

2024 BIT  
EVENT 

# O QUE HÁ DE NOVO - AC

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# O que há de novo no ALPHACAM

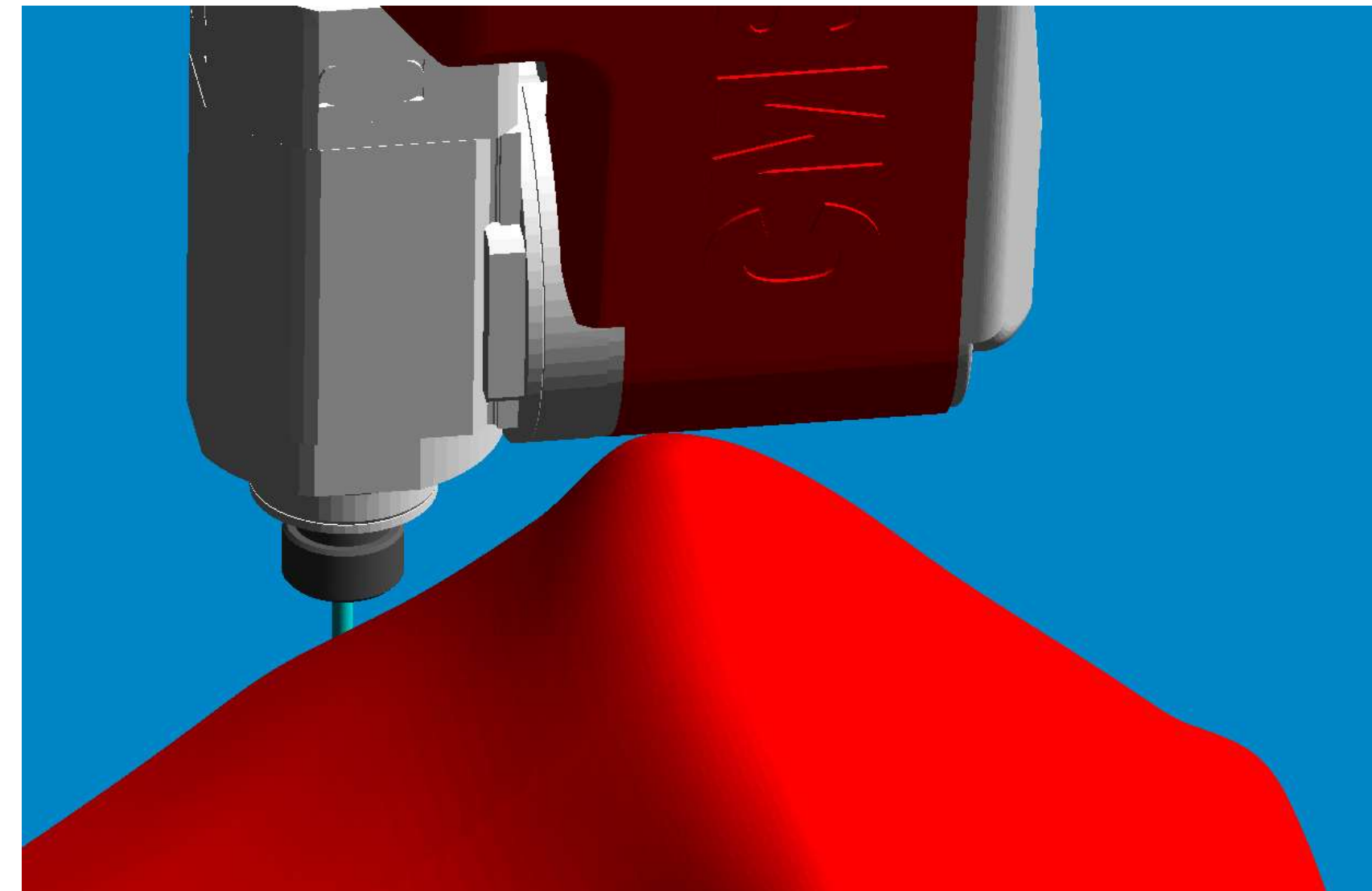
VERSÃO 2024.1

- ✓ SIMULAÇÃO
- ✓ GERAL
- ✓ CAD
- ✓ MAQUINAÇÃO
- ✓ AUTOMATION MANAGER
- ✓ NESTING

# Simulação

# Simulação

- Funcionalidades de Controlo
- Configurações Especiais
- Controlo de Velocidade
- Comandos Adicionais
- Botão HUD
- "Project Page" de Simulação
- Otimizador de 5 Eixos
- Detecção de Colisões
- Reparação de Material STL

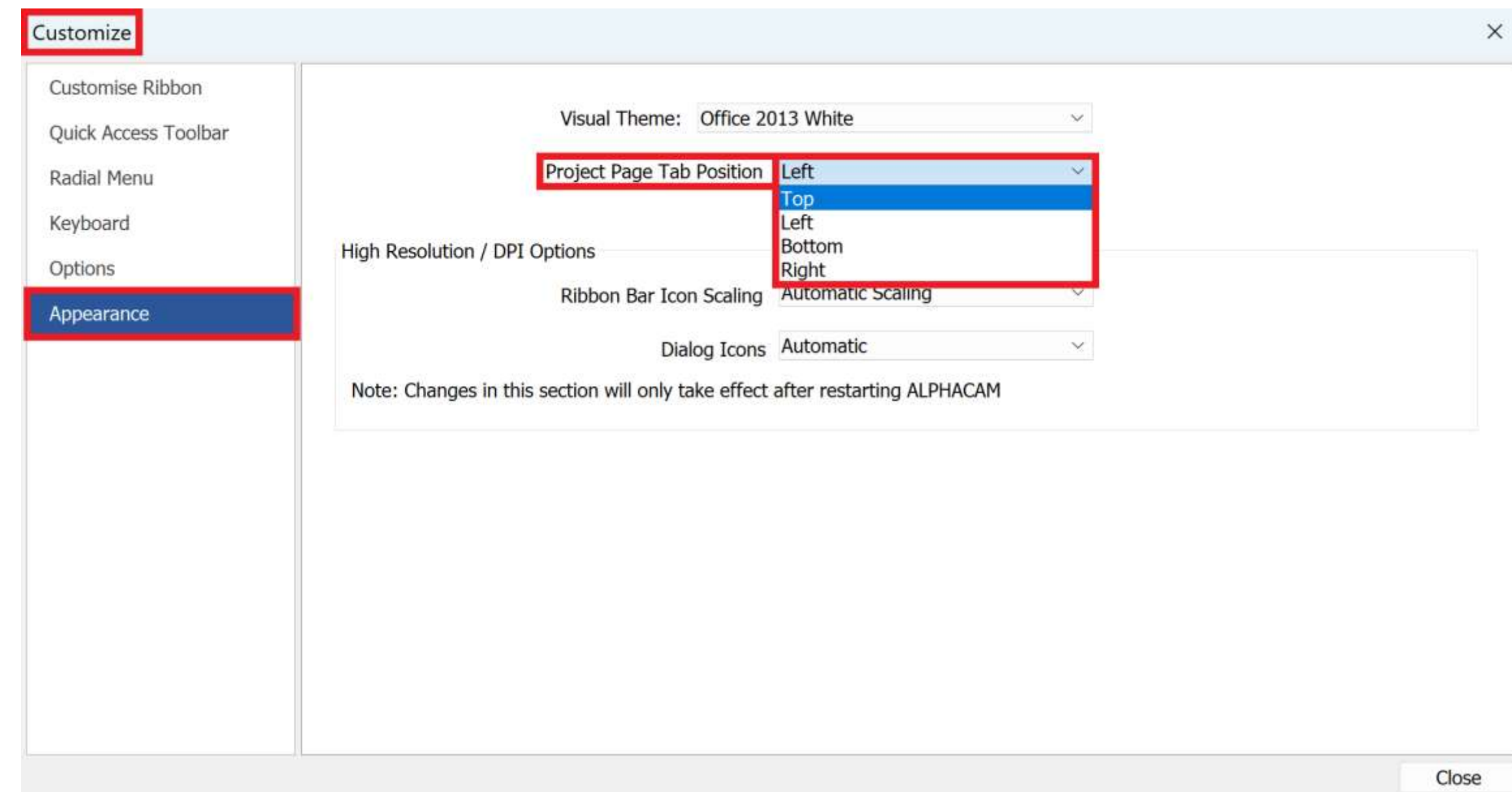


# Opções Gerais

# Opções Gerais

## Project Pages

- Interface Gráfica do ALPHACAM
  - Permite agora escolher entre 4 posições para colocar as abas

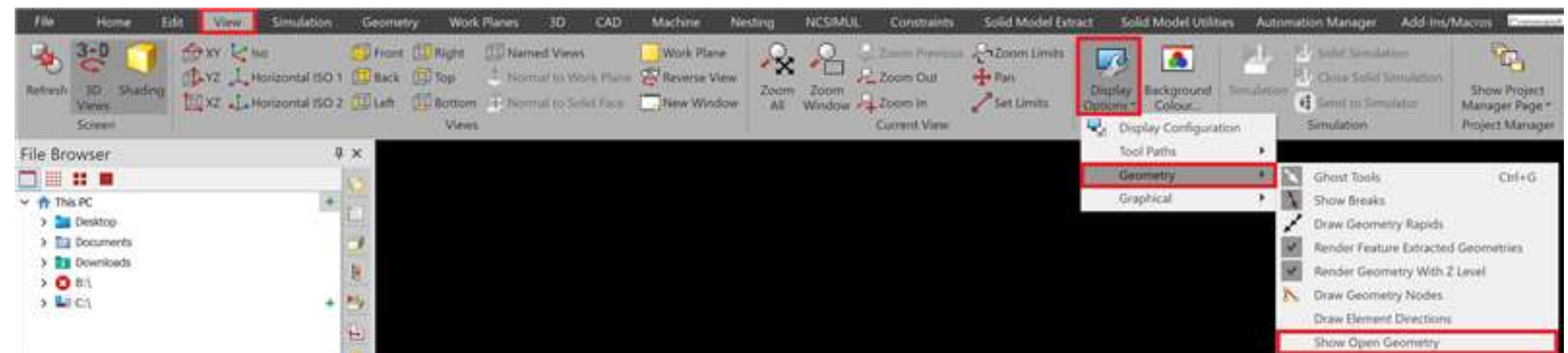
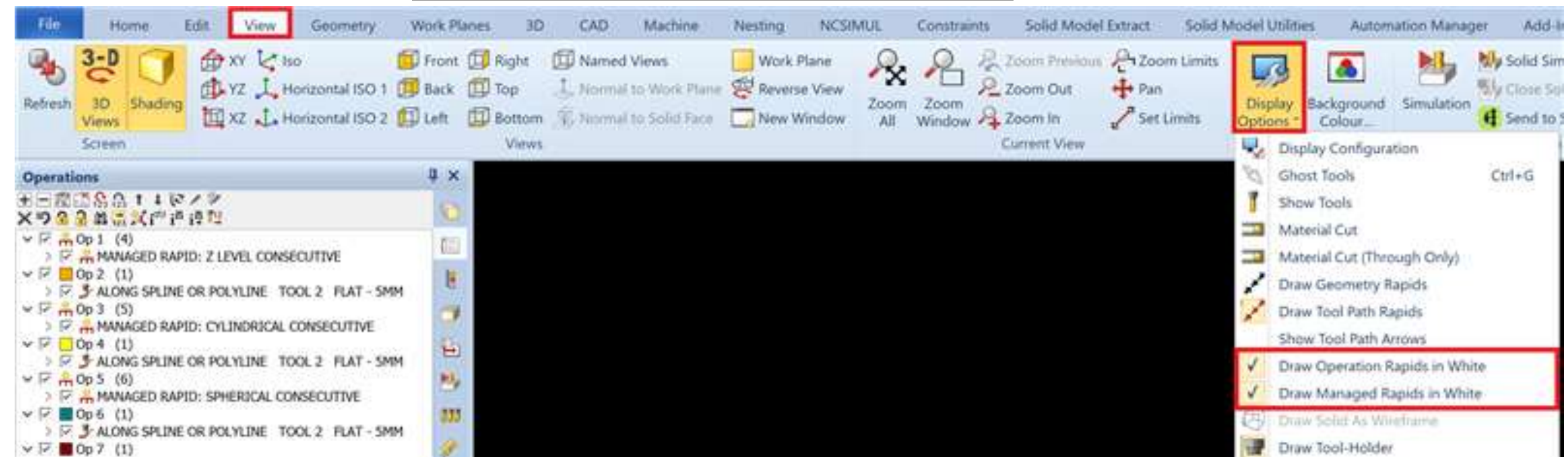
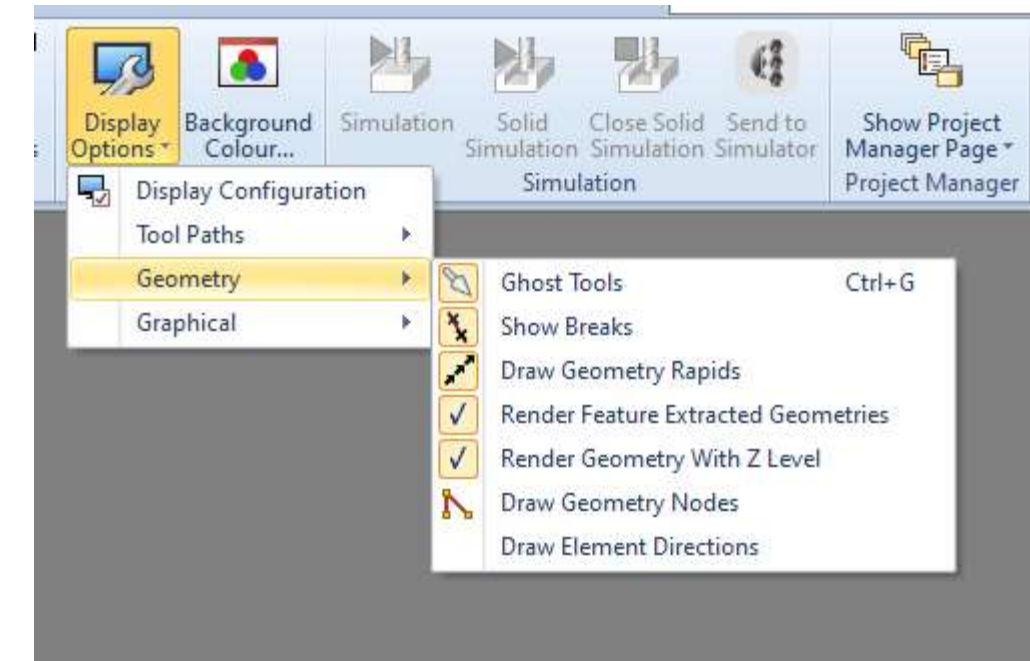




# Opções Gerais

## Display Options

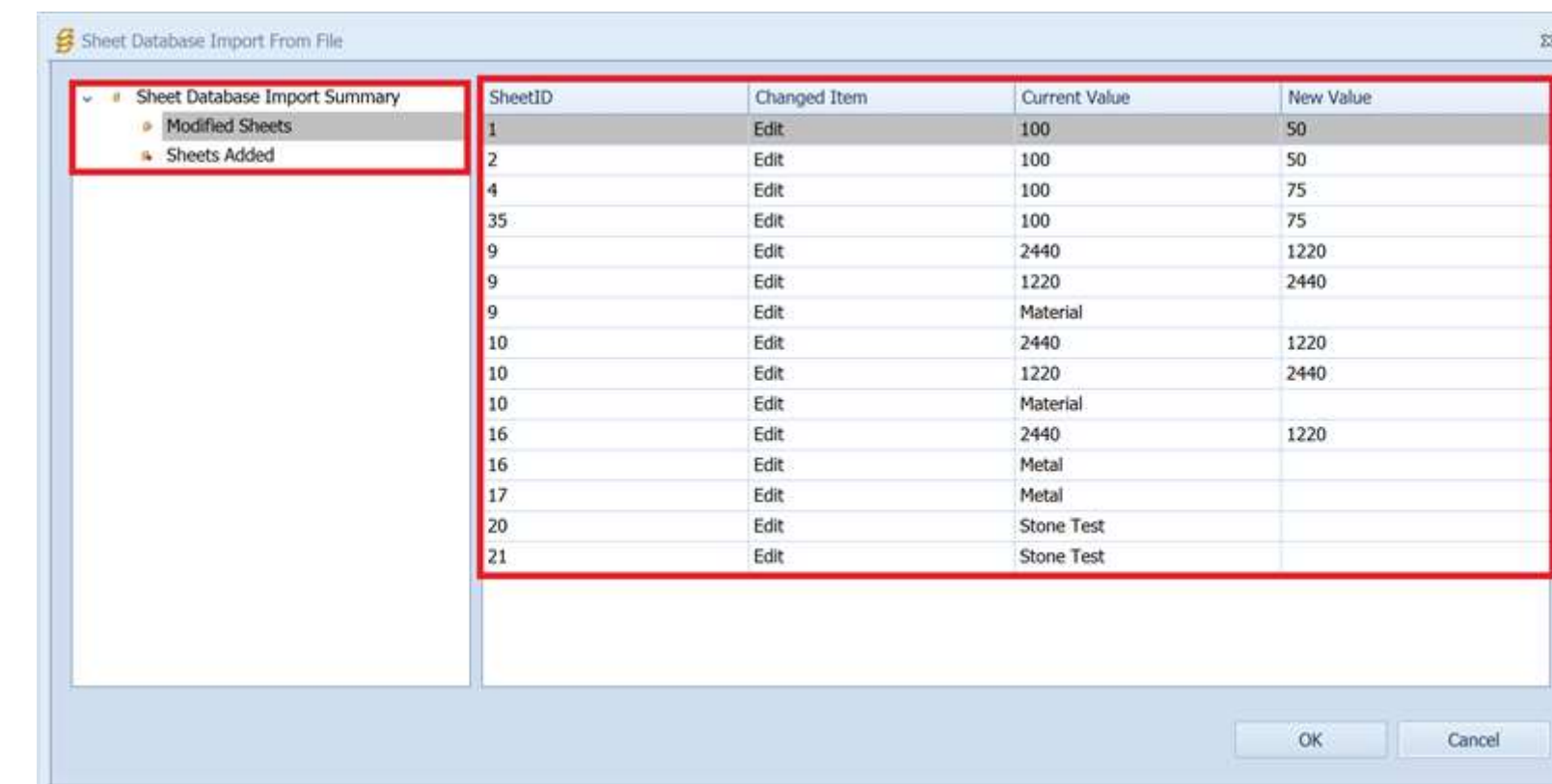
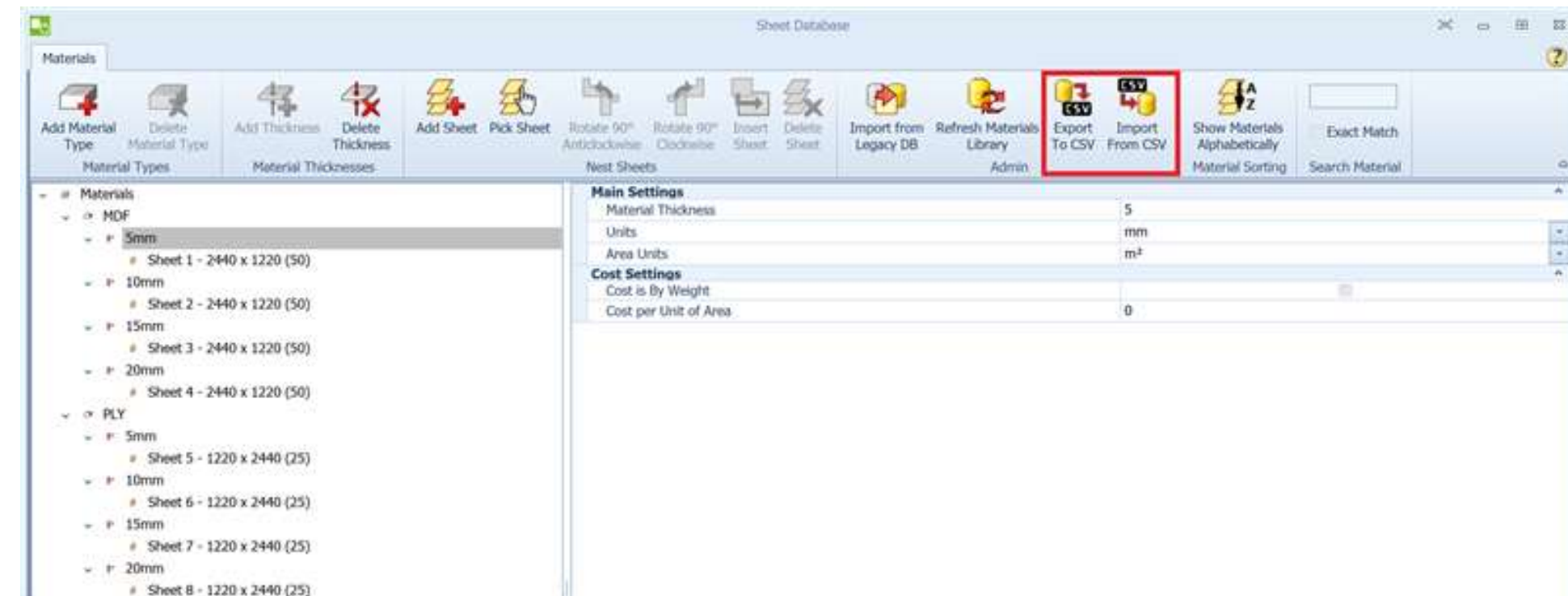
- Menu Reorganizado
- Gestor de Rápidos
  - Permite diferenciar rápidos geridos pelo Rapid Manager
- Mostrar Geometrias Abertas
  - Coloca as geometrias abertas em outra cor para se diferenciar melhor



# Opções Gerais

## Base de Dados de Materiais

- Controlar Chapas por CSV
  - Permite agora exportar e importar a base de dados dos materiais através de CSV

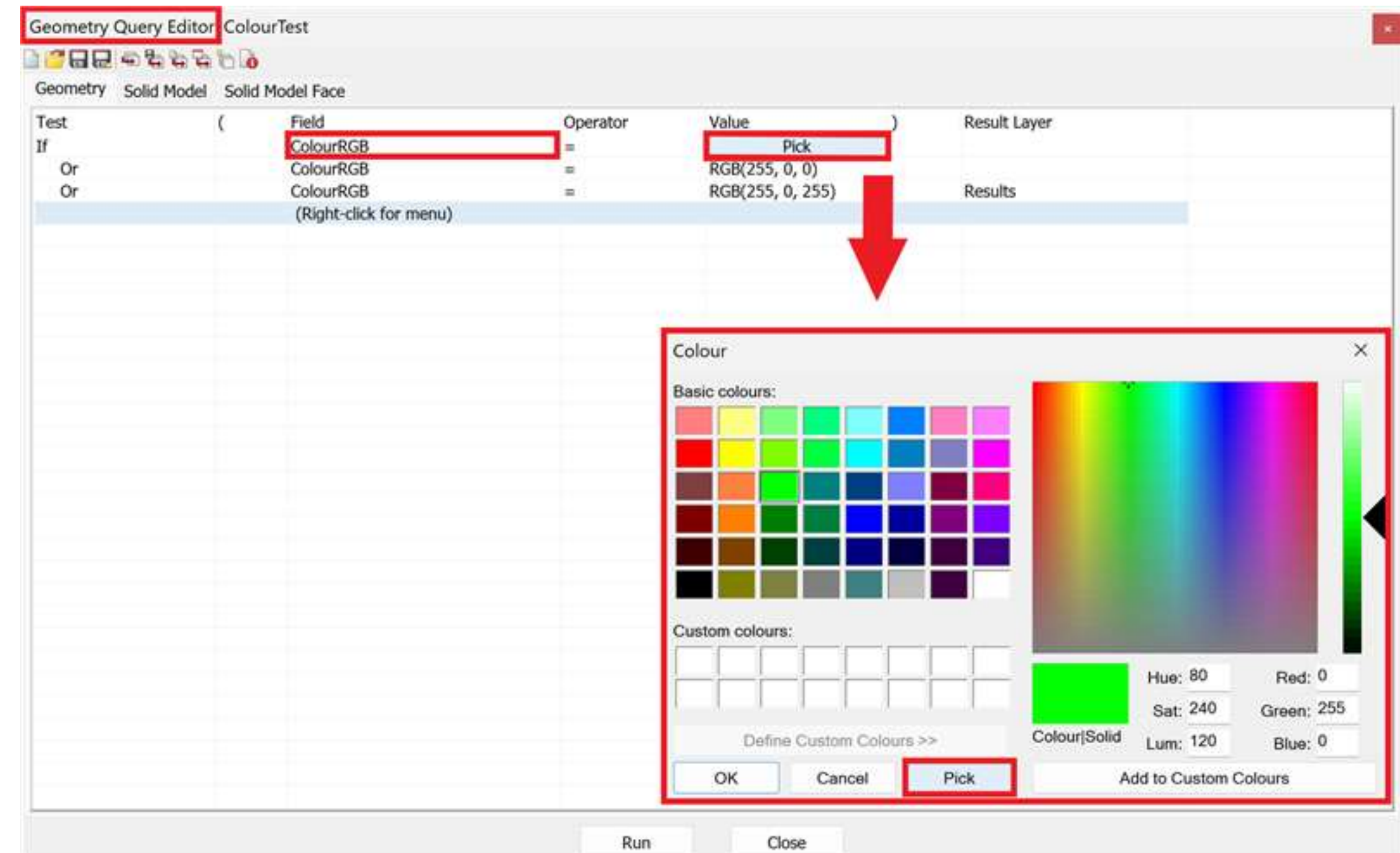




# Opções Gerais

## Queries

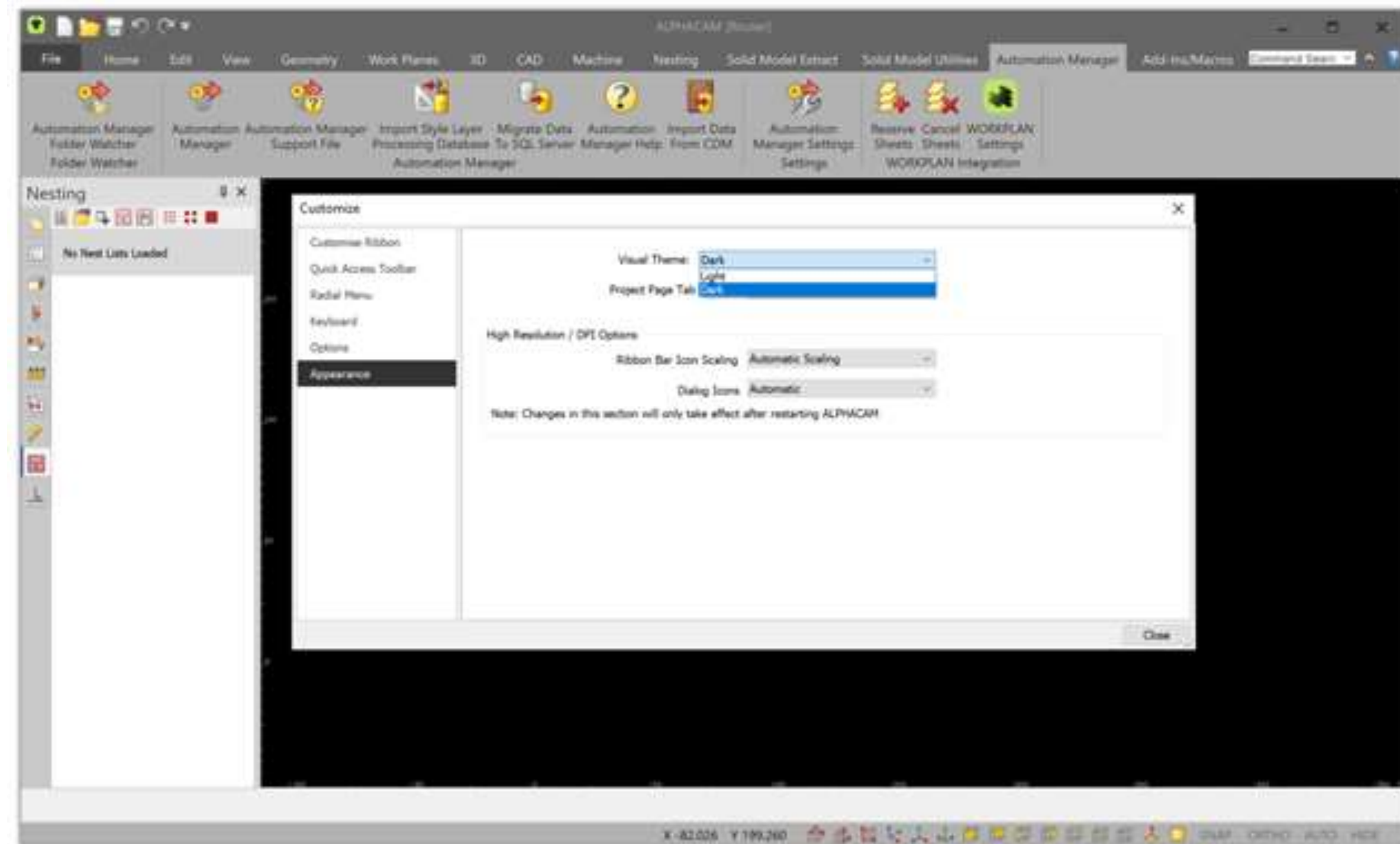
- Botão para escolher cor
  - Permite ir buscar o valor de RGB através de uma face de sólido



# Opções Gerais

## Interface do Utilizador

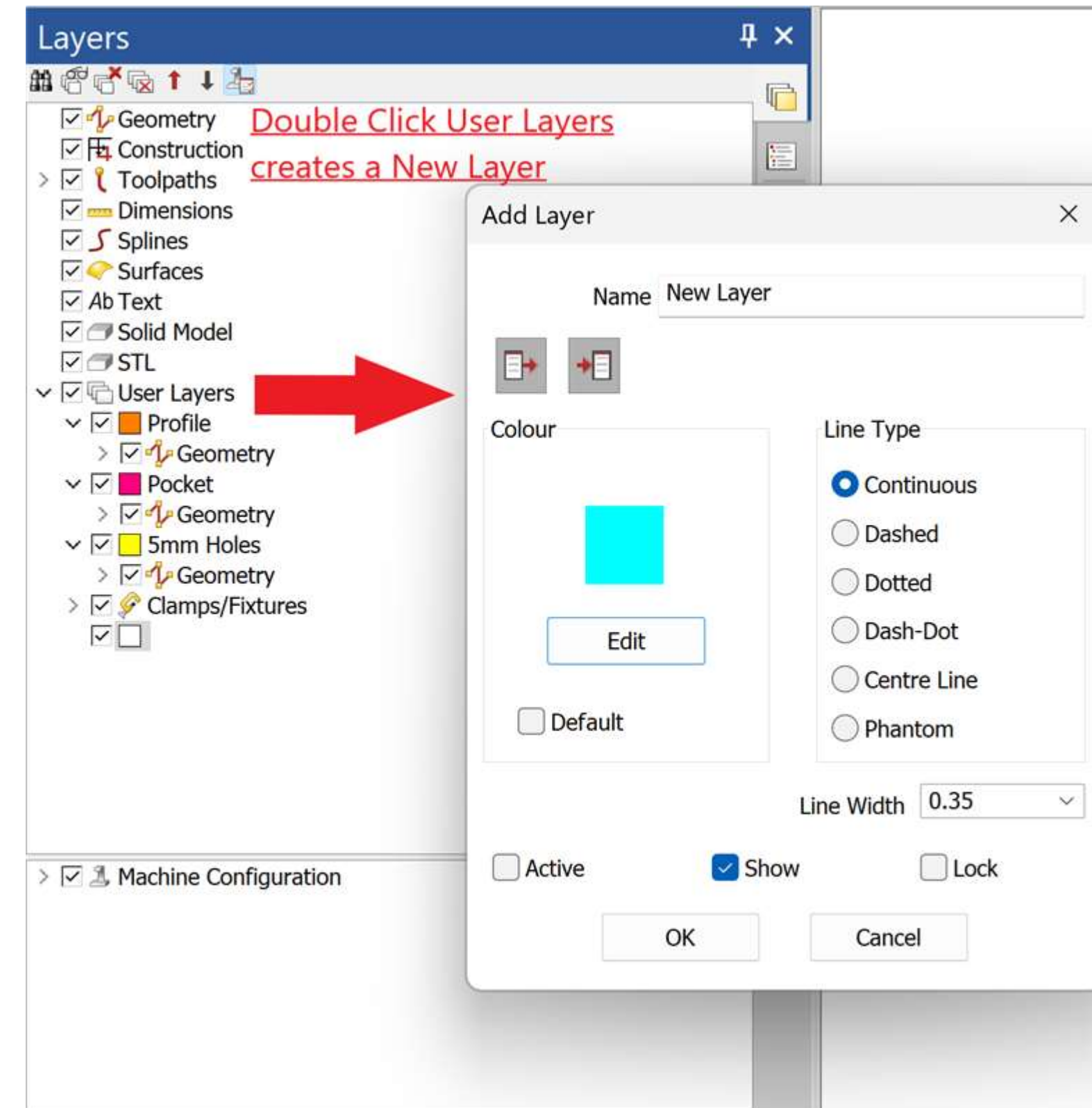
- Temas escuros/Claros

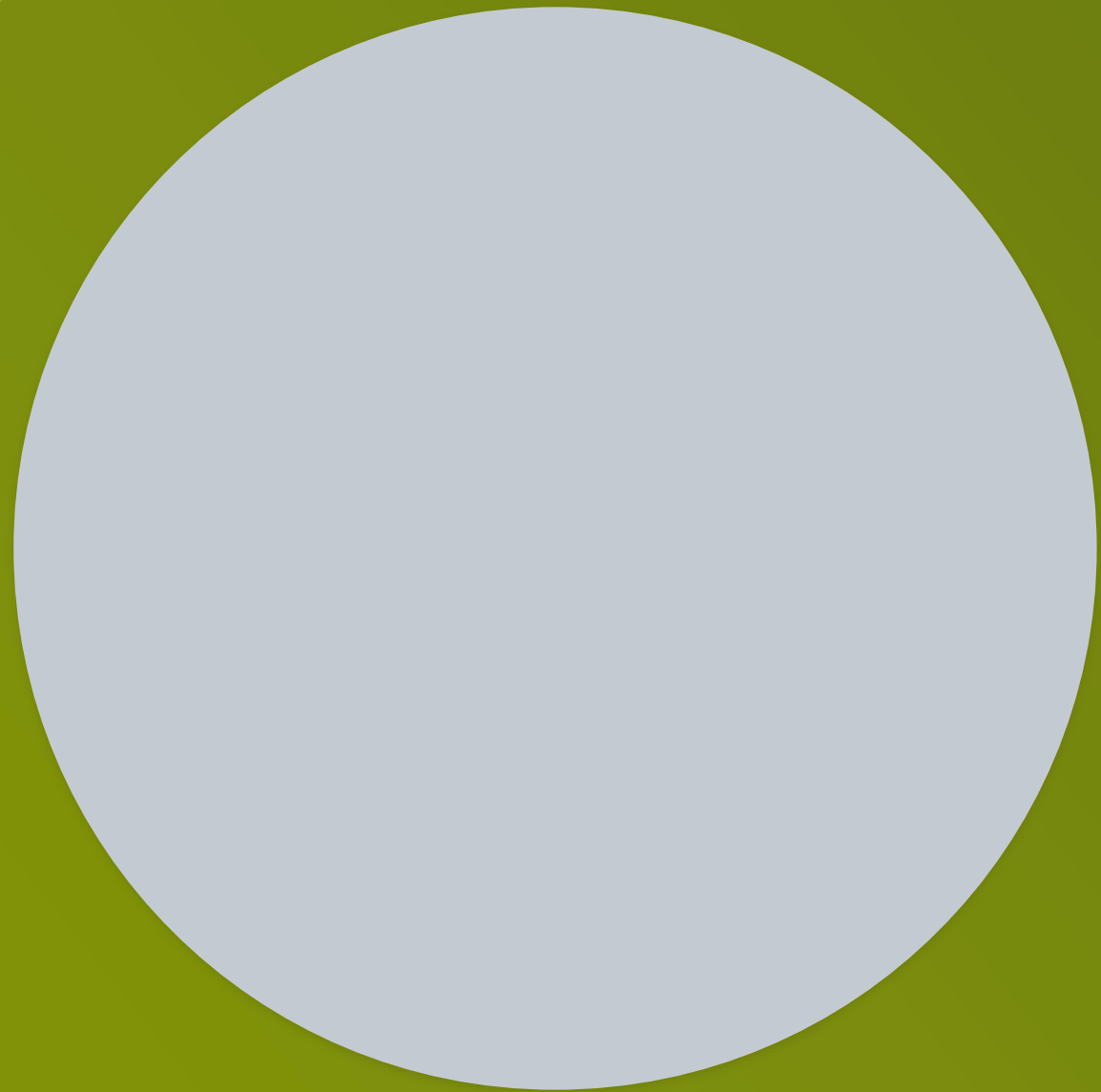


# Opções Gerais

## Layers

- Criação de Layers por duplo clique





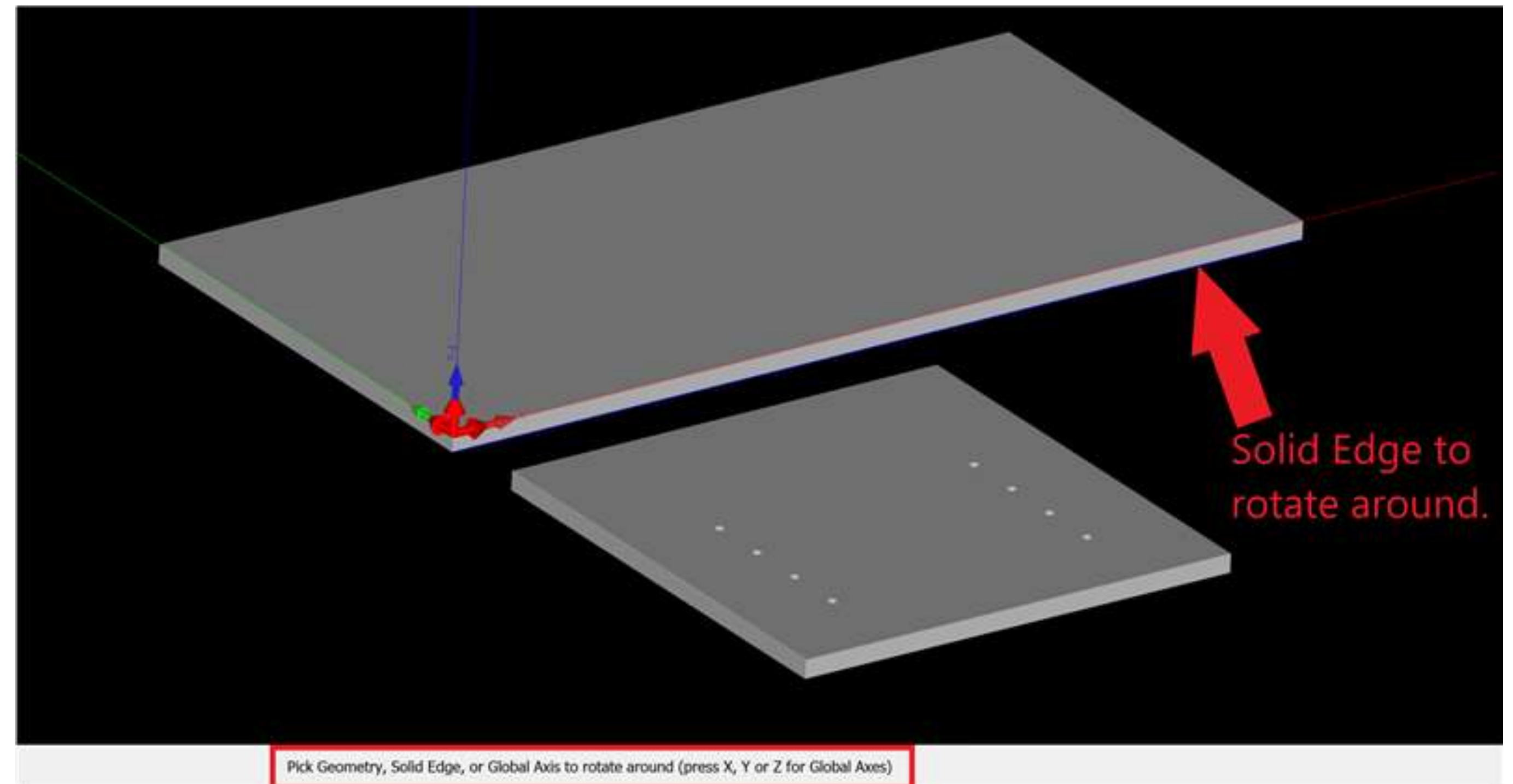
CAD



# CAD

## Rotate 3D

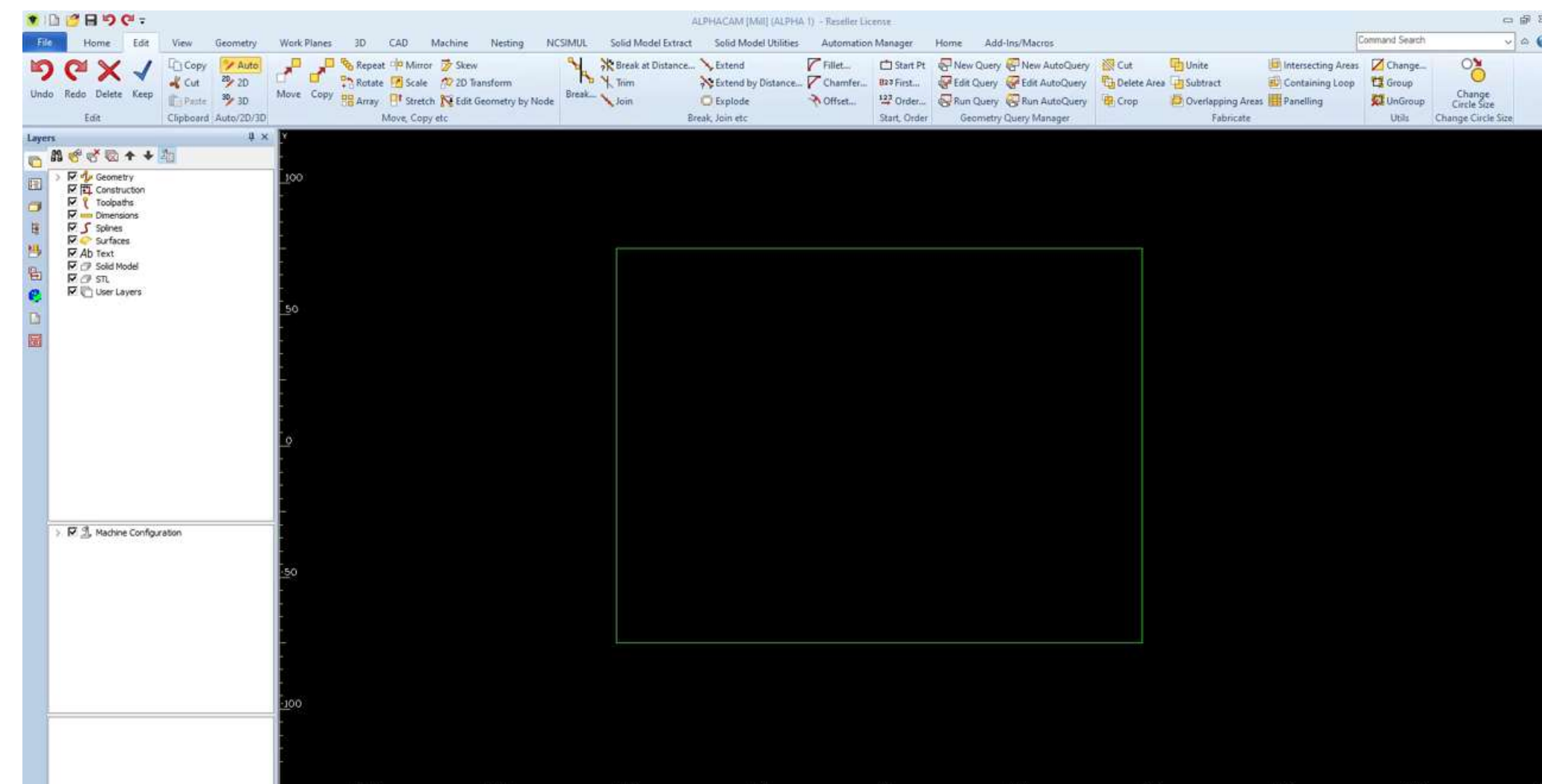
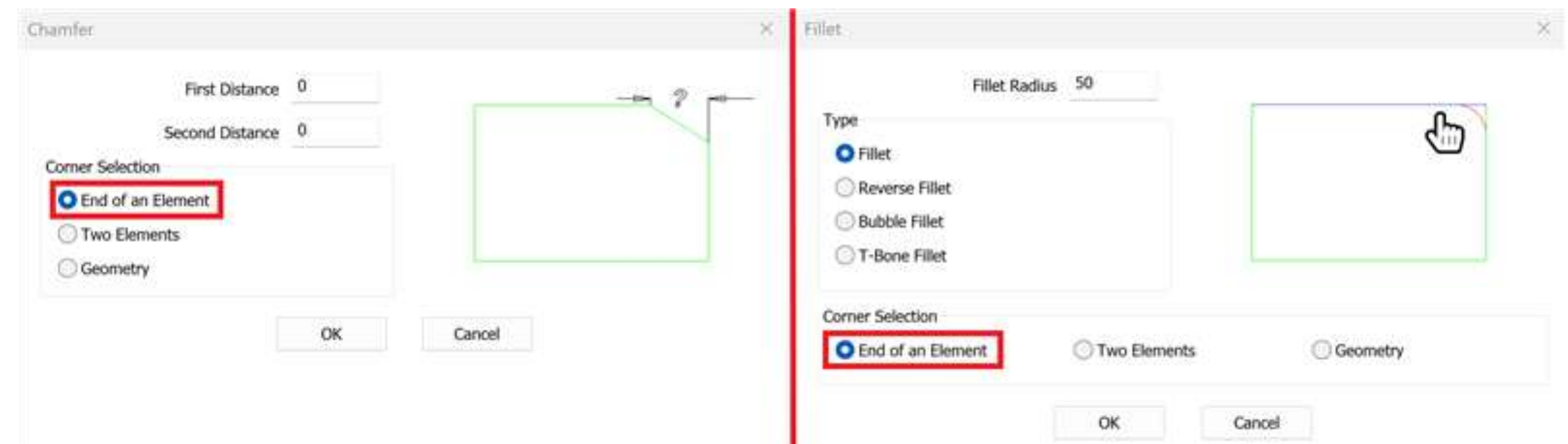
- Usa aristas de sólidos



# CAD

## Fillet e Chanfer

- Nova opção “End of an Element”
  - Irá ser aplicado no canto mais próximo do clique
- Alteração nos nomes
  - Melhor compreensão das opções que estão disponíveis para uso
- Pré-visualização
  - Permite agora ver no desenho como irá ficar o chanfre ou o fillet



# CAD

## Change Circle Size

- Mover para layer ativa

Change Circle Size
✕

**Which Circles**

All Selected Circles

All Circles of Given Diameter  
     Diameter to Match    10

All Circles within Diameter Range  
     Min                    20.25  
     Max                    20.5

All Circles on a Given User Layer  
     User Layer to Match    

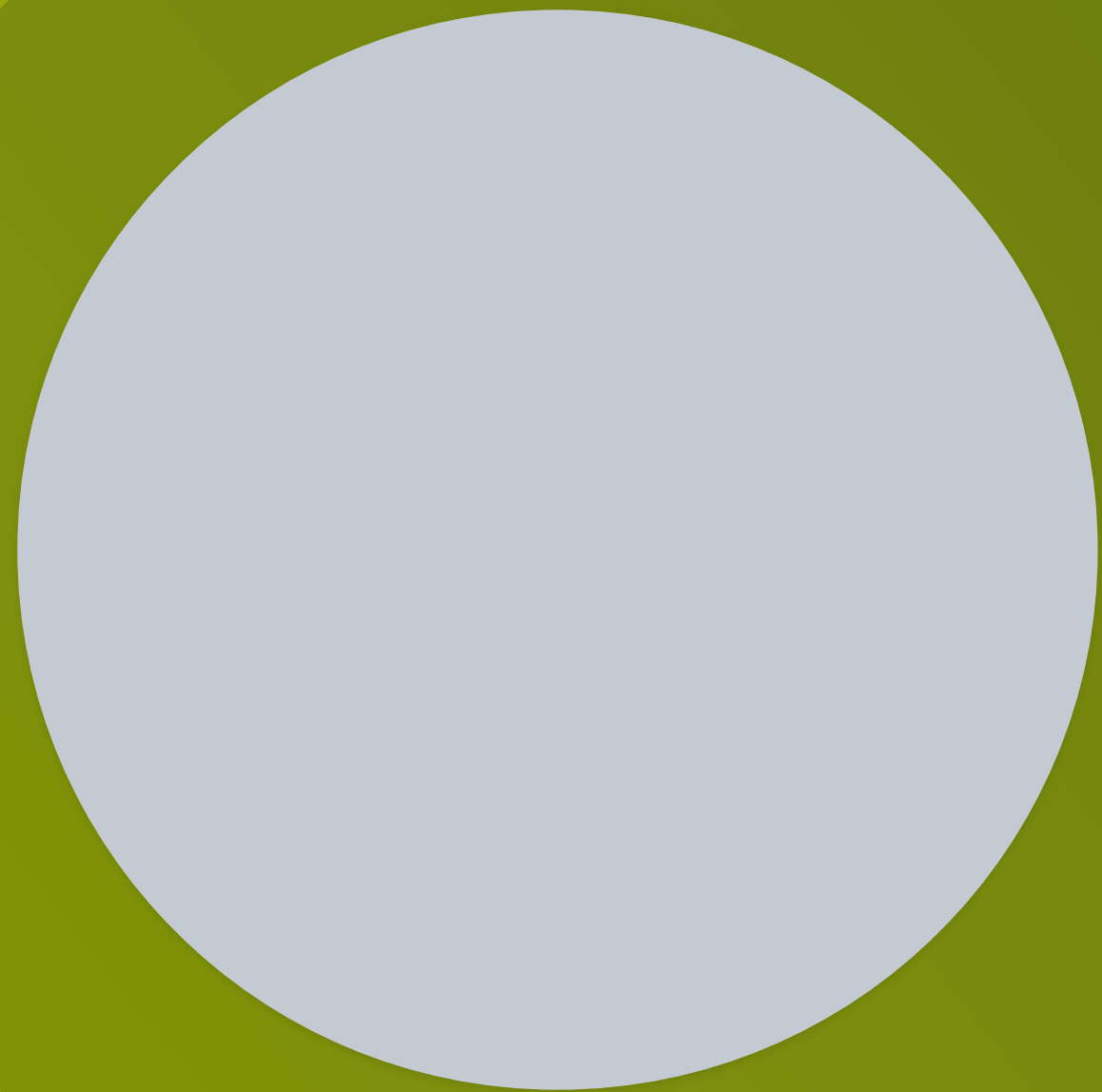
Allow selection

**Change Circles**

    New Diameter        5

Move To Active Layer

OK      Cancel



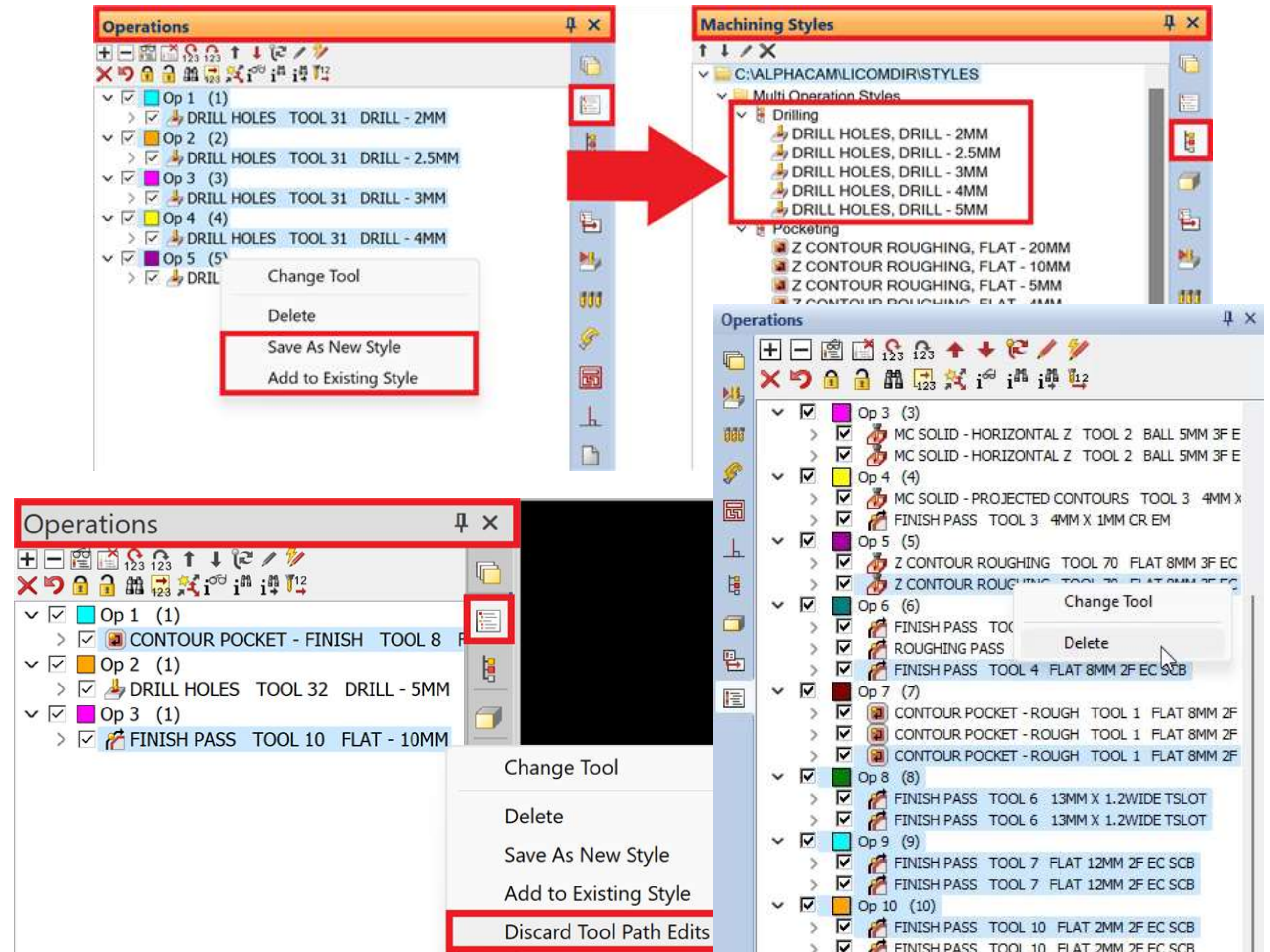
# Machining



# Machining

## Múltipla Seleção

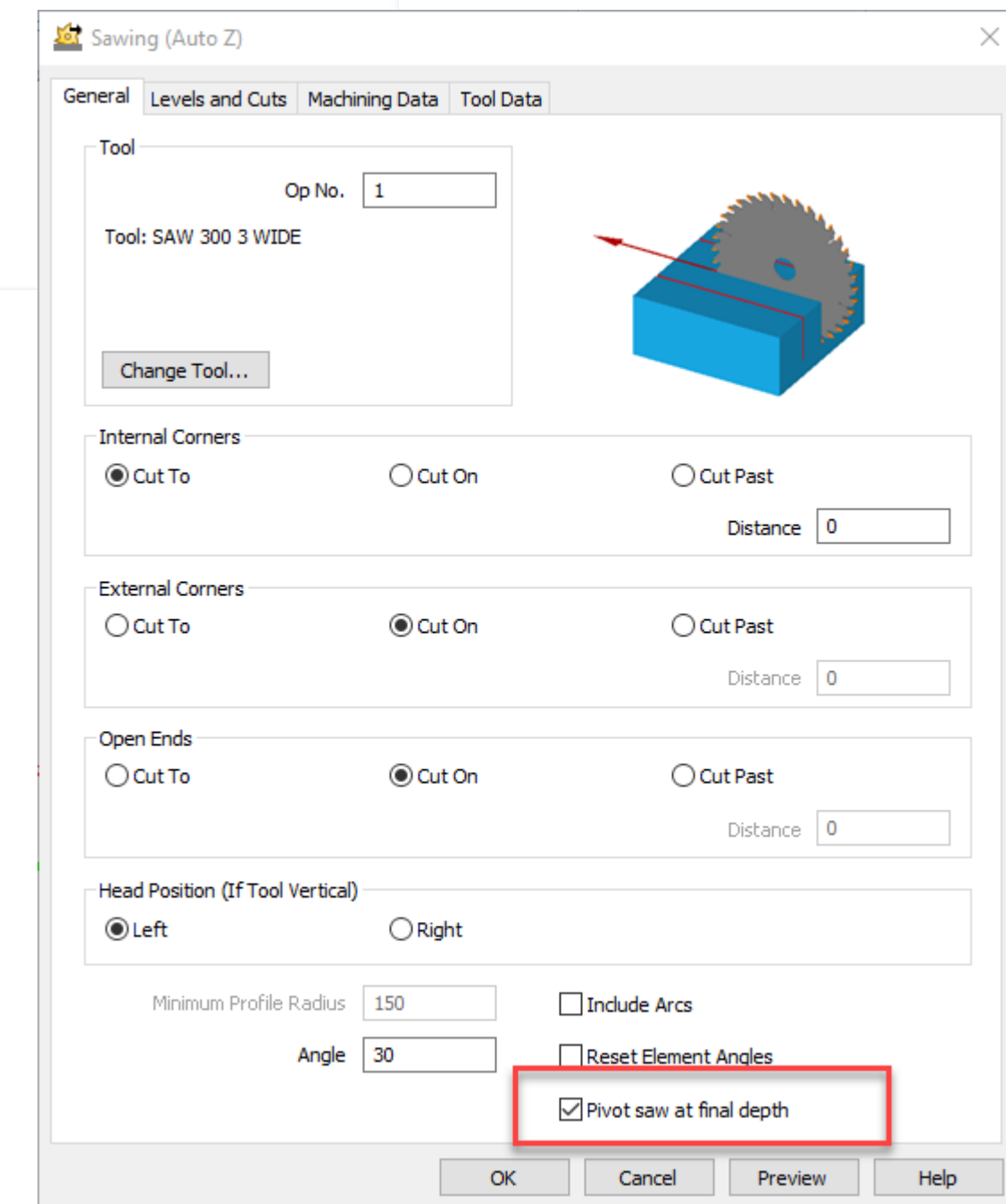
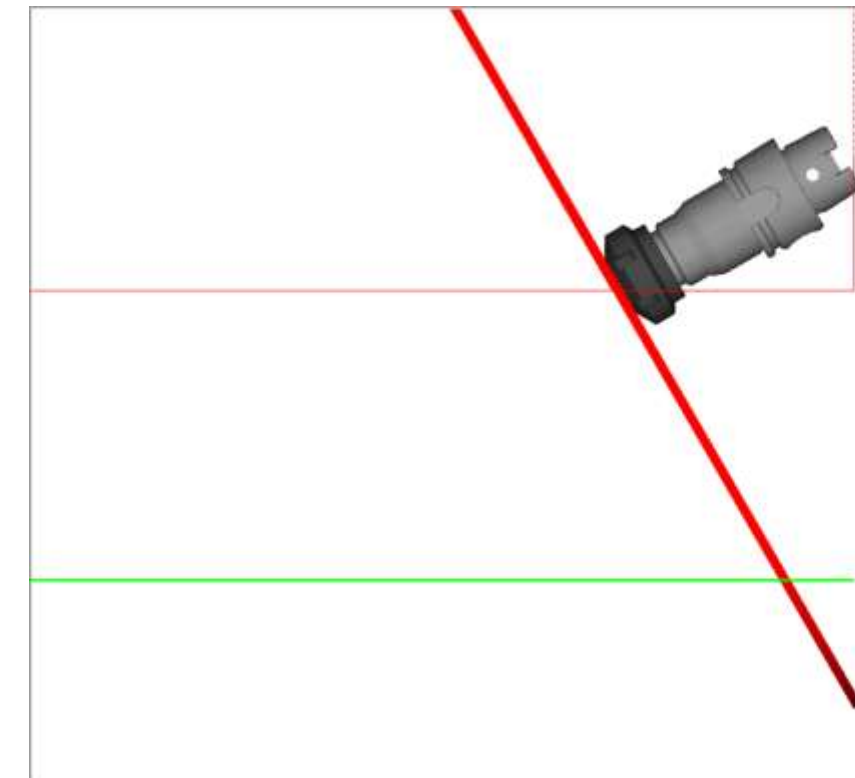
- Trocas de ferramenta
- Apagar operações
- Remover alterações aos toolpaths
- Adicionar/Criar estilos de maquinação



# Machining

## Sawing

- Opção para usar como referência o final da geometria
- Profundidade extra no final da geometria

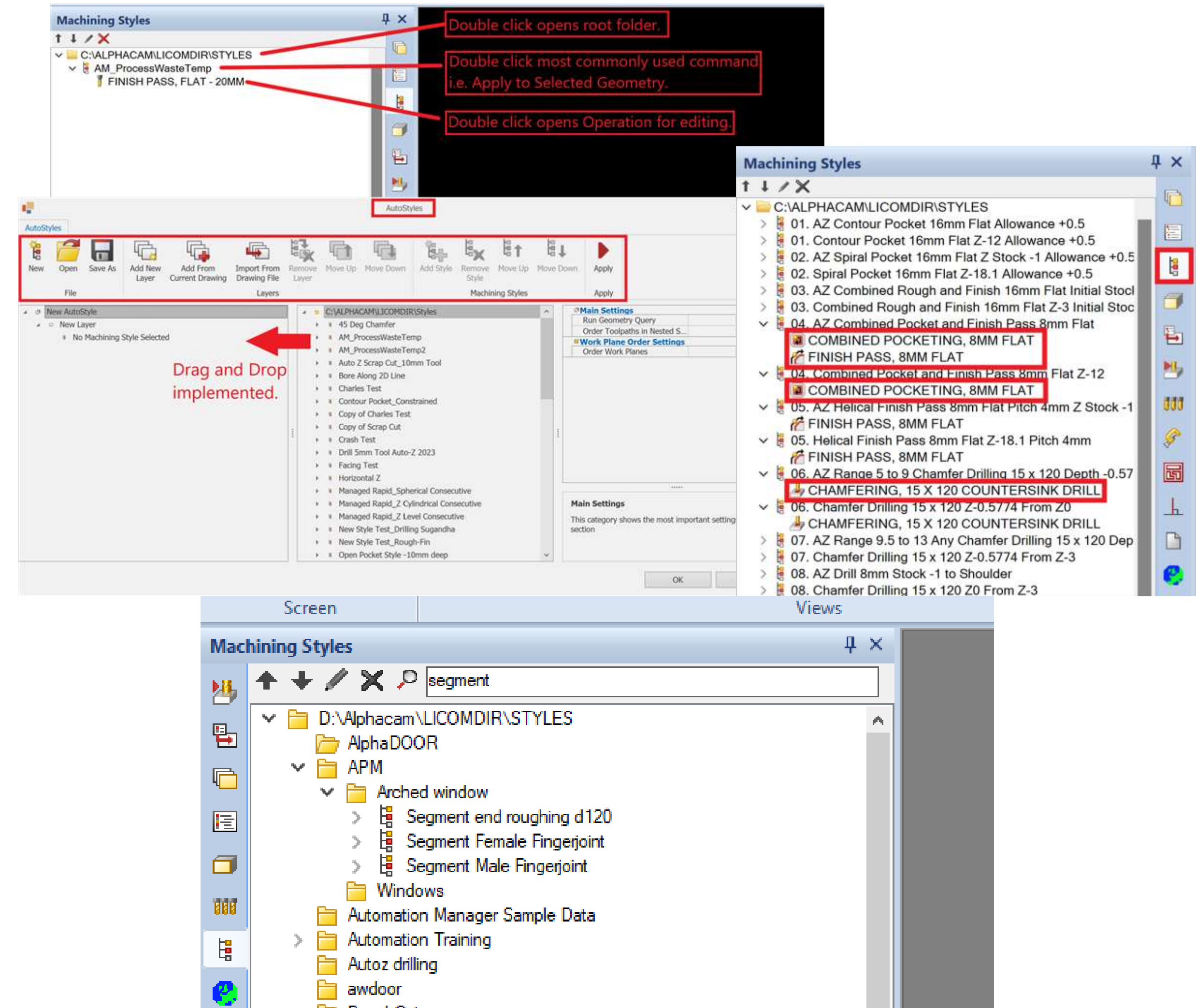




# Machining

## Estilos de Maquinação

- Duplo Clique
  - Abrir pastas
  - Aplicar estilos
  - Editar operações no estilo
- Usa os ícones das operações
- Ferramenta de pesquisa nos estilos
- Interface dos Auto-Estilos alterado
  - Permite fazer "drag and drop" dos estilos para layers

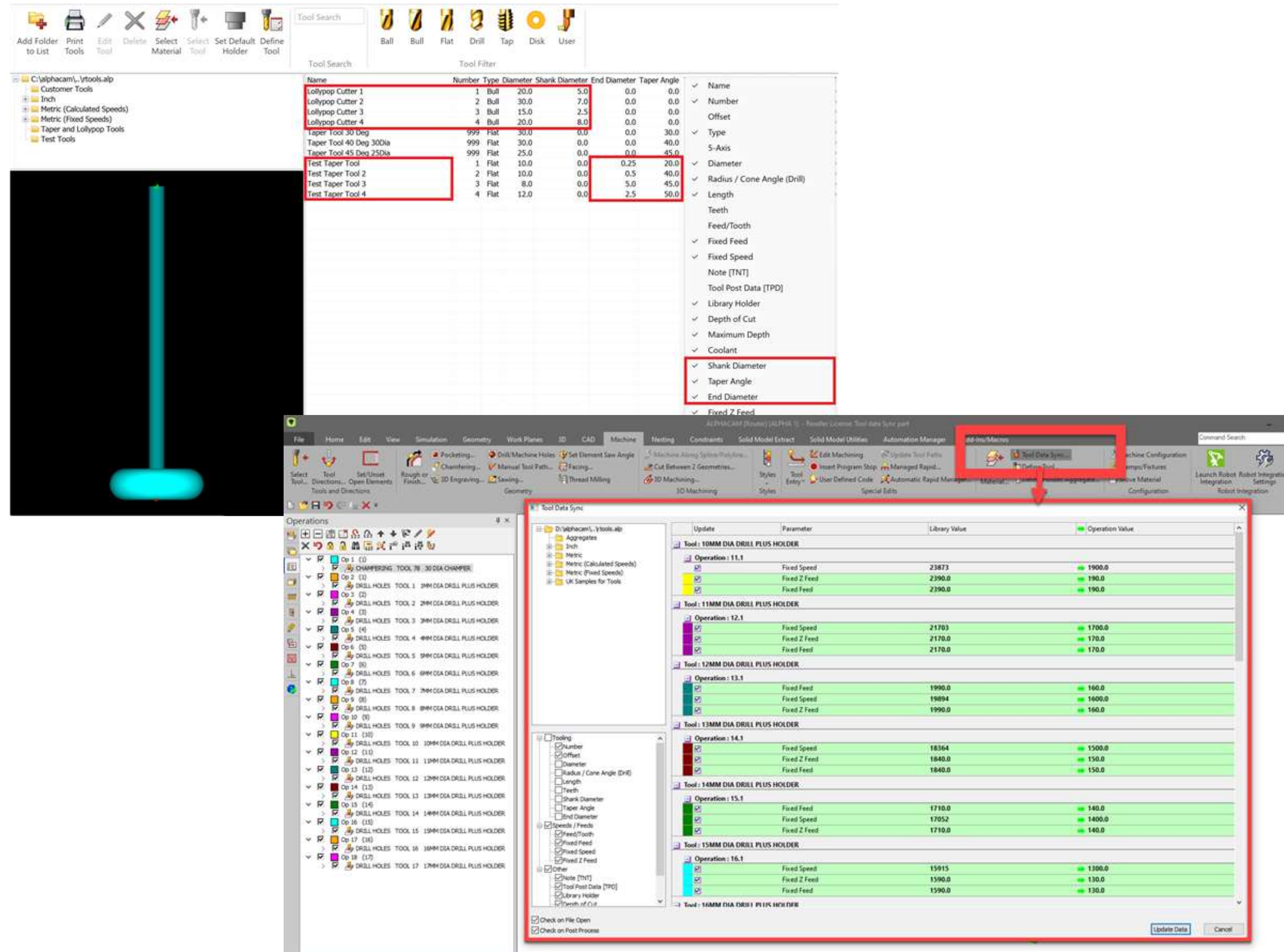




# Machining

## Biblioteca de ferramentas e Add-Ins

- Campos acrescentados na seleção de ferramentas
- Ângulo da ferramenta
- Diâmetro final
- Tool Data Sync
- Novo Add-In



The image displays a screenshot of a CAM software interface, likely Mastercam, showing a tool library and a 'Tool Data Sync' dialog box. A 3D model of a tool is shown on the left. The tool library table lists various tools with their parameters. The 'Tool Data Sync' dialog box shows a list of operations with their respective tool and parameter values.

Name	Number	Type	Diameter	Shank Diameter	End Diameter	Taper Angle
Lollipop Cutter 1	1	Bull	20.0	5.0	0.0	0.0
Lollipop Cutter 2	2	Bull	30.0	7.0	0.0	0.0
Lollipop Cutter 3	3	Bull	15.0	2.5	0.0	0.0
Lollipop Cutter 4	4	Bull	20.0	8.0	0.0	0.0
Taper Tool 30 Deg	999	Flat	30.0	0.0	0.0	30.0
Taper Tool 40 Deg 30Dia	999	Flat	30.0	0.0	0.0	40.0
Taper Tool 45 Deg 25Dia	999	Flat	25.0	0.0	0.0	45.0
Test Taper Tool	1	Flat	10.0	0.0	0.25	20.0
Test Taper Tool 2	2	Flat	10.0	0.0	0.5	40.0
Test Taper Tool 3	3	Flat	8.0	0.0	5.0	45.0
Test Taper Tool 4	4	Flat	12.0	0.0	2.5	50.0

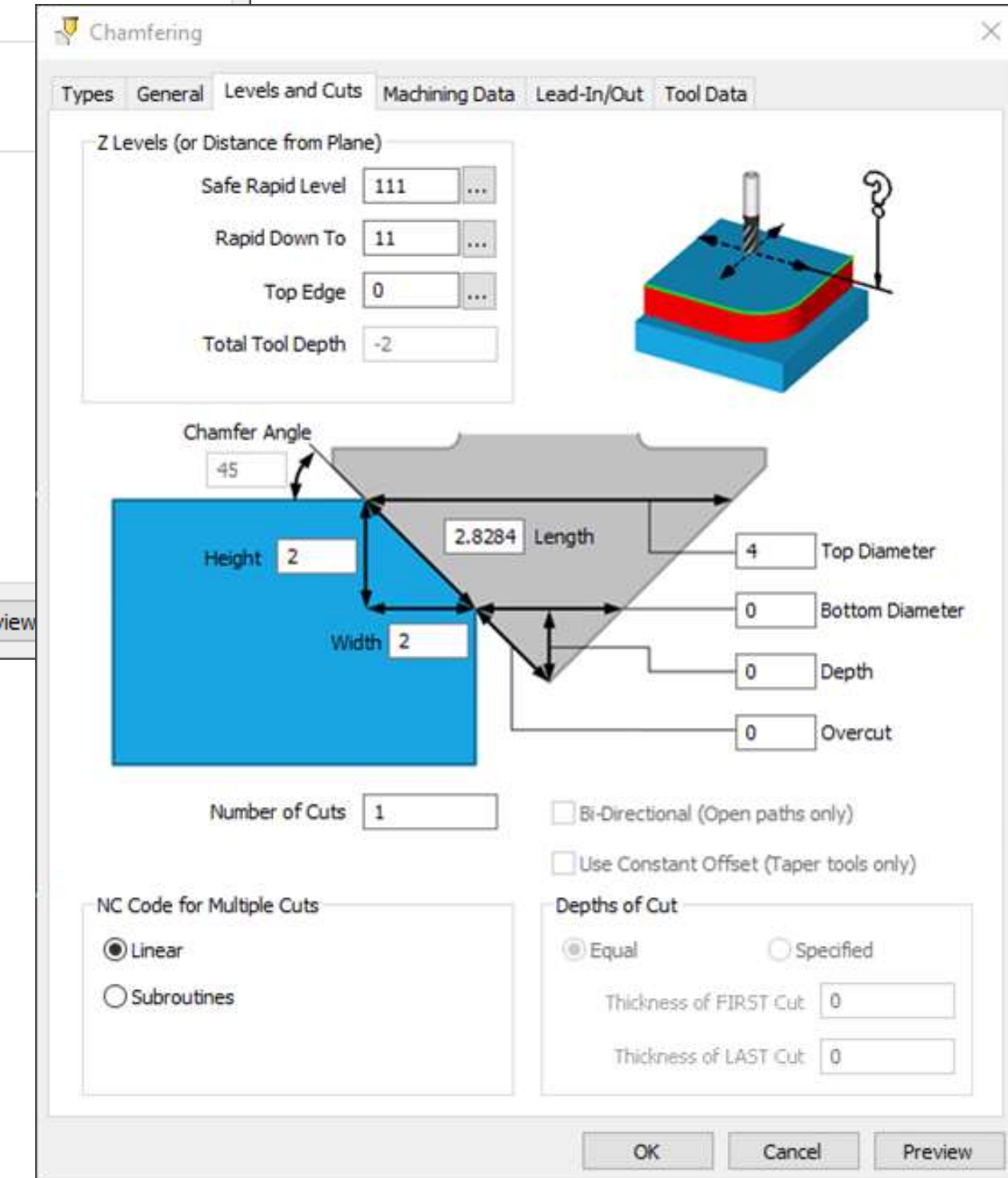
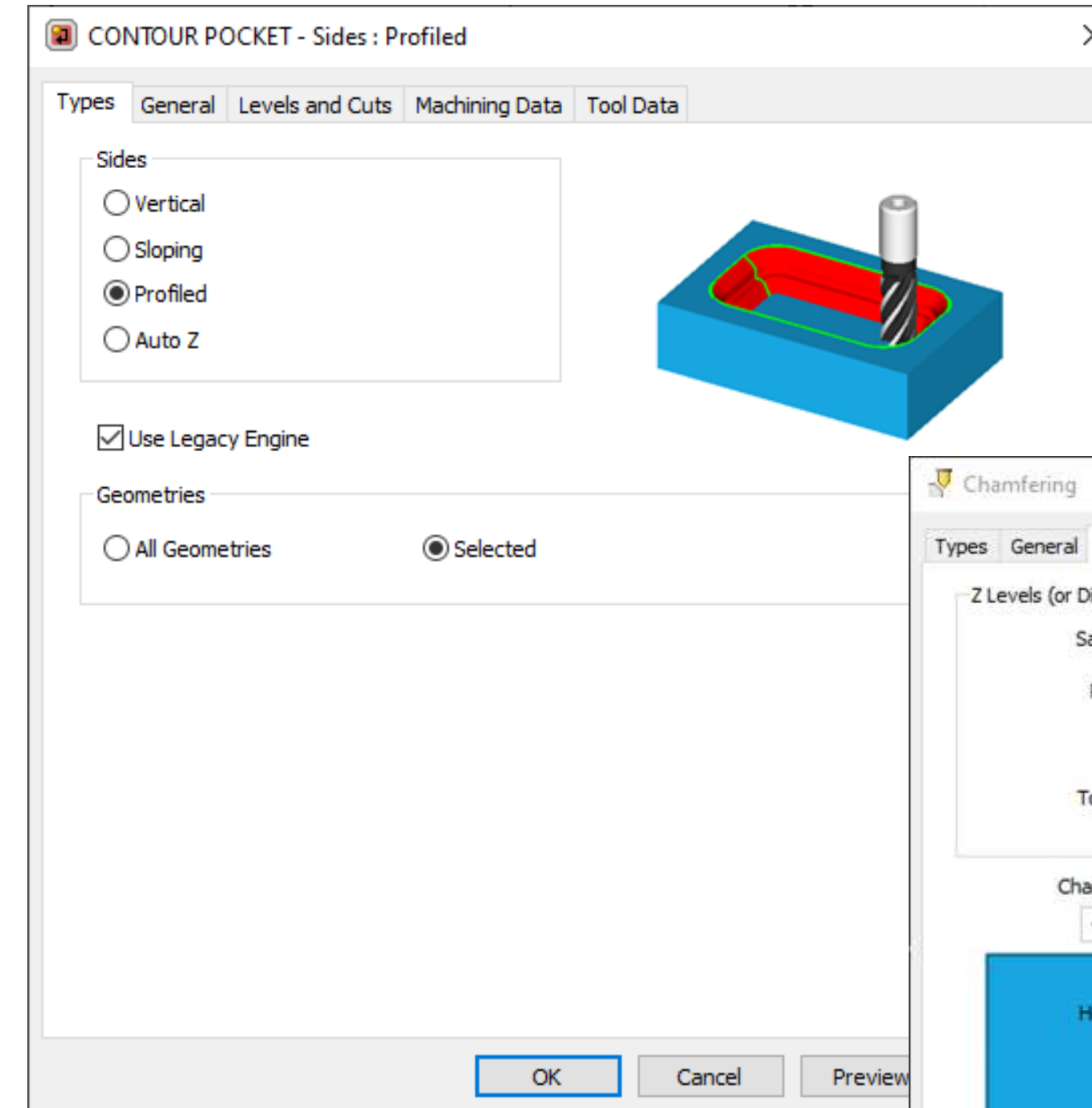
Tool	Operation	Parameter	Library Value	Operation Value
Tool: 10MM DIA DRILL PLUS HOLDER	Operation: 11.1	Fixed Speed	23873	1900.0
		Fixed Z Feed	2390.0	190.0
		Fixed Feed	2390.0	190.0
Tool: 11MM DIA DRILL PLUS HOLDER	Operation: 12.1	Fixed Speed	21703	1700.0
		Fixed Z Feed	2170.0	170.0
		Fixed Feed	2170.0	170.0
Tool: 12MM DIA DRILL PLUS HOLDER	Operation: 13.1	Fixed Feed	1990.0	160.0
		Fixed Speed	19894	1400.0
		Fixed Z Feed	1990.0	160.0
Tool: 13MM DIA DRILL PLUS HOLDER	Operation: 14.1	Fixed Speed	18364	1500.0
		Fixed Z Feed	1840.0	150.0
		Fixed Feed	1840.0	150.0
Tool: 14MM DIA DRILL PLUS HOLDER	Operation: 15.1	Fixed Feed	1710.0	140.0
		Fixed Speed	17052	1400.0
		Fixed Z Feed	1710.0	140.0
Tool: 15MM DIA DRILL PLUS HOLDER	Operation: 16.1	Fixed Speed	15915	1300.0
		Fixed Z Feed	1590.0	130.0
		Fixed Feed	1590.0	130.0



# Machining

## Operações

- Novas operações
- Chanfering
- Alterações no Pocketing

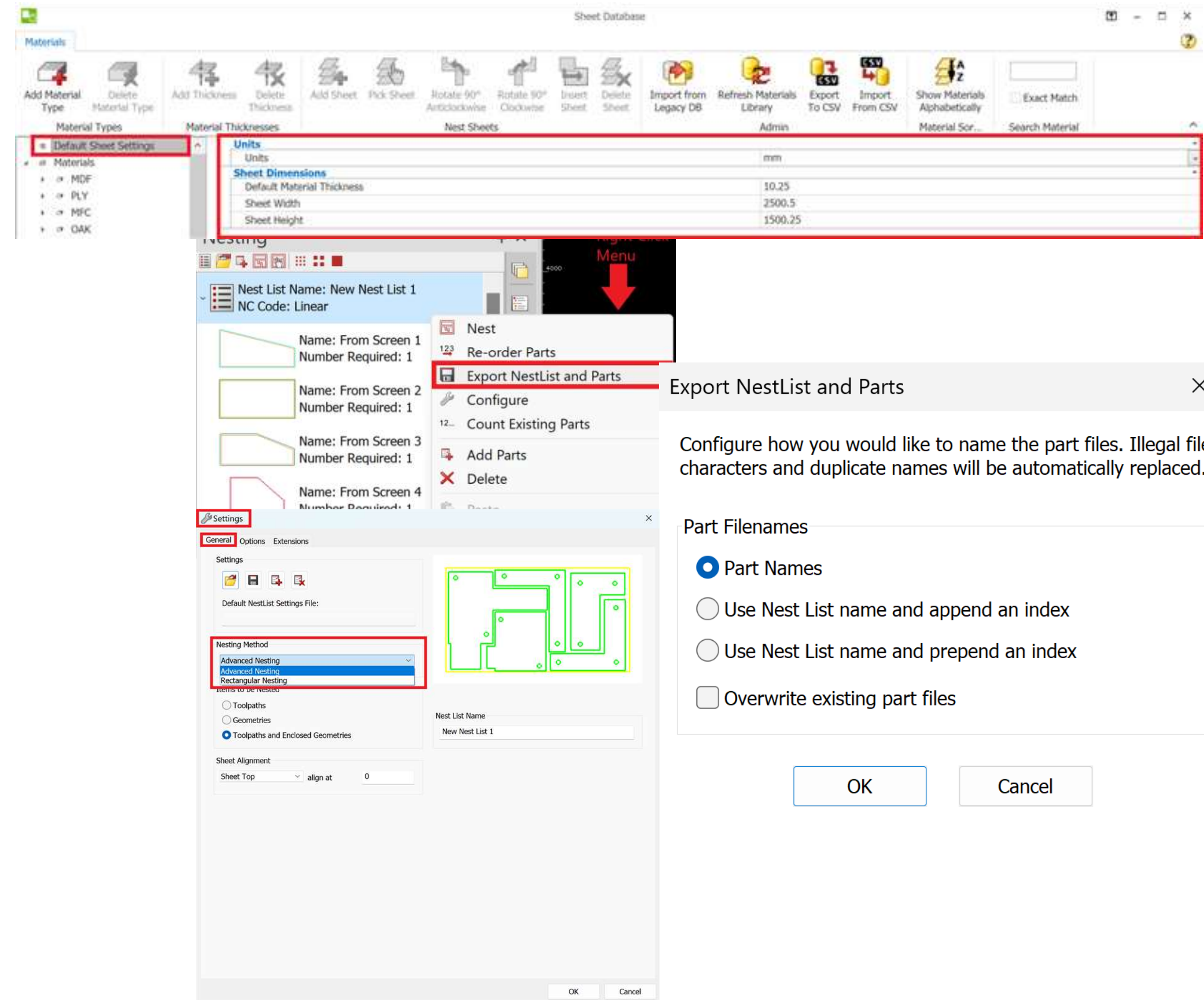




# Nesting

# Nesting

- Removido os motores de Nesting
- Export de peças junto com as Nest Lists
- Base de dados
  - Dimensões preferenciais para as chapas



The screenshot displays the 'Sheet Database' application interface. At the top, a toolbar contains various icons for material management and nesting. Below the toolbar, a table lists 'Default Sheet Settings' with the following values:

Units	mm
Sheet Dimensions	
Default Material Thickness	10.25
Sheet Width	2500.5
Sheet Height	1500.25

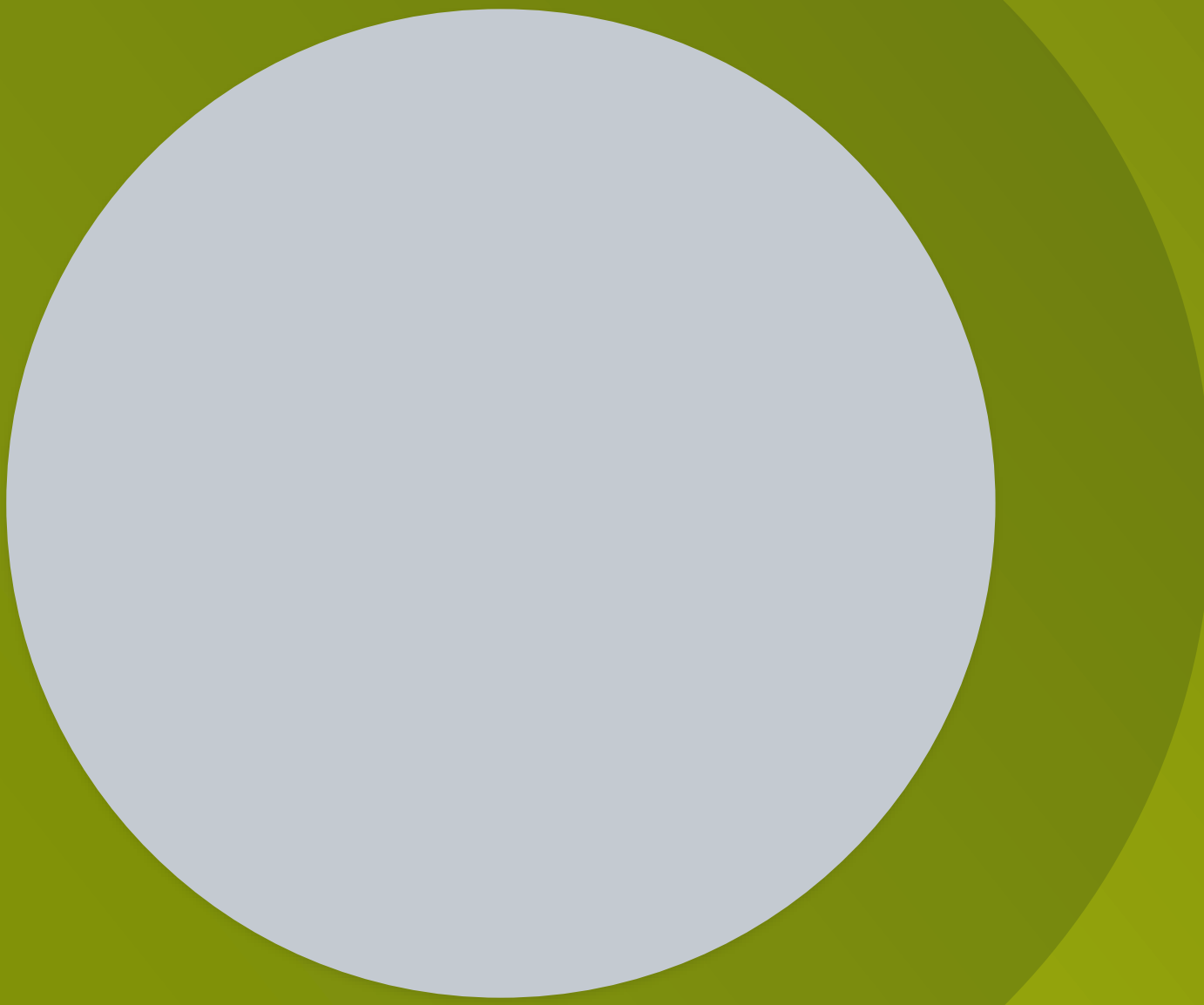
In the center, a 'Nesting' window shows a list of parts with their names and required quantities. A context menu is open over this list, with 'Export NestList and Parts' highlighted. To the right, an 'Export NestList and Parts' dialog box is shown, containing the following text: 'Configure how you would like to name the part files. Illegal file characters and duplicate names will be automatically replaced.'

The dialog box includes a 'Part Filenames' section with the following options:

- Part Names
- Use Nest List name and append an index
- Use Nest List name and prepend an index
- Overwrite existing part files

At the bottom of the dialog are 'OK' and 'Cancel' buttons. In the background, a 'Settings' window is visible, with the 'Nesting Method' dropdown menu set to 'Advanced Nesting'.



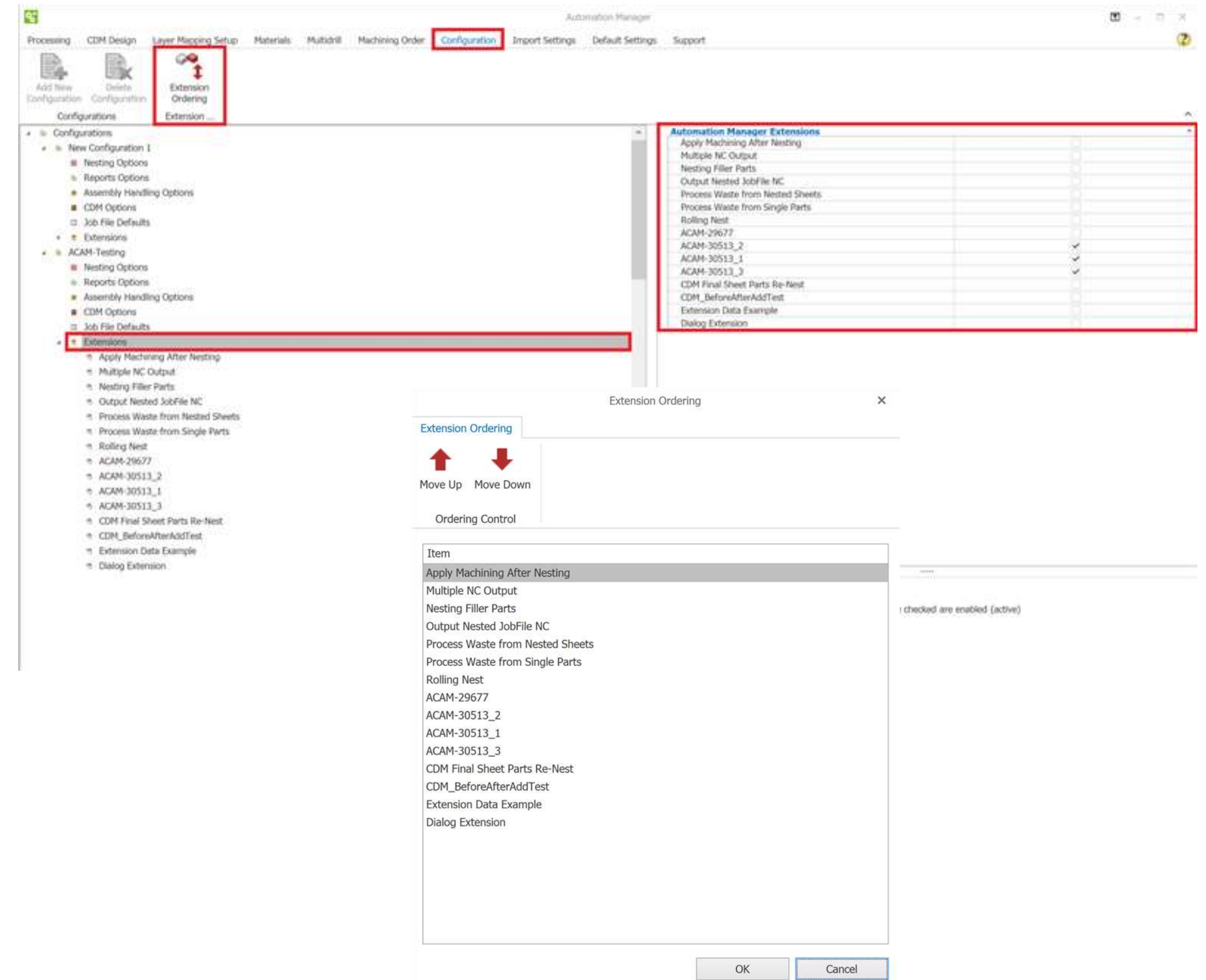


# Automation Manager

# Automation Manager

## Extensões

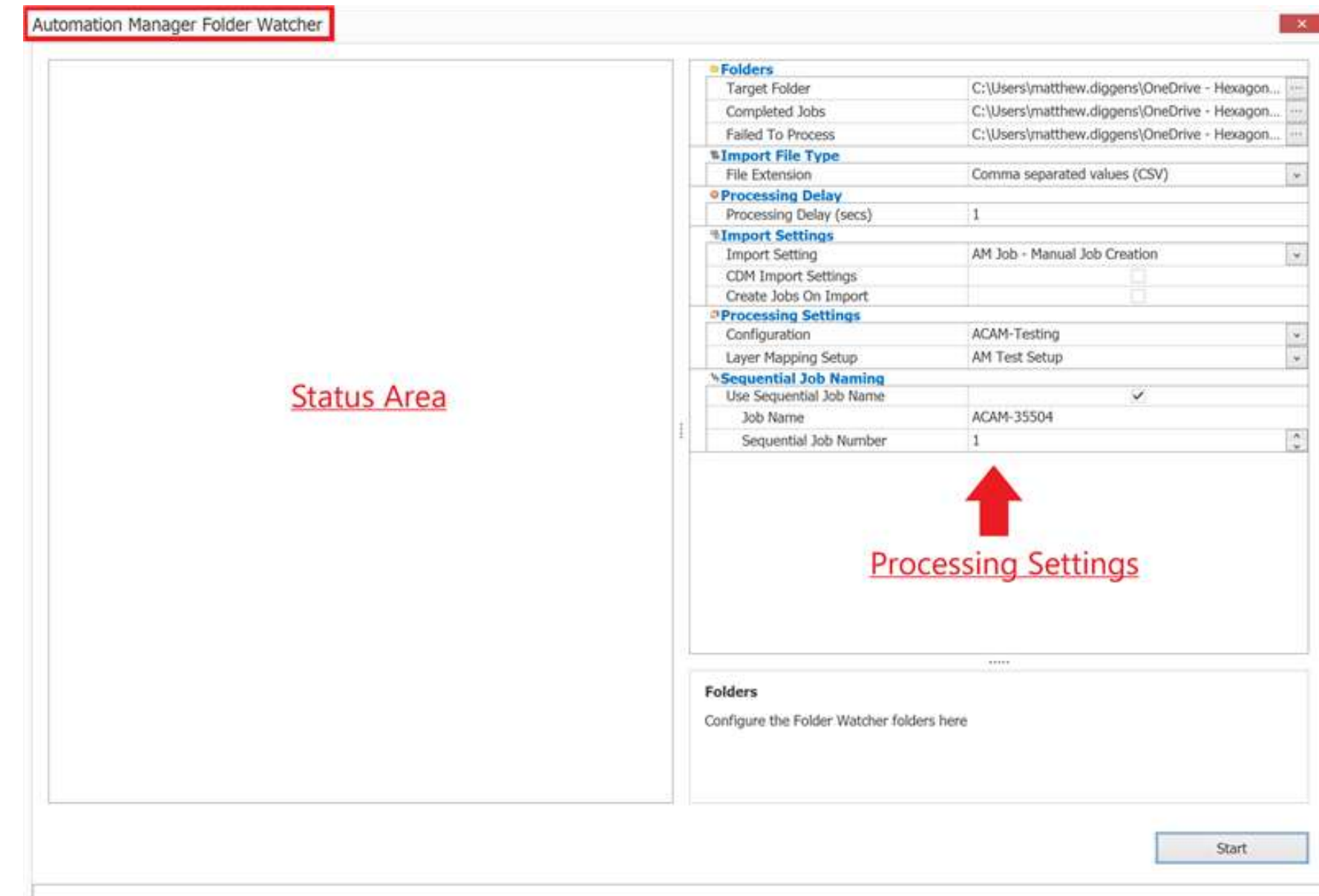
- Nova vista das extensões
- Ordenação de extensões



# Automation Manager

## Folder Watcher

- Interface melhorado

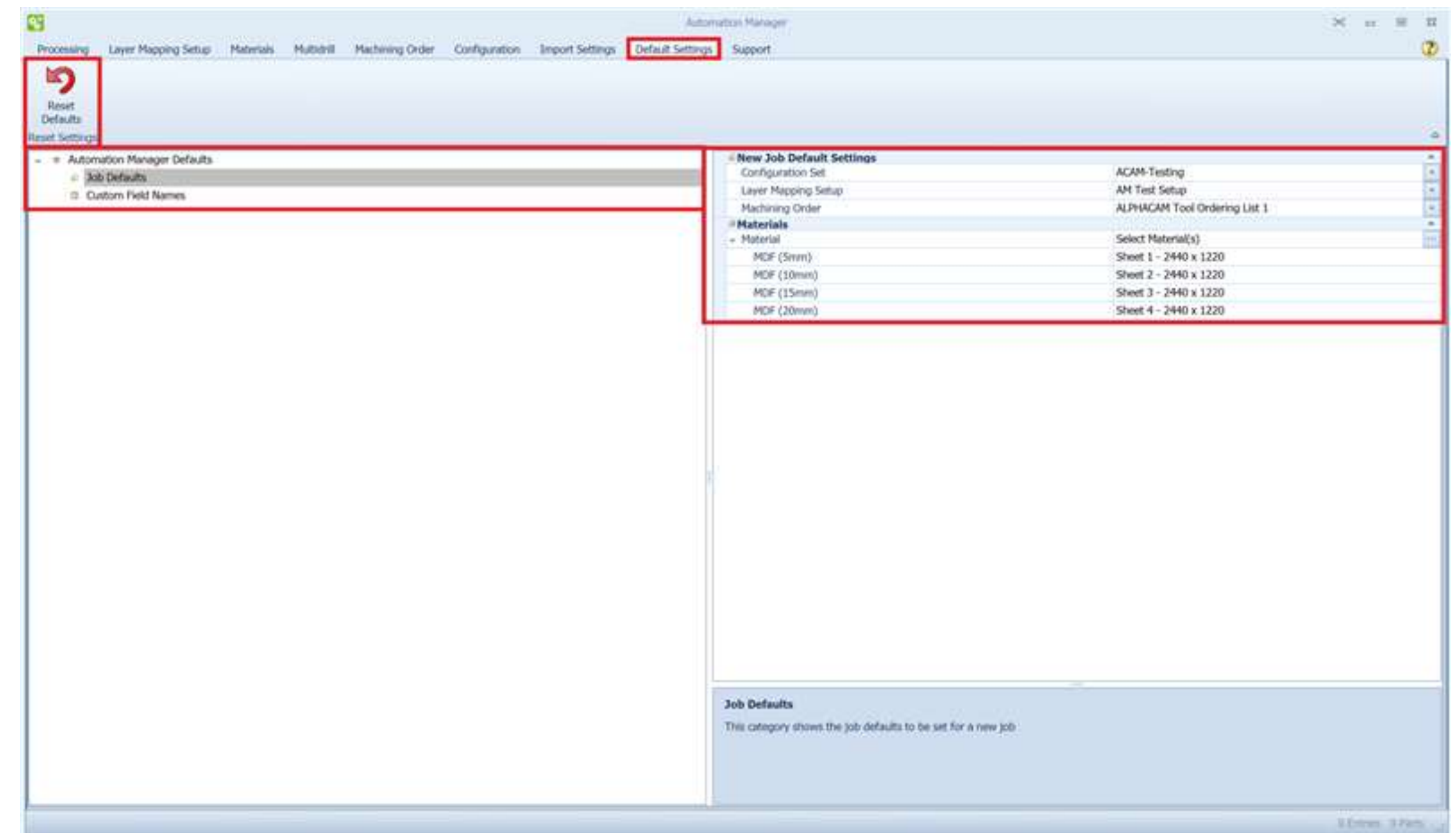




# Automation Manager

## Job defaults

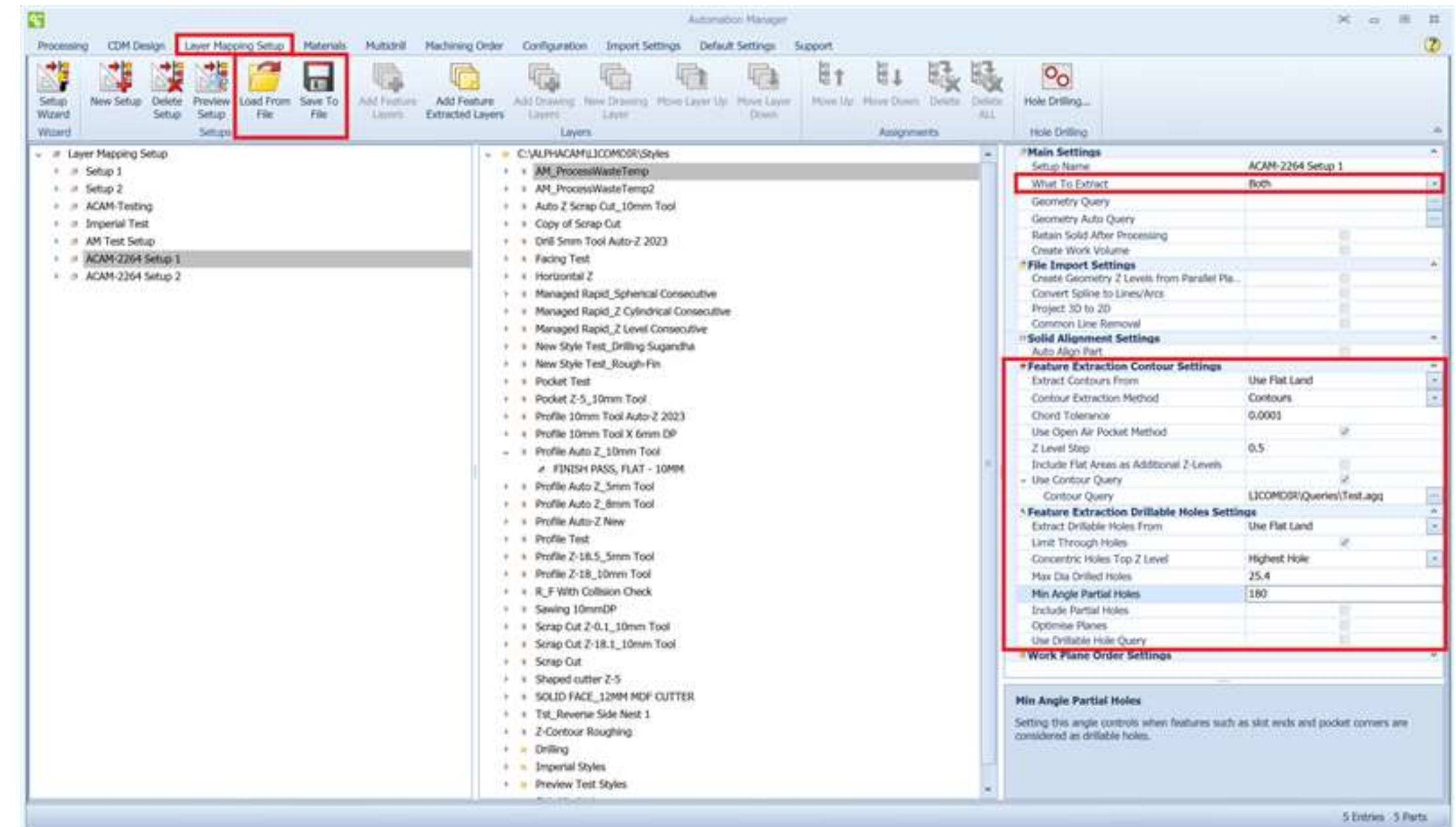
- Configurações por defeito na criação de um novo Job
- Nomes nos Custom Fields



# Automation Manager

## Extração de geometrias

- Alteração na configuração dos Layers Mappings
- Guardar/Carregar ficheiros de extração automática



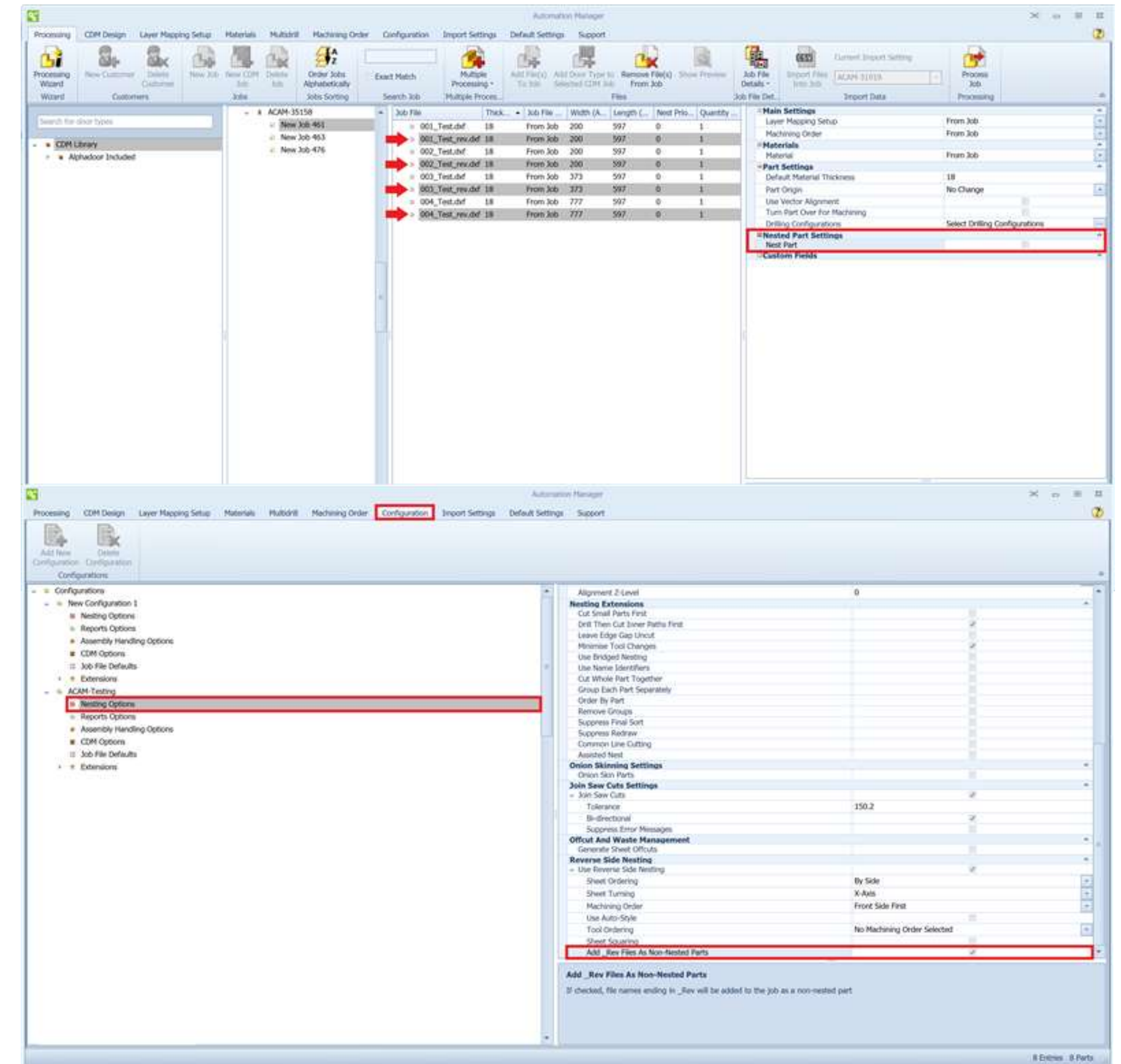
# Automation Manager

## Nesting

- Removido os motores de Nesting
- Reverse Side Nesting
  - Ficheiros \_Rev

## Drag and Drop

- CSV's
- Nest Lists
- Sólidos
- Ficheiros ALPHACAM





# OBRIGADO

Use o seu telemóvel para ler o QRCode e responder ao questionário.

