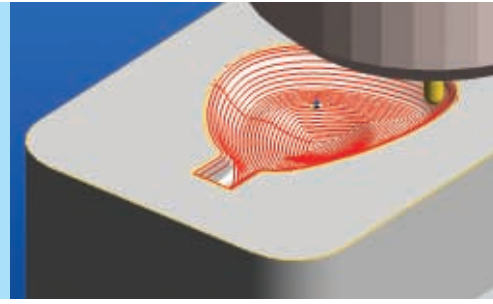


# EdgeCAM Part Modeler with EdgeCAM Solid Machinist, the Complete Solution



Coupled with EdgeCAM Solid Machinist, EdgeCAM Part Modeler provides a complete solid-based CAD/CAM solution. It provides the manufacturing engineer with an easy-to-use and cost-effective solid modeler for both parts and assemblies.



## Features of EdgeCAM Solid Machinist

### Guaranteed Data Integrity

True data integrity is achieved because the solid model is not filtered through a translator. The result - more of the models' inherent intelligence can be used to generate the machining strategy.

EdgeCAM Solid Machinist will detect and notify the user when a model or part has been changed. It will give the user the option to update the modified version, including any amended features. EdgeCAM Solid Machinist will recognize all dimensional and topological modifications, and recalculate the machining strategy and NC code accordingly.

### Feature Finder

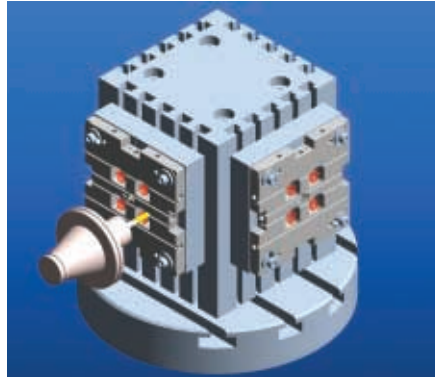
When a Parasolid®-based model is opened in EdgeCAM Solid Machinist, it is maintained as a solid model, exactly as it was created. At a single click, EdgeCAM Solid Machinist uses automatic feature recognition to interrogate the solid model to find machineable features. These features can then be machined using EdgeCAM's extensive range of prismatic and free form cutting operations.

### 2.5 and 3-Axis Milling

- Operations are recorded separately to make editing and resequencing easier
- Generate NC programs using simple or intelligent operations
- Profiling cycles feature tool offset calculations, finishing allowances, automatic cutter compensations and ramp lead in/lead out options
- Nested islands are fully supported by roughing cycles which reduce tool retractions and plunging

### Multiplane Machining

- Supports the machining of holes, pockets and surfaces on different faces of the part
- Reduces total setup times and fully exploits multi-axis machine capabilities



### Surface Machining

- Surface models are machined with reliable gouge free toolpaths. Approach strategies provide improved quality and tool life
- Choice of cycles, surface finish controls, flowline and waterline machining
- Cusp height control provides a constant surface finish
- Rapid roughing is achieved through machining optimized Z level cross-sections

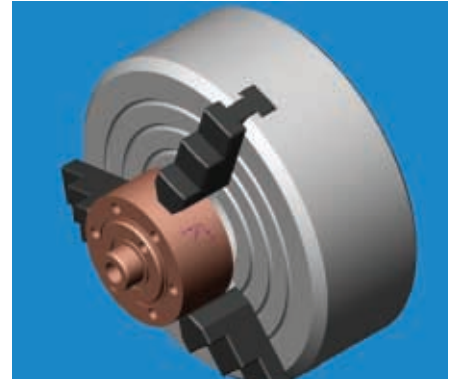
### Advanced Surface Machining

- Automated combination finishing cycles minimize cycle times
- Advanced strategies designed specifically for the mold and die market
- Project boundary collapse, circular and flow curve
- Z level male and female roughing

- Automated rest milling cycles
- Pencil Milling for high quality finishing

### Turning

- Using Feature Finder, EdgeCAM creates the maximum turned envelope ensuring that the whole 3-dimensional model is considered for machining, unlike the more usual 'slicing' method, which just considers a 2-dimensional profile
- Feature Finder will also detect holes that lie on the axial C axis
- Feature Finder will generate the four profiles: External Turn, Internal Turn, Face Turn and Back Face Turn
- The profiles generated are associative to the model. If the model is updated, it can be reloaded into EdgeCAM and the profile features will be regenerated



### EdgeCAM Productivity Toolbox

EdgeCAM Solid Machinist comes complete with:

- Code Wizard
- ToolStore
- NC Code Editor
- Communications Wizard
- Toolpath Verification

the **intelligent** choice

Your EdgeCAM supplier is:

**Head Office**  
**Pathtrace Engineering Systems**  
Reading RG2 0NH, UK  
Tel: +44 (0)118 975 6084  
Fax: +44 (0)118 975 6143  
Email: info@edgecam.com

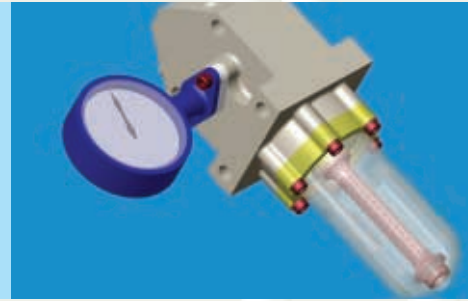


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Email: info@edgecam.com

# EdgeCAM Part Modeler

A cost effective tool offering the most frequently used modeling capabilities to Manufacturing Engineers who regularly receive customer data or have a need for in-house solid modeling.



## EDGE CAM PART MODELER® PROVIDES AN INTEGRATED CAD/CAM SOLUTION WITH EDGE CAM SOLID MACHINIST®

EdgeCAM Part Modeler is a simple but powerful tool for producing parts for: 2 and 3 Axis Milling, 2, 4 and C&Y Axis Turning as well as Surface Milling. Using the in-built procedural modeling capability, EdgeCAM Part Modeler intuitively enables the construction and editing of 2D and 3D models and assemblies. The user can build and make design changes to parts, quickly and easily, reducing the steps required to create complex models.

EdgeCAM Part Modeler is based on the Parasolid® modeling kernel and it enables design engineers to capture and reuse engineering knowledge and procedures, to automate the modeling process for mechanical components and assemblies. By reducing the normally extensive step-by-step procedure of model creation into a single operation, EdgeCAM Part Modeler provides a distinct advantage to users. With EdgeCAM Part Modeler, design time and the need for corrections to the model are significantly reduced.

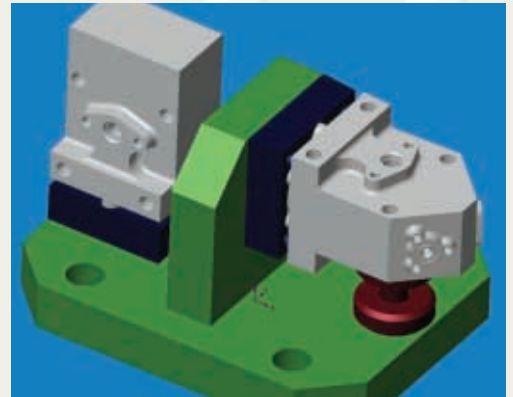
EdgeCAM Part Modeler can quickly create solid parts and perform Boolean operations to generate mold cores, cavities and EDM electrodes as well as jigs and fixtures. Seamless integration with EdgeCAM Solid Machinist offers true solid-based machining with Automatic Feature Recognition and full Part-to-Toolpath Associativity.



## Procedural Modeling

Part Modeler has the ability to execute a series of logically grouped feature construction steps as a single keystroke.

The procedures can be driven by design and manufacturing rules that can be executed simultaneously across multiple parts of an assembly with automatic part-to-part association.



## Drafting

EdgeCAM Part Modeler provides the user with a fully associative drafting tool.

Features include:

- 2D & 3D drafting
- Wireframe, Shaded, Hidden Line, and Hidden Line Removed display modes
- Isometric, Plan and Orthogonal Views
- Standard and Ordinate Dimensioning
- Geometric Tolerancing

## Other Features of EdgeCAM Part Modeler

- IGES Import and Export
- STL Export
- Printing and Plotting
- Context Sensitive Help
- On-Line Tutorials