



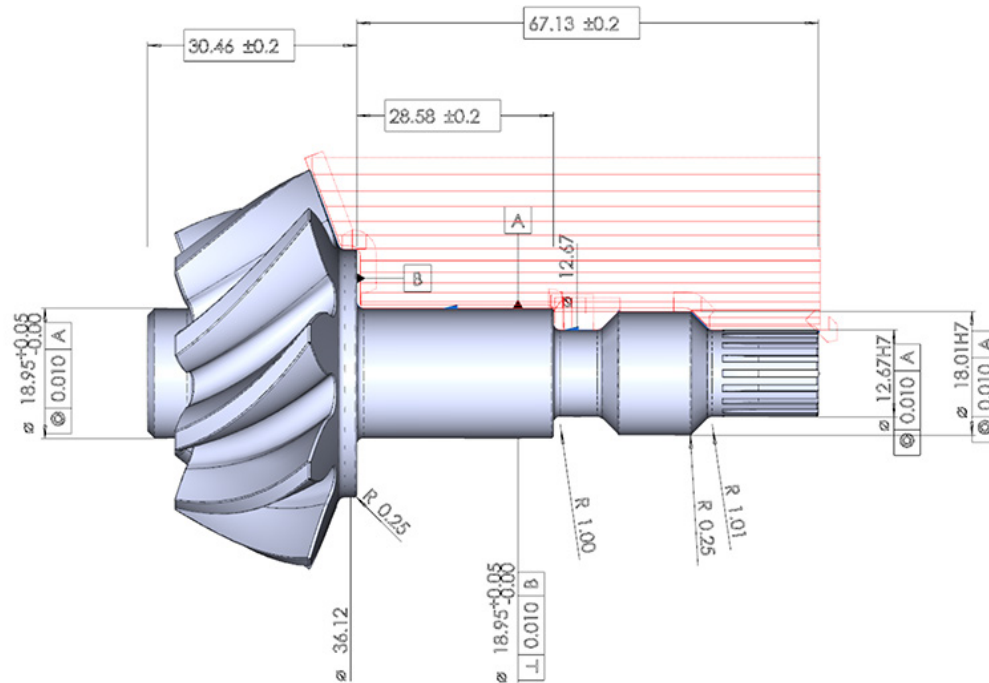
The Right Choice

What's New in ESPRIT Release 4.5

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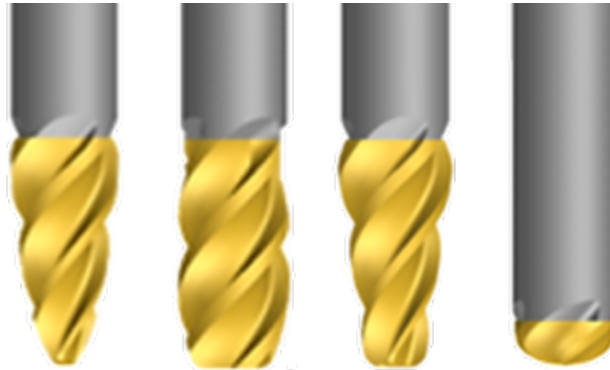
Turning Feature Offset



Selective offset lets you axially or radially shift individual sub-elements of a turning feature to account for specified tolerances or to leave material for secondary operations (grinding, burnishing, etc.). Add offset values manually, or use the offset calculator to apply offsets based on reference and target values, or to automatically apply standard ISO tolerances.

Offsets are defined as properties of the turning feature; no permanent change to the feature occurs, and offset values can be defined and adjusted in the Properties Manager.

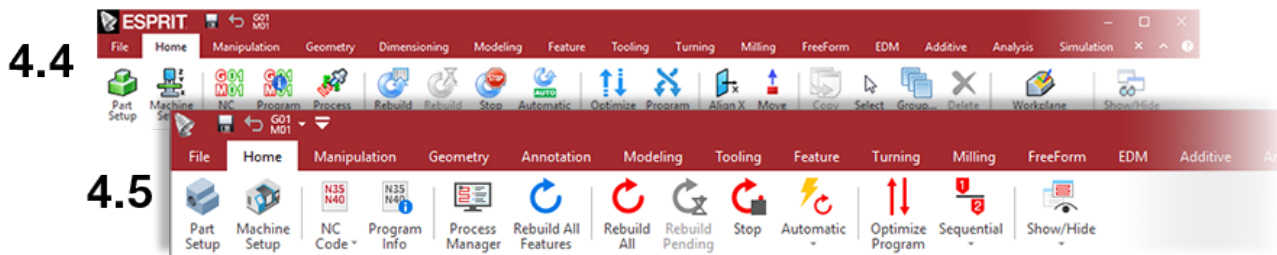
Circle Segment Tool Definition



Easily create circle segment end mills (sometimes referred to as “barrel” cutters) in four available shapes: oval, barrel, tapered, and lens.

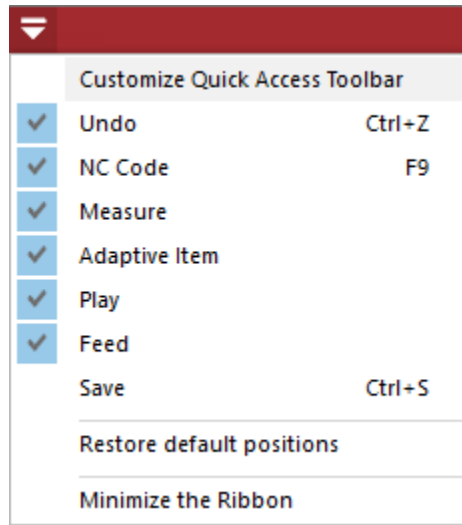
Use a circle segment end mill to enable larger axial depths, or larger stepovers of cuts with large radii in the cutting area.

Ribbon - New Icons and Organization



The ESPRIT ribbon menu has been redesigned with new icons and the commands have been reorganized to more closely follow your workflow.

Quick Access Toolbar - New Customization Options



The Quick Access Toolbar now features a **Customize Quick Access Toolbar** button  that lets you quickly see the current items in the Quick Access Toolbar and remove them with a click.

To access help for any item in the list, hover the mouse cursor over the desired item and press **F1**. The list also includes keyboard shortcuts, where applicable.

Heads-Up Toolbar - New Keyboard Shortcuts and Navigation for Layers, Views, and Workplanes

The Layers, Views, and Workplanes panels in the heads-up toolbar now offer keyboard shortcuts for common functions:

- Add: **Ctrl+N**
- Rename: **F2**
- Delete: **Delete**
- Select all: **Ctrl+A**
- Activate Layer/View/Workplane: **Enter**
- Toggle Layer Visibility: **Spacebar**

You can also use the keyboard arrow keys and **Page Up/Down** to navigate these panels.

What's New in ESPRIT Post Processor

Cycle Interrogation Functions

These functions interrogate various properties of specific operation indexes.

New System Variables

- ChannelCount
- CurrentChannel
- CurrentOperation

New Special Functions

- ChannelOperationCount
- ChannelSyncCount
- OperationCICodeValue
- OperationCycleClass
- OperationCycleCode
- OperationCycleType
- OperationHasCICode
- OperationHasMiscCode
- OperationHasTool
- OperationHasToolChange
- OperationMiscCode
- OperationStartingSyncNumber
- ToOperationLinkType
- FromOperationLinkType

Improved Movement Detected Diagnostics

When posting in long form, you will get a diagnostic message when movement occurs between the last link movement and the start point because one or more dim formattables are not specified in the example in the post, and thus were not output during the link movements.

XYZChanged is a bitwise mask of X,Y,Z,A,B,C,A1-A8. When either XYZChanged is non-zero or any forcedim register is set, then the softexample will get called.

Example:

```
ERR_567 Movement between link and start point {195}.  
  
-- Potential cause may be EX_LINK_RAPID_POSITION was not fully outputted.  
  
--Diagnostics:XYZChanged = [A8], ForceDim[ROTARYAXIS8(70),ROTARYAXIS8INCREMENTAL(79)].
```