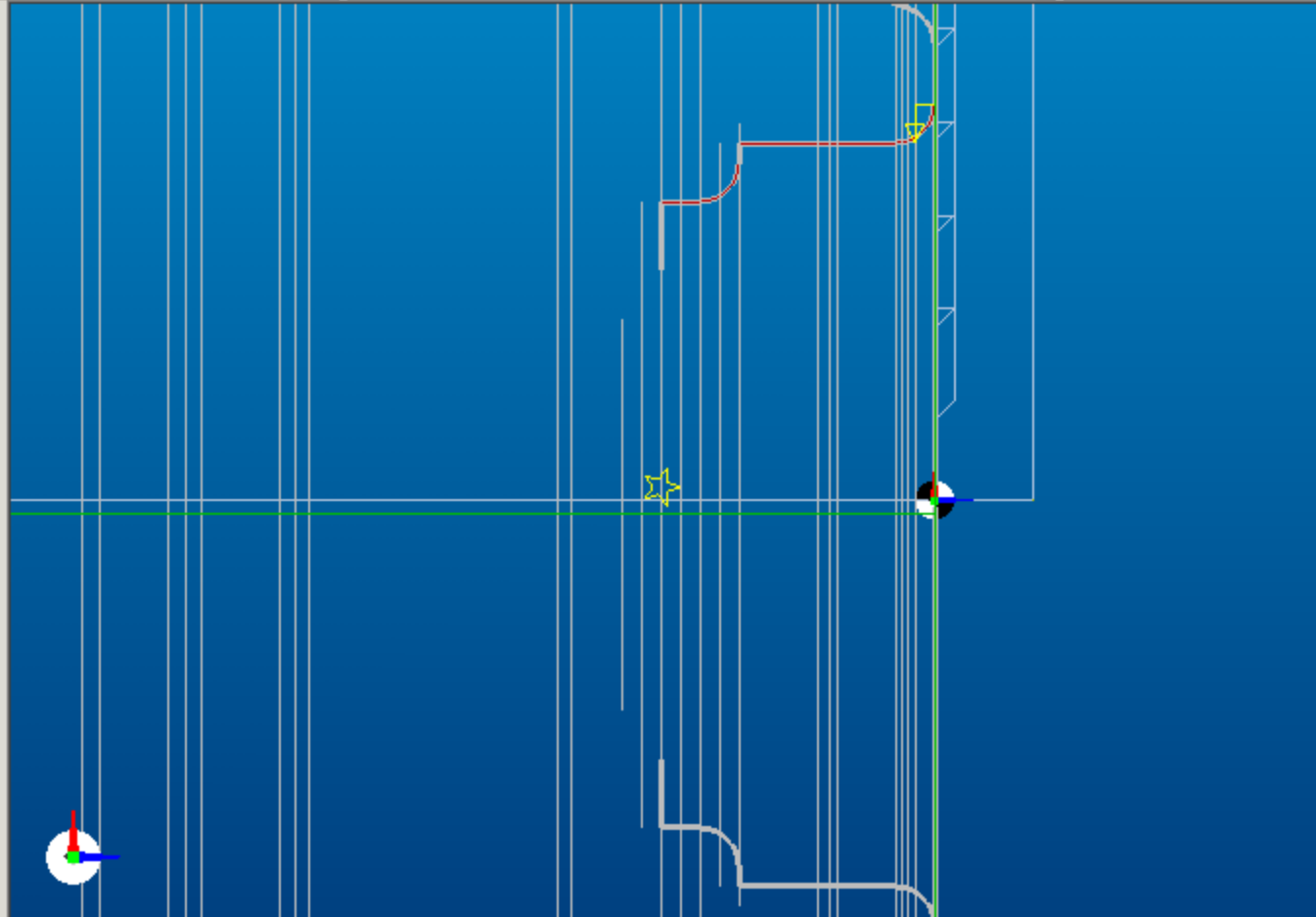
Sequence

- Instructions
- [-] NC Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...
 - [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Turn 5.00

Simulation

Simulation controls including a progress bar, a 'Constant' button, a slider, and a 'Hole : Drill' label with a value of '1'.



Sequence

- Instructions
- [-] NC Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...
 - [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Rough Turning Operation

General | Tooling

Canned Cycle

Compensation Pathcomp

Ignore Undercuts

Z Offset 0.2

X Offset 0.2

Cut Increment 5.0

—Profile Extension—

Start 0.0 End 0.16

OK Cancel

Turn 4.17

Simulation

Constant [Slider] 1 Hole : Drill



Sequence

- Instructions
- [-] NC Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...
 - [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Rough Turning Operation

General Tooling

Canned Cycle

Compensation Controller Offset

Ignore Undercuts

Z Offset 0.2

X Offset 0.2

Cut Increment 5.0

—Profile Extension—

Start 2 End 2

OK Cancel

Turn 4.17

Simulation

Constant [Slider] 1 Hole : Drill



Sequence

- Instructions
- [-] NC Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...
 - [+] 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/ Defaulting to Right and CLW.
 Warning - Hand of Tool for '20mm Deep Hole Jobber Defaulting to Right and CLW.

Rough Turning Operation

General Tooling

Feedrate

Speed

Position

Orientation

Reverse

Nose Radius

ToolStore

Symbol Edge Length

Side Angle

Turn 4.17

Simulation

Constant Hole : Drill



Sequence

- Instructions
- 1 Straight Turnin...
 - 2 Rough Turning...
 - 3 Finish Turning ...
 - 4 Groove Operati...
 - 5 Groove Operati...
 - 6 Turning Hole O...
 - 7 Turning Hole O...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Job Defaulting to Right and CLW.

Edgecam - lab05m01\ecsqliexpress\tstore

Turn

Tool Description	Symbol	Nose
CSKPL-2020-K12 General Back GC1015	S - Square	
CSKPL-2020-K12 General Back GC4015	S - Square	
CSKPR-2020-K12 General Back GC1015	S - Square	
CSKPR-2020-K12 General Back GC4015	S - Square	
CSKPR-2020-K12 General Turn GC4015	S - Square	
E12R-SCFCR09-R Gen Boring only - GC4015	C - 80 Rhombic	
PCLNL-2525-M12 0.8 General Turn GC1015	C - 80 Rhombic	
PCLNL-2525-M12 0.8 General Turn GC4015	C - 80 Rhombic	
PDJNR-2525-M15 0.8 General Turn GC4015	D - 55 Rhombic	
R136.19-0016-07 Finish Bore - GC4015	D - 55 Rhombic	
SVLBL-2020-K16 0.4 - Finish Turn GC1015	V - 35 Rhombic	
SVLBL-2020-K16 0.4 - Finish Turn GC4015	V - 35 Rhombic	

Tools: Create... Edit... Delete Copy...

Filtering: Tools... Use Filters

Inches Millimetres

Select Cancel Help Print

Turn 4.17

Simulation

Constant 1 Hole : Drill



Sequence

Instructions

- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...
- 6 Turning Hole O...
- 7 Turning Hole O...
- 8 Rough Turning...
- 9 Finish Turning ...

Feedback

Warning - Hand of Tool for '20mm N...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm D...
Defaulting to Right and CLW.

Properties Feedback

Edgecam - lab05m01\ecsqliexpress\tstore

Turn

Tool Description	Symbol	Nose Ra
E12R-SCFCR09-R Gen Boring only - GC4015	C - 80 Rhombic	
R136.19-0016-07 Finish Bore - GC4015	D - 55 Rhombic	

Tools

Create...
Edit...
Delete
Copy...

Filtering

Tools...
Use Filters

Inches Millimetres

Select Cancel Help Print

Turn 0.67

Simulation

Constant

1 T0 Turning Tool :



Sequence

Instructions

- [-] N1 Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...
- [+] 8 Rough Turning...
- [+] 9 Finish Turning ...

Feedback

Warning - Hand of Tool for '20mm N...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm D...
Defaulting to Right and CLW.

Properties Feedback

Layers Features Sequence

Rough Turning Operation

General Tooling

Feedrate 0,4

Speed 180

Position 3

Orientation Axial

Reverse

Nose Radius 0,4

ToolStore E12R-SCFCR09-R Gen Boring only - GC40 Find...

Symbol C= 80ø Rhombic Edge Length 9

Side Angle 100



OK Cancel

Turn 0.67

Simulation

Constant

1

TO Turning Tool:

Simulation Tracking



Sequence [Maximize] [Close]

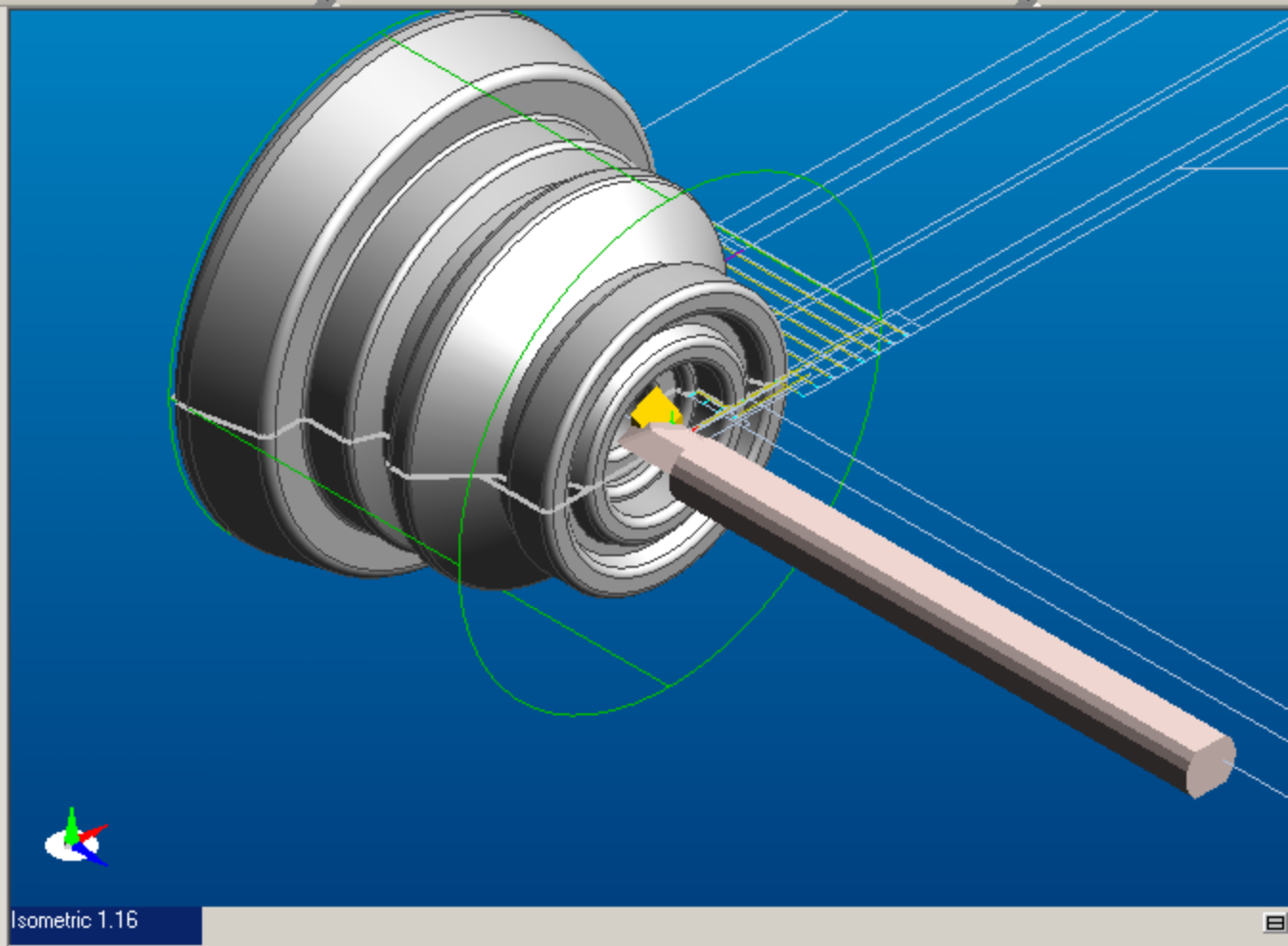
Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...
- [+] 8 Rough Turning...
- [+] 9 Finish Turning ...

Feedback [Close]

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

[Properties] [Feedback]



Isometric 1.16

Simulation

[Play] [Stop] [Step Forward] [Step Backward]

Constant [Slider] 1 TO Turning Tool:



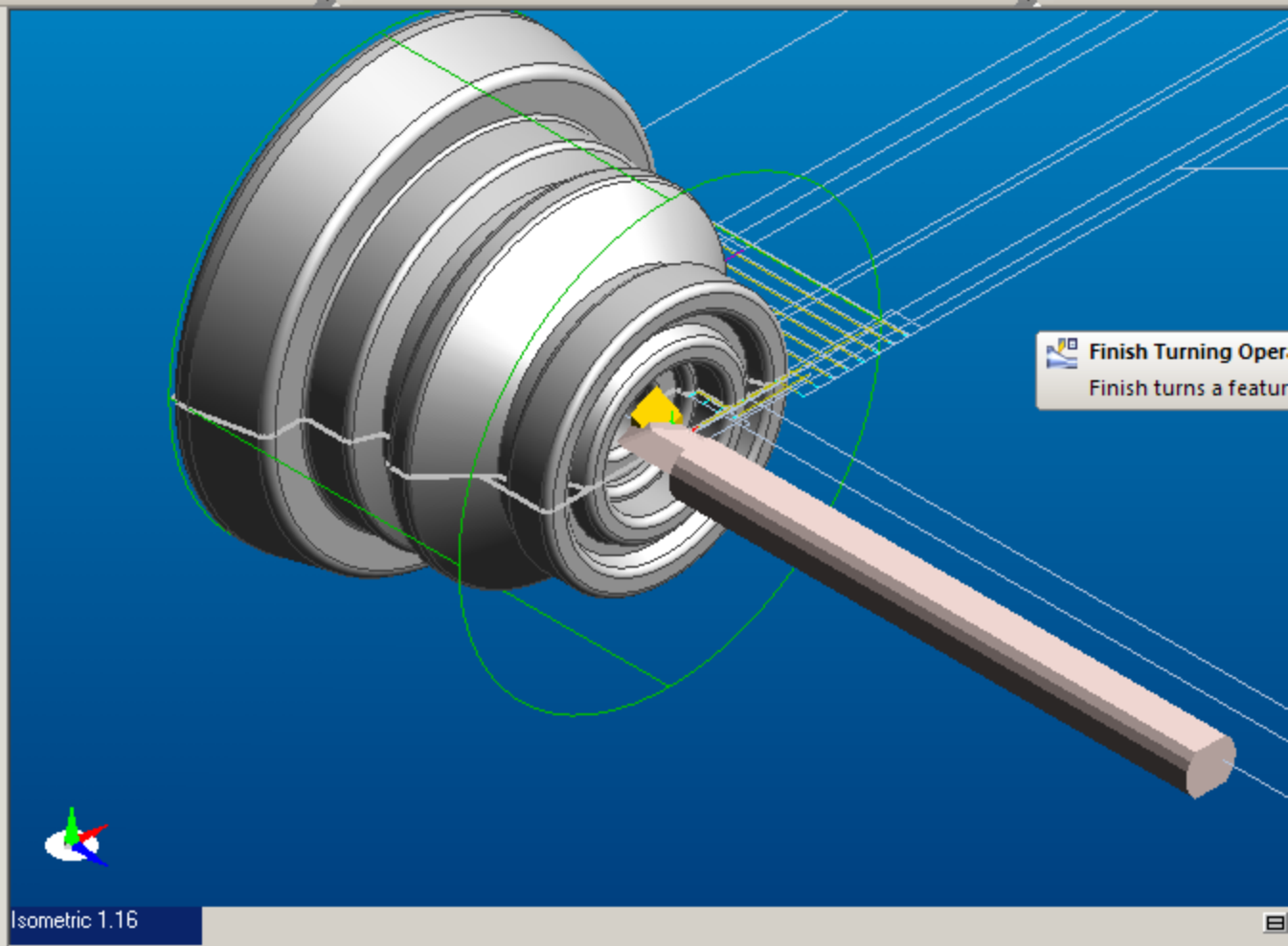
Sequence

- Instructions
- [-] NC Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...
 - [+] 7 Turning Hole O...
 - [+] 8 Rough Turning...
 - [+] 9 Finish Turning ...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Isometric 1.16

Simulation

Constant [Slider] 1 TO Turning Tool:

Simulation Tracking

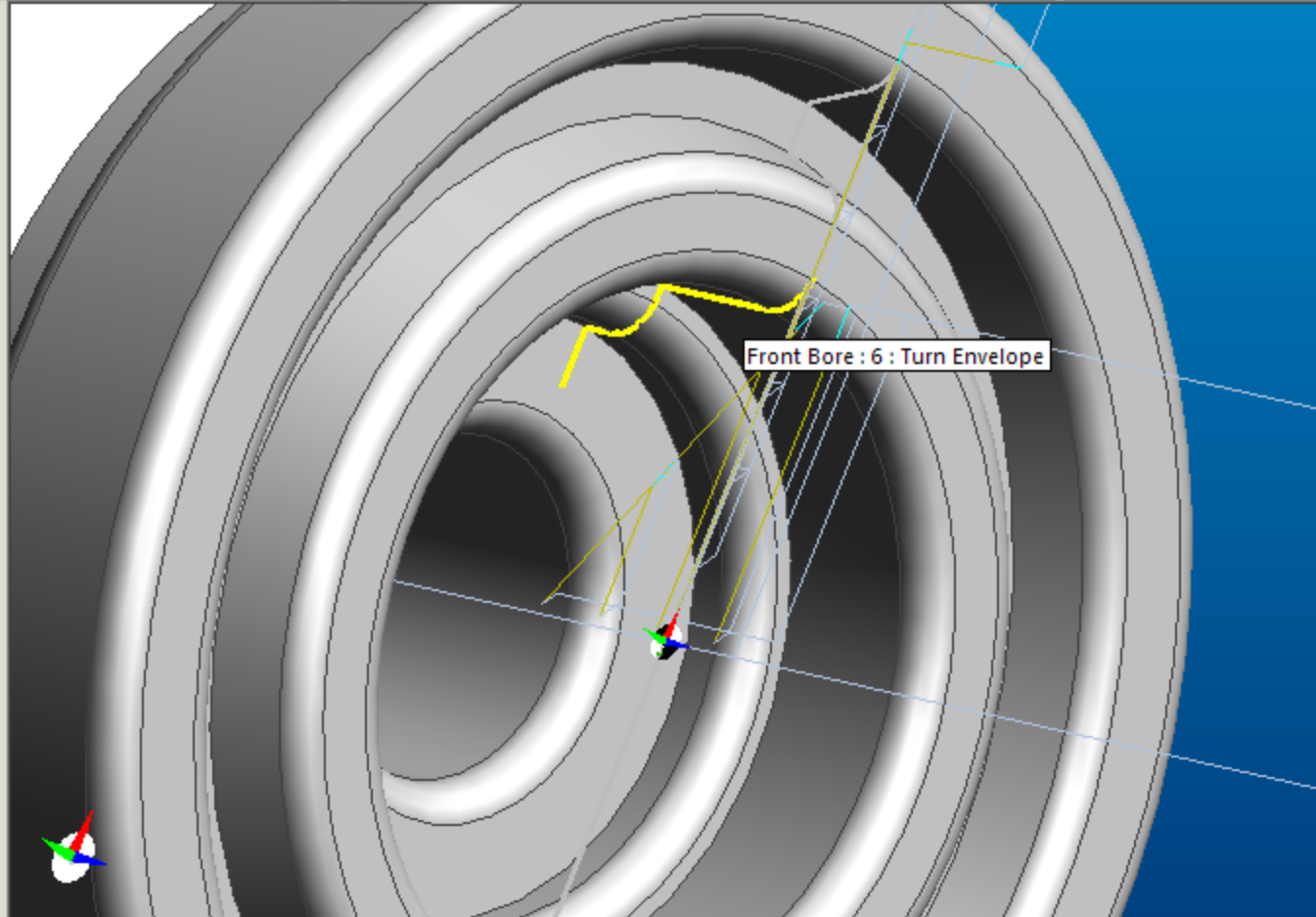


- Sequence
- Instructions
- 1 Straight Turnin...
 - 2 Rough Turning...
 - 3 Finish Turning ...
 - 4 Groove Operati...
 - 5 Groove Operati...
 - 6 Turning Hole O...
 - 7 Turning Hole O...
 - 8 Rough Turning...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Dynamic 5.00

Simulation

Constant 1 TO Turning Tool:

Simulation Tracking



Sequence

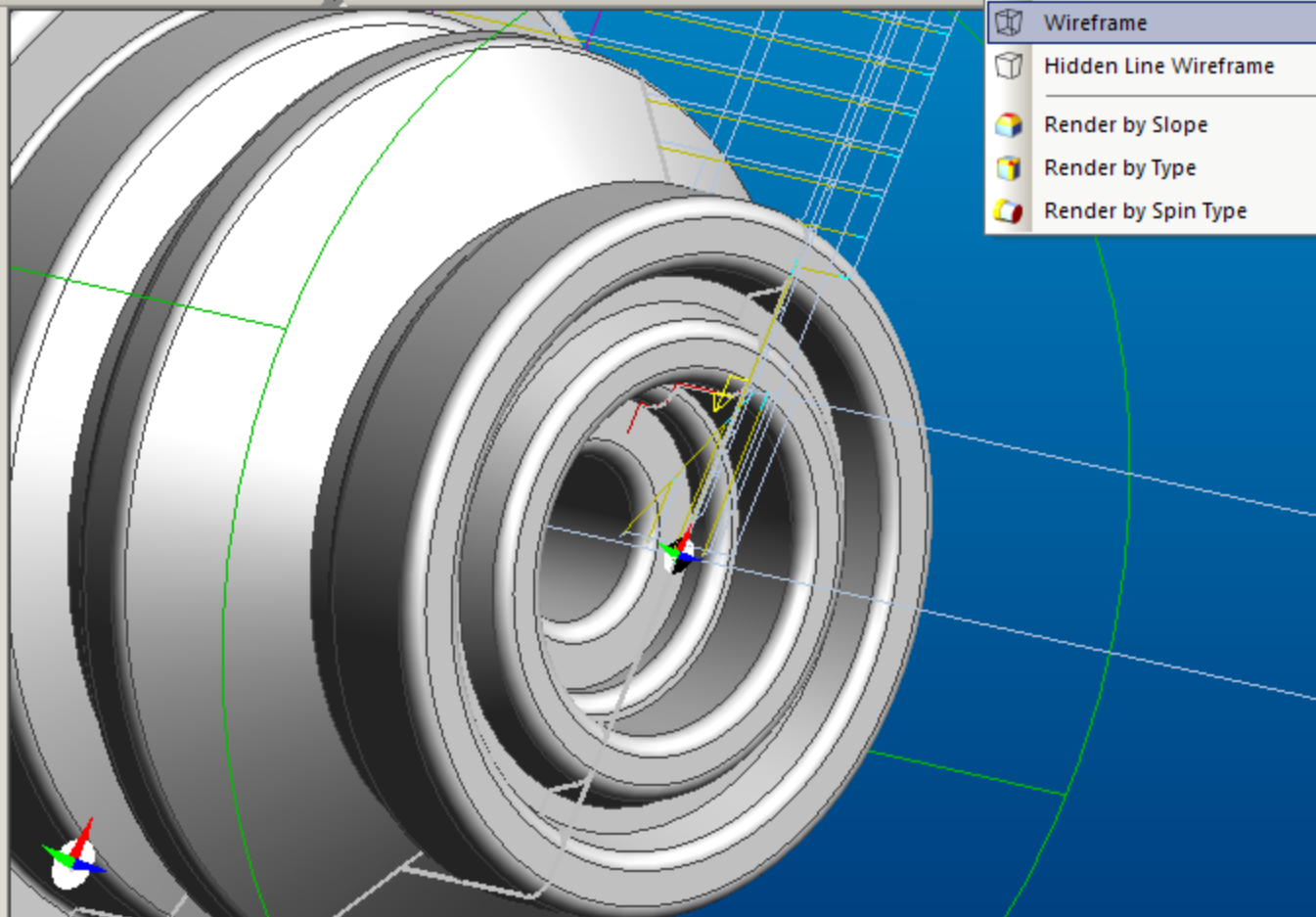
Instructions

- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...
- 6 Turning Hole O...
- 7 Turning Hole O...
- 8 Rough Turning...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/ Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber Defaulting to Right and CLW.

Properties Feedback



Rendered

Wireframe

Hidden Line Wireframe

Render by Slope

Render by Type

Render by Spin Type

Dynamic 2.41

Simulation

Constant

1 TO Turning Tool :



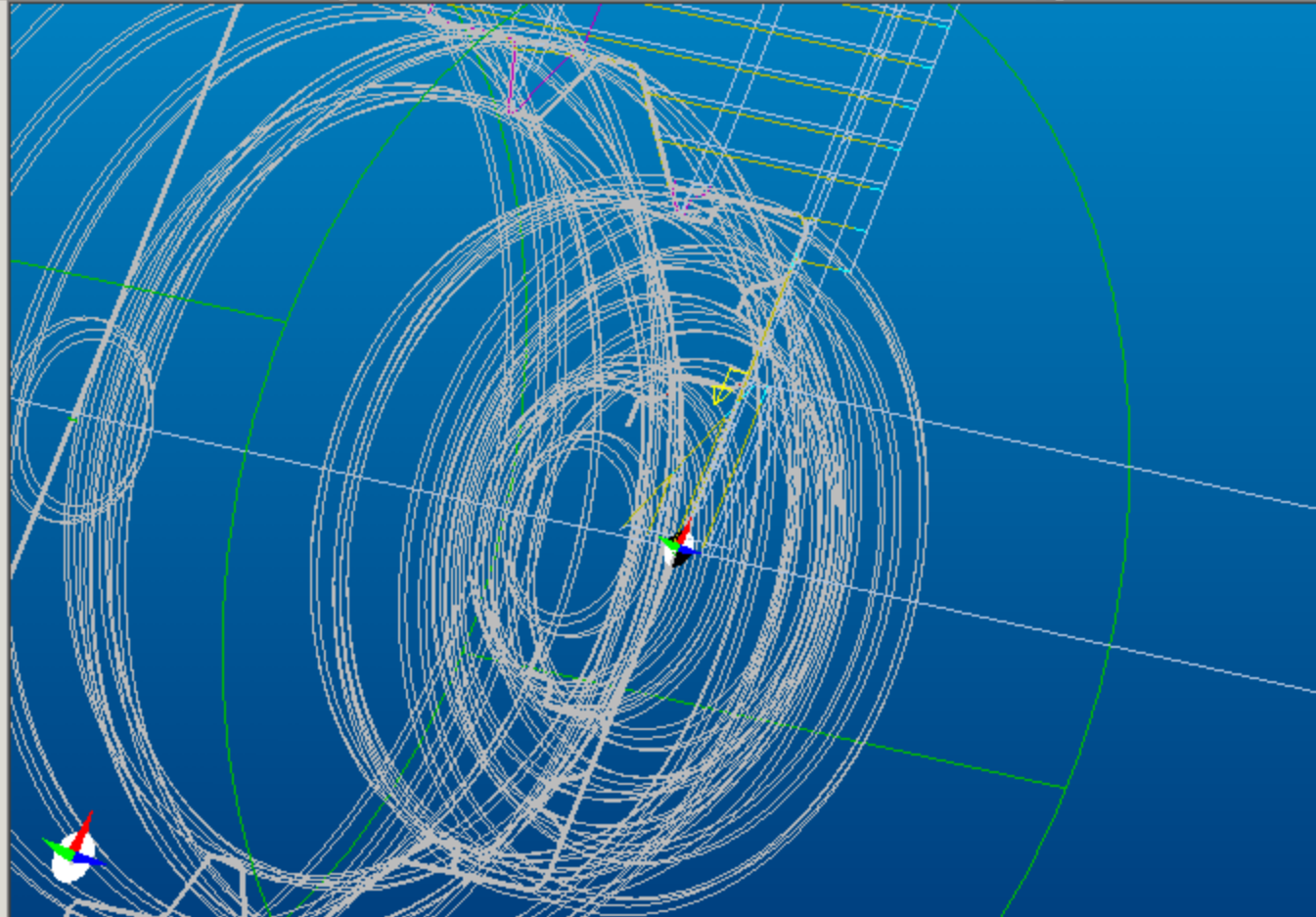
Sequence

- Instructions
- [-] NC Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...
 - [+] 7 Turning Hole O...
 - [+] 8 Rough Turning...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Dynamic 2.41

Simulation

Simulation controls including a progress bar, a 'Constant' button, a slider, and a 'TO Turning Tool:' label.



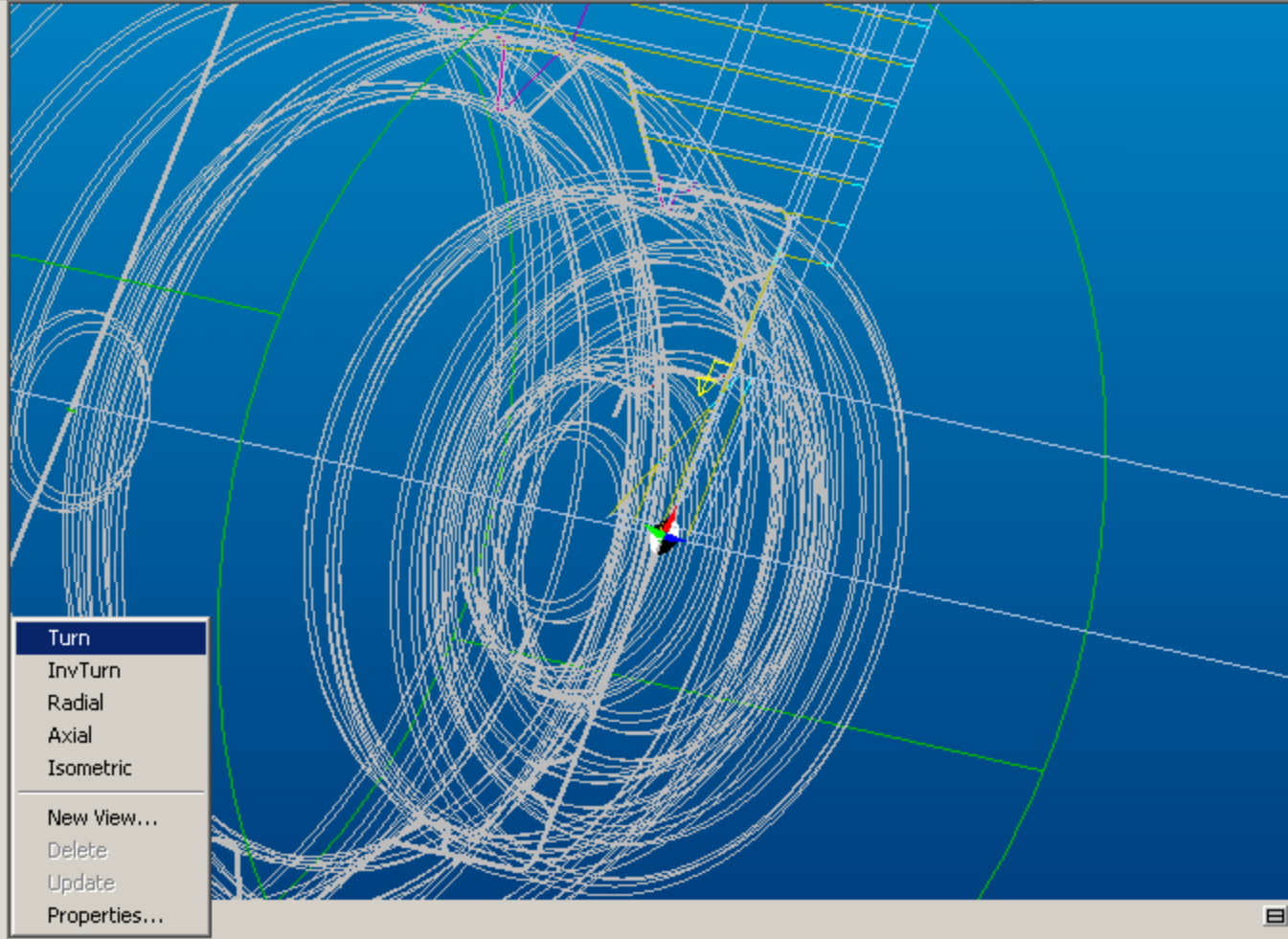
Sequence

- Instructions
- [-] NC Torneamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...
 - [+] 7 Turning Hole O...
 - [+] 8 Rough Turning...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Simulation

Simulation controls including a progress bar, a 'Constant' button, a numerical input field set to '1', and a 'TO Turning Tool:' label.



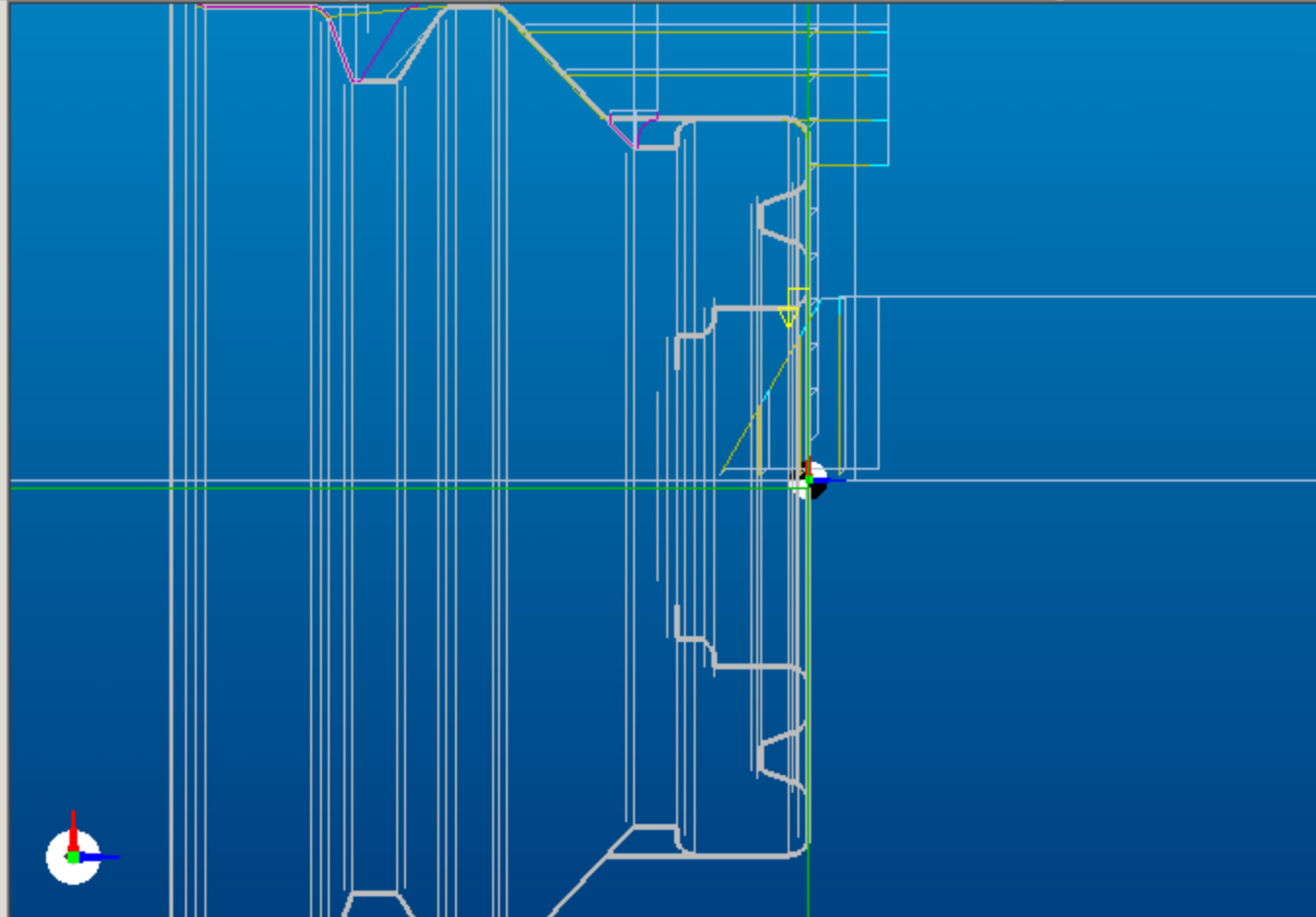
Sequence

- Instructions
- [-] NC Tomeamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...
 - [+] 7 Turning Hole O...
 - [+] 8 Rough Turning...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Turn 2.41

Simulation

Simulation controls including a progress bar, a 'Constant' button, a numerical input field with '1', and a 'TO Turning Tool:' label.



Sequence

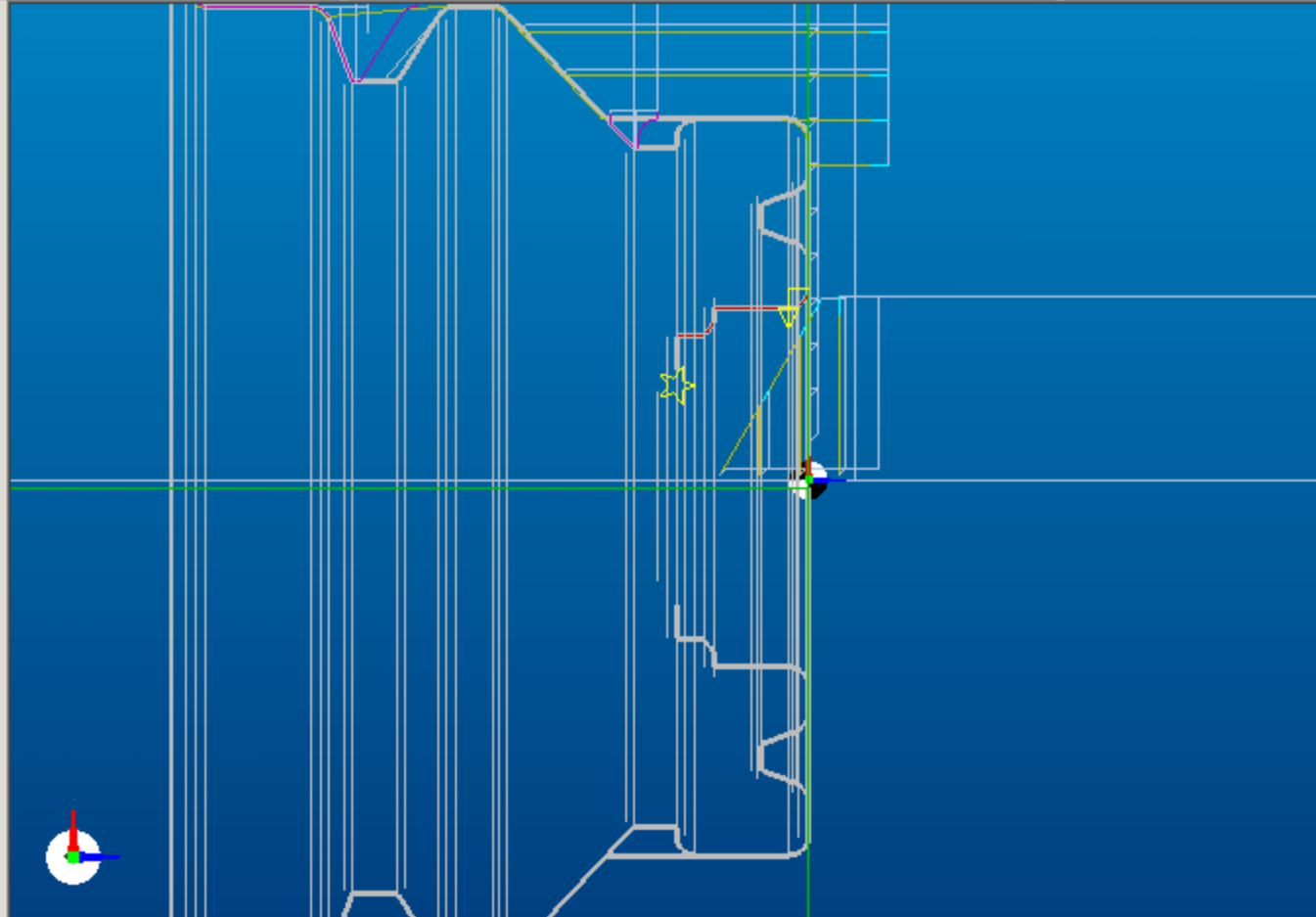
Instructions

- NC Torneamento: fanuc...
- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...
- 6 Turning Hole O...
- 7 Turning Hole O...
- 8 Rough Turning...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Turn 2.41

Simulation

Constant [Slider] 1 TO Turning Tool:

Simulation Tracking



Sequence

Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...
- [+] 8 Rough Turning...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback

Finish Turning Operation

General Tooling

Ignore Undercuts

Compensation None

Z Offset

X Offset

—Profile Extension—

Start 2 End 2

OK Cancel

Turn 2.41

Simulation

Constant 1 TO Turning Tool:

Simulation Tracking



Sequence

Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...
- [+] 8 Rough Turning...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback

Layers Features Sequence

Finish Turning Operation

General

Tooling

Feedrate 0.3

Speed 135

Position 0

Orientation Radial

Reverse

Nose Radius 0.8

ToolStore

Find...

Symbol D= 55ø Rhombic

Edge Length 16

Side Angle 95

Use Current Tool

OK

Cancel



Turn 2.41

Simulation

Constant

1

TO Turning Tool:

Simulation Tracking



Sequence

- Instructions
- 1 Straight Turnin...
 - 2 Rough Turning...
 - 3 Finish Turning ...
 - 4 Groove Operati...
 - 5 Groove Operati...
 - 6 Turning Hole O...
 - 7 Turning Hole O...
 - 8 Rough Turning...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Job Defaulting to Right and CLW.

Edgecam - lab05m01\ecsqliexpress\tstore

Turn

Tool Description	Symbol	Nose Ra
E12R-SCFCR09-R Gen Boring only - GC4015	C - 80 Rhombic	
R136.19-0016-07 Finish Bore - GC4015	D - 55 Rhombic	

Tools: Create... Edit... Delete Copy...

Filtering: Tools... Use Filters

Inches Millimetres

Select Cancel Help Print

Turn 2.41

Simulation

Constant 1 T0 Turning Tool :



Operations

- Torneamento: fanuc...
- 1 Straight Turnin...
- 2 Rough Turning...
- 3 Finish Turning ...
- 4 Groove Operati...
- 5 Groove Operati...
- 6 Turning Hole O...
- 7 Turning Hole O...
- 8 Rough Turning...
- 9 Finish Turning ...

back

...ing - Hand of Tool for '20mm N...

...ulting to Right and CLW.

...ing - Hand of Tool for '20mm D...

...ulting to Right and CLW.

Properties Feedback

Layers Features Sequence

Finish Turning Operation

General Tooling

Feedrate

Speed

Position

Orientation

Reverse

Nose Radius

ToolStore

Symbol Edge Length

Side Angle Use Current Tool

Turn 1.16

Simulation

Constant

T0 Turning Tool :

Simulation Tracking



Sequence

Instructions

- [-] NC Torneamento: fanuc...
- [+] 1 Straight Turnin...
- [+] 2 Rough Turning...
- [+] 3 Finish Turning ...
- [+] 4 Groove Operati...
- [+] 5 Groove Operati...
- [+] 6 Turning Hole O...
- [+] 7 Turning Hole O...
- [+] 8 Rough Turning...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback

Layers Features Sequence

Finish Turning Operation

General

Feedrate

Speed

Position

Orientation

Reverse

Nose Radius

ToolStore

Symbol Edge Length

Side Angle Use Current Tool



OK

Cancel

Turn 2.41

Simulation

Constant

1

T0 Turning Tool:

Simulation Tracking



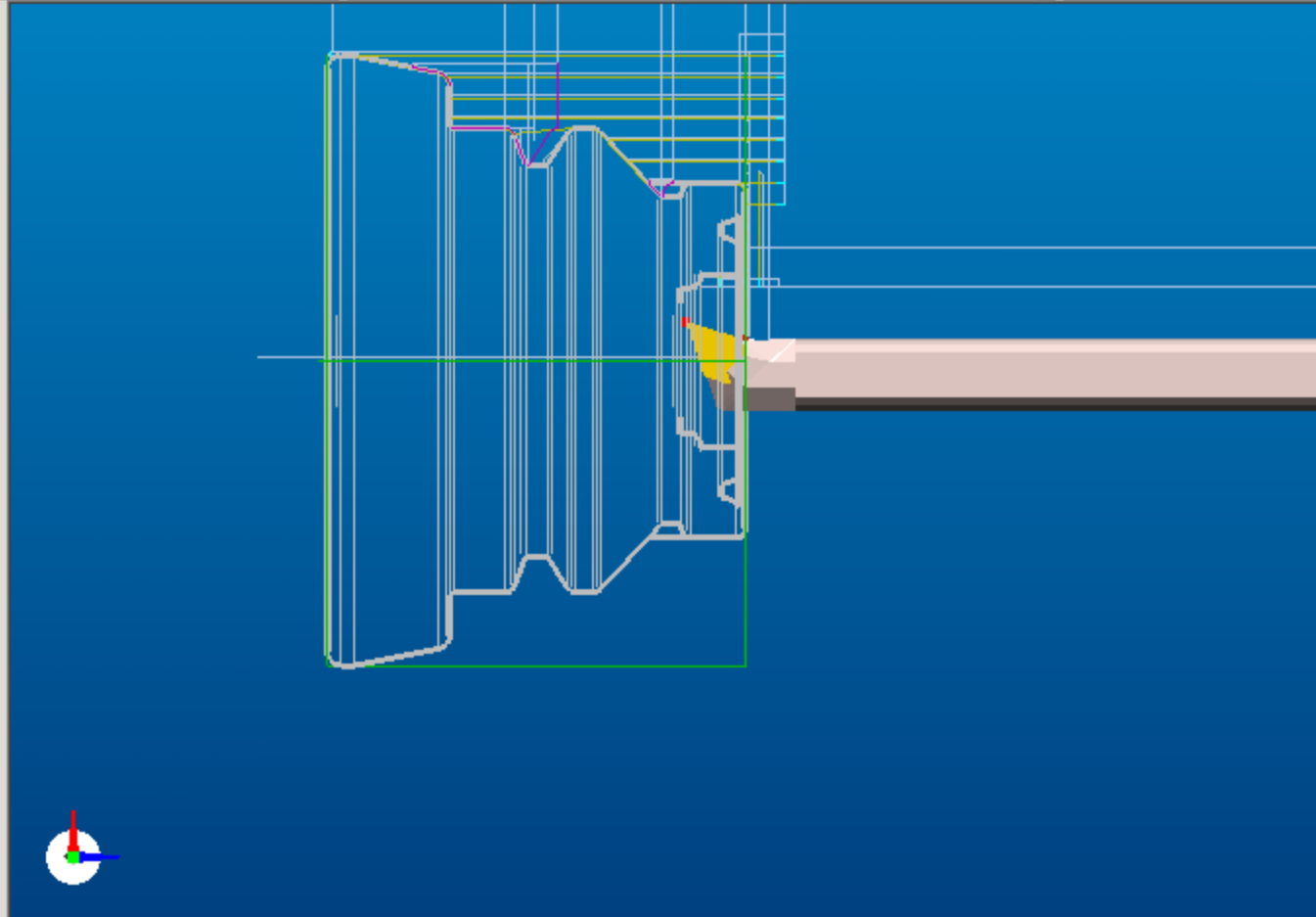
Sequence

- Instructions
- [-] NC Tomeamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...
 - [+] 7 Turning Hole O...
 - [+] 8 Rough Turning...
 - [+] 9 Finish Turning ...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



Turn 1.16

Simulation

Simulation controls including a progress bar, a 'Constant' button, a numerical input field set to '1', and a 'TO Turning Tool:' label.



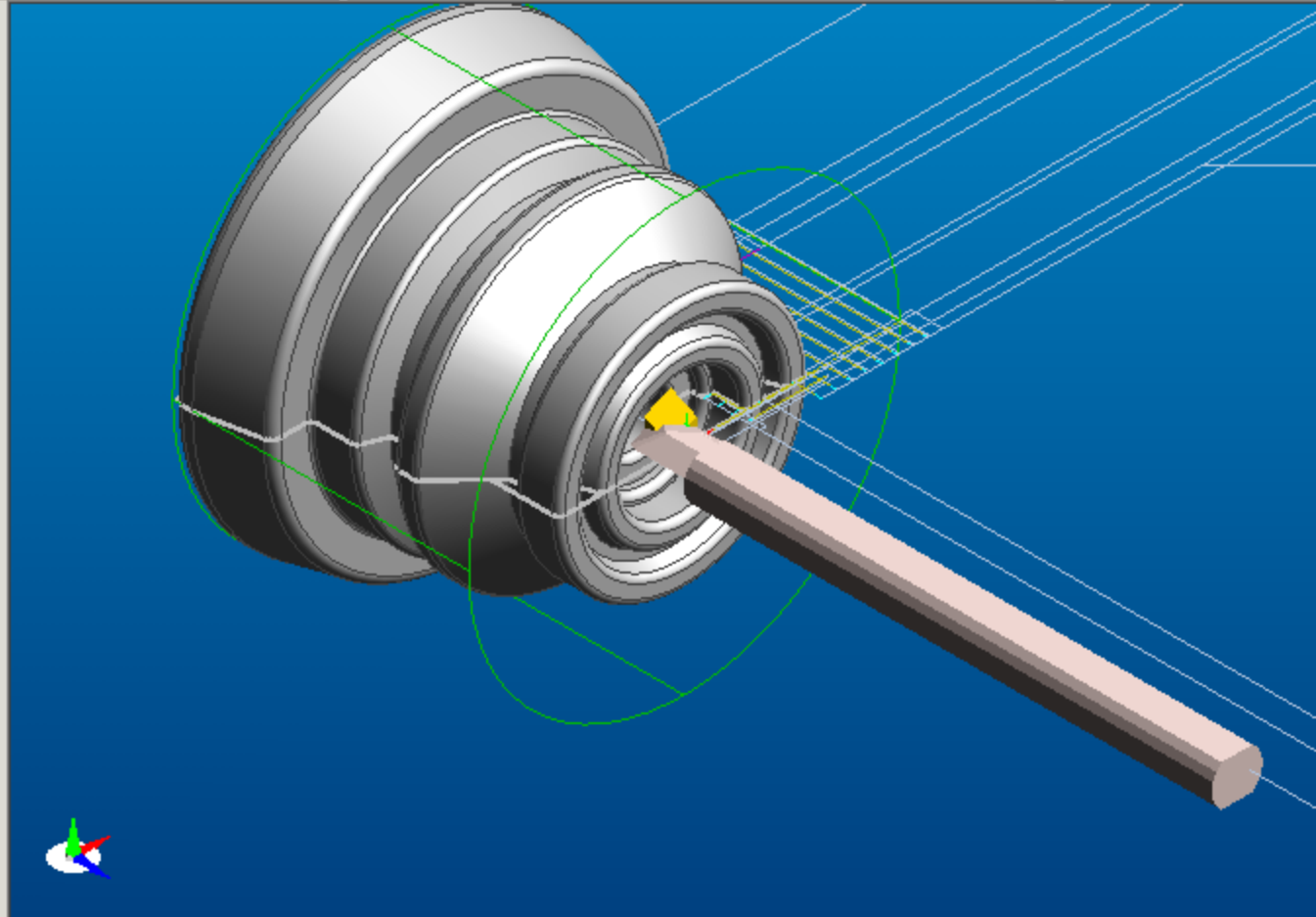
Sequence

- Instructions
- [-] NC Tomeamento: fanuc...
 - [+] 1 Straight Turnin...
 - [+] 2 Rough Turning...
 - [+] 3 Finish Turning ...
 - [+] 4 Groove Operati...
 - [+] 5 Groove Operati...
 - [+] 6 Turning Hole O...
 - [+] 7 Turning Hole O...
 - [+] 8 Rough Turning...
 - [+] 9 Finish Turning ...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

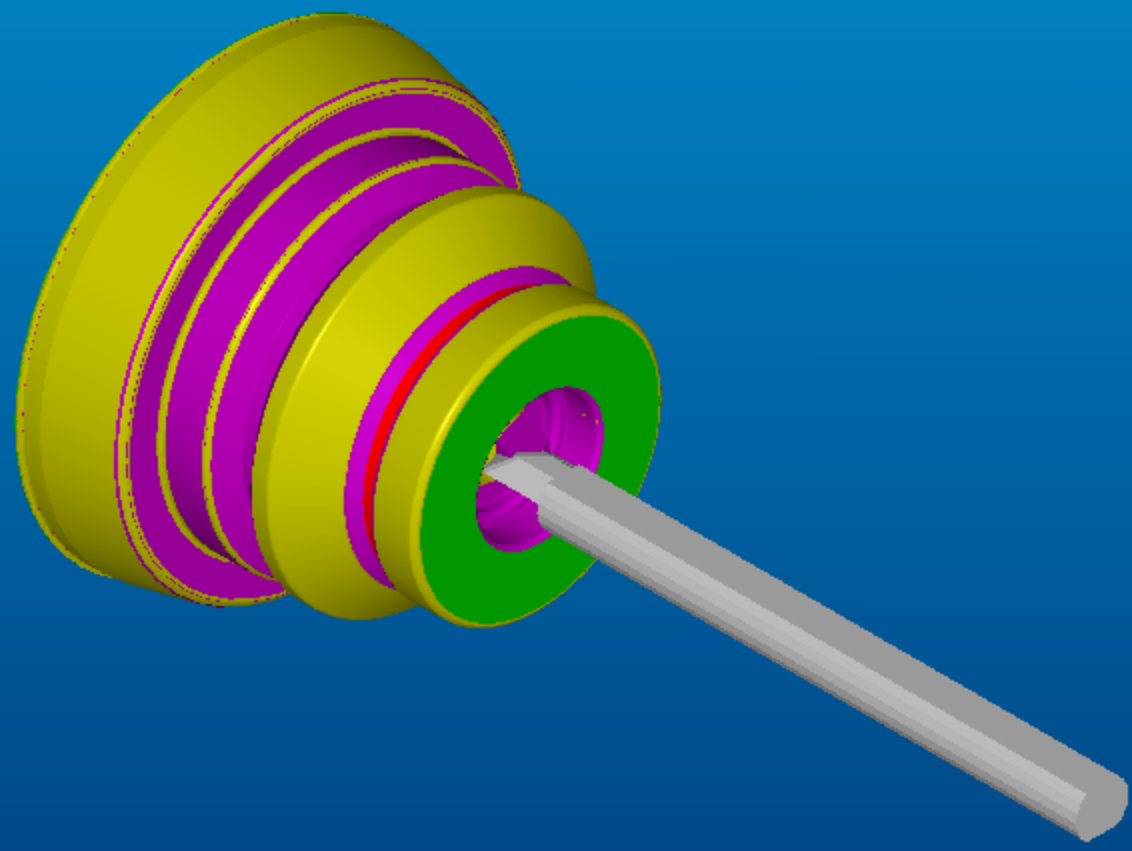
Properties Feedback



Isometric 1.16

Simulation

Simulation controls including a progress bar, a 'Constant' button, a numerical input field showing '1', and a 'TO Turning Tool:' label.



Output

7.07 Hole : Drill
8.03 Move to Toolchange
8.07 New Rough Turn
9.03 Move to Toolchange
9.07 Finish Turning
4 Faults detected



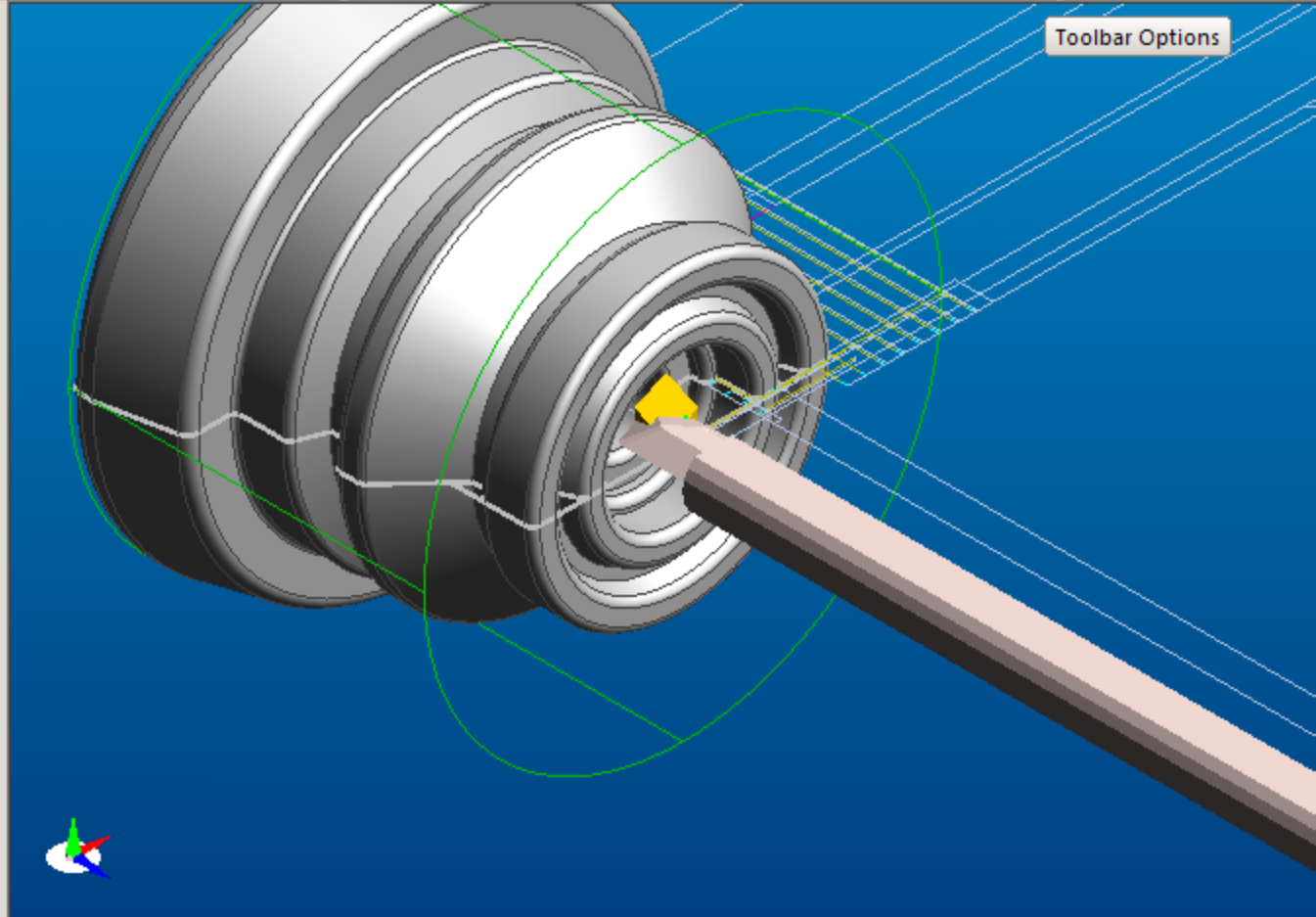
Sequence

- Instructions
- NC Tormemento: fanuc...
 - + 1 Straight Turnin...
 - + 2 Rough Turning...
 - + 3 Finish Turning ...
 - + 4 Groove Operati...
 - + 5 Groove Operati...
 - + 6 Turning Hole O...
 - + 7 Turning Hole O...
 - + 8 Rough Turning...
 - + 9 Finish Turning ...

Feedback

Warning - Hand of Tool for '20mm NC Spot Drill - 13/...
Defaulting to Right and CLW.
Warning - Hand of Tool for '20mm Deep Hole Jobber...
Defaulting to Right and CLW.

Properties Feedback



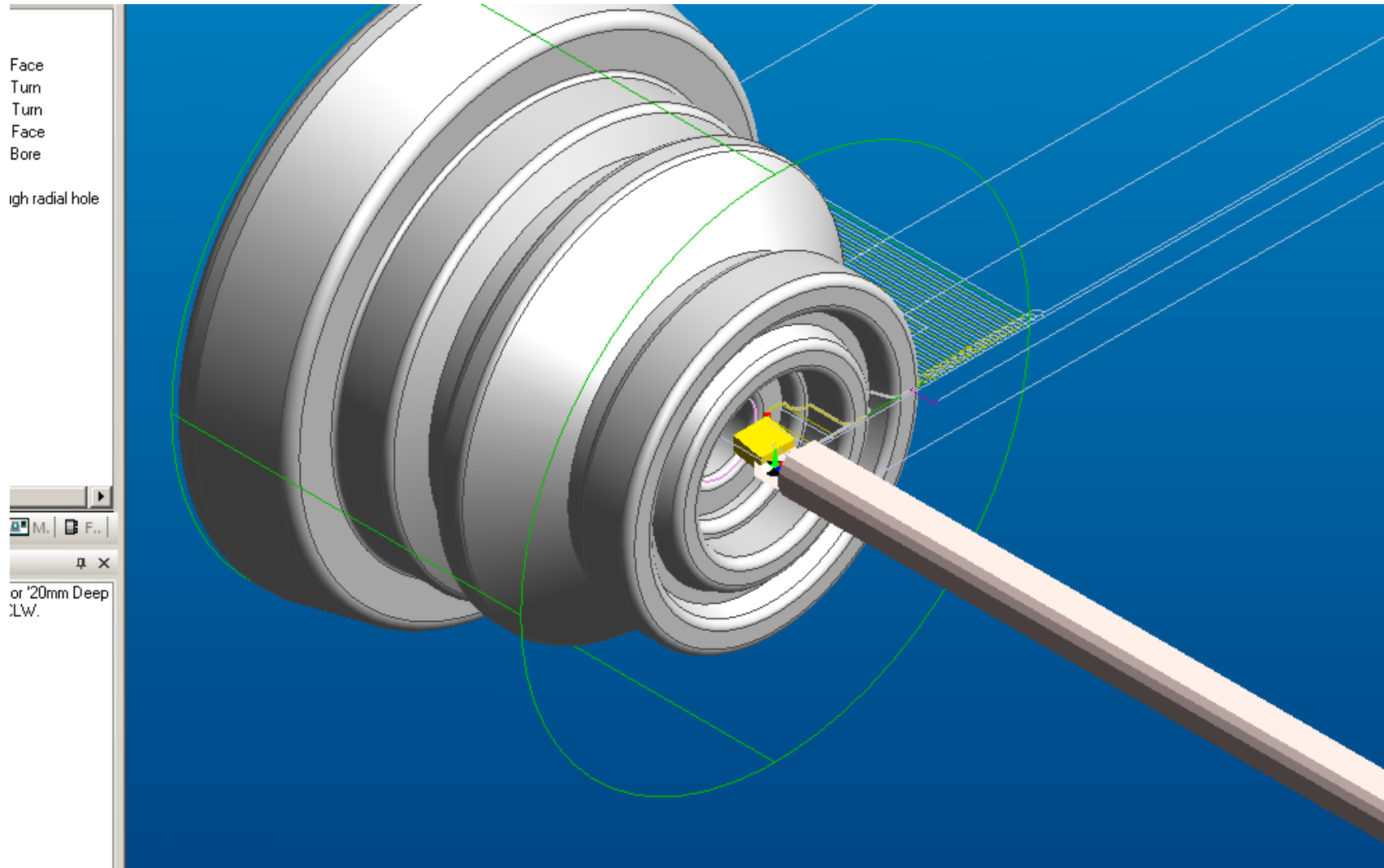
Toolbar Options

Isometric 1.40

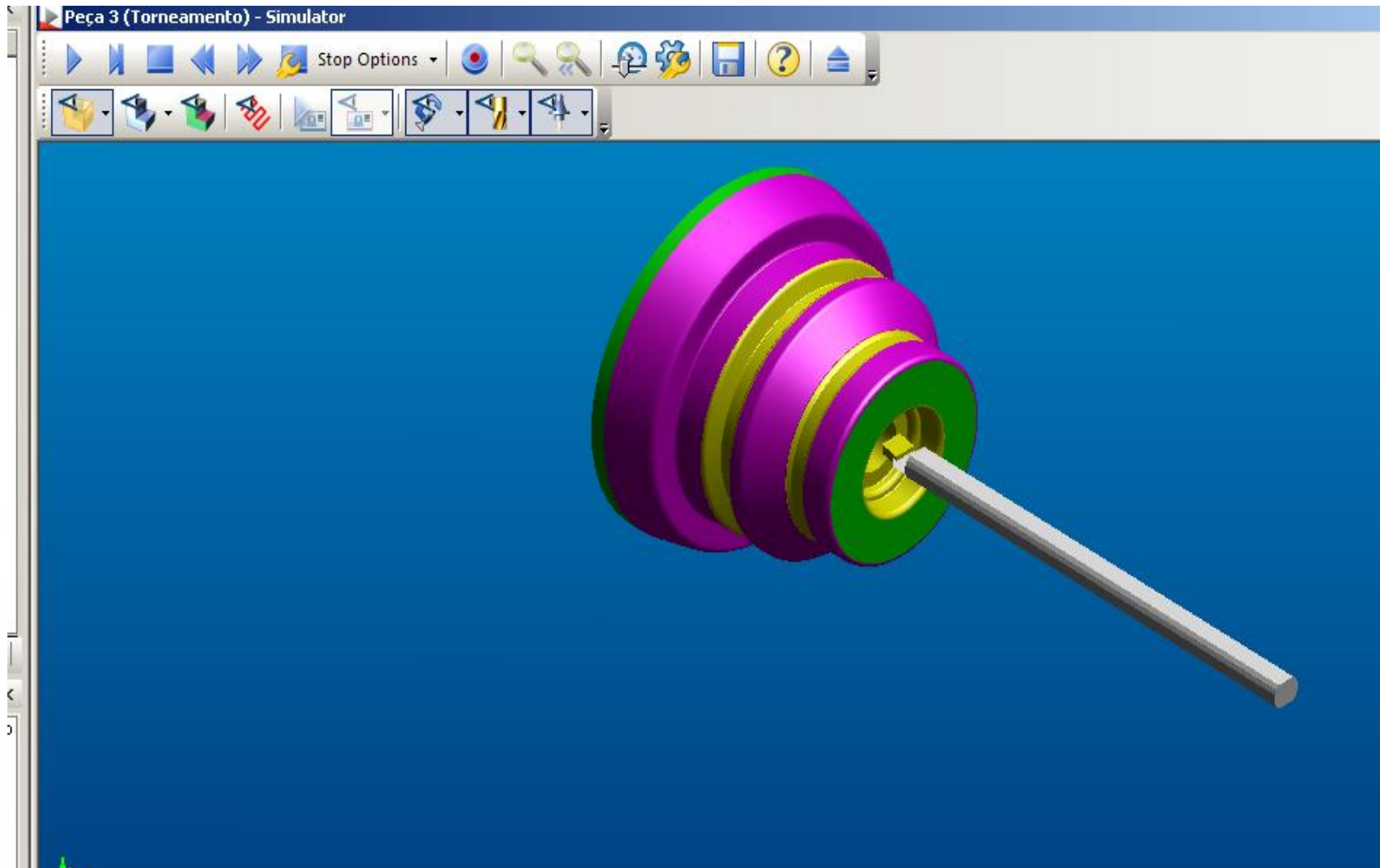
Simulation

Simulation controls including a progress bar, a 'Constant' button, a slider, and a '1' dropdown menu. The text 'TO Turning Tool:' is visible on the right side of the simulation area.

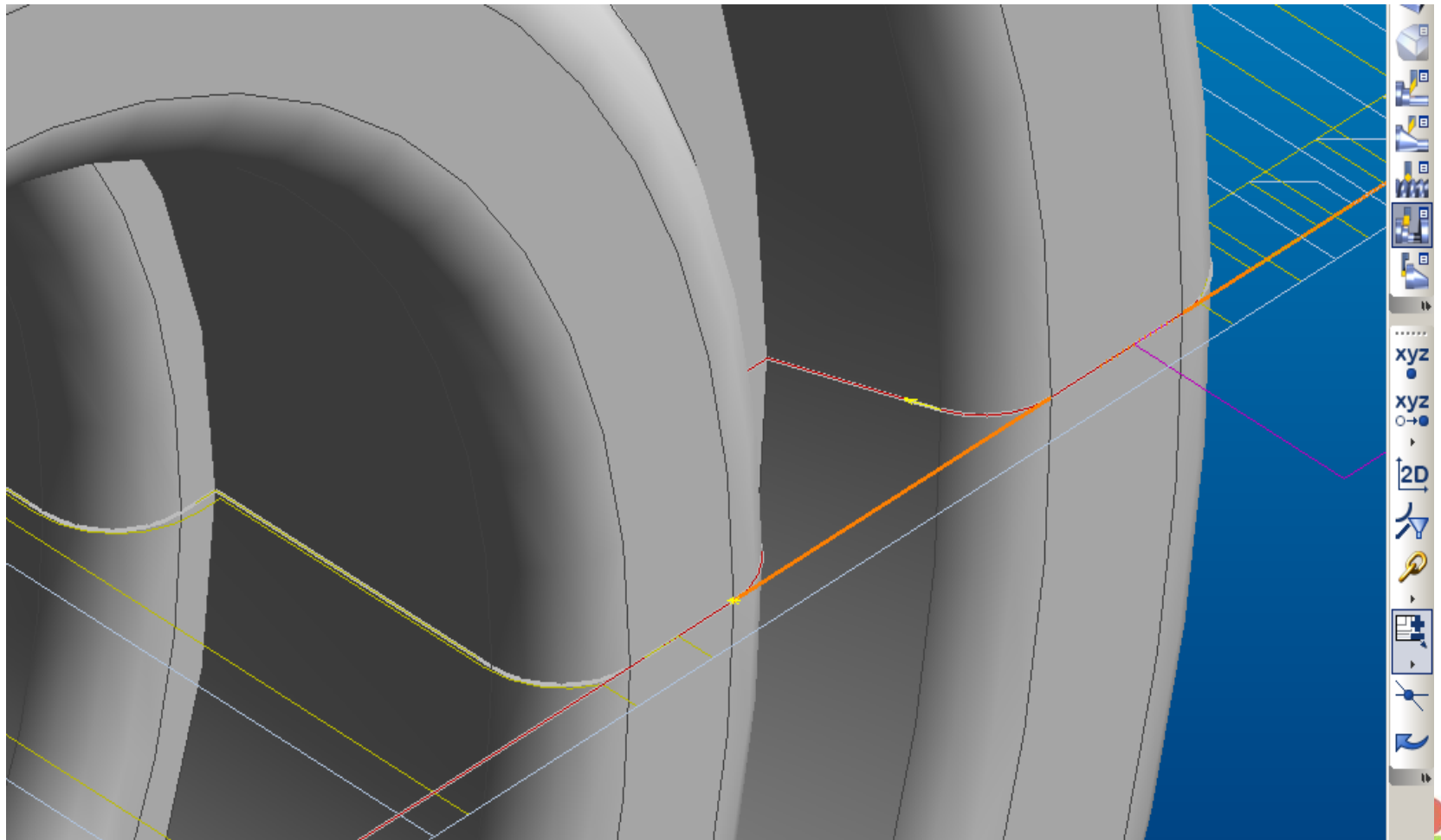
Observe a ferramenta e o rebaixo.



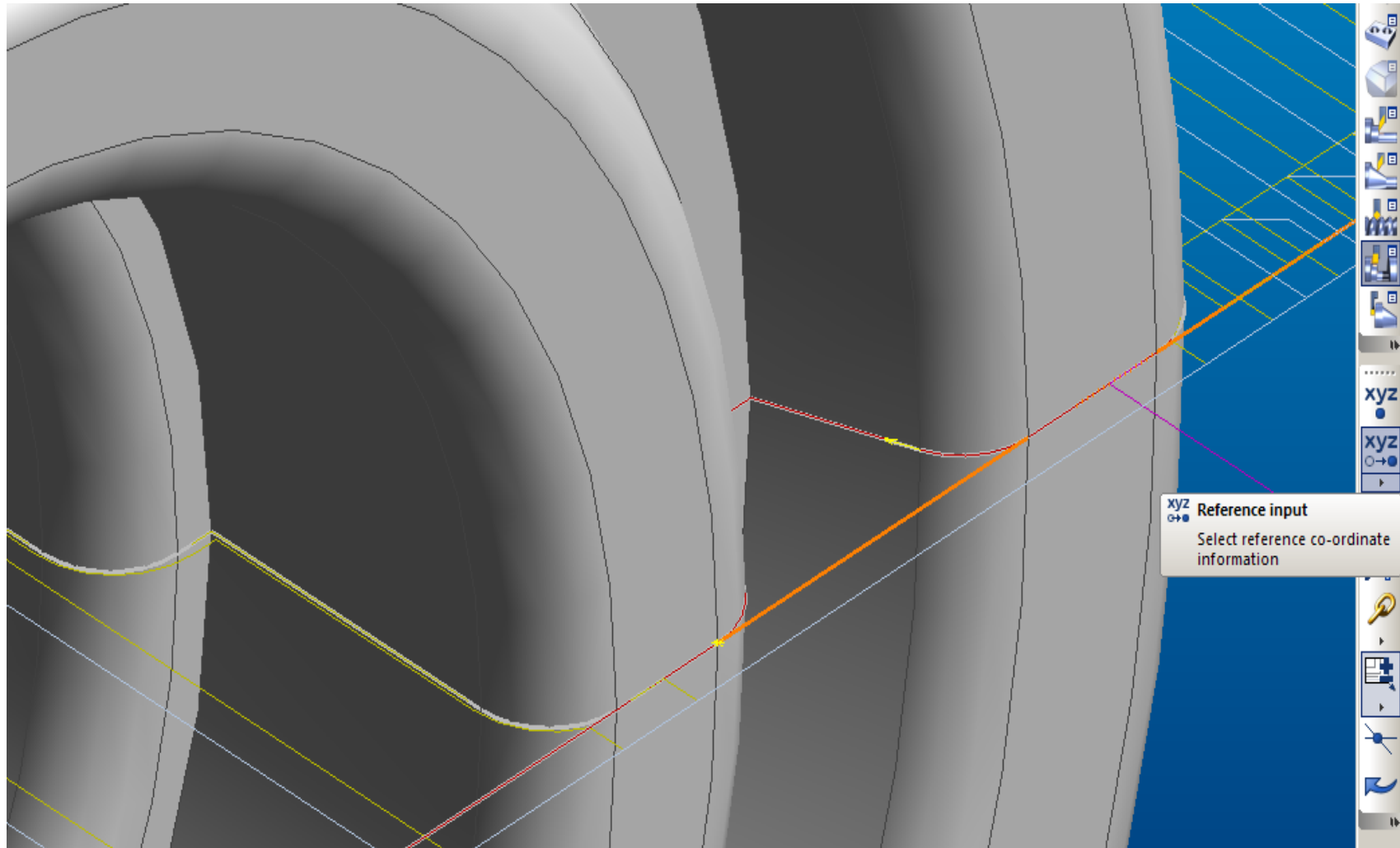
Observe o resultado da simulação.



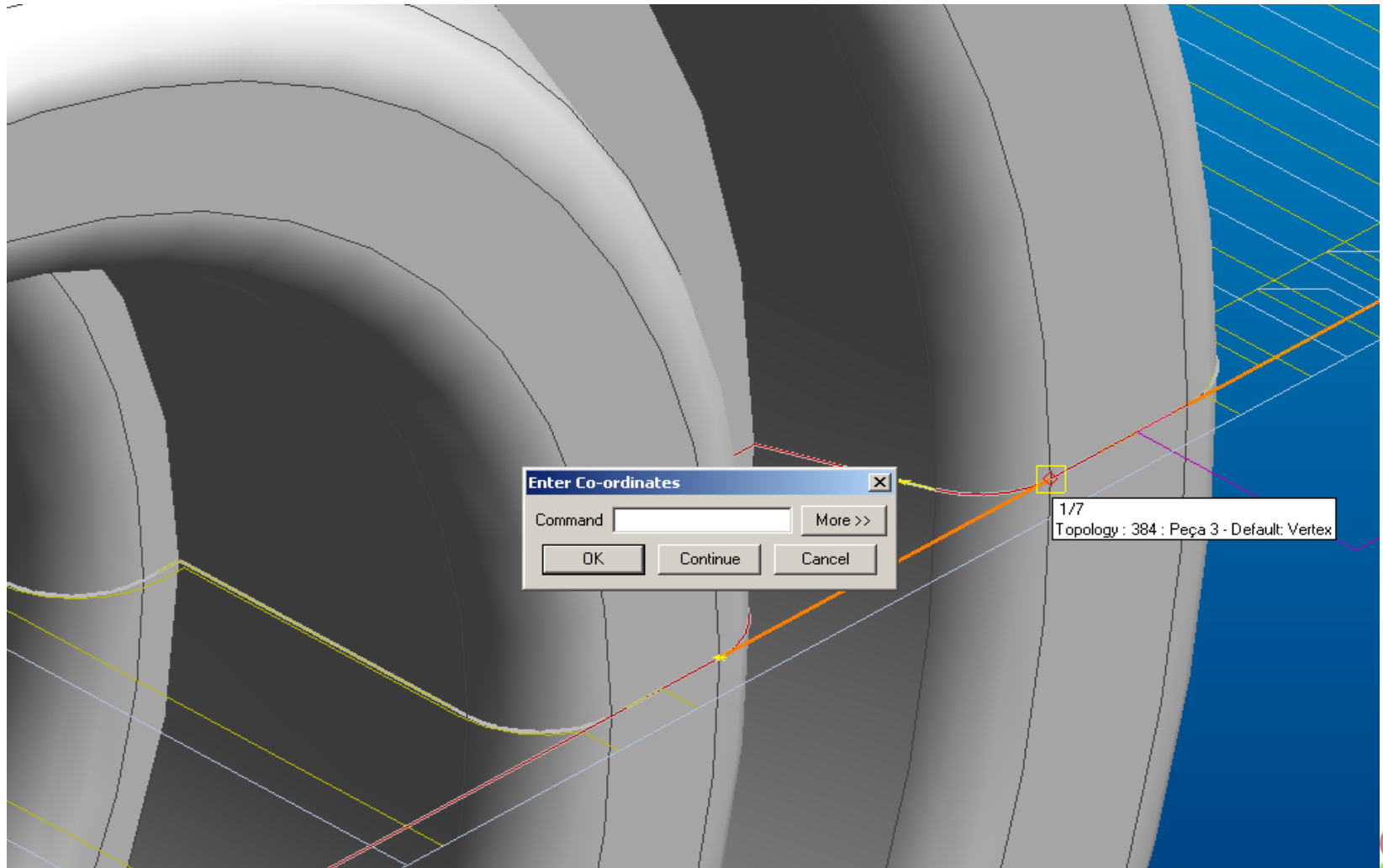
Em seguida segure a tecla **Ctrl** e clique em qualquer ponto do perfil para alterar a opção de seleção para ponto final (asterisco) e clique no fim do rebaixo conforme a figura e confirme.



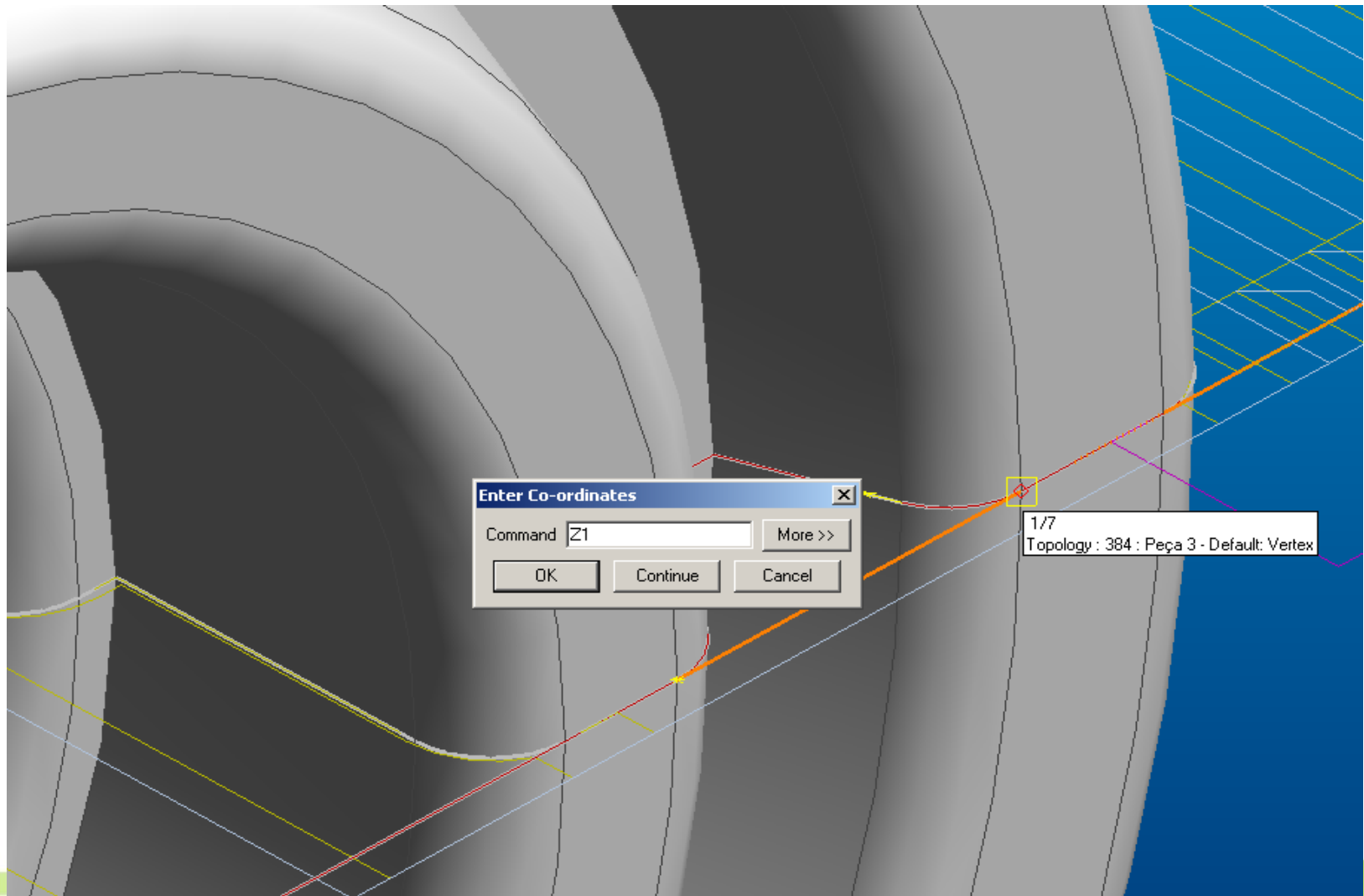
A barra de Status agora aparece "Digitise cycle start point".
Selecione o subcomando **Reference Input**.



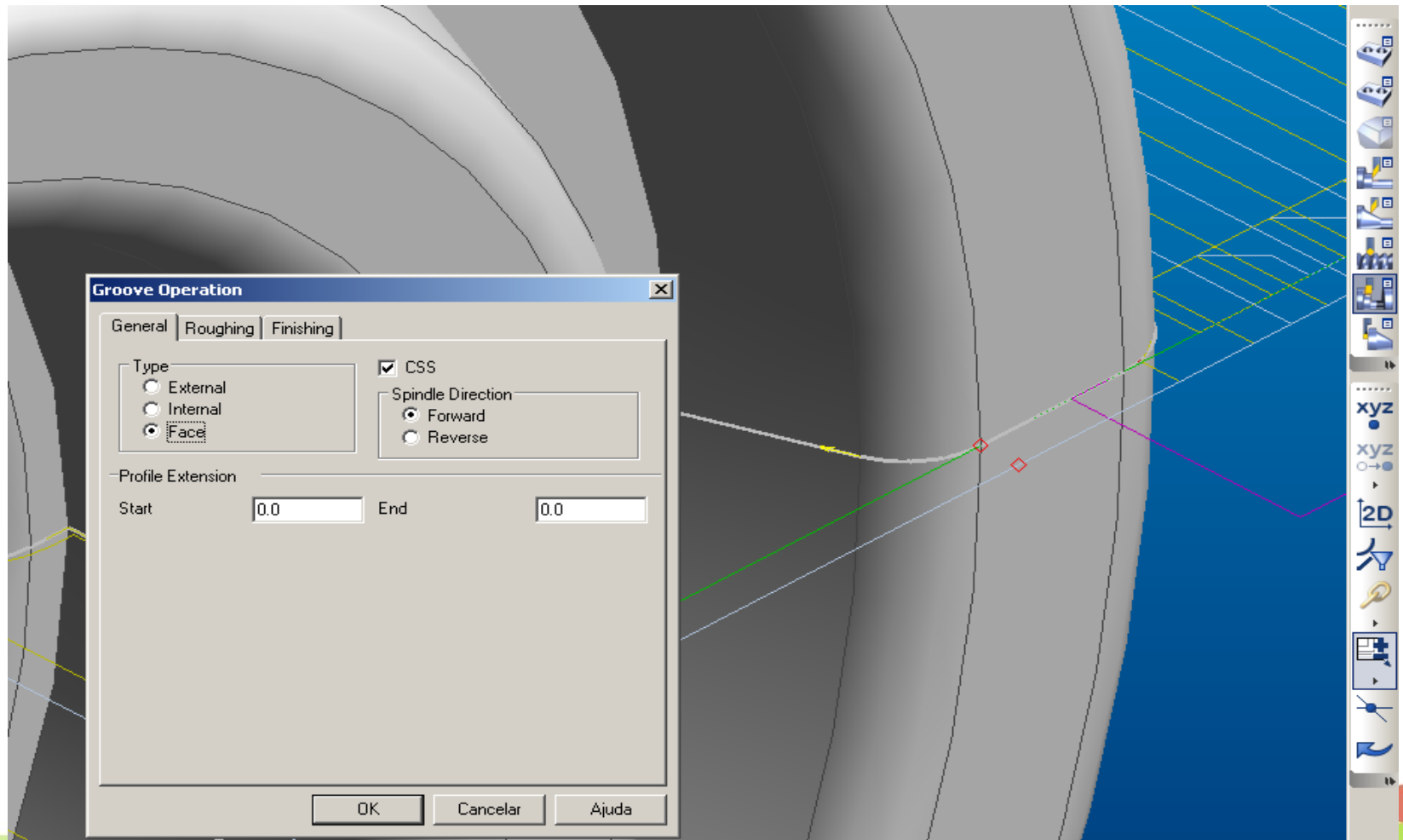
Na barra de status aparece "Reference position for next coordinate" clique no ponto mostrado abaixo.



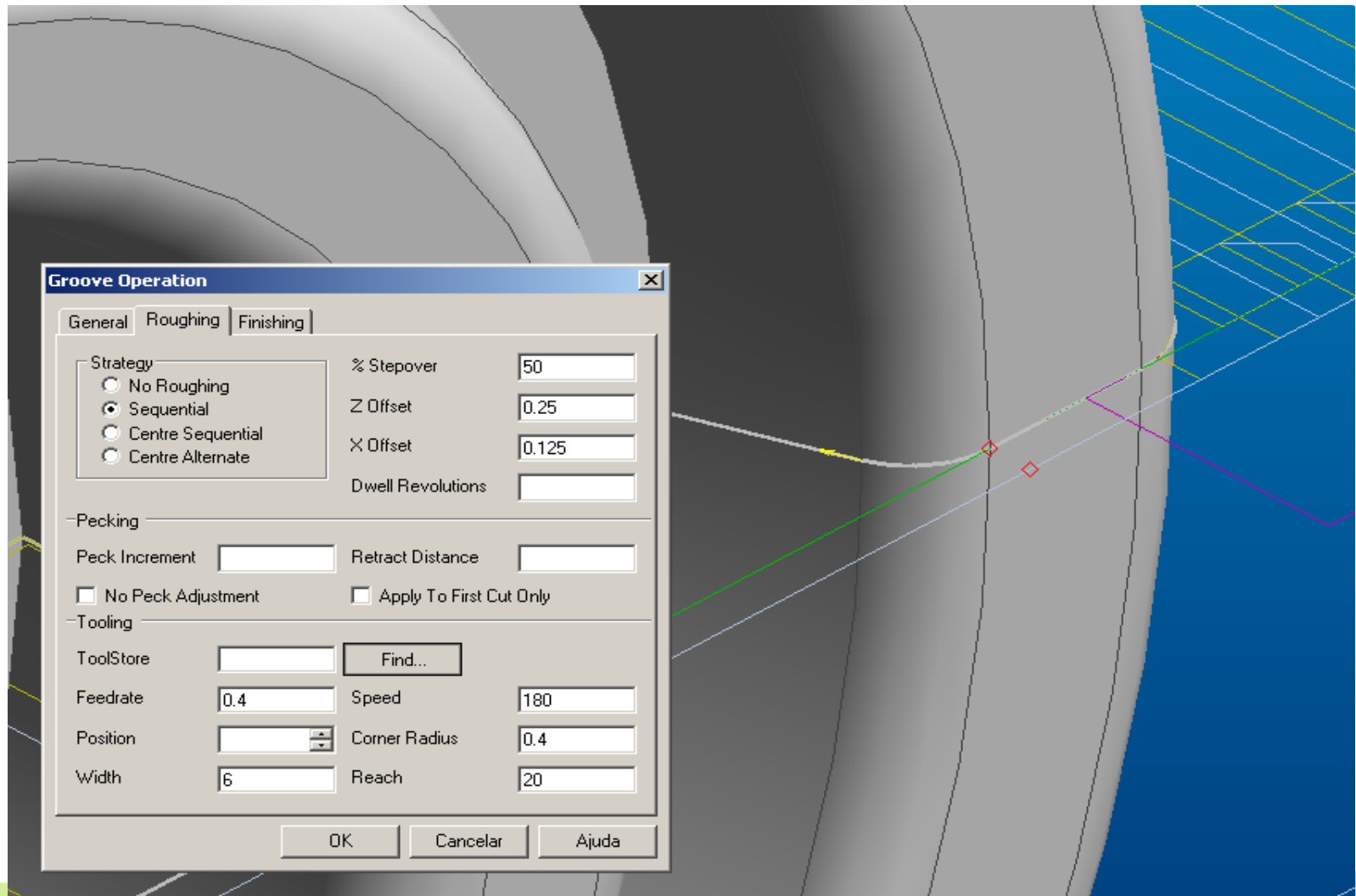
Informe um valor de Z1 para um ponto 1mm afastado do canal, e clique em OK.



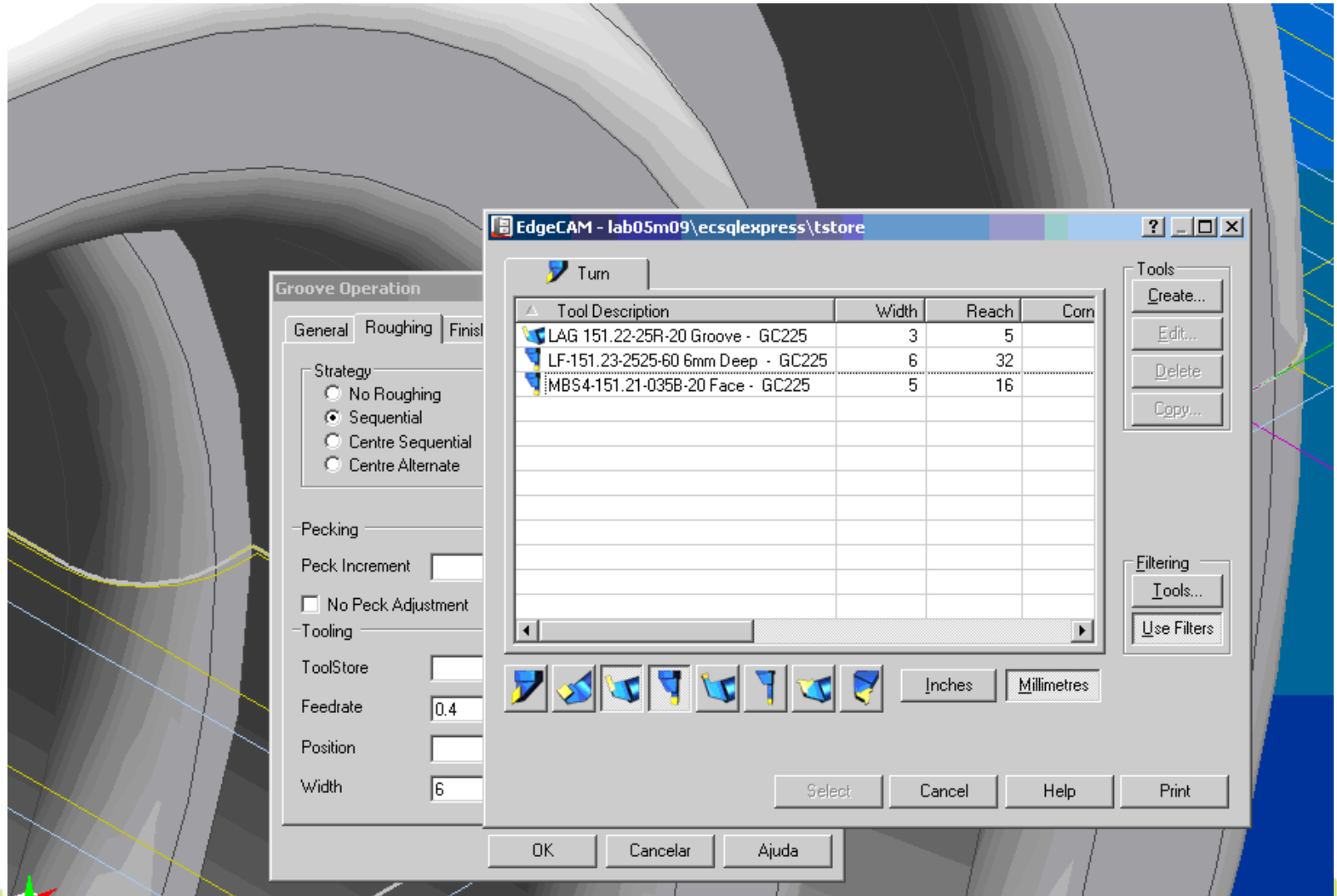
No exato momento que você confirmar a coordenada, a seguinte caixa de diálogo, **Groove Operation**, abre. Na tab **General** faça esta configuração.



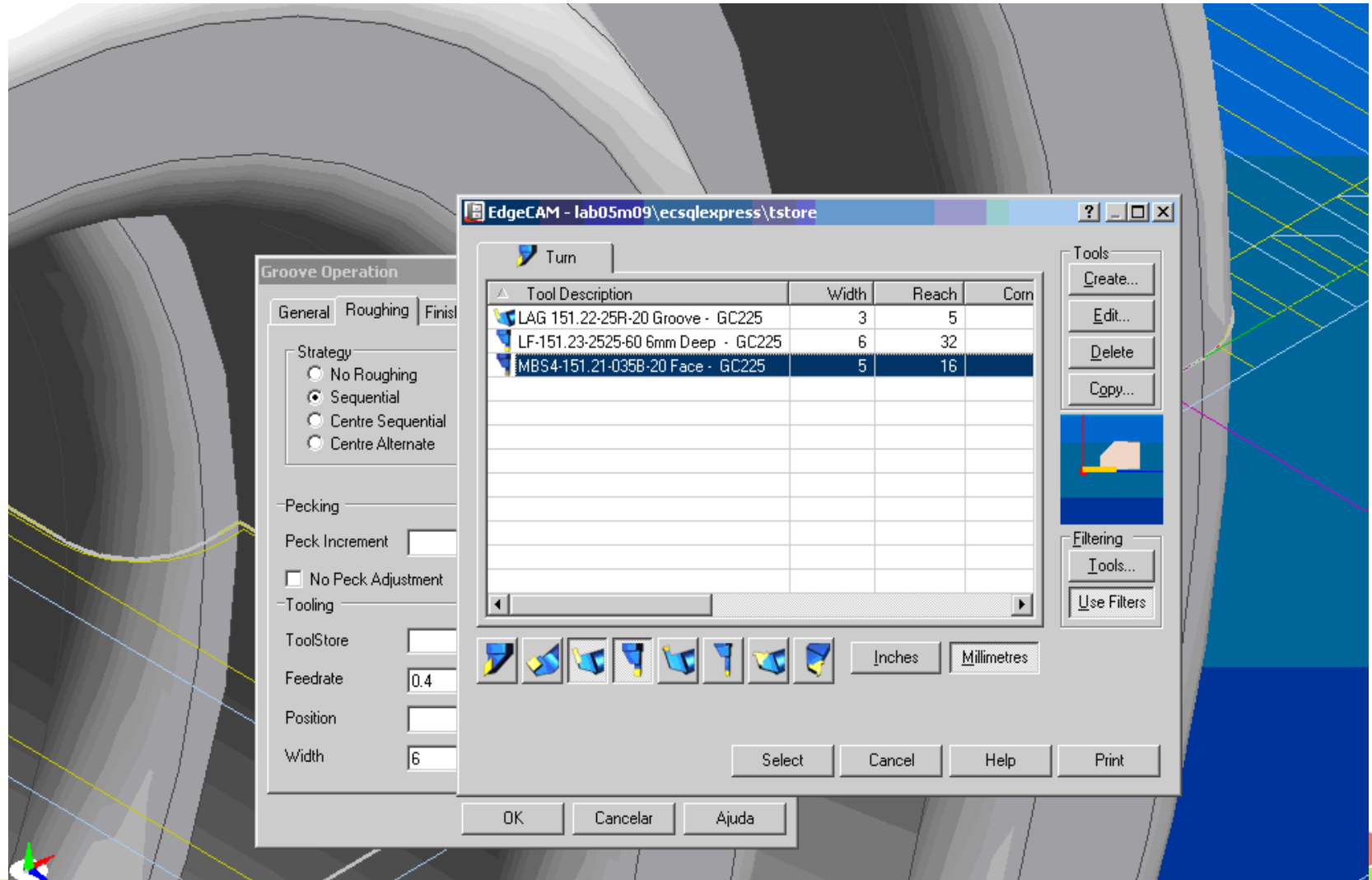
Na tab **Roughing** faça esta configuração. No espaço denominado **Tooling** clique em **Find** para abrir a toolstore.



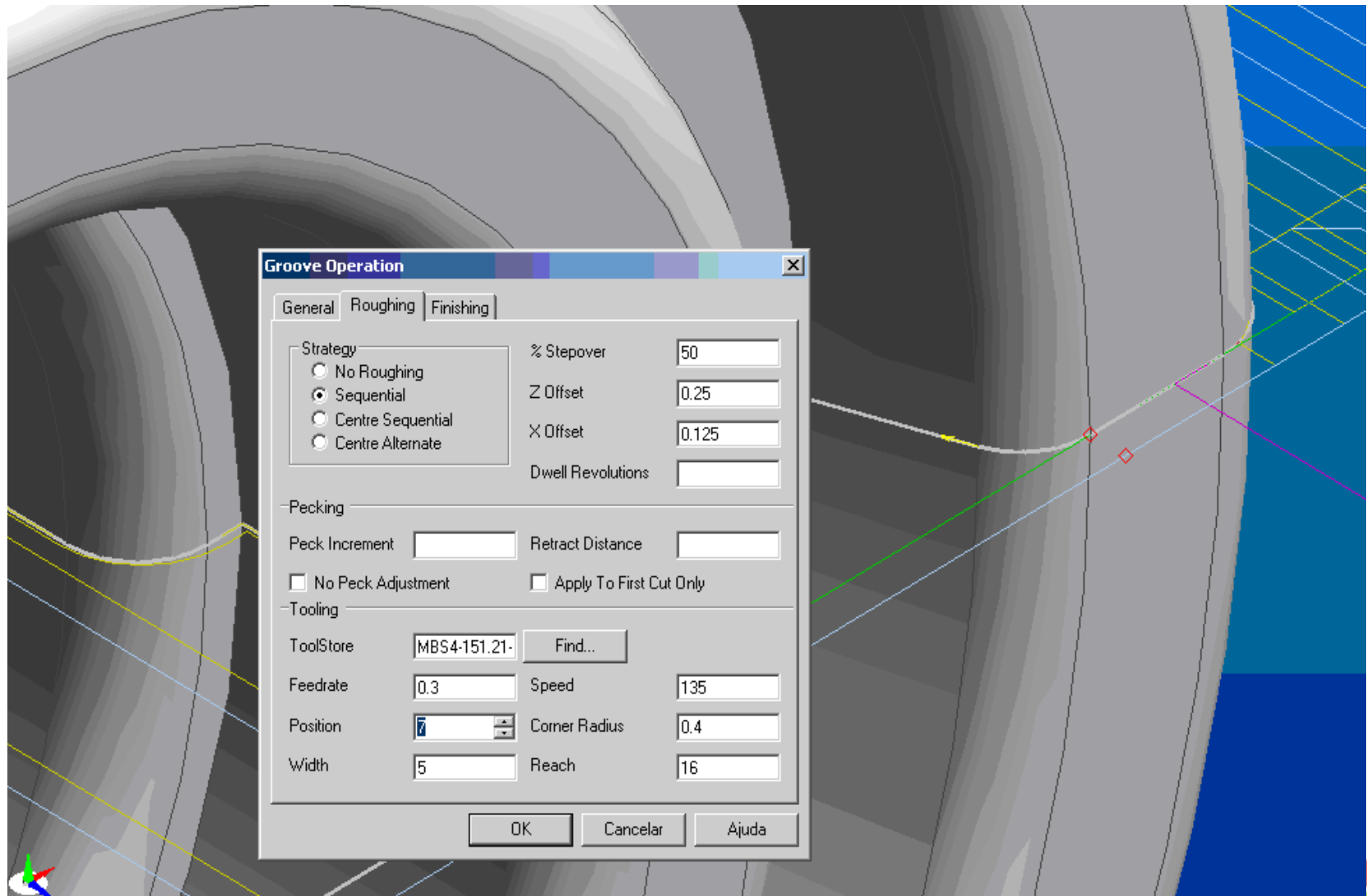
Na Figura abaixo exibe as ferramentas conforme a configuração existente.



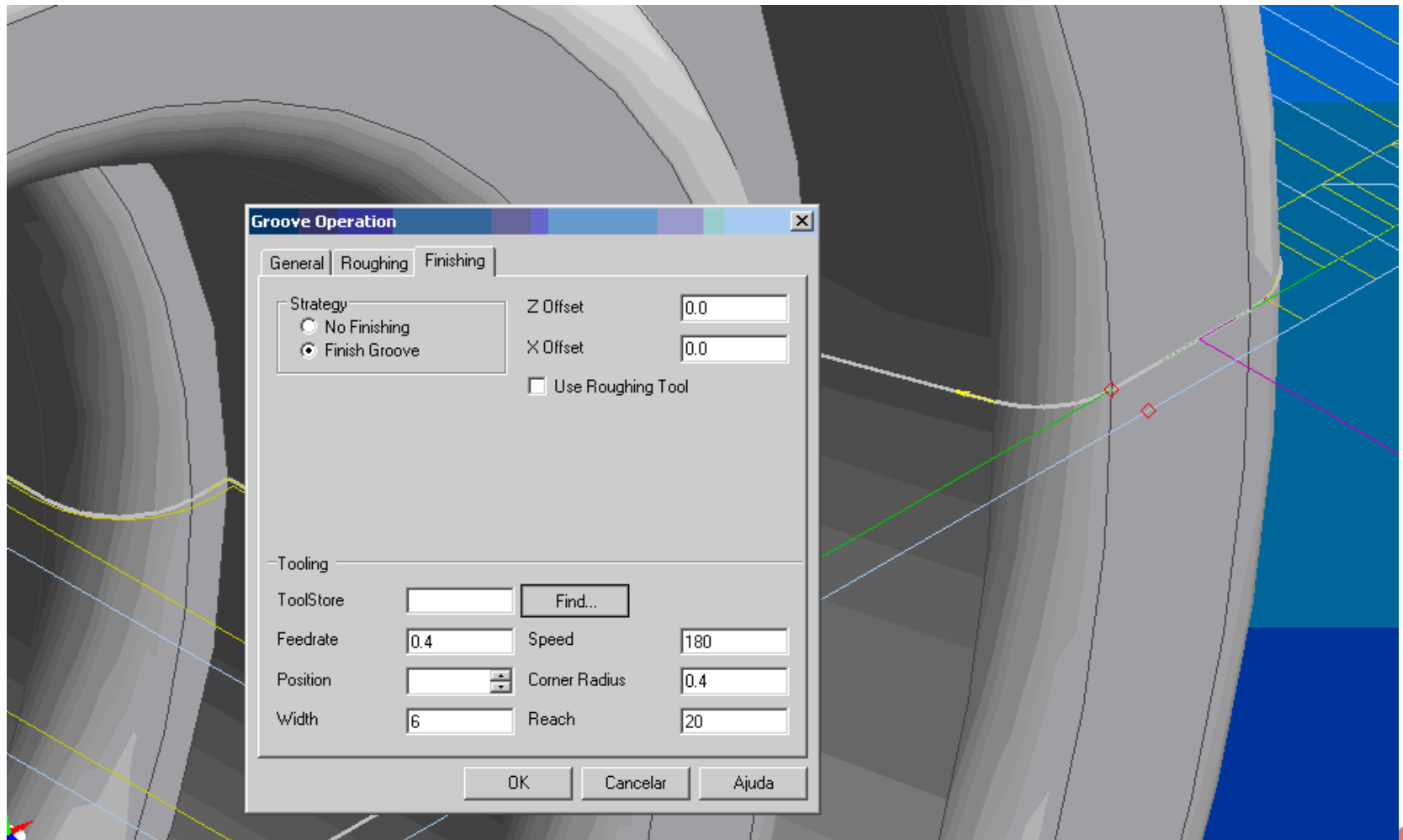
Na tab **Finishing** faça esta configuração. No espaço denominado **Tooling** clique em **Find** para a selecionar. Clique no botão **Select**.



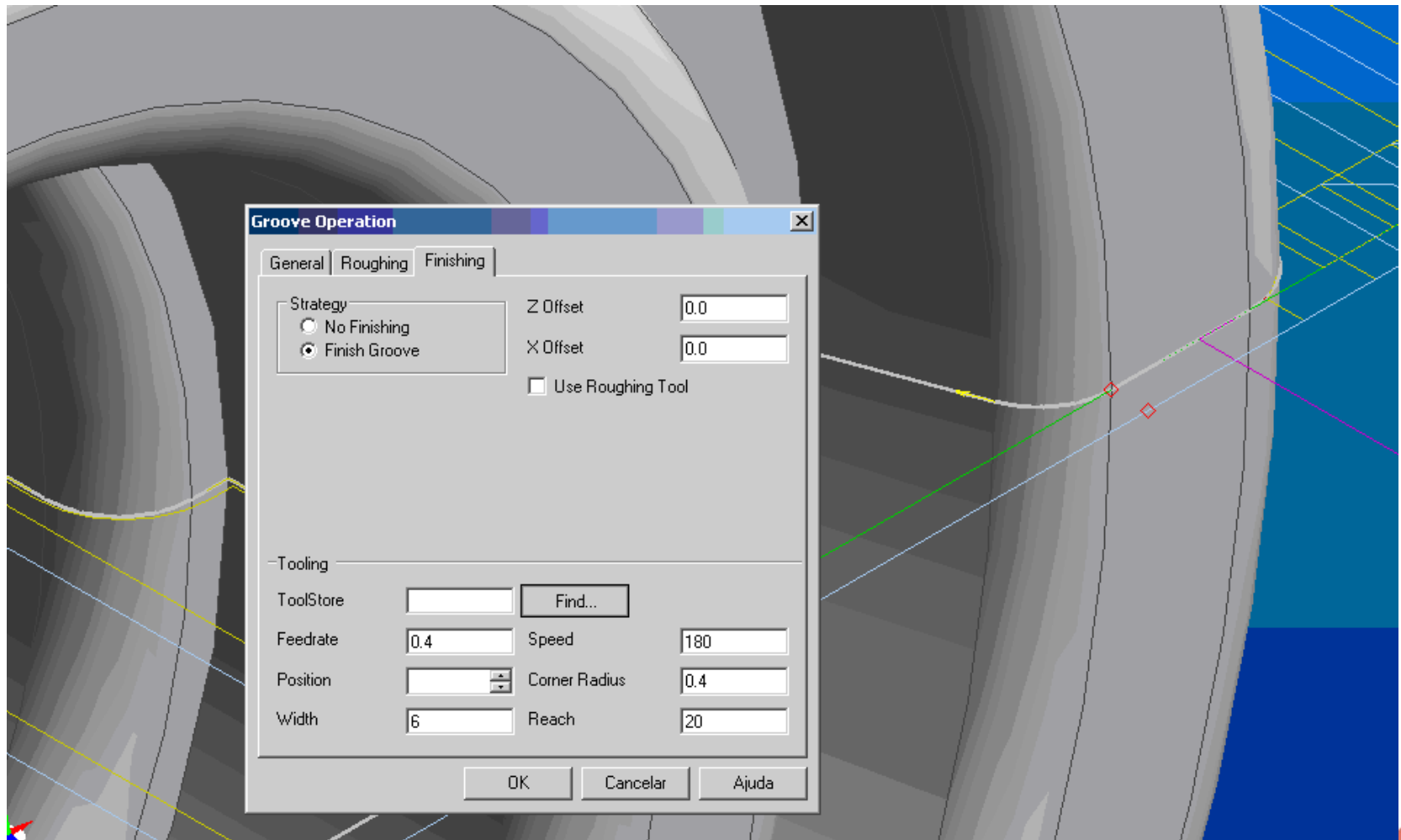
Coloque a position 3.



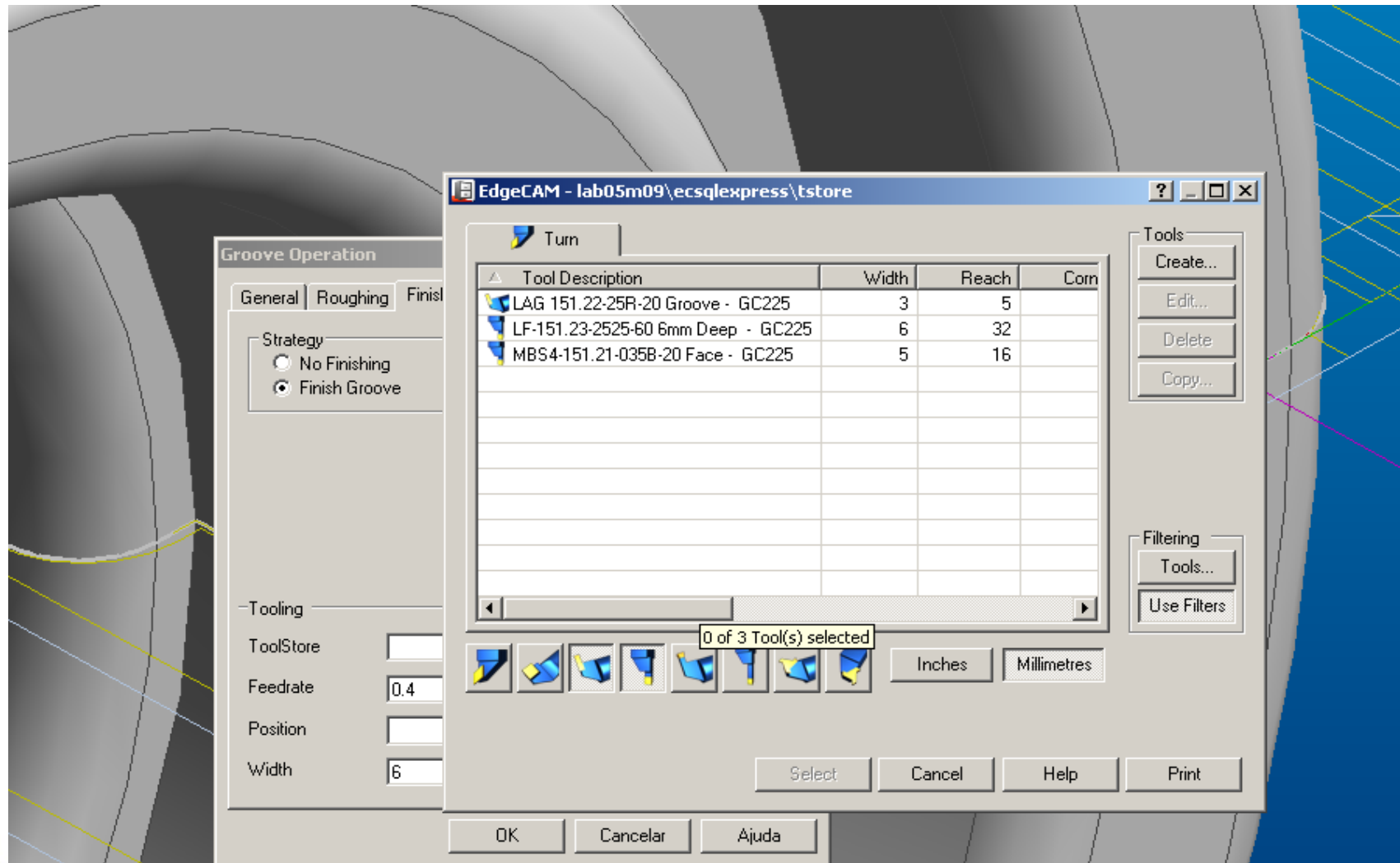
Desta forma usaremos a mesma ferramenta do desbaste para o acabamento, podendo apenas alterar os dados de corte. **OK** para



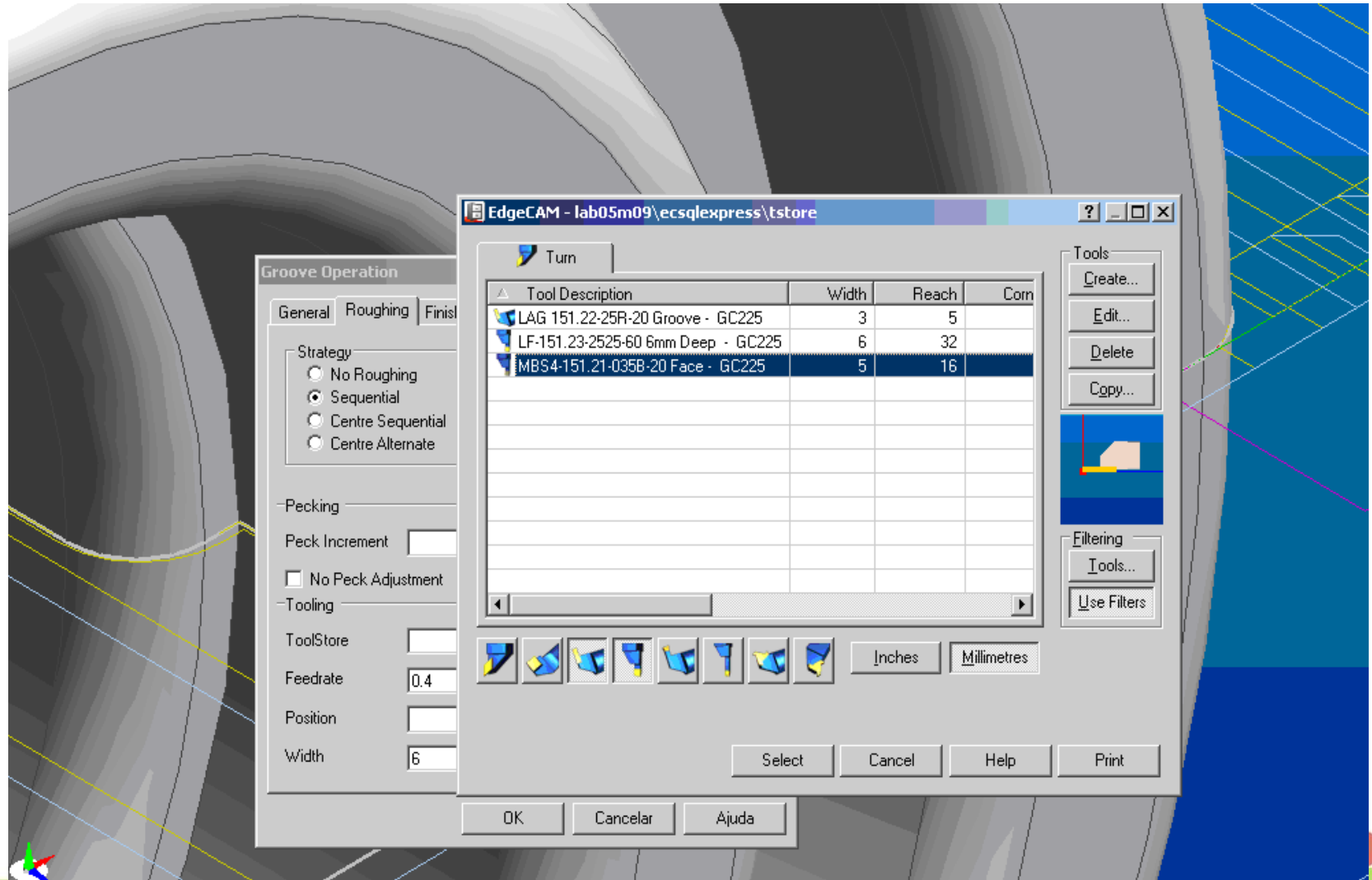
No espaço denominado **Tooling** clique em **Find** para a selecionar.
Clique no botão **Select.** encerrar.



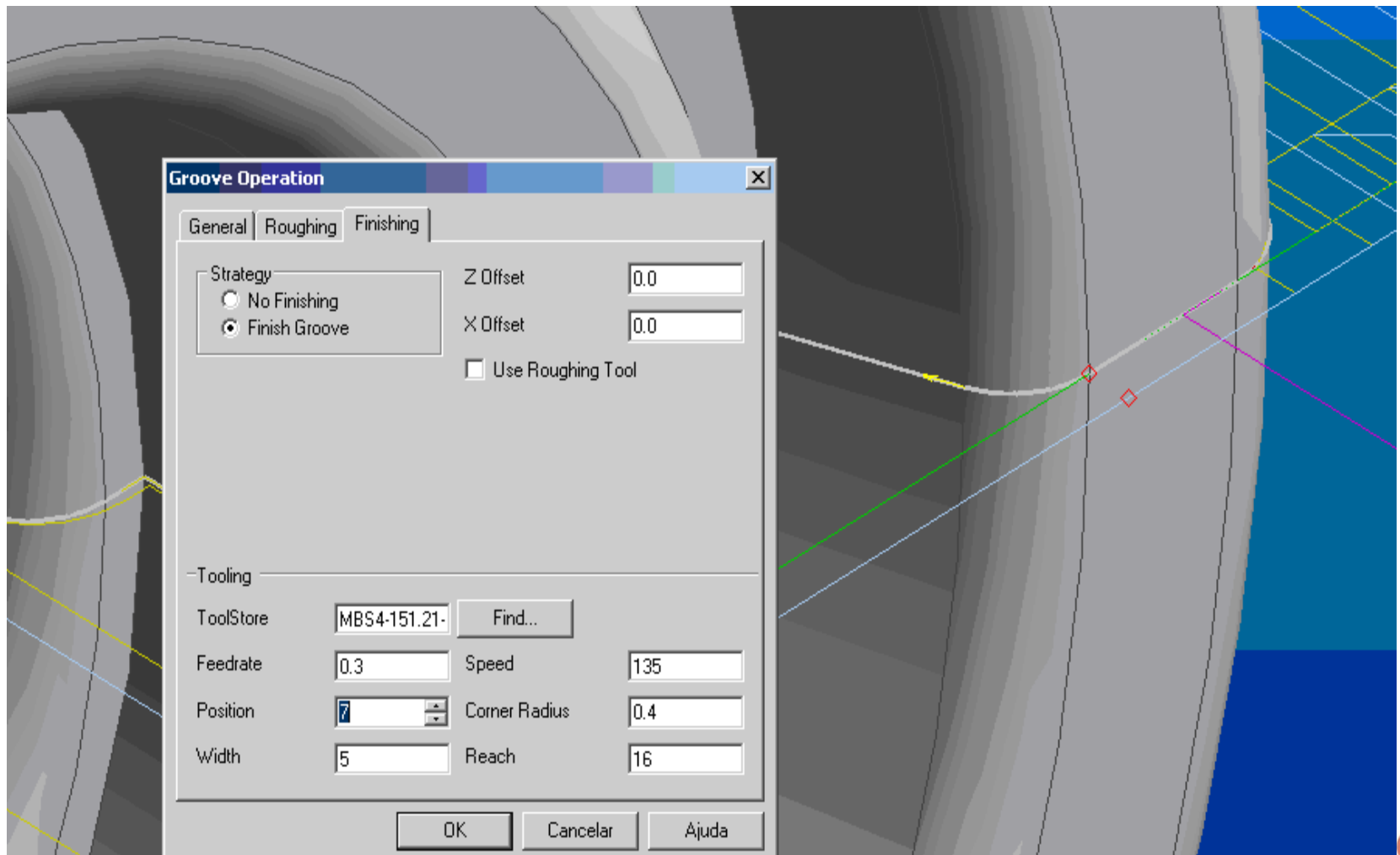
Na Figura abaixo exibe as ferramentas conforme a configuração existente.



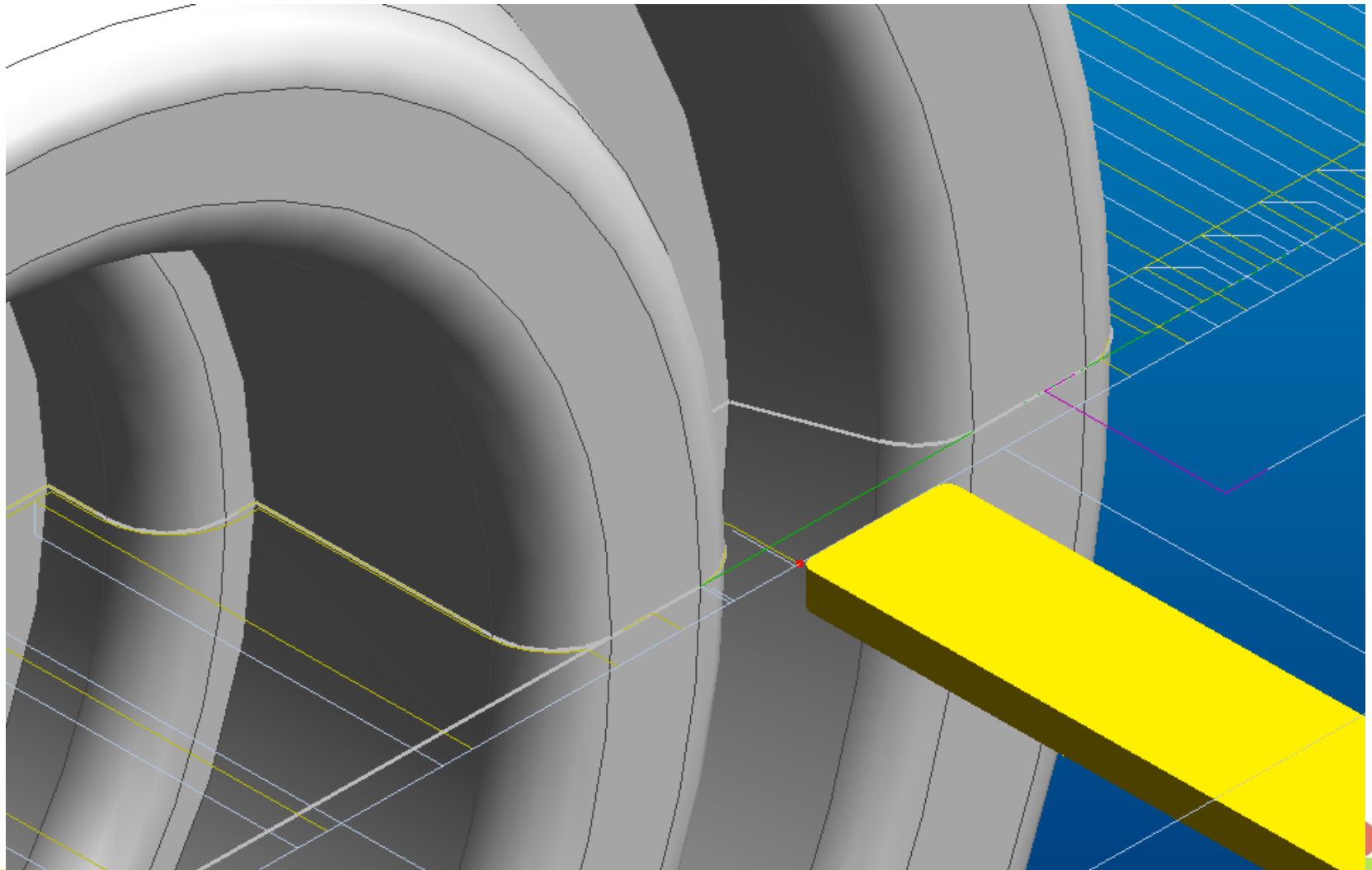
Na tab **Finishing** faça esta configuração. No espaço denominado **Tooling** clique em **Find** para a selecionar. Clique no botão **Select**.



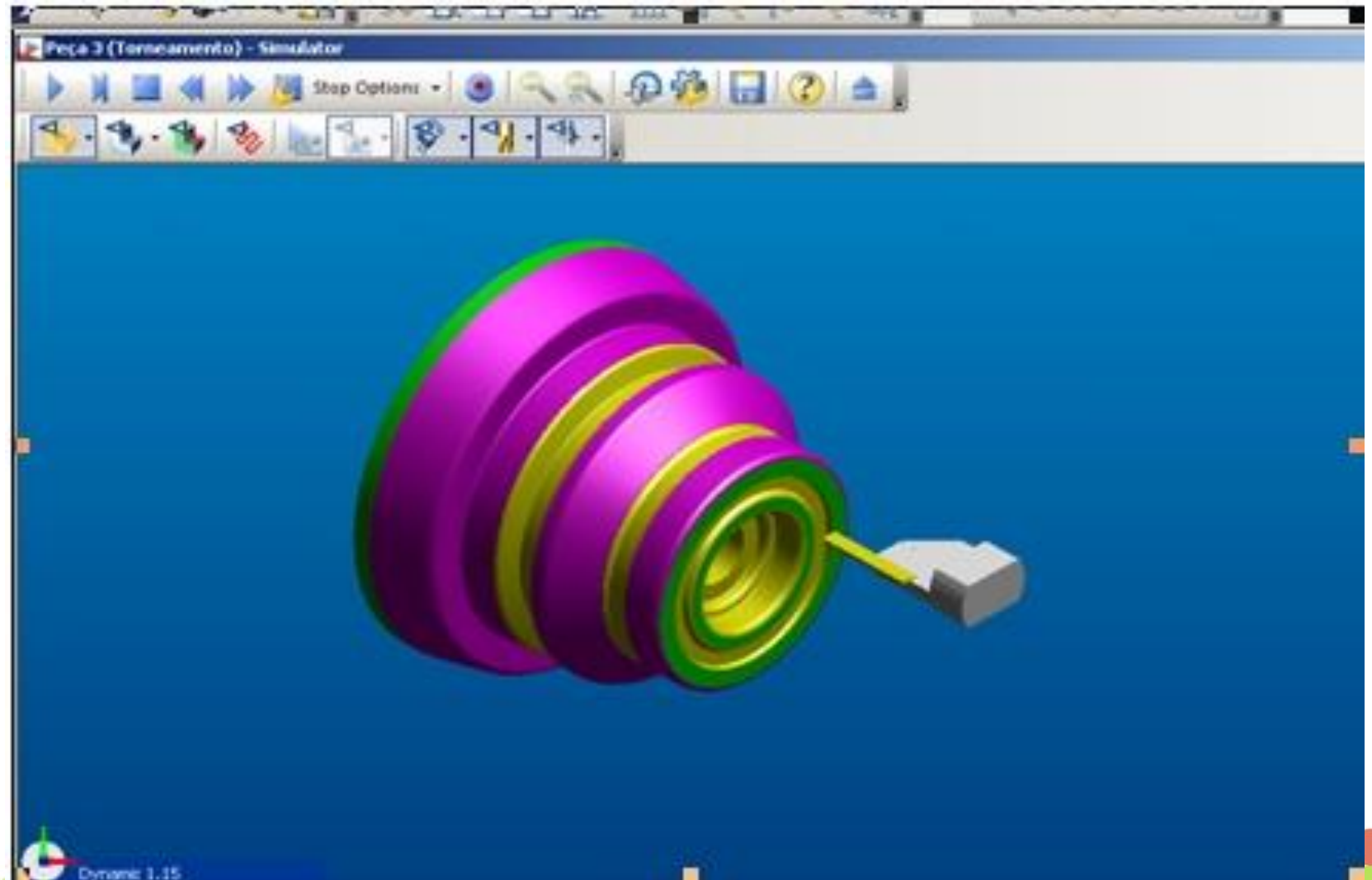
Coloque a position 7.



Observe a ferramenta e o rebaixo.



Observe o resultado da simulação.



Utiliza-se estes botões para a simulação.



Play/Resume



Shuttle



Pause

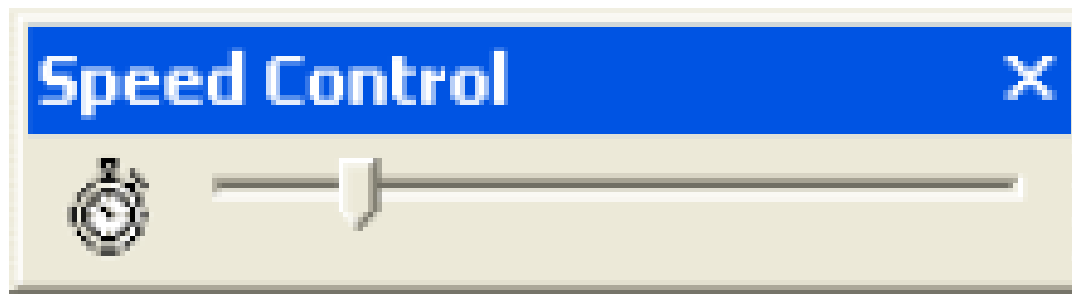


To Start

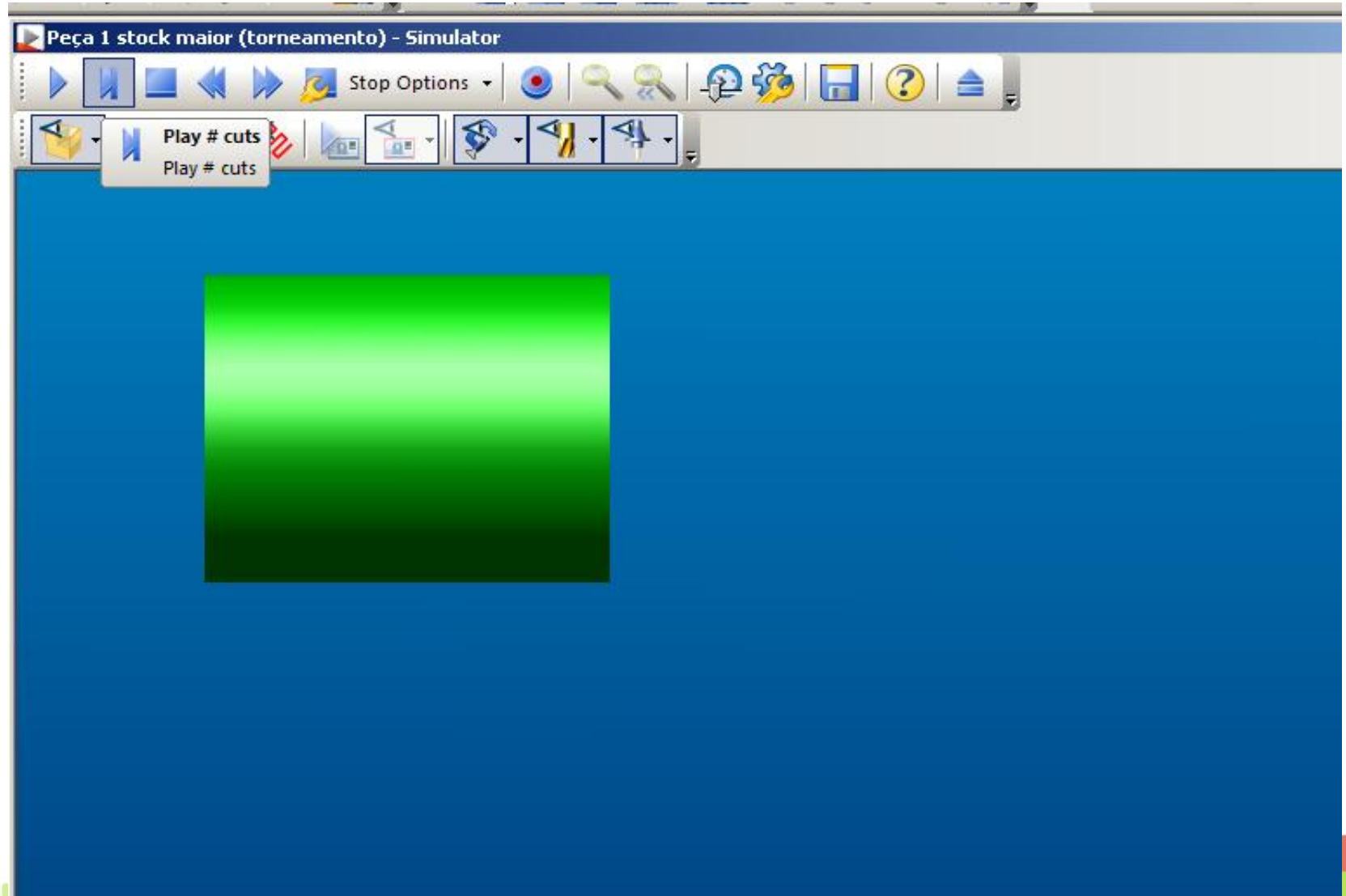


To End

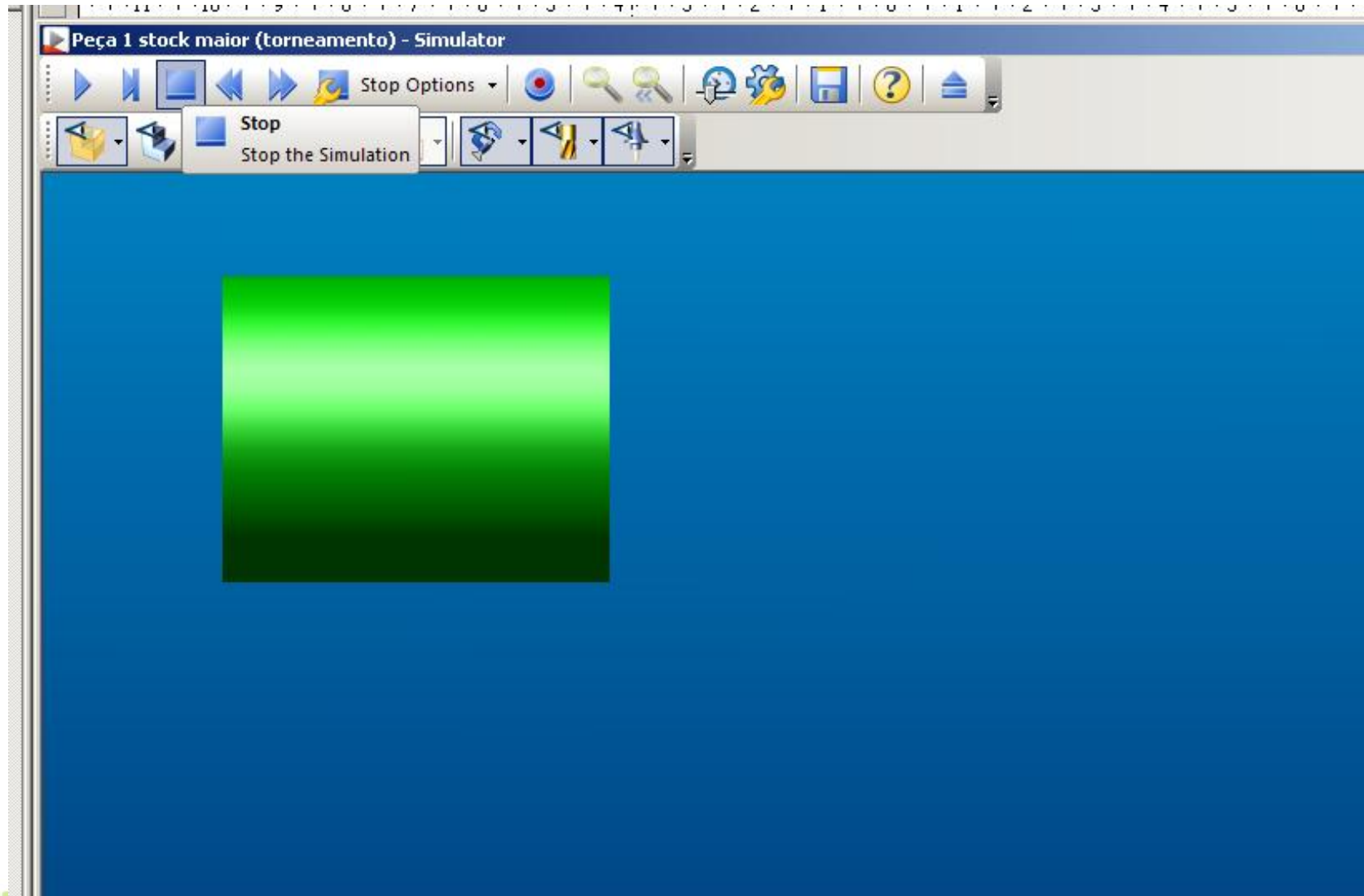
No controle de velocidade que aparece, clique segurando e arraste para a direita ou para esquerda para controlar a velocidade de simulação.



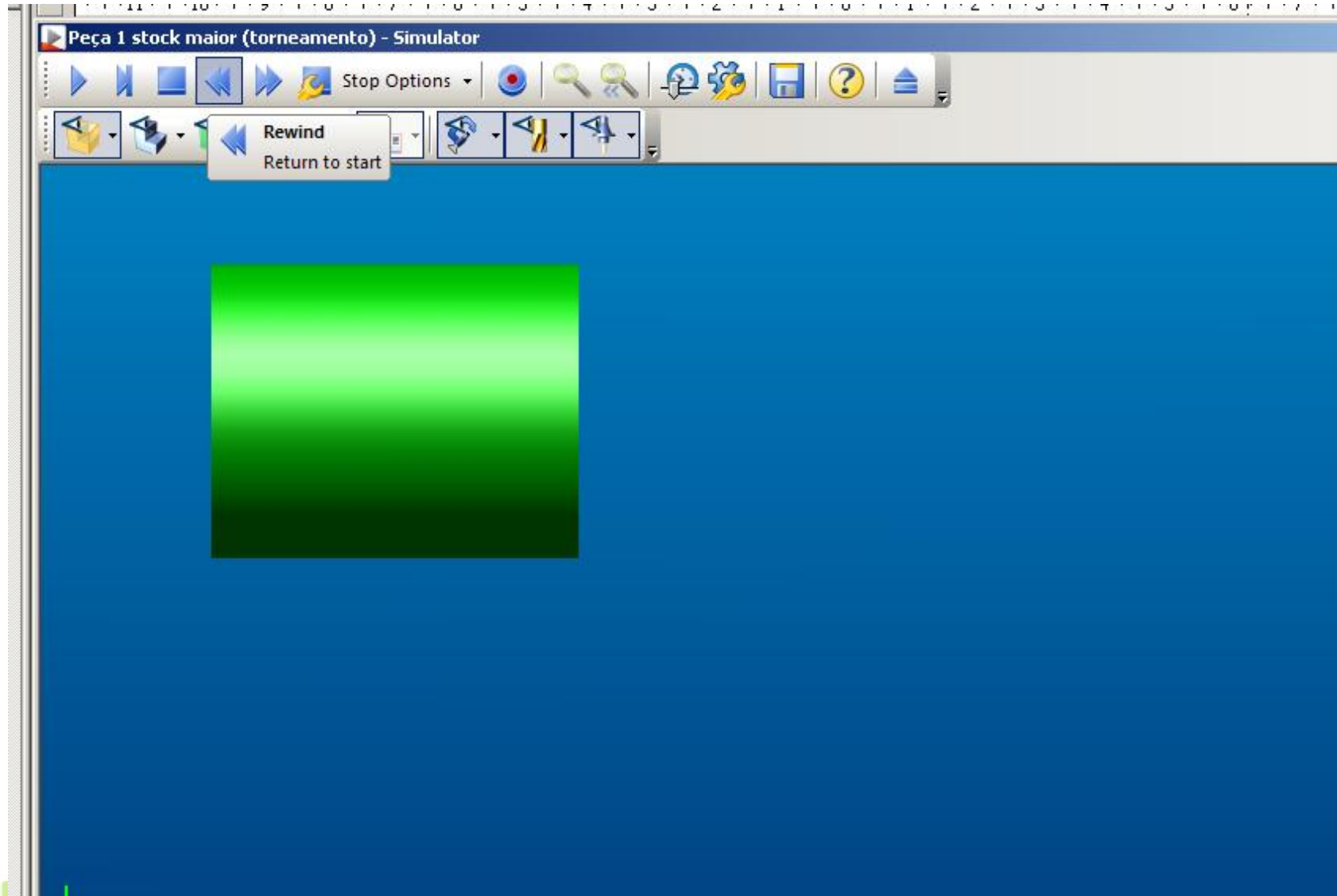
O ícone Play # cuts é simulação passo a passo.



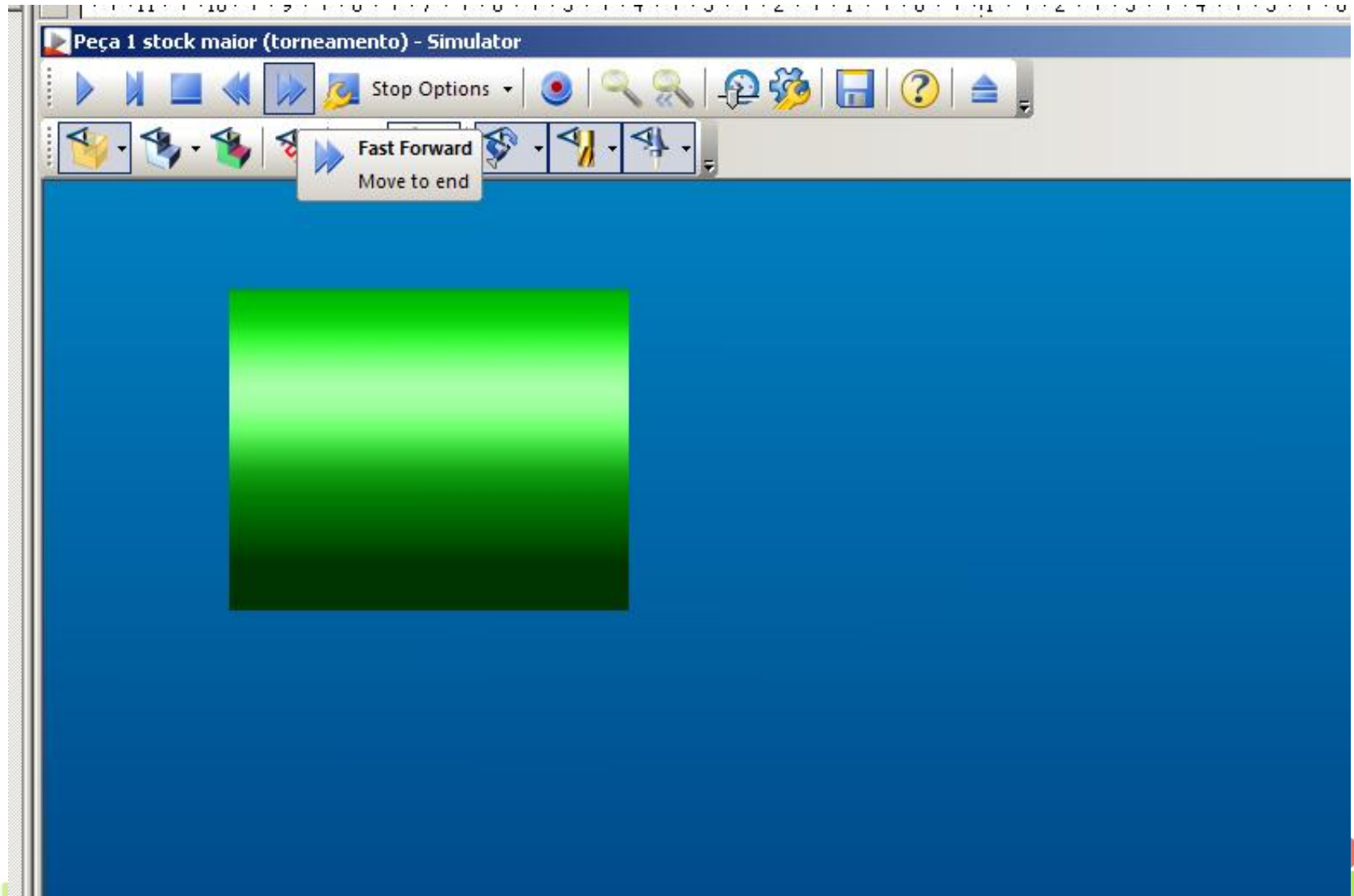
O ícone stop é parar a simulação.



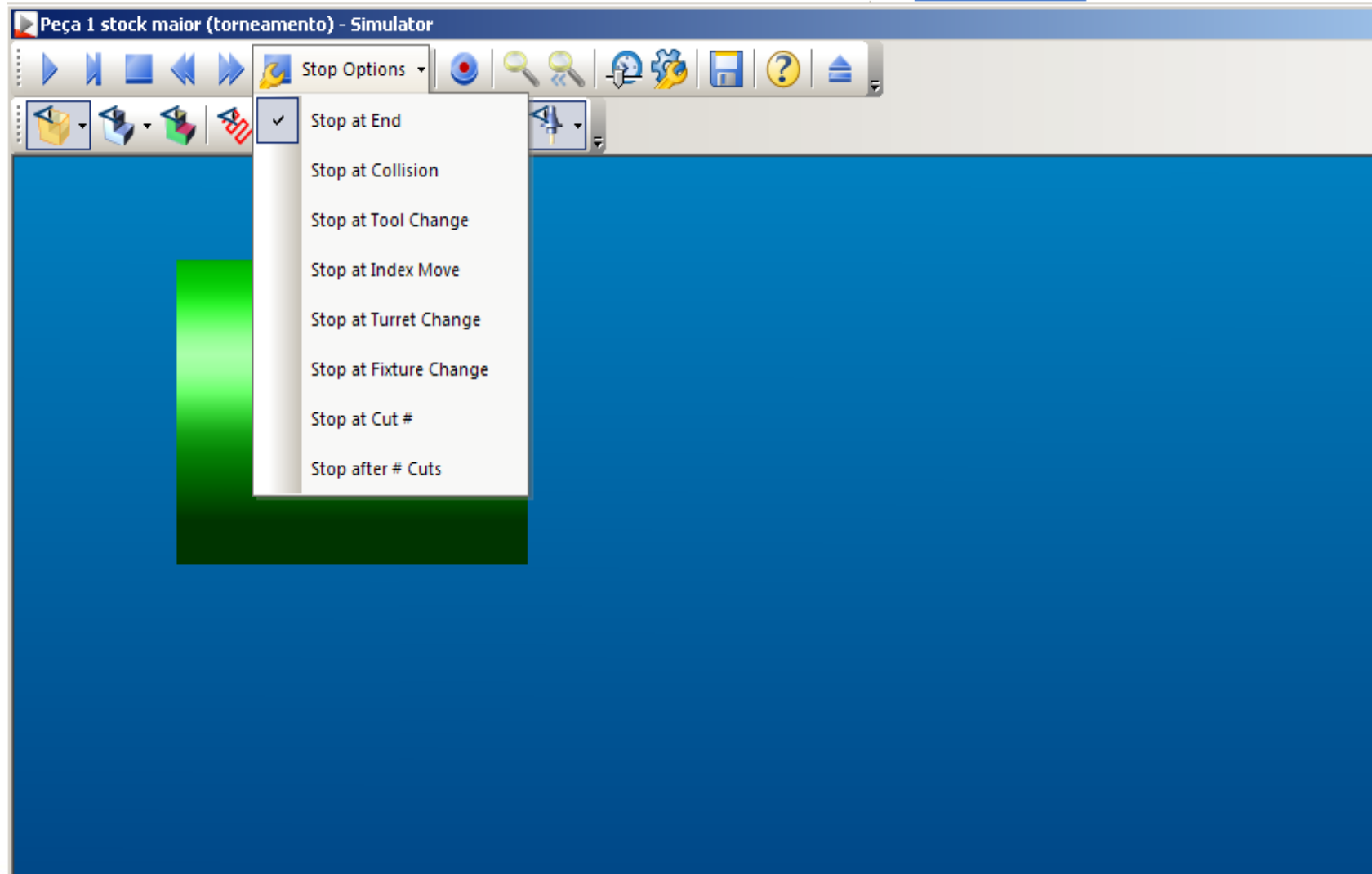
O ícone Rewind é para retornar a simulação.



O ícone Fast Forward avança rápido a simulação.



O ícone Stop Options é opção de parada de simulação.



Uma vez satisfeita usinagem virtual, gere o código CNC.

Clique no botão GenerateCode na barra de ferramentas MAIN, abaixo da barra Standard (ou no menu File).



Se a cópia do EdgeCam for licenciada aparecerá esta janela.

A versão de estudante não é permitida.

