What's New in ESPRIT Release 4.4

Contents

Interactive Workplane Gnomon

Workplane Modification controls: [1] Align vector, [2] 2D translate, [3] 3D translate, [4] align plane, [5] rotate.
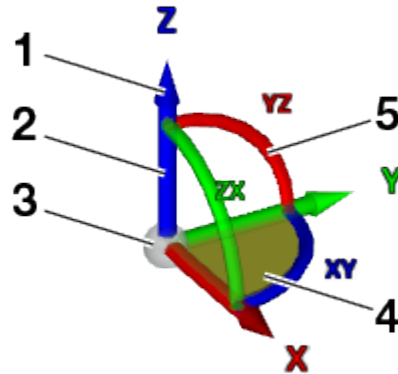
The new workplane gnomon lets you quickly translate, rotate, and align workplanes with interactive tools. To use it, select the new Modify Workplane command from the Ribbon or from the Heads Up View toolbar, click on the control section of the gnomon that corresponds to the desired modification type, and then use mouse movement, snap points, or entered values to modify the workplane.

Internal Links in Threading
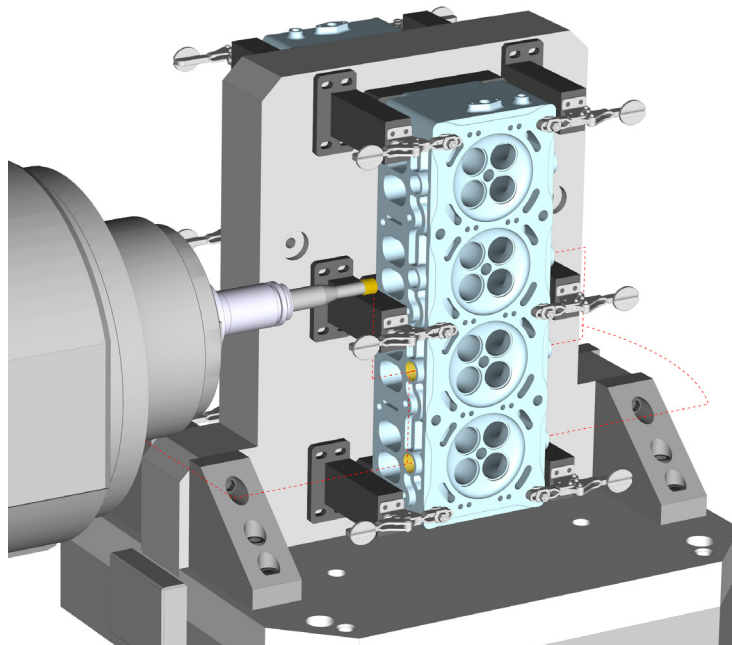
Threading cycles now support features containing multidirectional holes. New options for tool lead-in and lead-out allow for better tool engagement and improved cycle times at the start and end of each thread. New Transition Move settings let you fine-tune the balance between rapids and feeds for optimal performance.

Tool List View

The Tool List is a detailed list of the tools in your ESPRIT document. You can quickly review complete tool information, sort the displayed list, and create a tool list report directly from the list.

To acccess the Tool List, select **Show/Hide** from the **Home** tab on the ribbon, and select **Tools** from the list.

Station		ID	Style	No.	Dia.	Rad.	Length Comp.	Cutting Length	Tool Length	Tool Hand	Comment
∨ ⚙ Turret1 - 13 items											
1		BM5.2	Ball End Mill	5	2.6 mm		5	30 mm	40 mm		
2		Boring Bar Sub	Turning Insert	1		0.8 mm	1			Right	
3		Cutoff	Grooving Insert	3		0.1 mm	3			Right	
4		DR12	Drill	11	12 mm		11	60 mm	80 mm		
5		DR5.6	Drill	6	6 mm		6	20 mm	50 mm		
6		EM12 Sub	End Mill	3	12 mm		1	50 mm	80 mm		
7		CNMG Main	Turning Insert	1		0.8 mm	1			Right	
7		CNMG Sub	Turning Insert	1		0.8 mm	1			Right	
8		EM12	End Mill	3	12 mm		1	50 mm	80 mm		
9		EM10_2	End Mill	3	10 mm		1	20 mm	60 mm		
10		ID Thread	Top Notch Insert	1		0.1 mm	1			Right	
11		Turning Round	Turning Insert	1		5 mm	1			Left	
12		EM10	End Mill	3	10 mm		1	20 mm	60 mm		
∨ ⚙ Unassigned - 3 items											
		CNMG Main(1)	Turning Insert	1		0.8 mm	1			Right	
		CNMG Sub(1)	Turning Insert	1		0.8 mm	1			Right	
		EM12(1)	End Mill	3	12 mm		1	50 mm	80 mm		

Collinear Axes

New enhancements to collinear axis support include:

- Support for editing the collinear axes position for multiple program properties at once
- Safe positions for large angle changes
- Enhanced Link Strategy

Program Manager
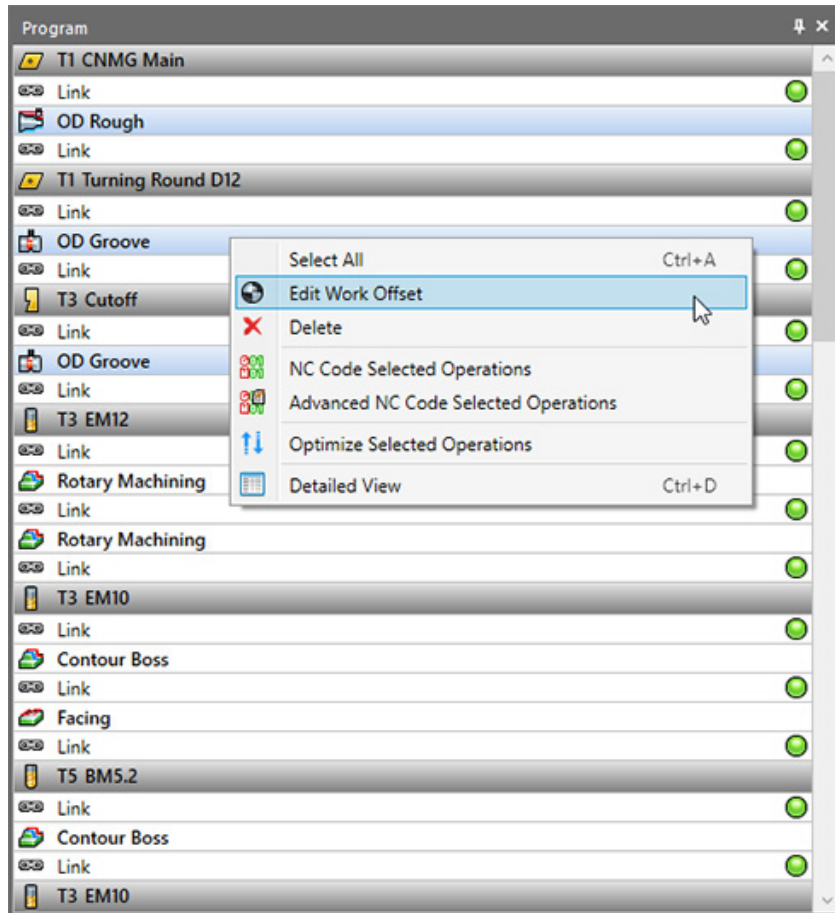
The Program Manager now lets you edit work offsets and rotary solutions for multiple selected operations.

Freeform Tool Path Enhancements
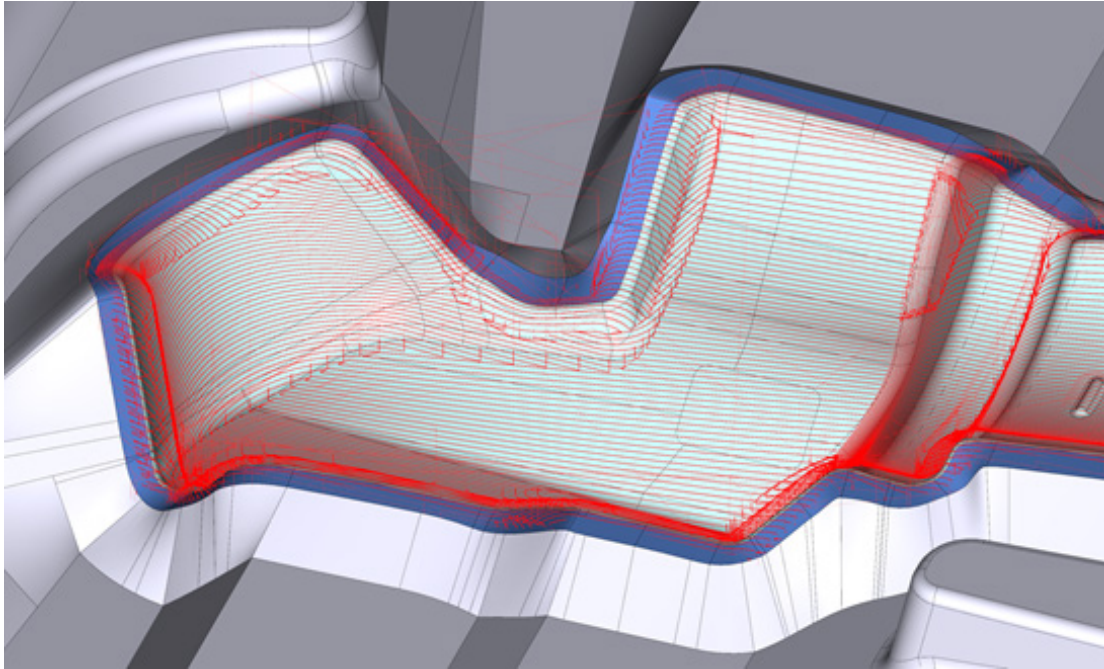
New options for Freeform Global finishing enable more control over the pattern for machining shallow areas. These options simplify the creation of 3-axis finishing cycles around steep and shallow regions, and improves overall surface finish.
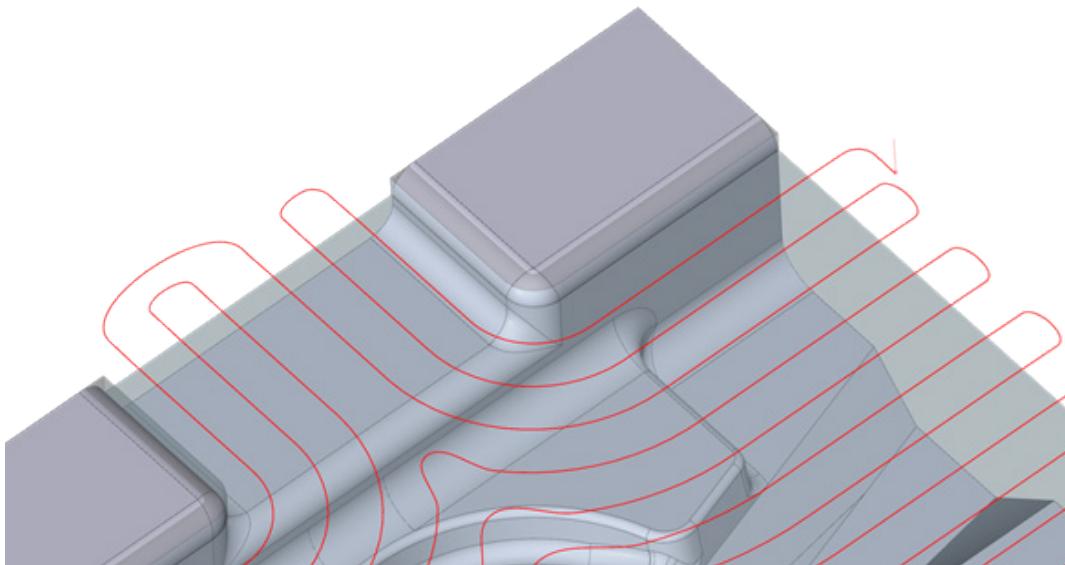
For Z-level cycles, including floor finishing, the new Preserve Sharp Edges and Sharp Edge Clearance options let you specify tangential extensions to minimize undesirable rounding movements in and around sharp corners.

Additive Enhancements
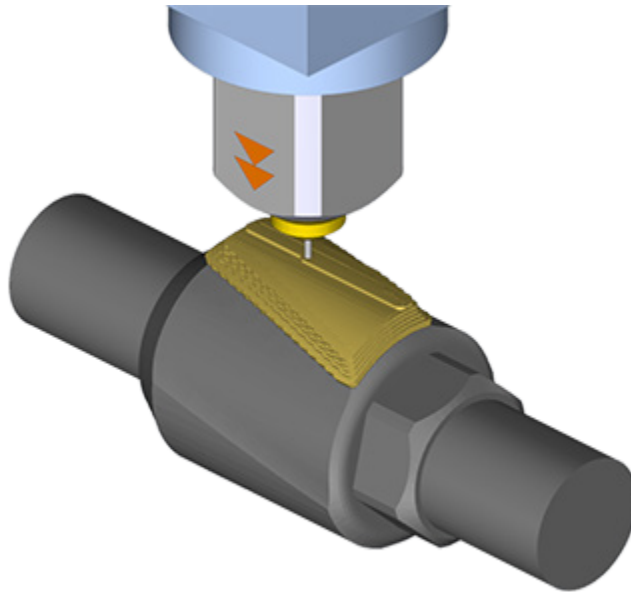
Additive Fillet Deposition is a new additive cycle for programming enhanced 4-axis deposition cycles on bar stock. This new cycle enables more complex additive deposition shapes.

Custom Settings for Operations and Tools

Enhanced custom settings for tools and operations now allow custom captions, value types, display and layout options. These customizations provide clear, explicit settings that are individually tailored for specific machine configurations and user preferences, without the need to consult external documentation.

UI Enhancements

- The Covering command now supports covering non-continuous faces.
- ESPRIT now features a comprehensive help system for API with quick reference to API elements and code samples in C# and VBA. Access API help at **File** > **Help** > **API/Macro Help**.