FeatureMILL 2½ D

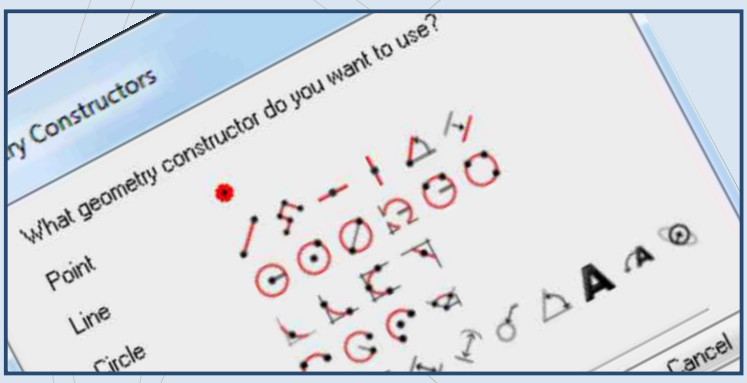
Delcam FEATURECAM

FeatureTURN creates efficient toolpaths

FeatureMILL2.5D is an advanced software package for unparalleled automation in Computer-aided manufacturing. As the name implies, it is a feature-based, or knowledge-based, manufacturing system. It knows about common features of milled parts and uses that knowledge to automate the manufacturing details. You control the amount of automation that is right for the situation.

Geometry

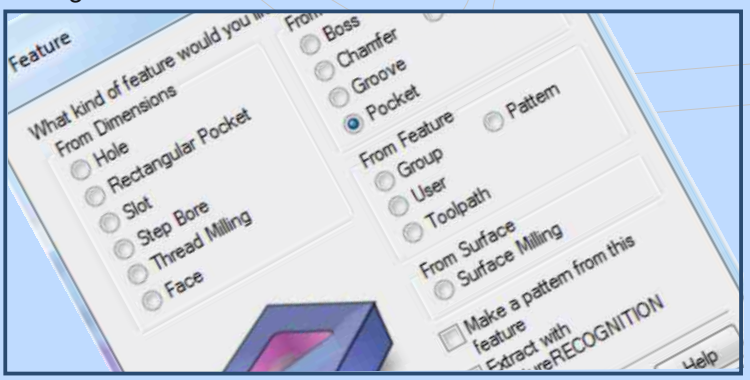
Either import the component drawing in DXF or IGES format or Simply create the component profile using the Geometry Constructors for lines, arcs, circles, fillets, chamfers etc.



Feature-Based

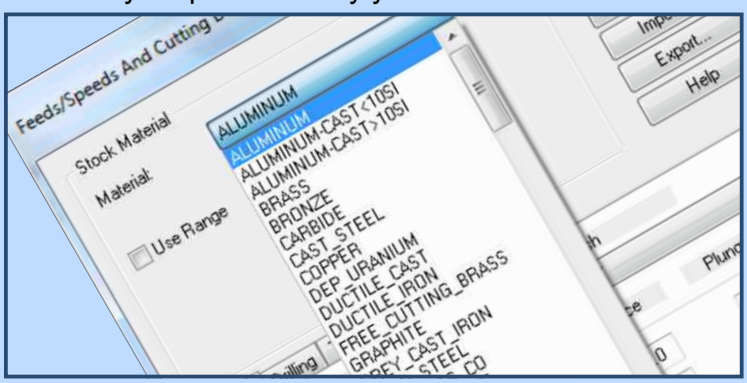
FeatureMILL can easily produce toolpaths for all the following 2.5 milling functions

Side contours	Thread Milling	Holes
Pockets	Chamfers	Stepped Bores
Slots	Rounded Edges	4th Axis Rotation
Facing		



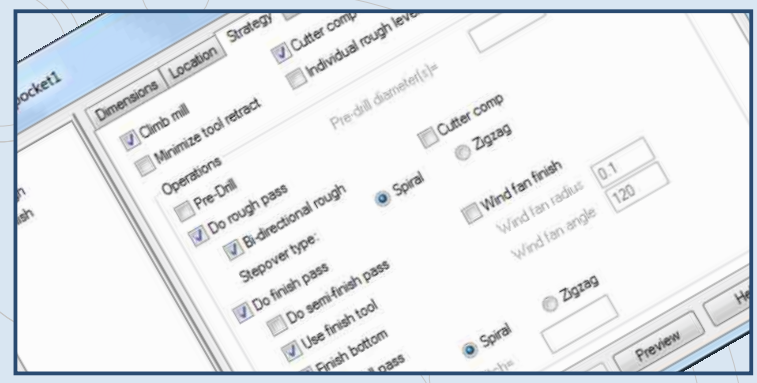
Feeds and Speeds Database

The extensive built-in databases are what provide the automation behind **FeatureMILL**. The feeds and speeds tables are fully customizable to give you the freedom to machine your parts the way you want to.



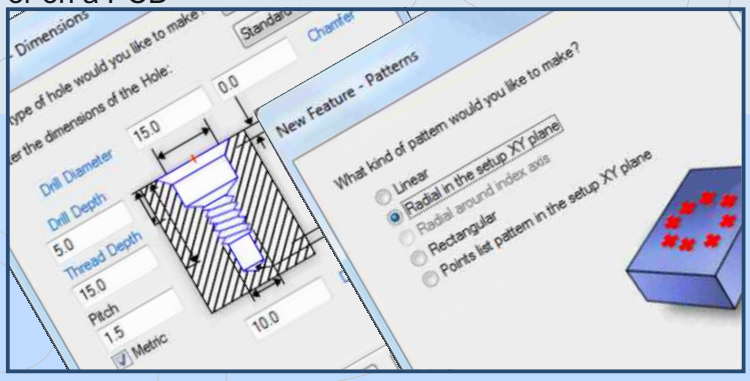
Machining Strategy

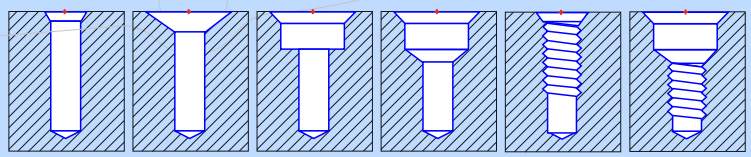
FeatureMILL lets you cut the part the way you want. The machining strategy properties tab lets you select exactly the way that you want to machine a feature. These can be set to default to your normal machining methods.



Holes

The hole wizard offers six types of hole from plain to counter drilled and tapped. Just select the type of hole and fill in the dimensions and FeatureCAM will automatically select the appropriate tools. You also have the option to create a pattern of holes either rectangular or on a PCD

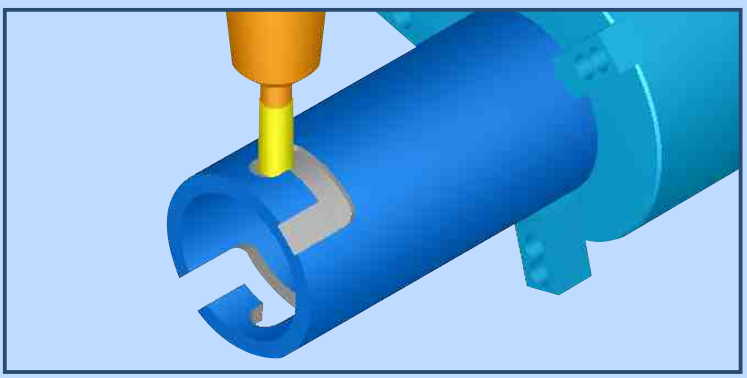




Plain Hole | Counter Sink | Counter Bore | Counter Drill | Tapped Hole | Counter Drilled Tapped

4th Axis Rotation

Features can be wrapped around the stock to provide full rotary axis milling. This is done by simply swapping the X axis for a rotational axis. In the simulation the part is shown to be rotating and any collisions between tool and chuck will be shown.



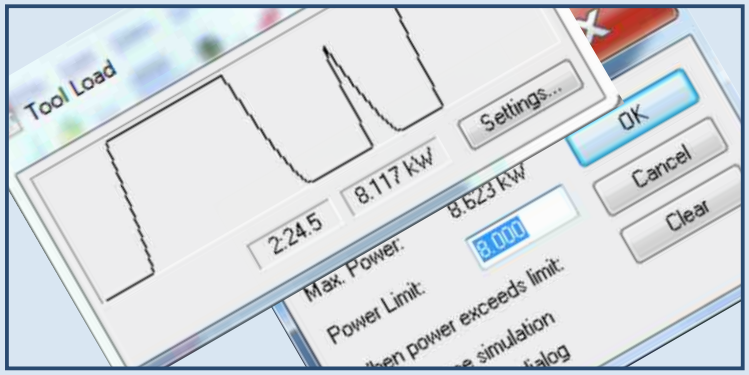
FeatureMILL 2½ D

Delcam FEATURECAM

FeatureTURN creates efficient toolpaths

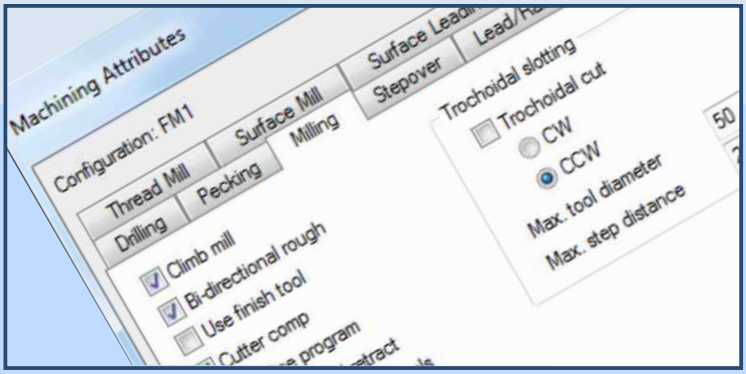
Power Consumption Monitor

During the cutting simulation the tool load is monitored and if the power consumption exceeds the machine tools limit then the simulation will pause and a warning is displayed.



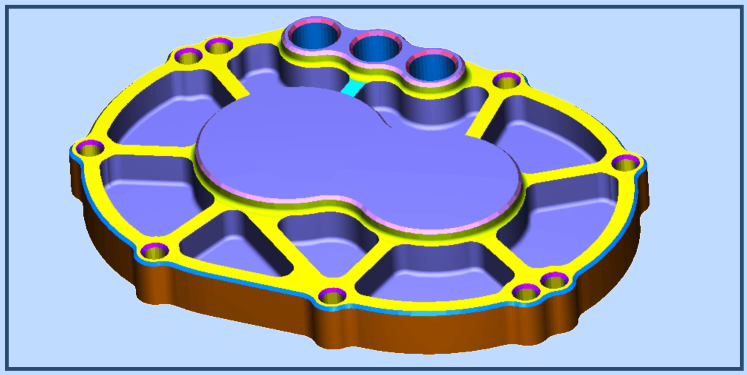
Machining Attributes

Configure FeatureMILL to work how you want to work. By setting the attributes for say climb milling, cutter comp etc these will be applied automatically each time you create a feature. This reduces the amount of time setting the machining strategy on each feature.



3D simulation

Shows a three dimensional solid simulation of the material being removed. Gouges with the tool holder or the tool during a rapid move can be visually detected. The movement of each tool can be optionally rendered in a separate colour.



Documentation

FeatureMILL will automatically generate a process plan for your part drawing including all the documentation your shop floor will need to produce the part. With a simple click of the mouse you can generate: Operation sheets, Tooling lists and NC Code.

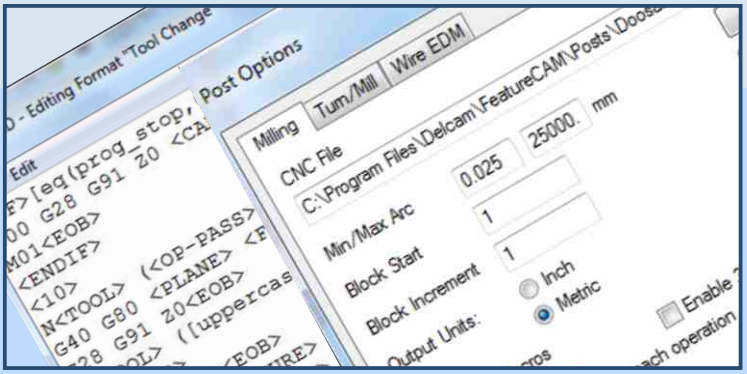
Manufacturing Operations Sheet

Part File : Endplate.FM	NC Program : Endplate.NC
Units : Metric	Material : Aluminium
Stock Size : 200mm x 150mm x 25mm	Date : 24/11/2011
Programmer : Fred Jones	

Op	Type	Feature	RPM	Feed	Tool	Dia	Tool#
1	Rough	Face	2000	.25	Face Mill	40	3
2	Rough	Pocket 1	3000	.3	End Mill	25	5
3	Rough	Profile	2500	.3	End Mill	25	5

Post Processors

The most important function of any CAM system is the ability to produce efficient NC code that does what you see in FeatureCAM. At Cambridge Numerical Control we pride ourselves with the quality of our post processor library.



Engraving

The Curve Wizard can create linear, circular or curved text in any windows font. If you have a rotary axis you can also wrap text around the parts outside diameter. Engraving is not just limited to text it can also be used to machine company logo's

Cambridge Numerical Control

Units 8 & 9 Royce Court Burrel Road St. Ives Cambs PE27 3NE Tel : +44 (0)1480-468639 Email sales@cnc.uk.com