

2024 BIT
EVENT 

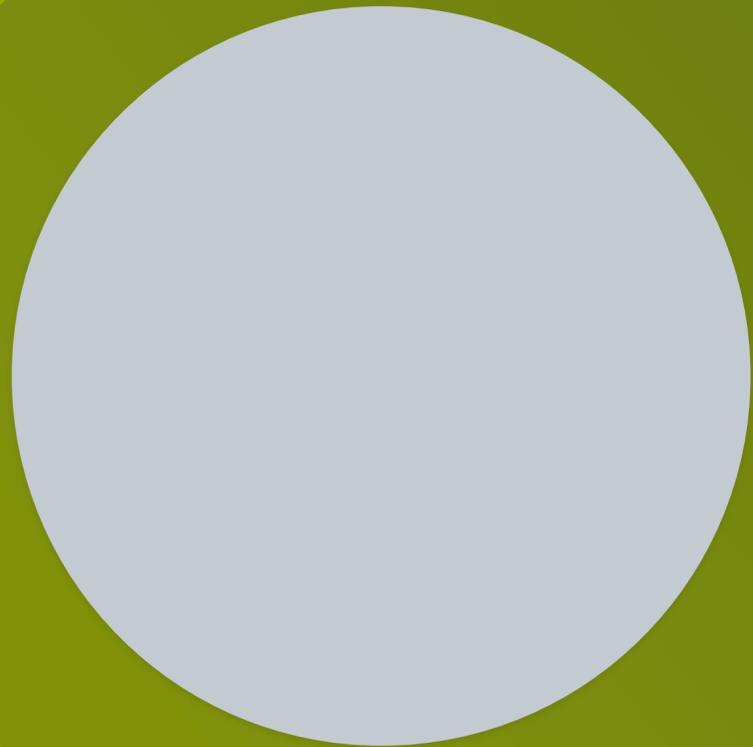
O QUE HÁ DE NOVO - AC

Nelson Almeida
Pedro Sousa

O que há de novo no ALPHACAM

VERSÃO 2024.1

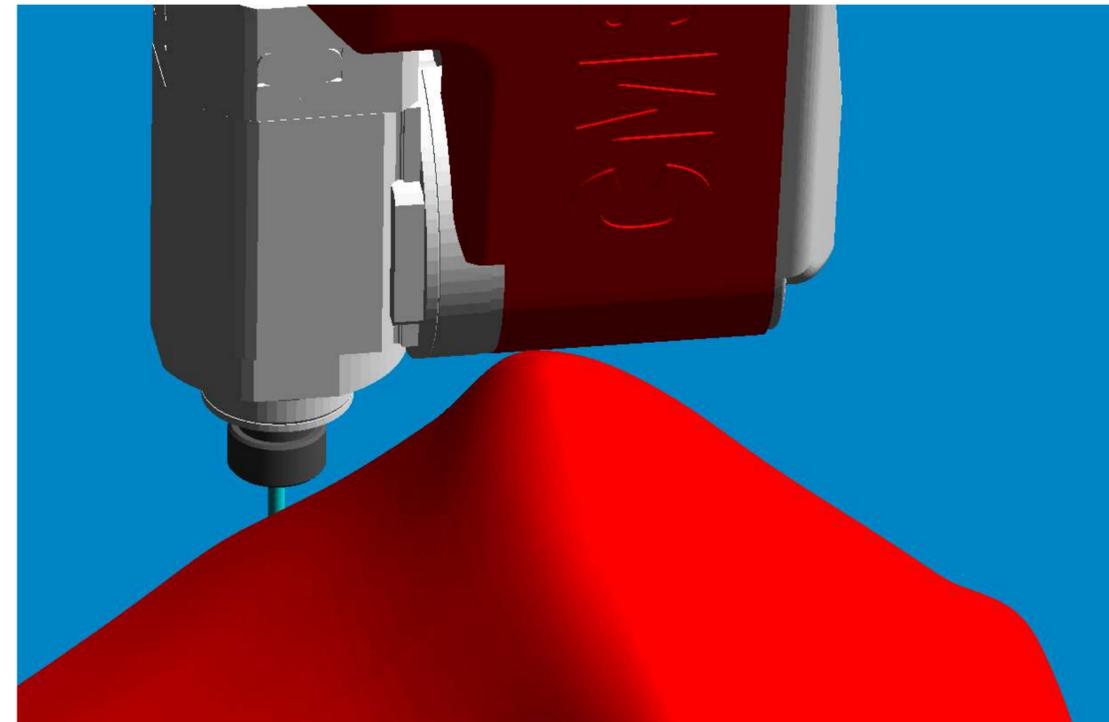
- ✓ SIMULAÇÃO
- ✓ GERAL
- ✓ CAD
- ✓ MAQUINAÇÃO
- ✓ AUTOMATION MANAGER
- ✓ NESTING



Simulação

Simulação

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

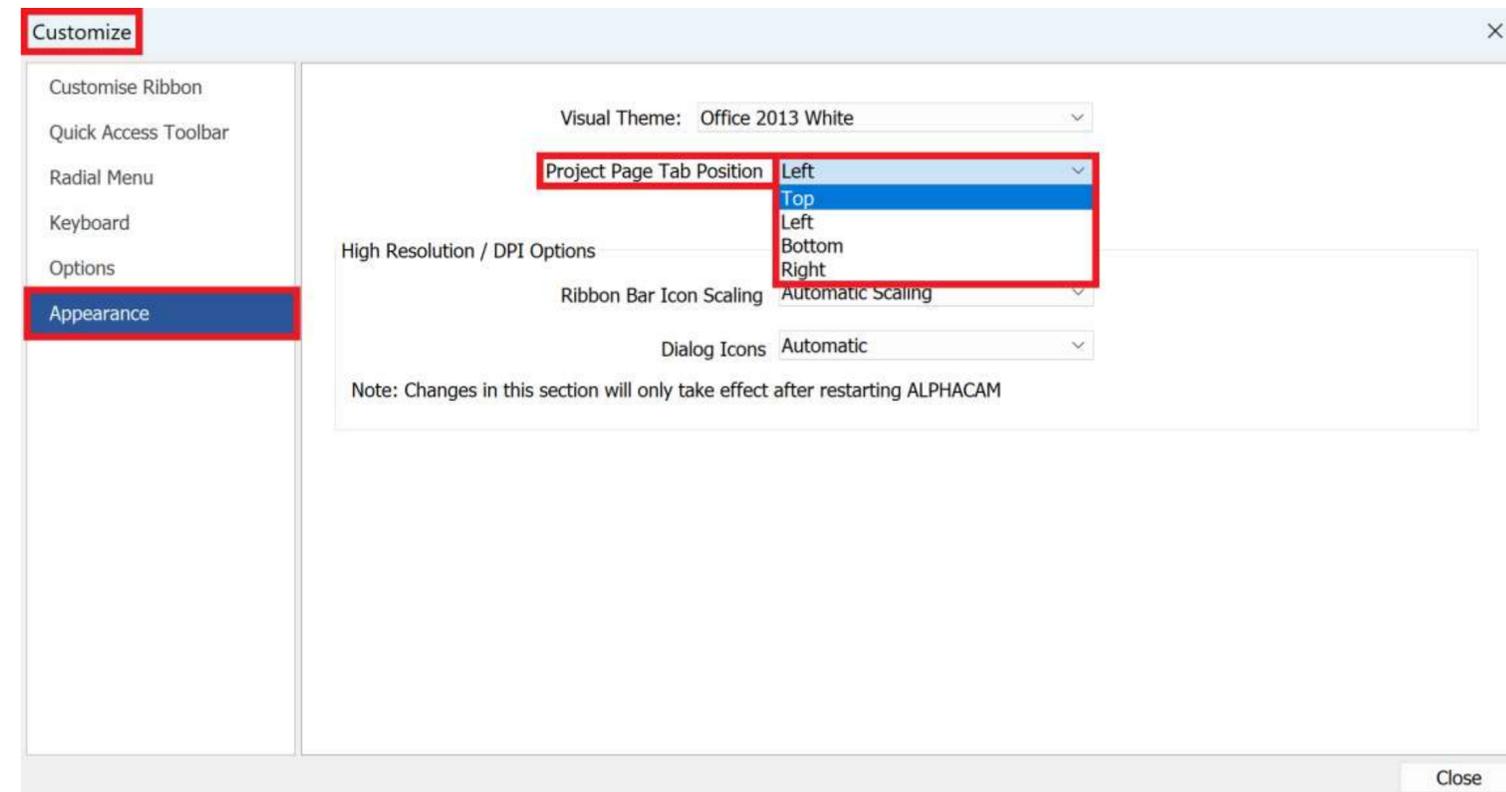


Opções Gerais

Opções Gerais

Project Pages

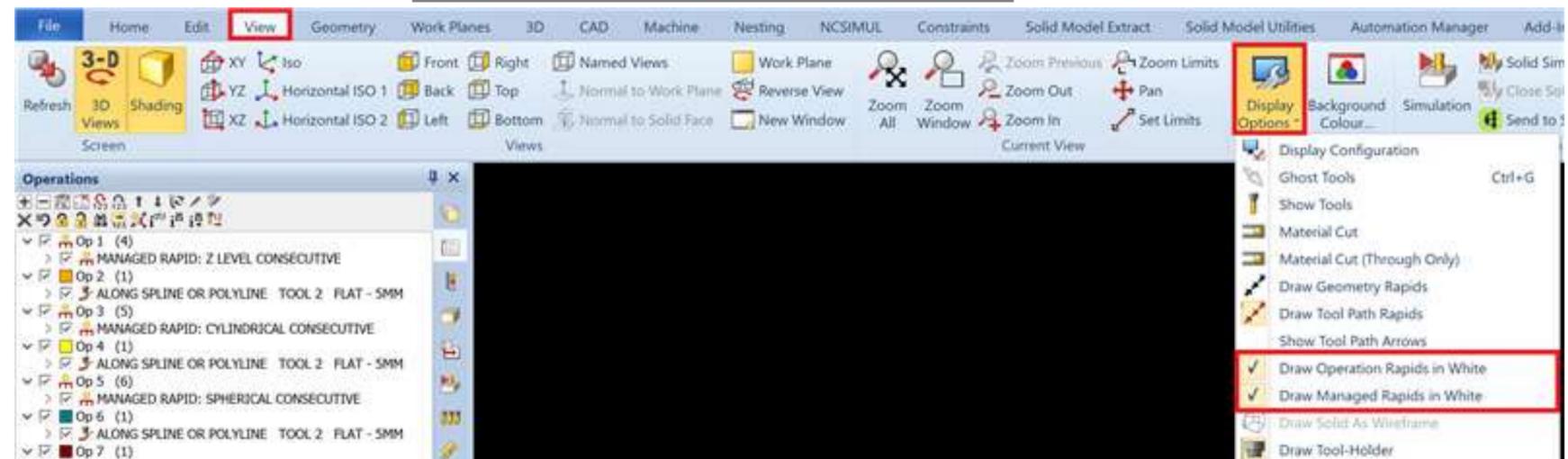
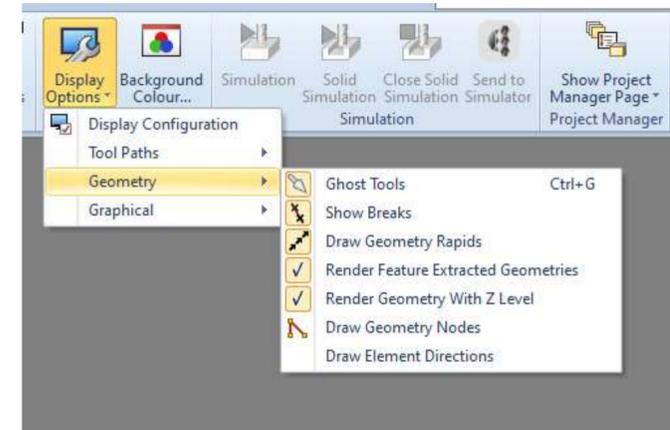
- Interface Gráfica do ALPHACAM
 - Permite agora escolher entre 4 posições para colocar as abas



Opções Gerais

Display Options

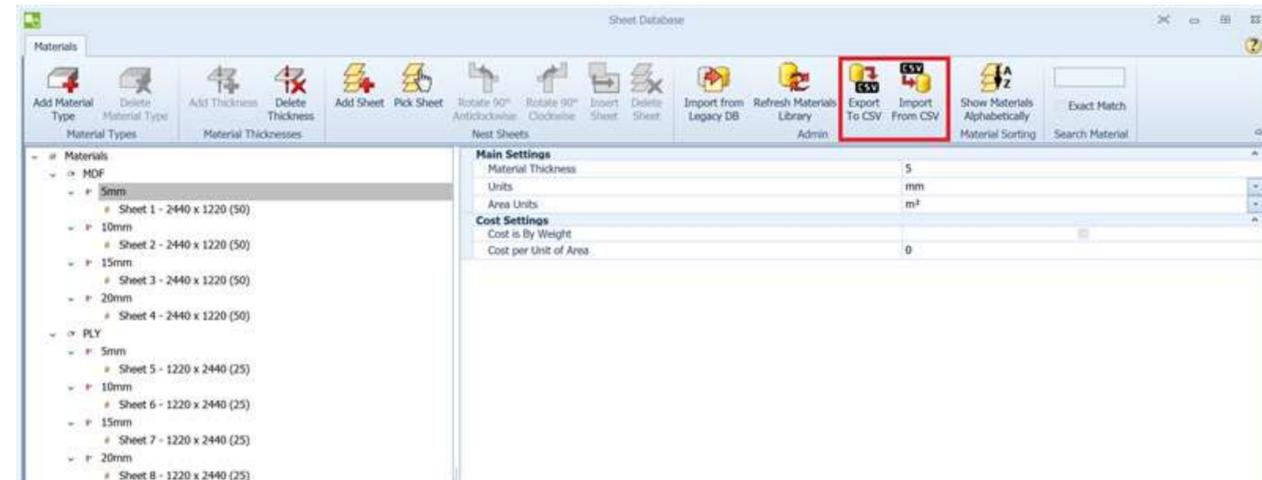
- Menu Reorganizado
- Gestor de Rápidos
 - Permite diferenciar rápidos geridos pelo Rapid Manager
- Mostrar Geometrias Abertas
 - Coloca as geometrias abertas em outra cor para se diferenciar melhor



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



Sheet Database Import From File

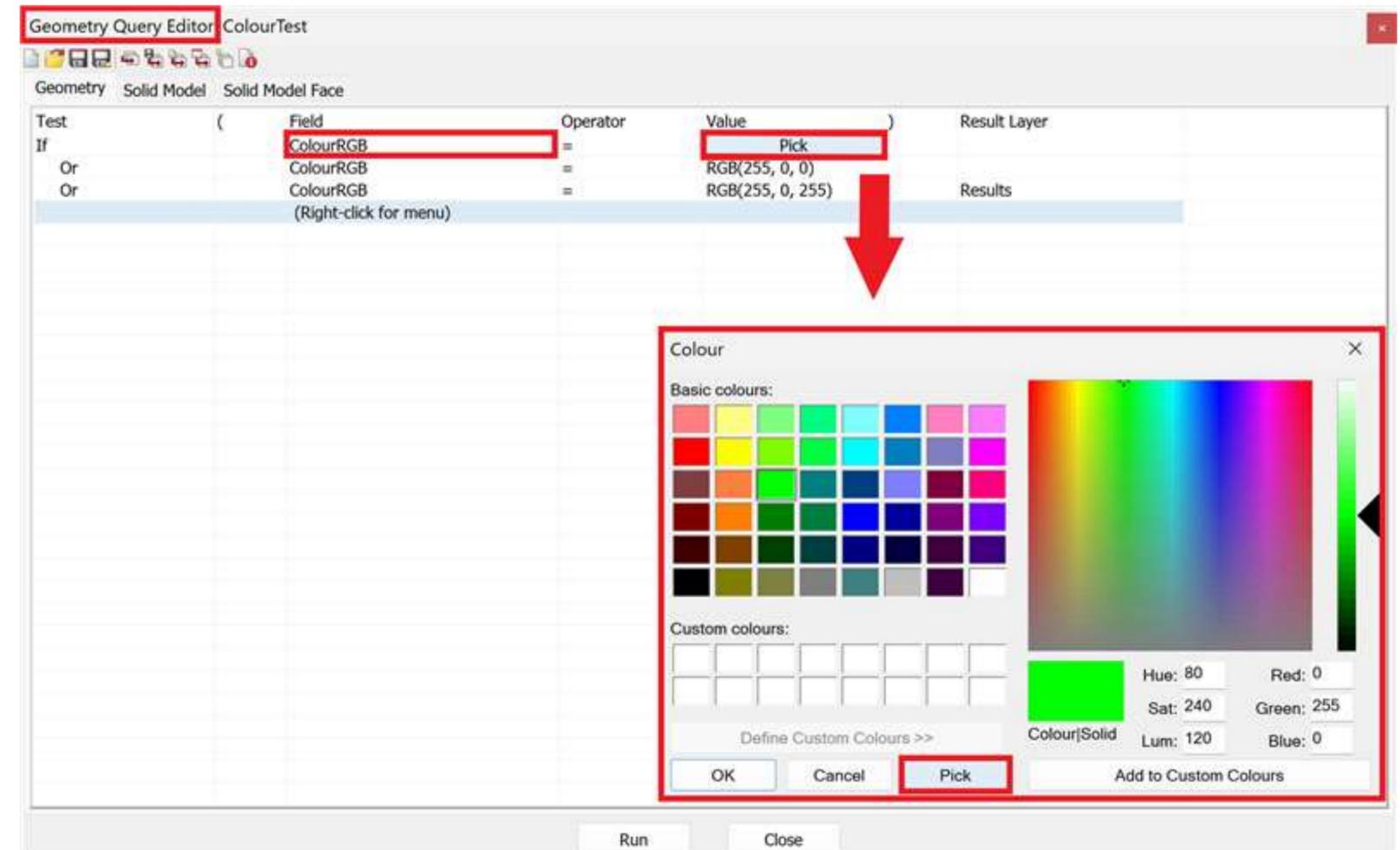
SheetID	Changed Item	Current Value	New Value
1	Edit	100	50
2	Edit	100	50
4	Edit	100	75
35	Edit	100	75
9	Edit	2440	1220
9	Edit	1220	2440
9	Edit	Material	
10	Edit	2440	1220
10	Edit	1220	2440
10	Edit	Material	
16	Edit	2440	1220
16	Edit	Metal	
17	Edit	Metal	
20	Edit	Stone Test	
21	Edit	Stone Test	

OK Cancel

Opções Gerais

Queries

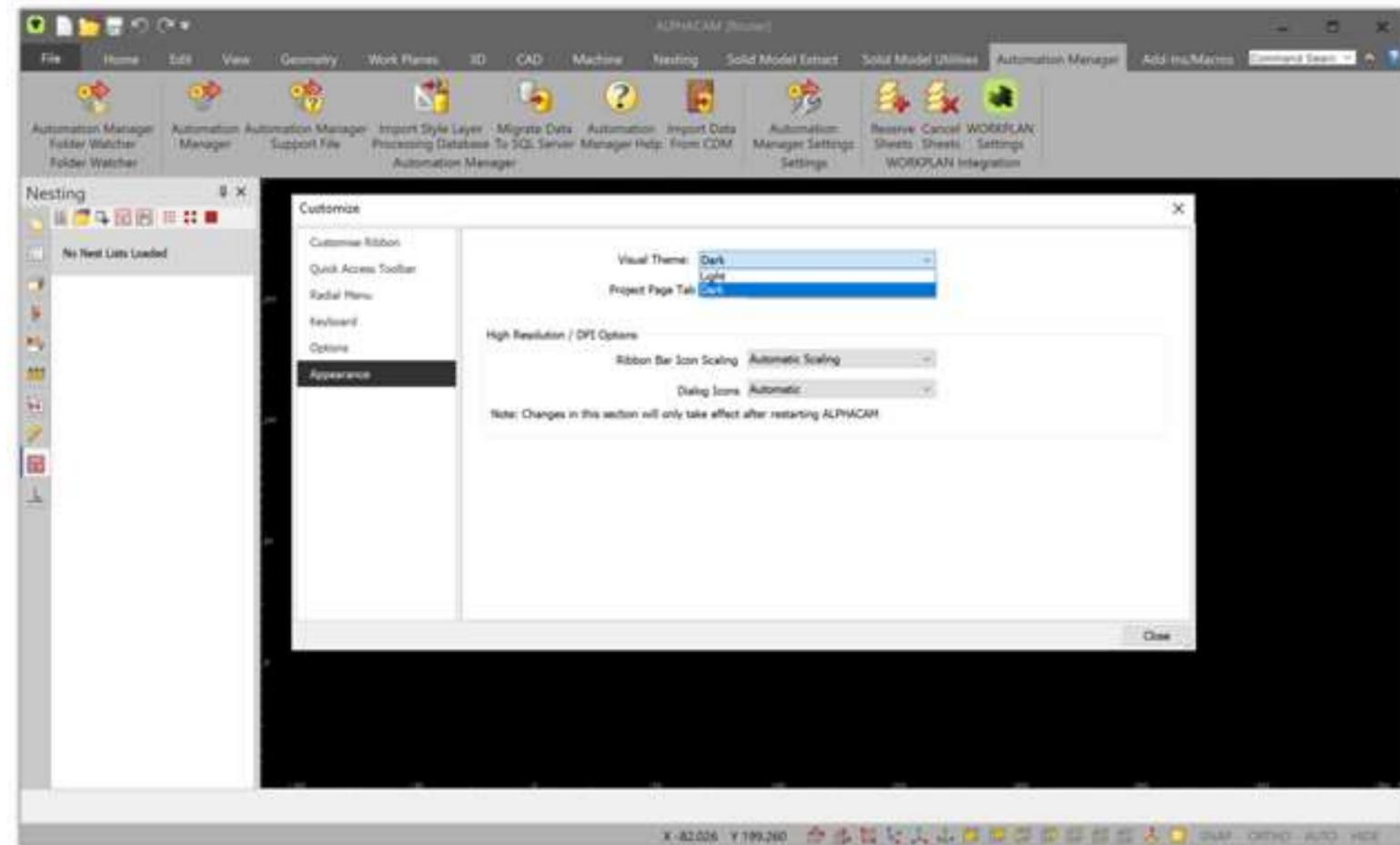
- Botão para escolher cor
 - Permite ir buscar o valor de RGB através de uma face de sólido



Opções Gerais

Interface do Utilizador

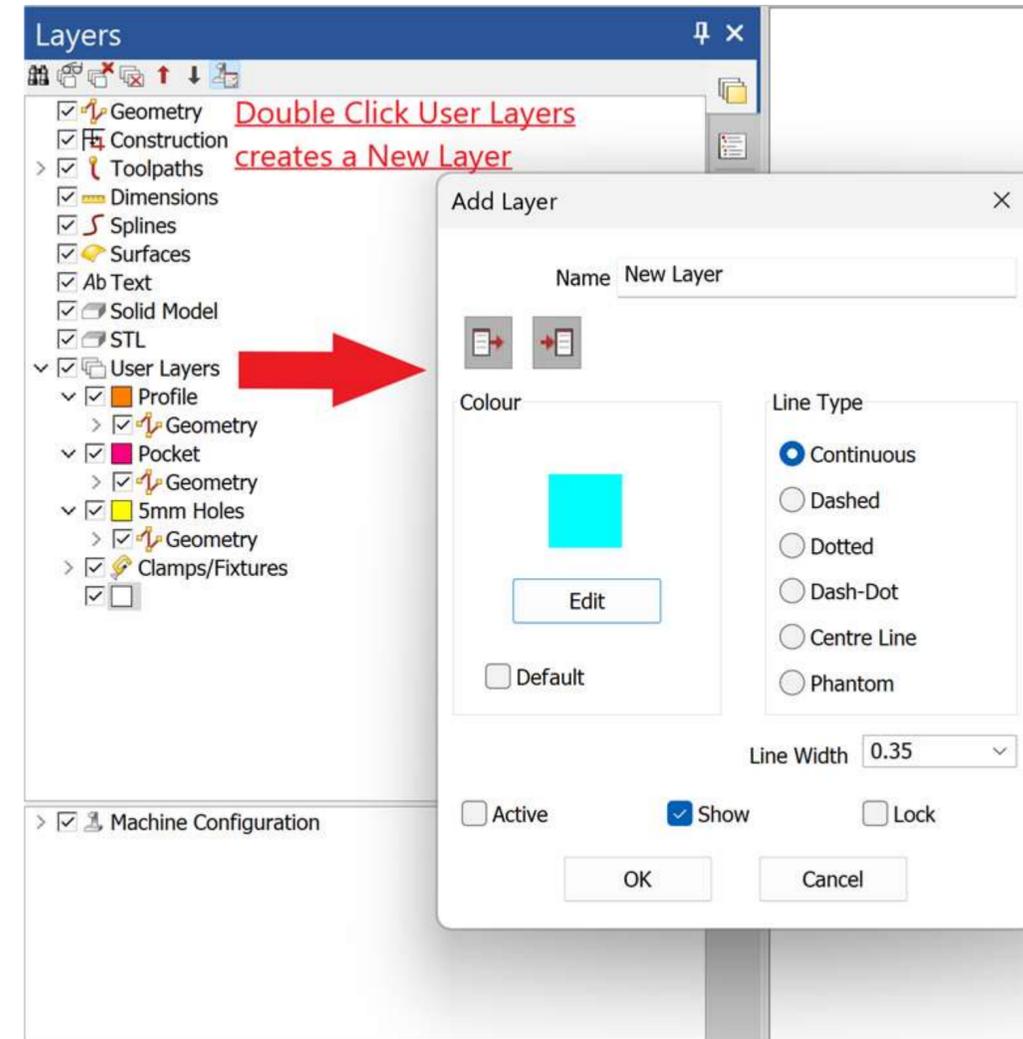
- Temas escuros/Claros



Opções Gerais

Layers

- Criação de Layers por duplo clique



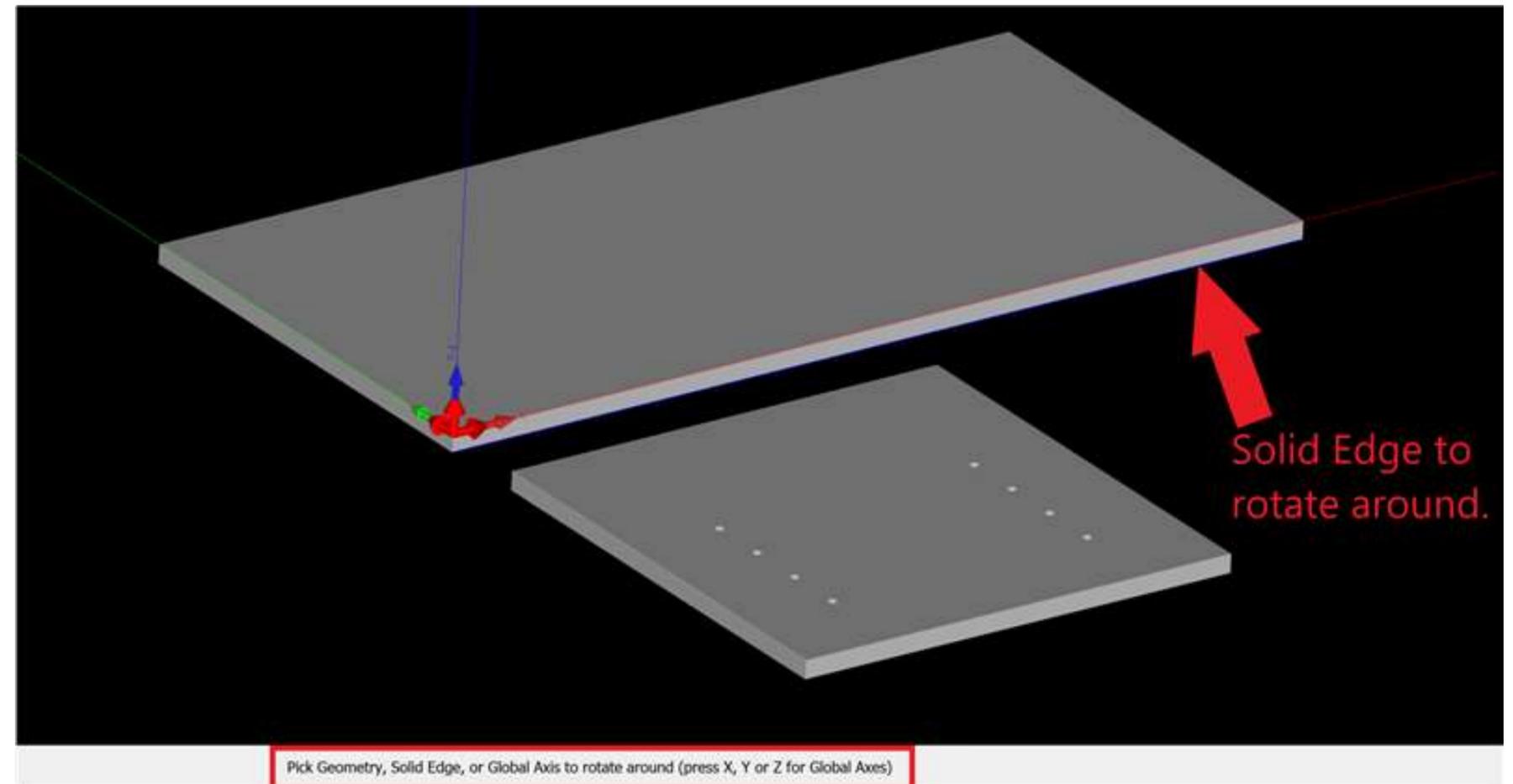


CAD

CAD

Rotate 3D

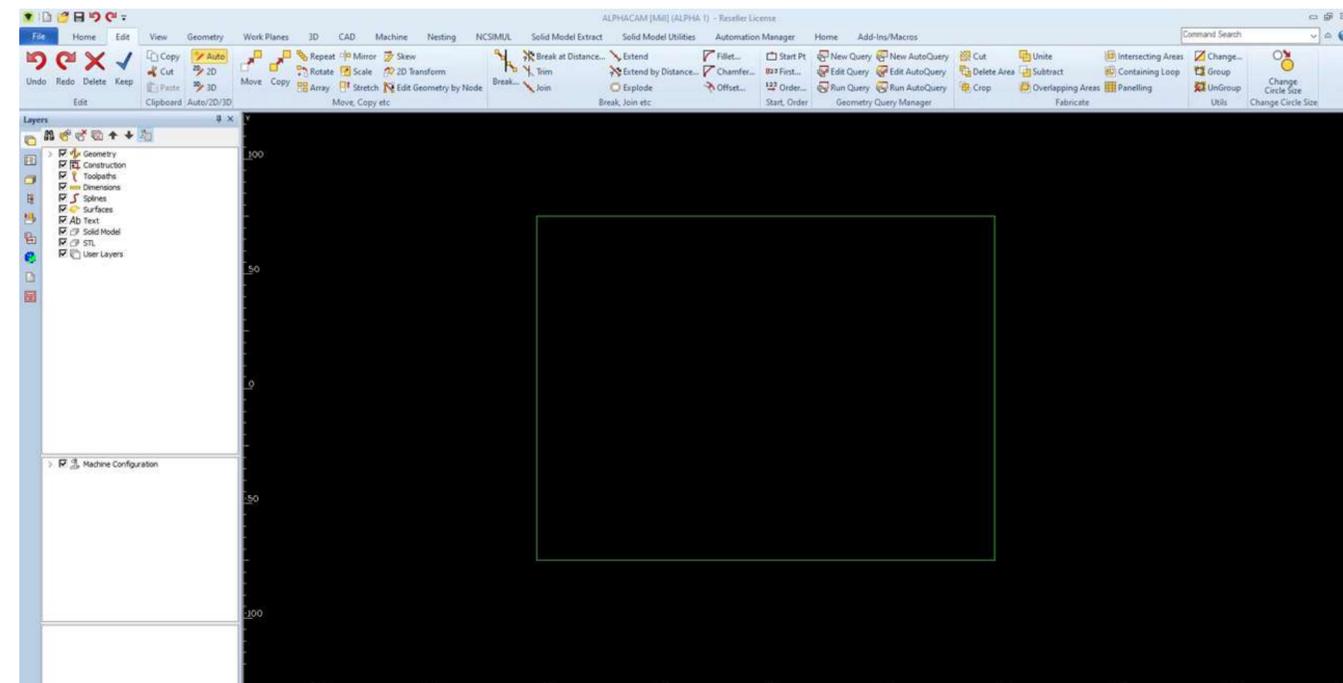
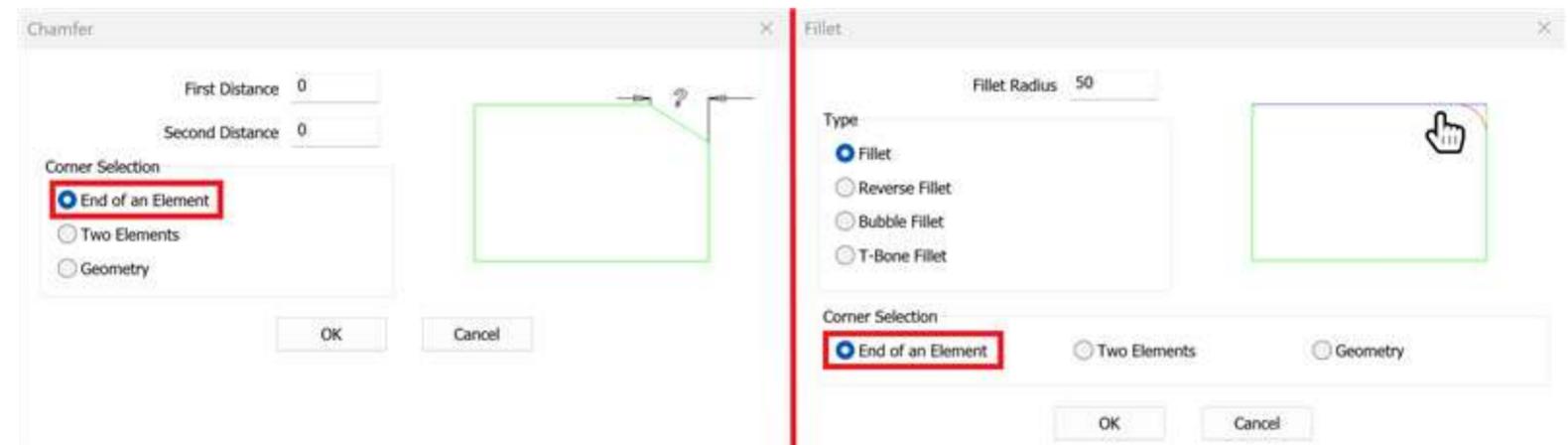
- Usa aristas de sólidos



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

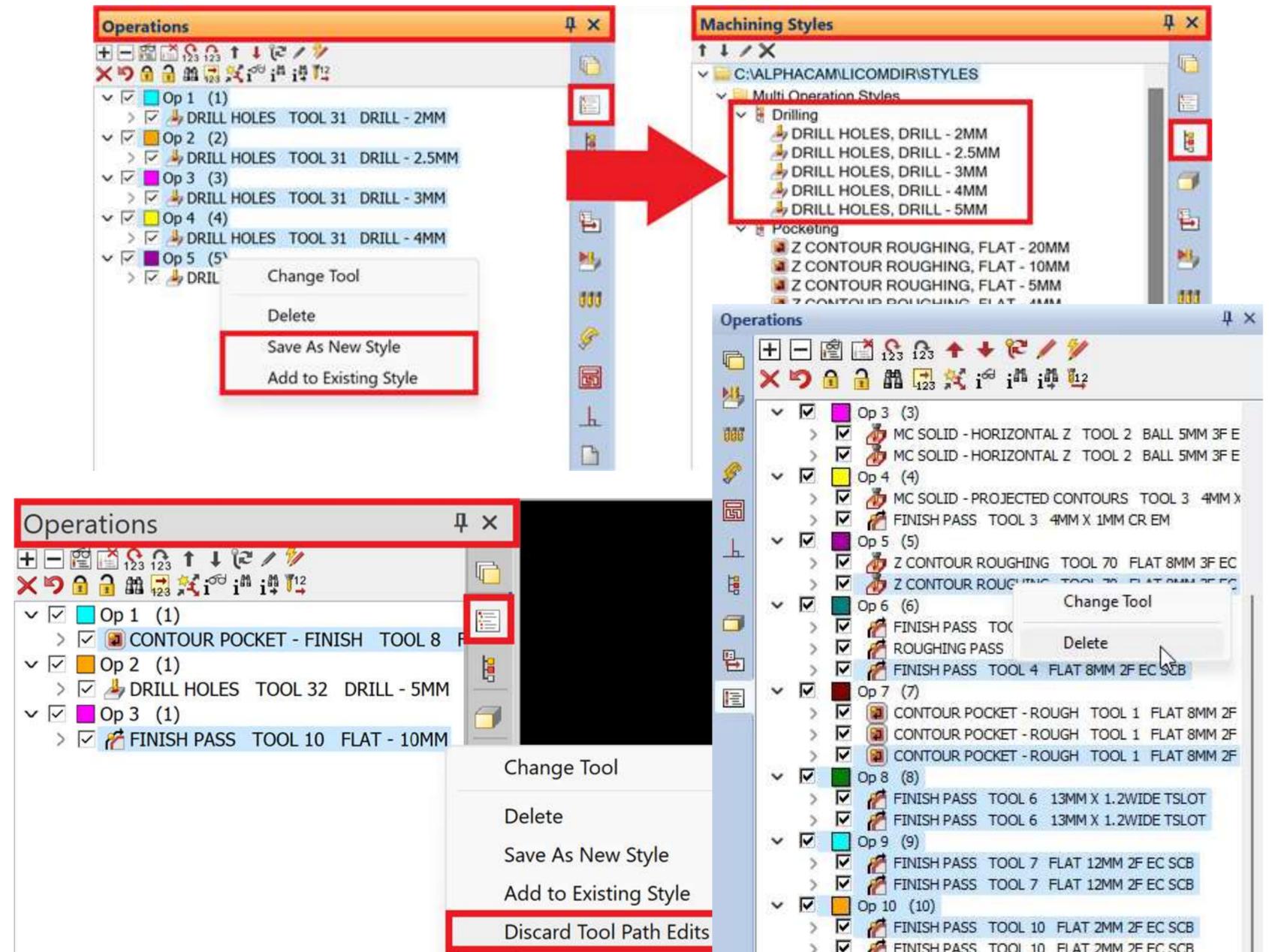


Machining

Machining

Múltipla Seleção

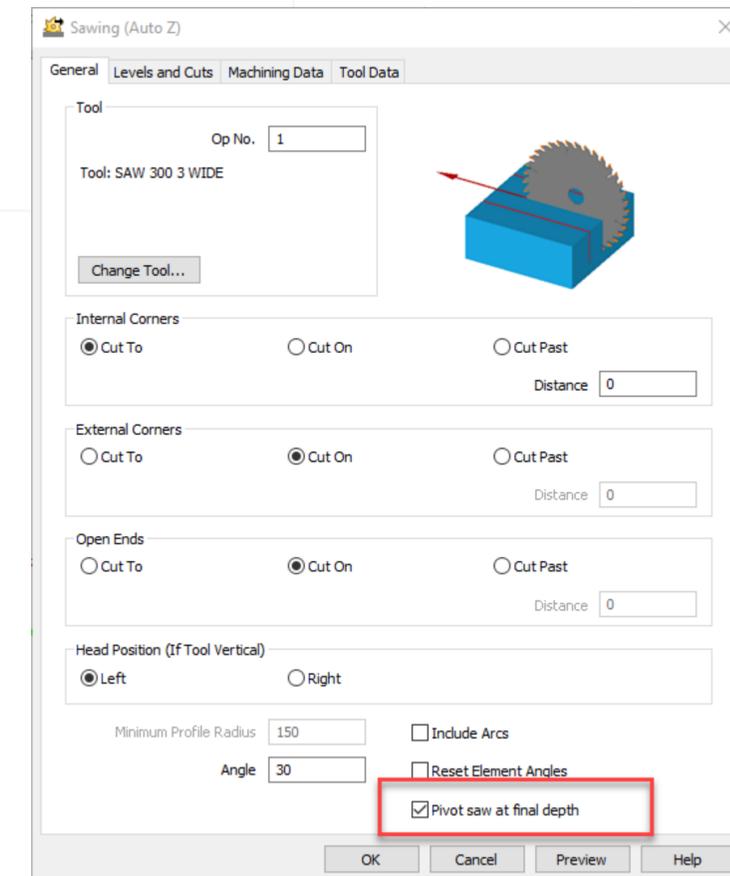
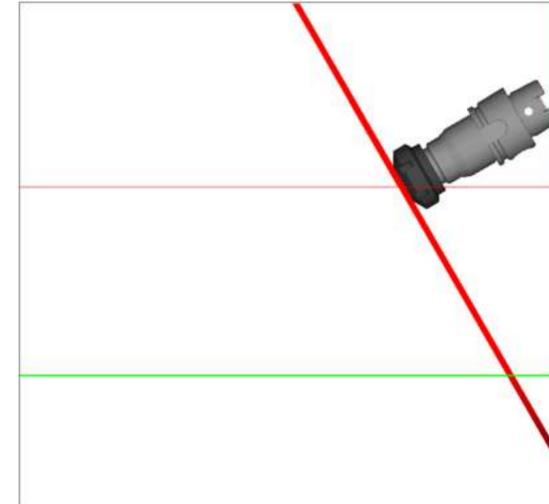
- Trocas de ferramenta
- Apagar operações
- Remover alterações aos toolpaths
- Adicionar/Criar estilos de maquinação



Machining

Sawing

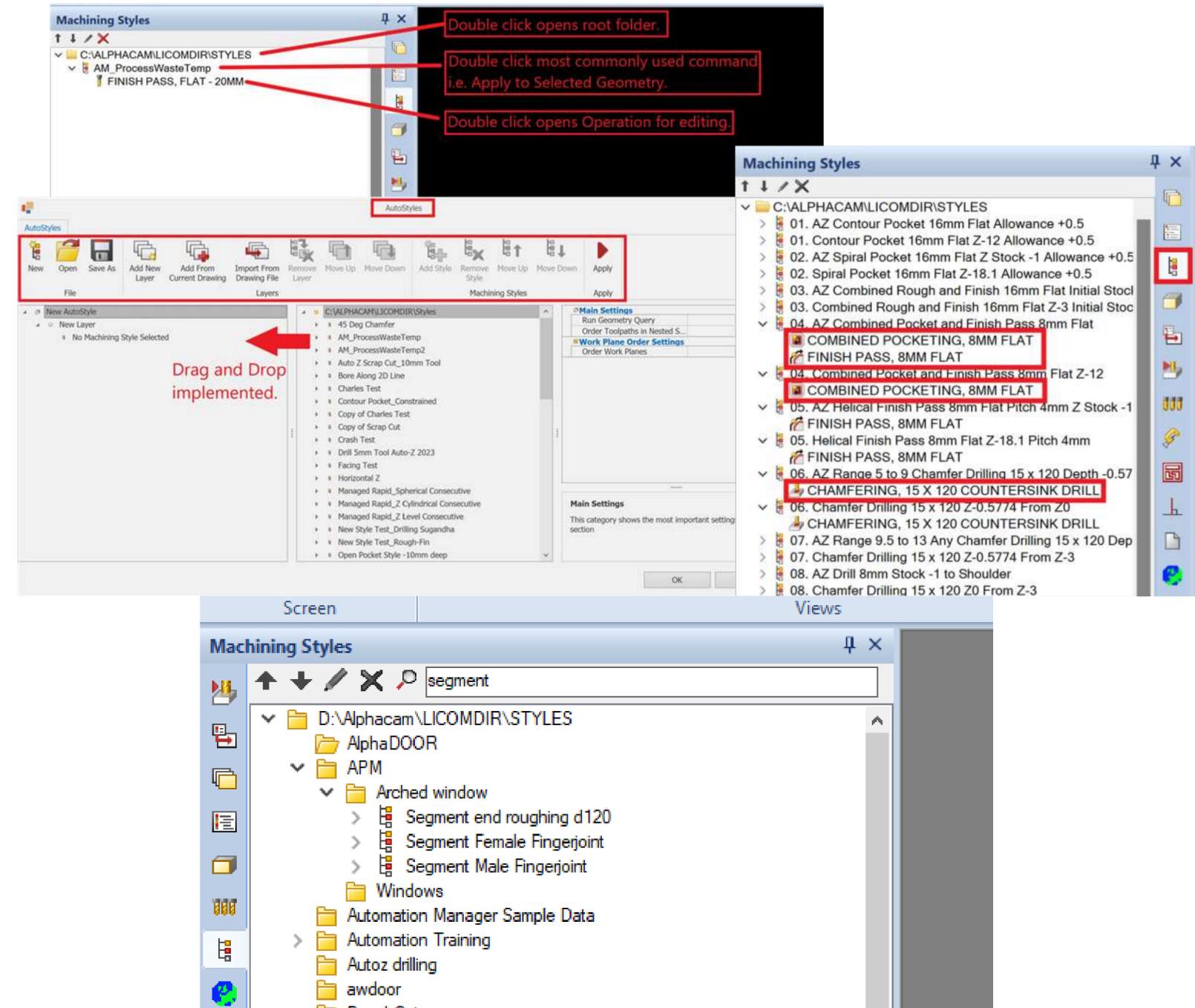
- Opção para usar como referência o final da geometria
- Profundidade extra no final da geometria



Machining

Estilos de Maquinação

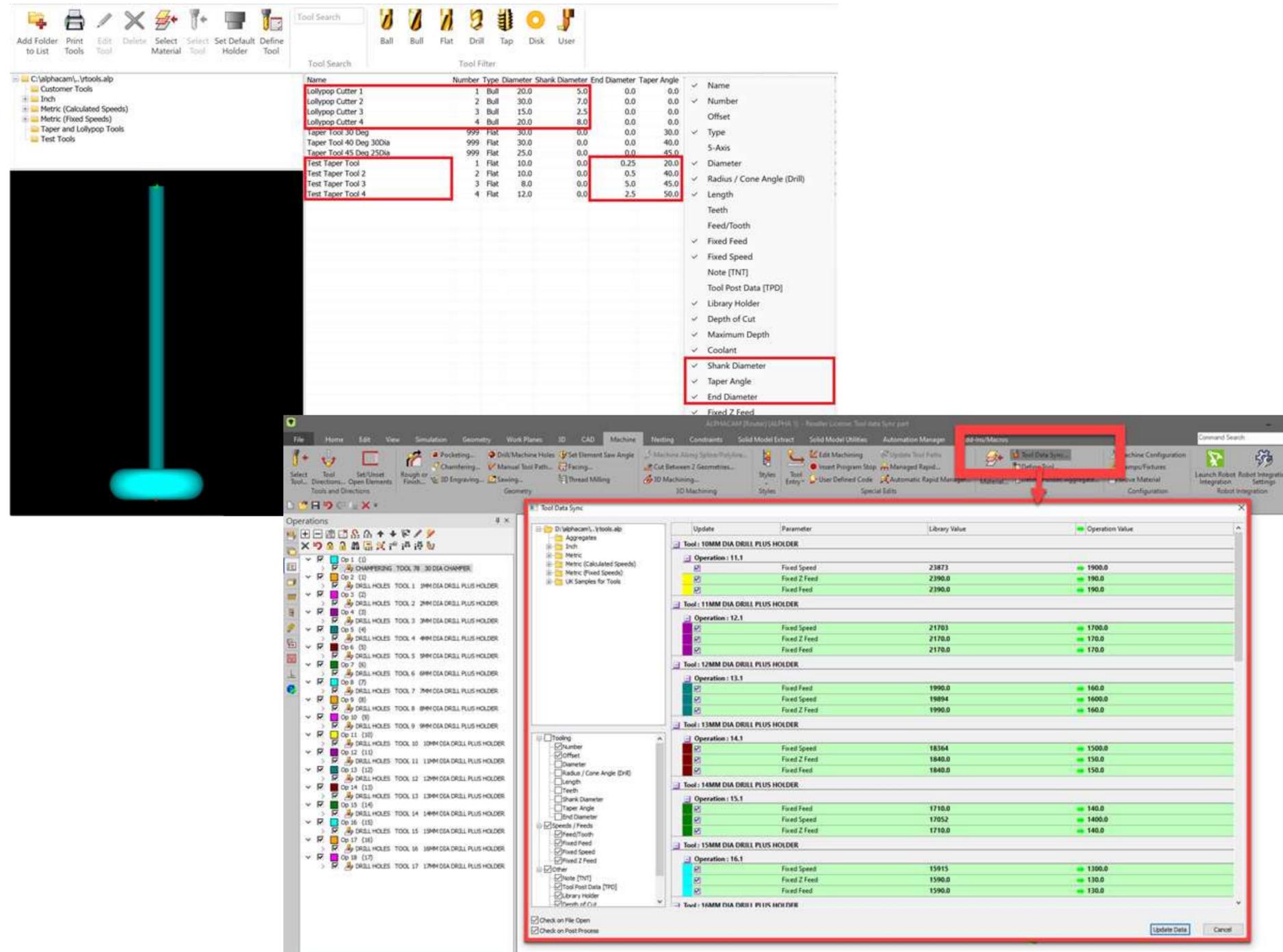
- Duplo Clique
 - Abrir pastas
 - Aplicar estilos
 - Editar operações no estilo
- Usa os ícones das operações
- Ferramenta de pesquisa nos estilos
- Interface dos Auto-Estilos alterado
 - Permite fazer "drag and drop" dos estilos para layers



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 screenshot displays the software's tool management interface. On the left, a 3D model of a blue tool is shown. The main window features a 'Tool Search' table with the following data:

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

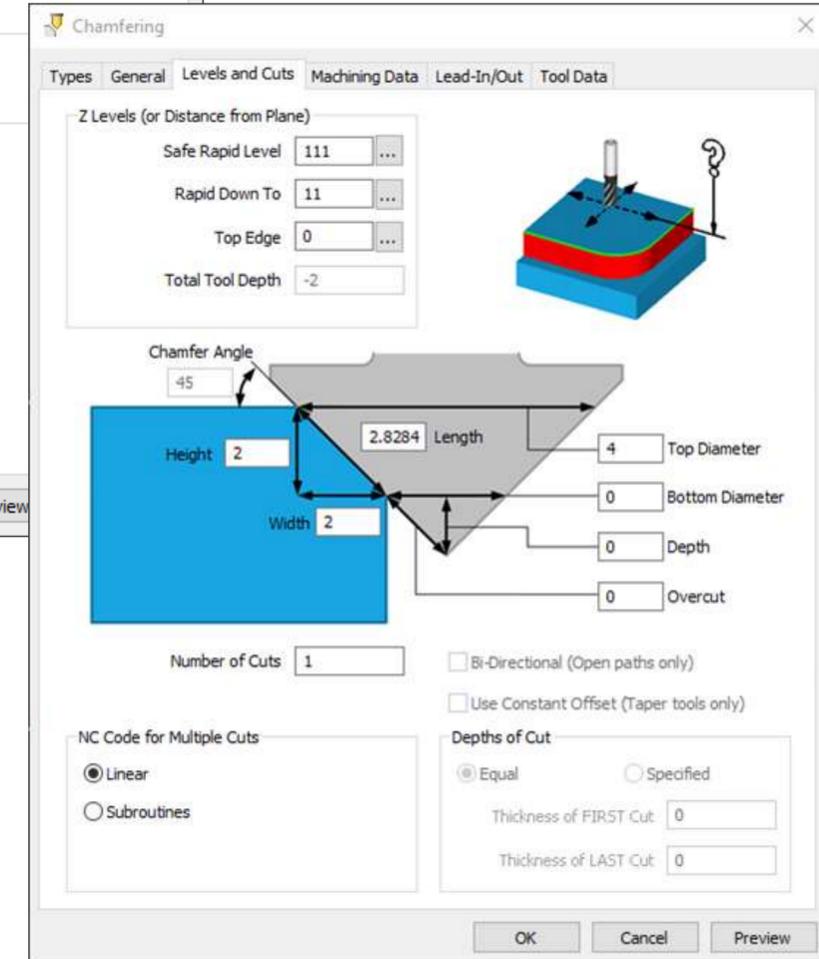
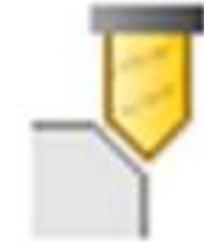
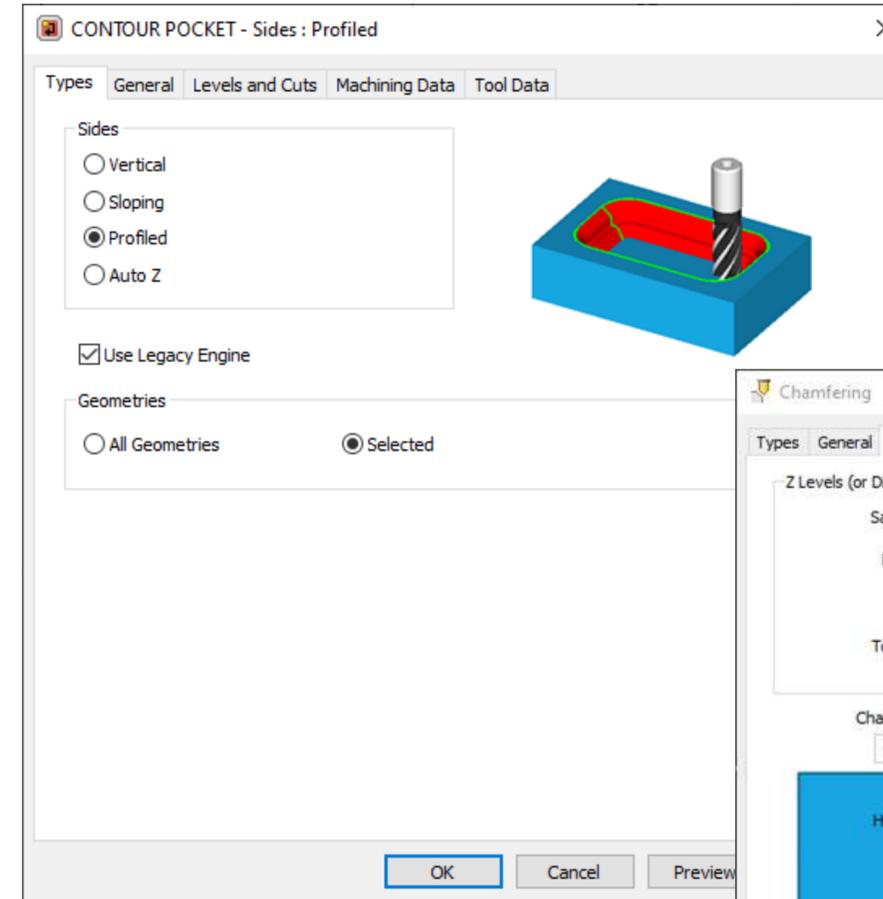
Below the table, a 'Tool Filter' panel lists various parameters such as Name, Number, Offset, Type, 5-Axis, Diameter, Radius / Cone Angle (Drill), Length, Teeth, Feed/Tooth, Fixed Feed, Fixed Speed, Note [TNT], Tool Post Data [TPD], Library Holder, Depth of Cut, Maximum Depth, Coolant, Shank Diameter, Taper Angle, and End Diameter. The last three items are highlighted with a red box.

The bottom portion of the image shows the 'Tool Data Sync' dialog box, which is also highlighted with a red box. It contains a table with columns for 'Update', 'Parameter', 'Library Value', and 'Operation Value'. The table lists parameters for various tools and operations, such as Fixed Speed, Fixed Z Feed, and Fixed Feed, with their respective values and operation values.

Machining

Operações

- Novas operações
- Chanfering
- Alterações no Pocketing

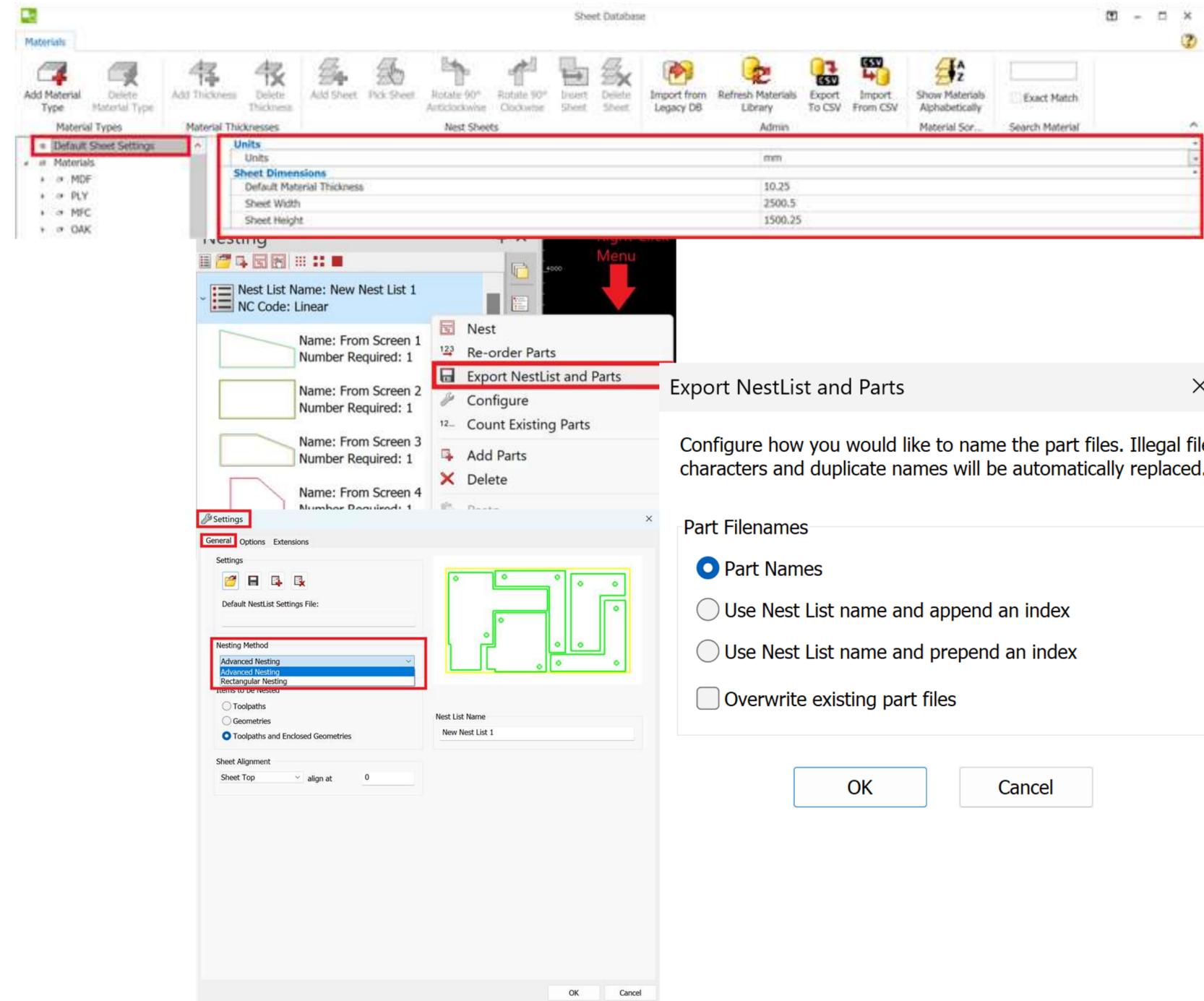




Nesting

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

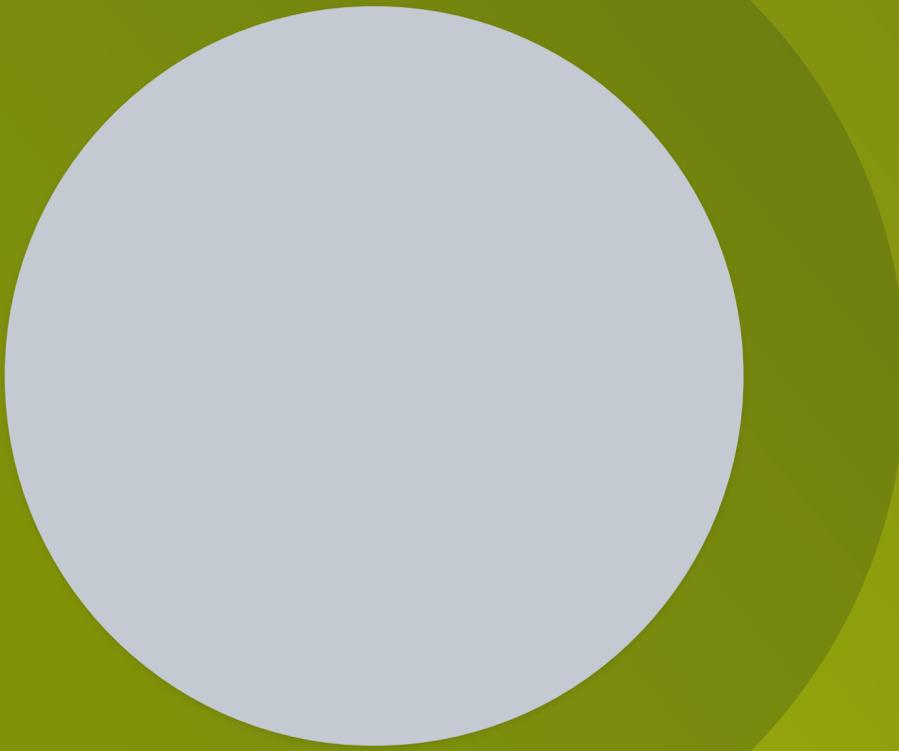
In the center, a 'Nesting' window shows a list of parts with their names and required quantities. A context menu is open over this list, with 'Export NestList and Parts' highlighted. To the right, an 'Export NestList and Parts' dialog box is shown, containing the following configuration options:

Configure how you would like to name the part files. Illegal file characters and duplicate names will be automatically replaced.

Part Filenames

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

Buttons for 'OK' and 'Cancel' are located at the bottom of the dialog.

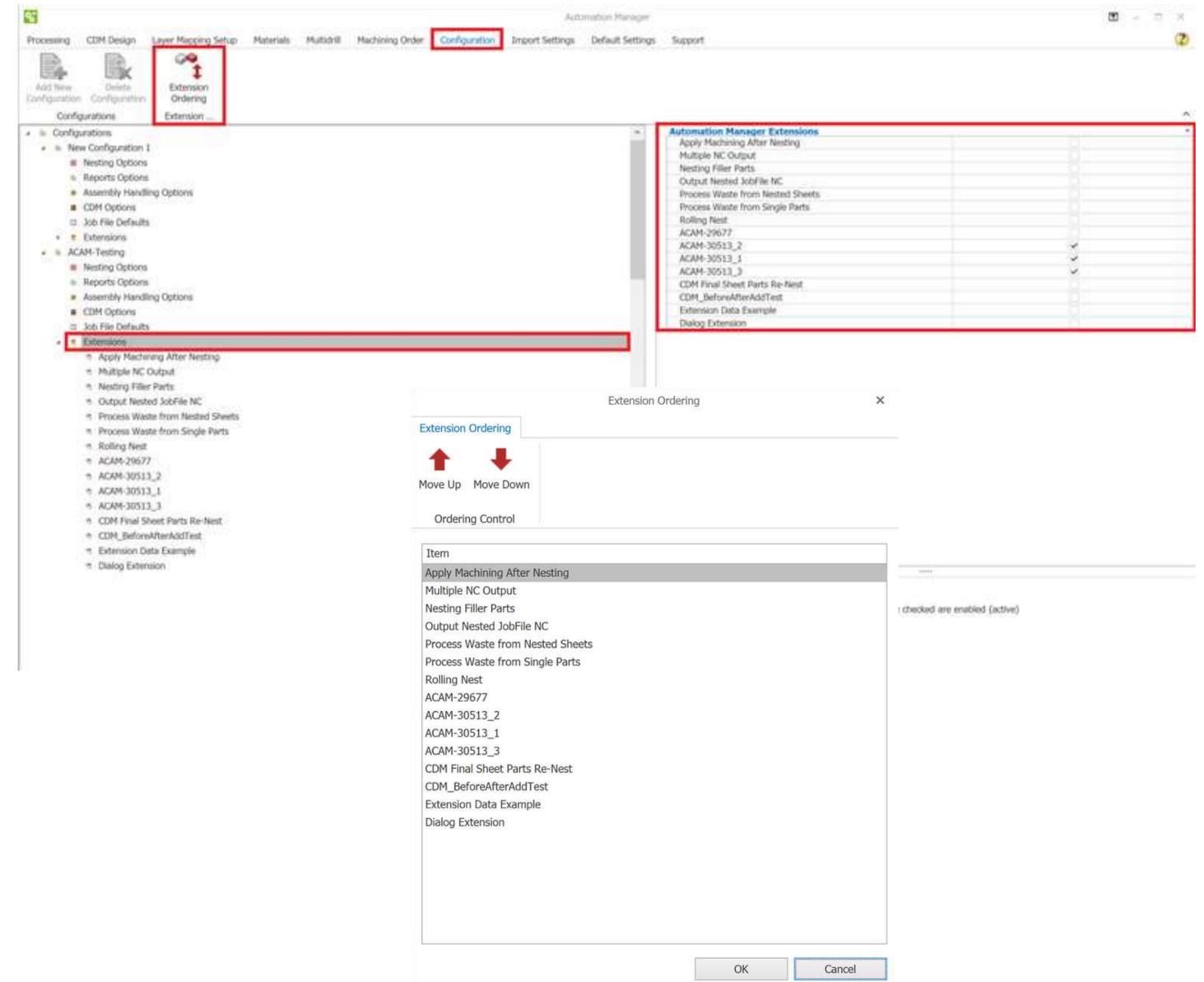


Automation Manager

Automation Manager

Extensões

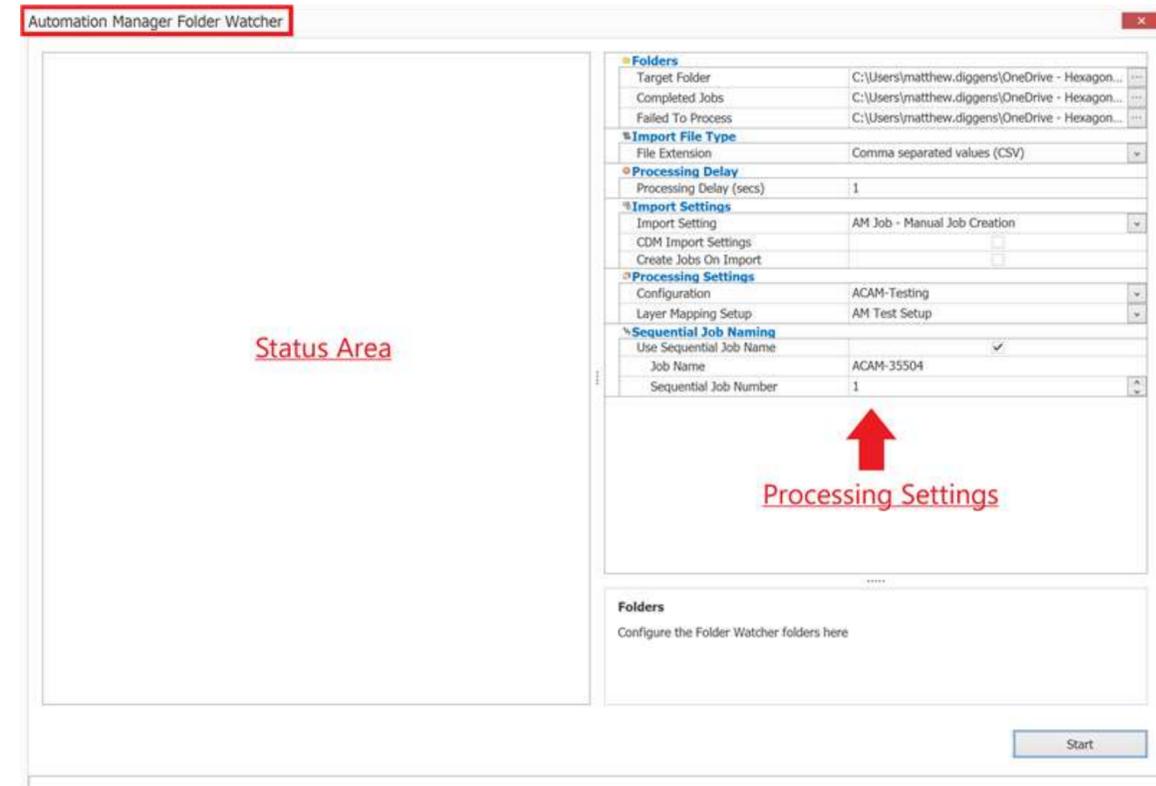
- Nova vista das extensões
- Ordenação de extensões



Automation Manager

Folder Watcher

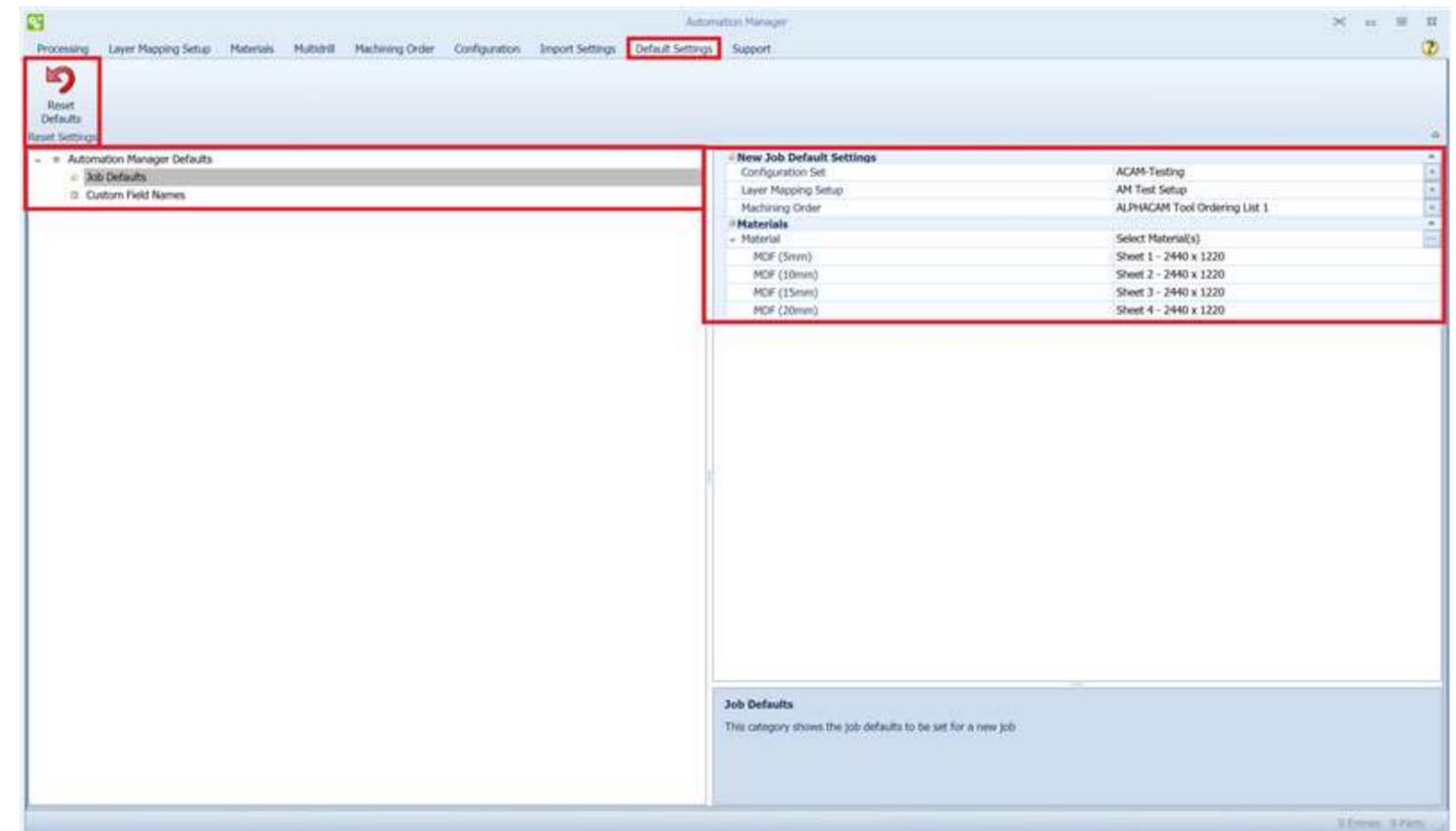
- Interface melhorado



Automation Manager

Job defaults

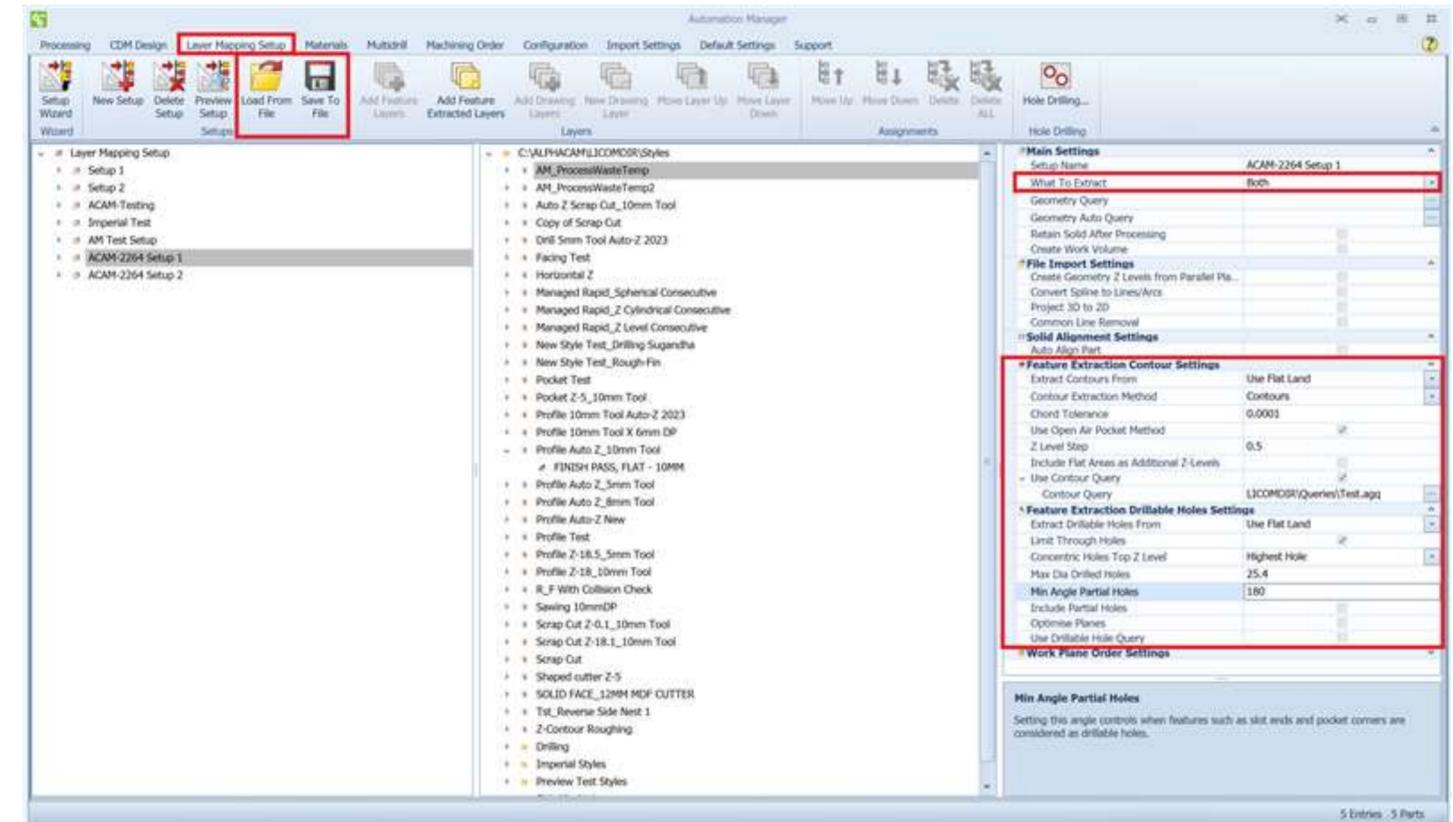
- Configurações por defeito na criação de um novo Job
- Nomes nos Custom Fields



Automation Manager

Extração de geometrias

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



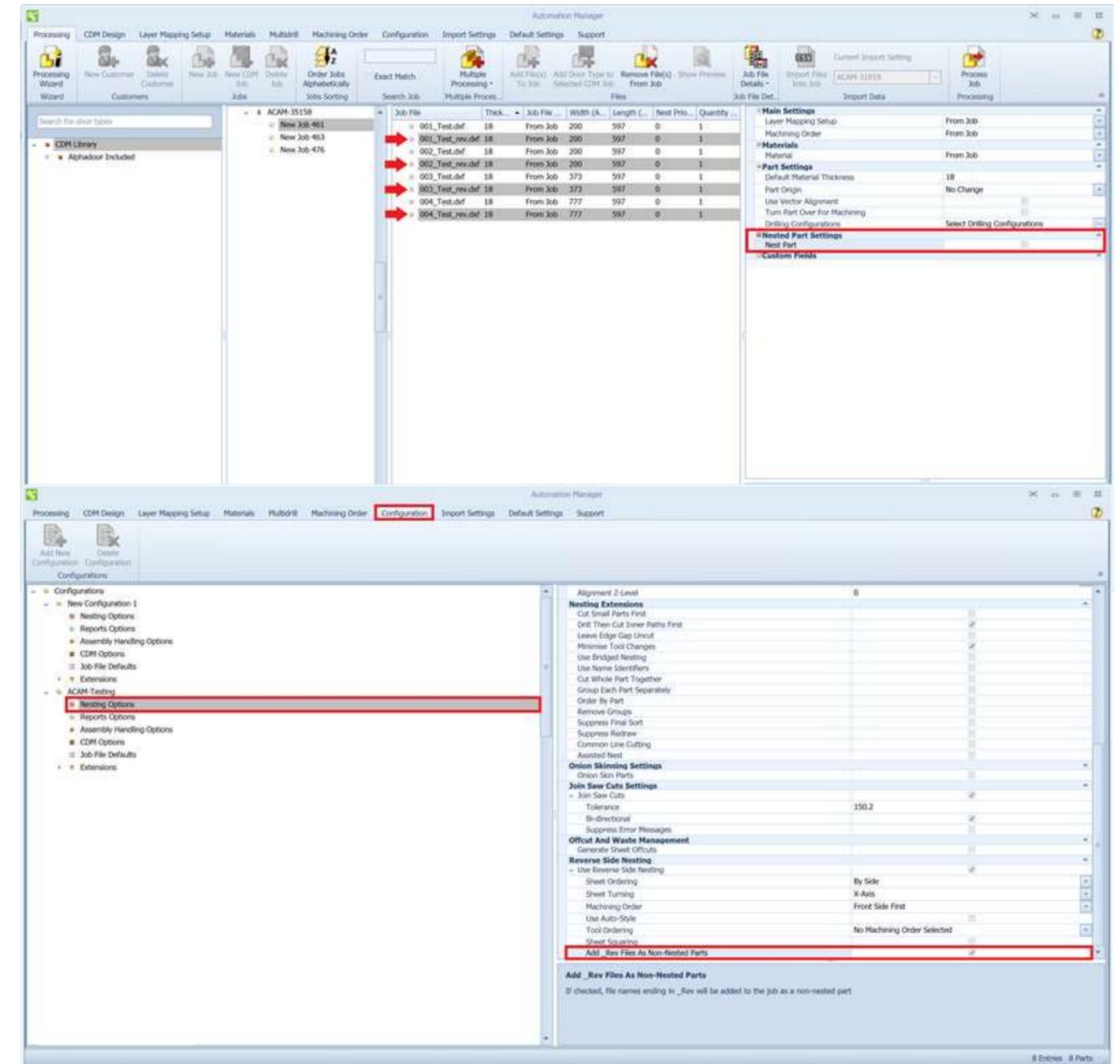
Automation Manager

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.

