What's New in ESPRIT Release 5.1

Contents

Work Offset Definition

The work offset definition enhancement in ESPRIT 5.1 lets you define a work offset directly on the machine or on a fixture, share a work offset between multiple workpieces, and program a unique main offste with dynamic offsets.

This simplifies programming scenarios such as tombstones, letting you define a single work offset at the center of the table, or simplifying the workflow for defining a work offset for probing.

3+2 Parallel Plane Finishing
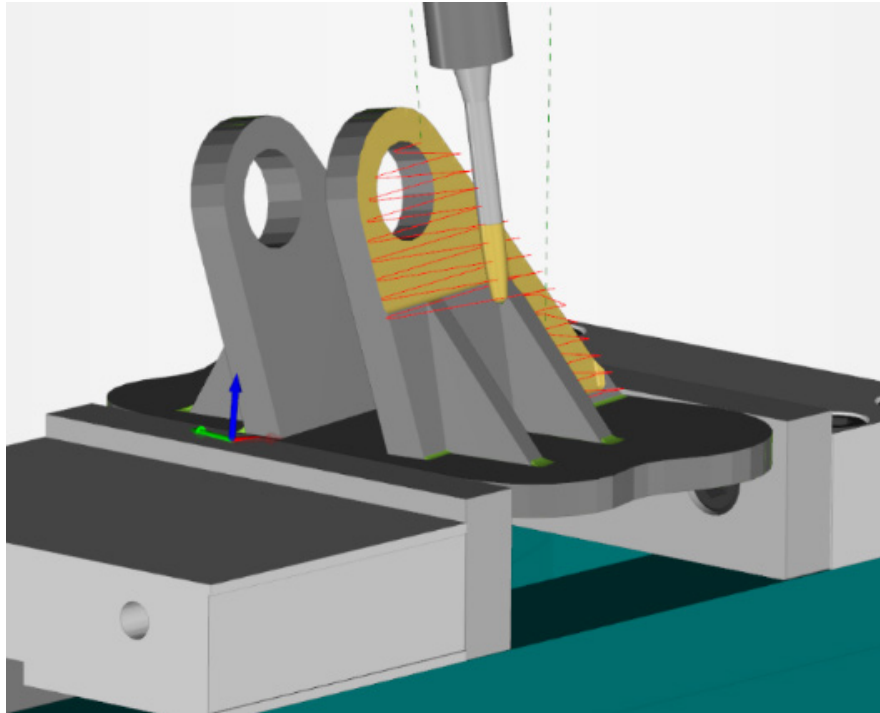
This enhancement to Parallel Plane Finshing offers substantial cycle time reductions for circle-segment tool applications on machines that do not have simultaneous 5-axis capabilities, or for users who prefer a fixed orientation for more rigidity. The new Plane Split option lets the system use the best single indexed orientation if it can, or split the face into regular zones with different orientations. The Plane Priority option machines the largest possible area with one orientation, and then machines corners with different orientations. You can define additional overlaps for a high-quality surface finish.

5-Axis Composite - Drive Profile Pattern
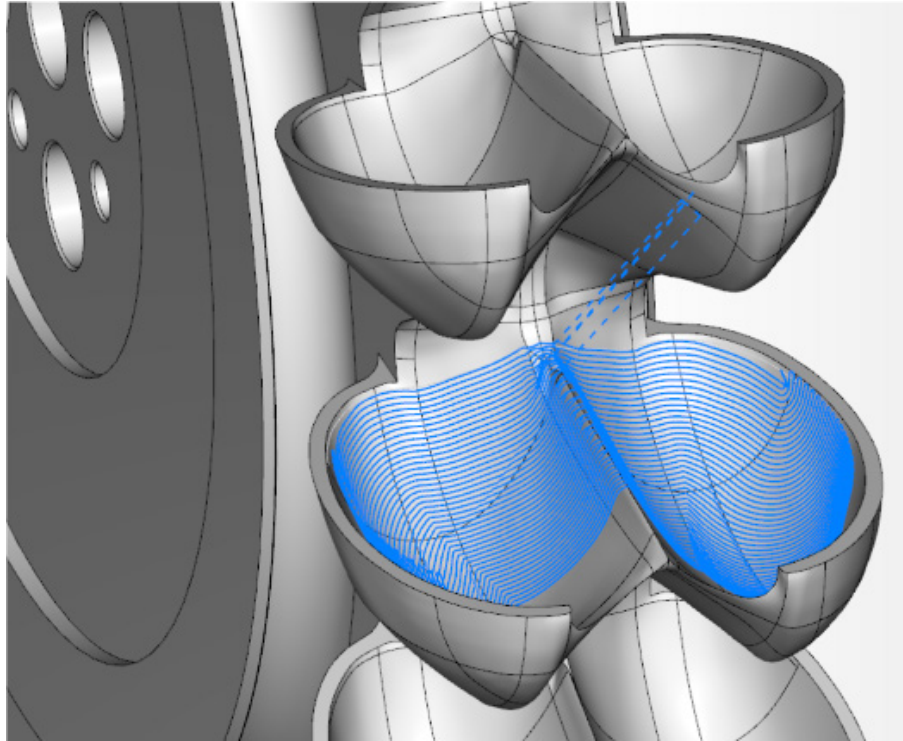
Now offered for composite machining cycles is the Drive Profile pattern. This lets you generate passes from selected geometry, without the need to create a drive surface.

Additive - Thin Wall Deposition Cycle
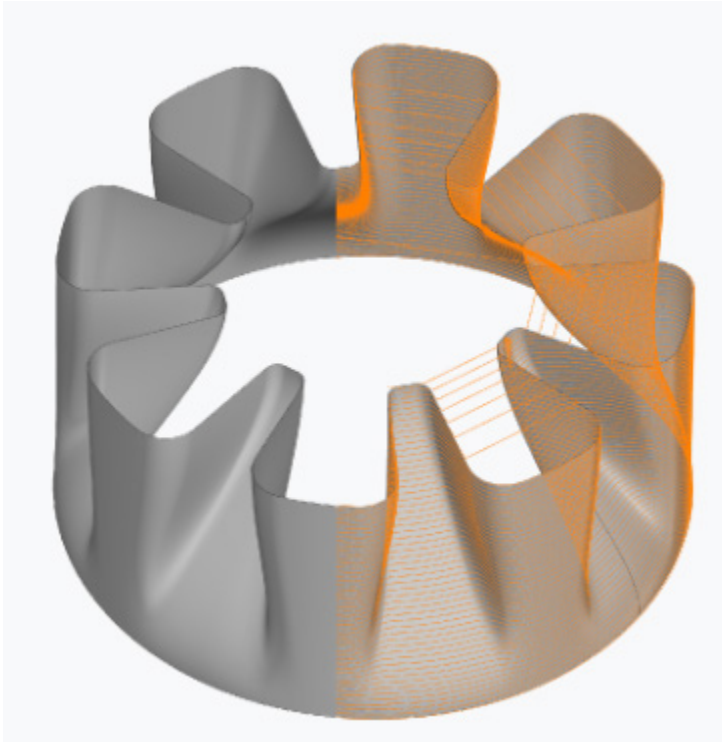
This new additive cycle lets you create walls from surfaces sliced along the Z Axis. Create these cycles from open or closed faces and from any substrate shape. Build several faces simulaneously with sub-feature compatibility.

Refer to Thin Wall Deposition for more information.
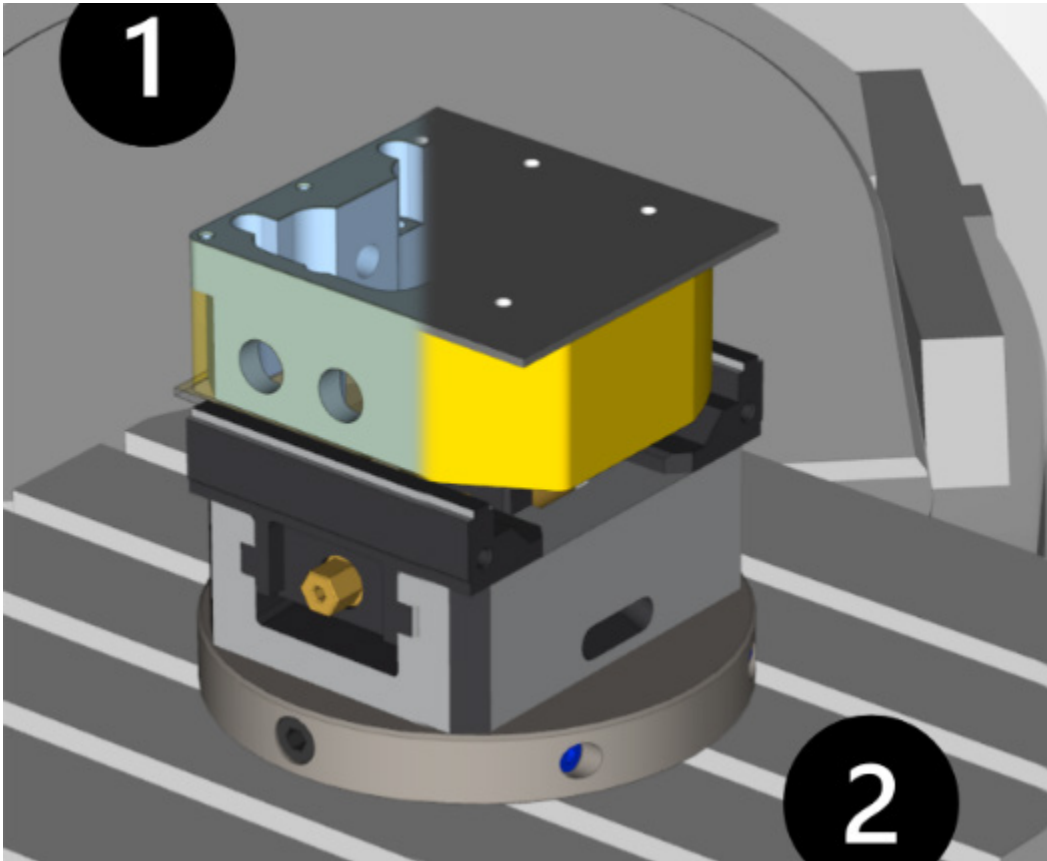
Preview Features in ESPRIT Release 5.1

These features are available to preview only. To activate preview features, select **File > Options > Preview Features**.

Feature Manager
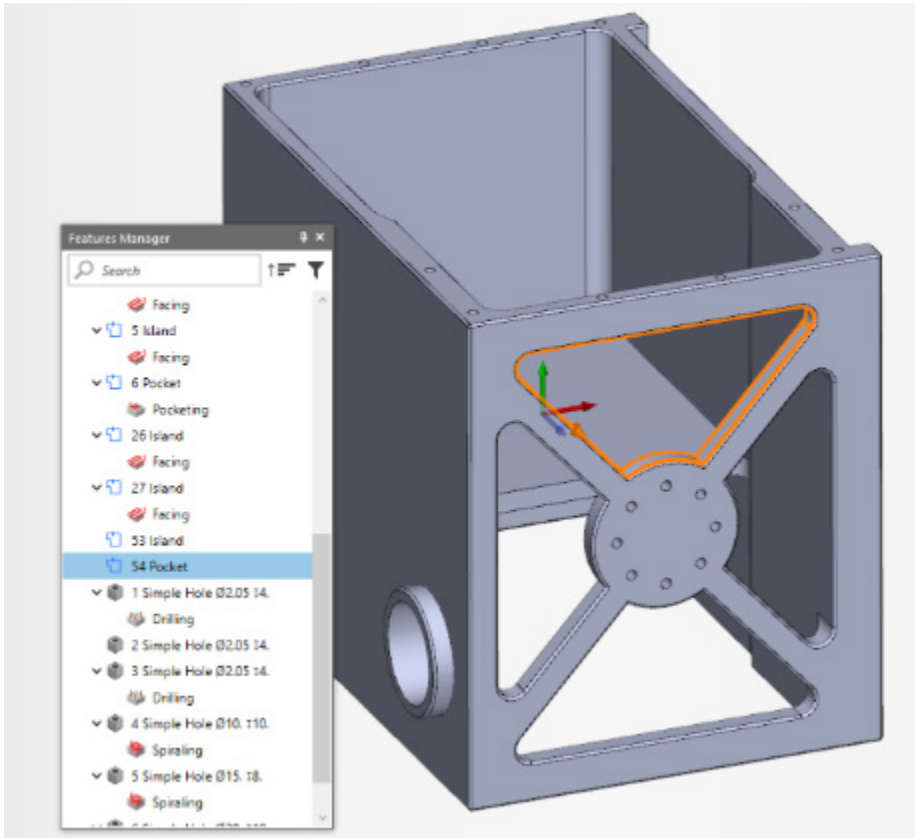
The new Feature Manager has a new user interface, complete with a search bar, filter, and sort options. Find, organize, and access features in complex parts faster and easier.

Setup Change

Quickly create multiple setups in a single program, each with their own fixtures, workpieces, and work offsets. Easily program and manage fixture changes, part flips, or pallet changes.

Fixture Avoidance
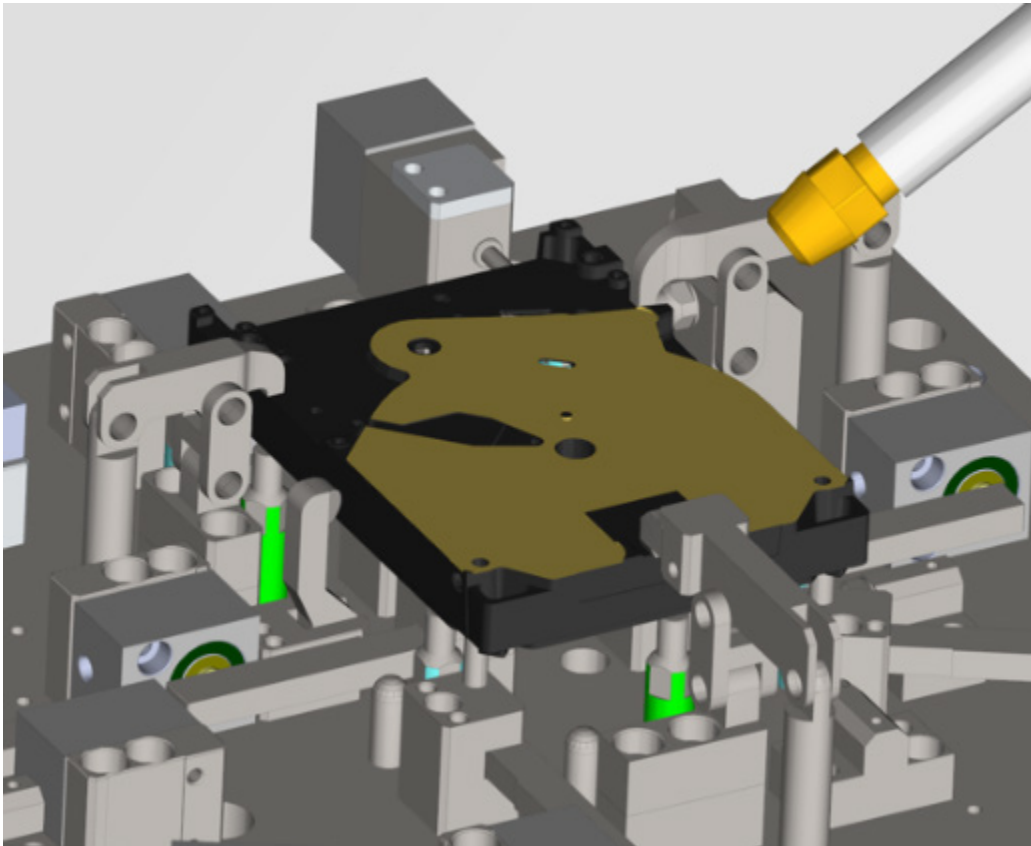
This new option for pocketing cycles lets ESPRIT automatically detect and eliminate toolpath segments that will cause collisions with the tool or fixture assemblies, with no need to create extra geometry to constrain the toolpath or alter fixture data in the ESPRIT document.