

CAM Express – 3-Axis Machining

fact sheet

Siemens PLM Software

www.siemens.com/plm/camexpress

► Summary

CAM Express software is an in-depth, highly flexible system that allows users to maximize the value of their investments in the latest, most efficient and most capable machine tools. The 3-Axis Machining package provides a full complement of 3-axis milling and drilling capabilities, well-suited for the most demanding mold and die machining. To maximize the value of the advanced toolpath technology CAM Express delivers the proven methods and knowledge needed to deliver an effective high-speed machining solution.

Benefits

- Easy to use
- Easy to deploy
- Low cost of ownership
- Work with any CAD data
- Postprocessor integrated and accessible to user
- High-speed machining techniques drive efficiency

Features

- Free Flow Machining technology provides smooth, uninterrupted cutting
- Multiple rest-mill capabilities
- Full tool library
- Machining data libraries
- Flexible operation navigator
- Shop documentation

3-axis milling

Roughing, rest-milling, semi-finishing and finishing of contoured surfaces, is accomplished with a complete set of milling strategies to address the challenges of complex geometry. This capability includes Siemens' patent pending Free Flow Machining technology as well as additional functions needed for high-speed machining.

Wire EDM

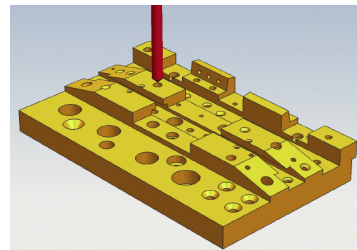
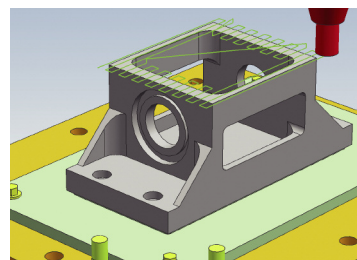
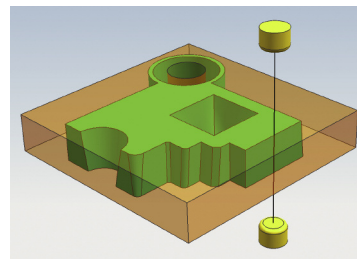
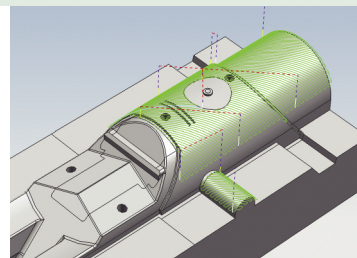
CAM Express provides a complete solution for programming 2- to 4-axis wire EDM machines. A range of wire operations is available, including multi-pass profiling, wire reversing and area removal.

2½-axis milling

2½-axis roughing patterns can be applied based on basic boundary data or solid geometry. Zigzag, offset and plunge milling are examples of the toolpaths provided. High-speed roughing toolpaths such as trochoidal are available here. Feature based machining functions automate the identification and programming of slots and faces.

Drilling

CAM Express addresses drilling, reaming, boring, tapping, peck drilling and custom cycles. Automated hole making is available with the feature based machining options.



Comprehensive foundation –

CAM Express includes extensive support functions that add substantial value

Toolpath verification

Features dynamic pan and zoom during playback and visual display of material removal.

Geometry modeling and translation

CAM Express includes basic geometry creation and a collection of standard translators. Use the assembly modeling tools to assemble a detailed machine environment or to position parts and fixtures.

Libraries

Tools, machines, cutting parameters, templates and posts are all organized for effective re-use and easy selection.

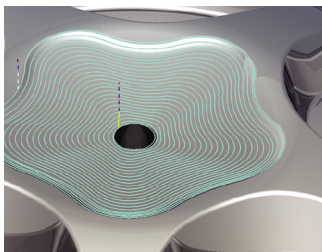
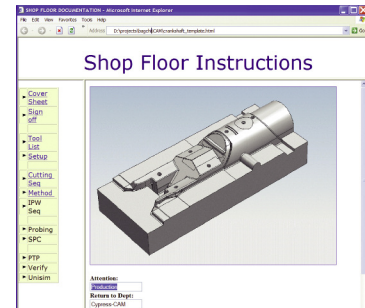
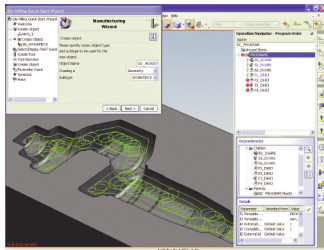
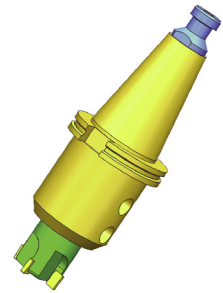
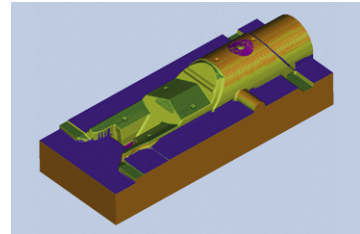
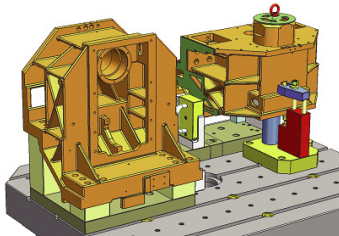
Machining parameter data is automatically drawn from the library as operations are created.

Wizards

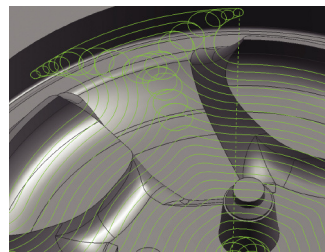
CAM Express comes with the drag-and-drop wizard builder.

Integrated postprocessing

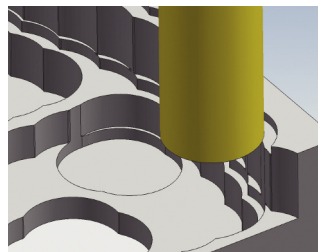
CAM Express includes a graphical post builder capability. Simple menu selections are all that is needed to build or edit a postprocessor. CAM Express automatically generates shop documentation, including setup sheets, operations sequence information and tool lists.



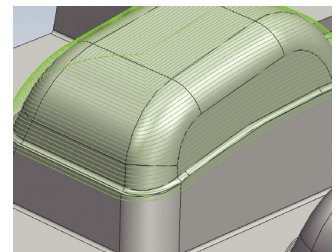
Free Flow Machining technology provides superior finish quality



High-speed roughing patterns maintain specified chip loads without overloading



Specific plunge milling patterns apply efficient axial roughing to any geometry



Finish patterns emphasize consistent stepover and predictable stock

Contact

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