

Mastercam® Design

Efficient Wireframe Geometry

- Multiple point and line creation techniques.
- Efficient arc, circle, and fillet functions, including filleting at every corner in a chain of entities.
- A variety of functions for creating splines on surfaces including surface projections, surface intersections, edge curves, slicing curves, and parting lines.
- Create pre-filleted shapes to save time.



Flexible Geometry Editing

- Change widths, styles, and colors globally or for a single entity.
- Quickly modify parameters such as line length and arc radius after creation.
- Fillet or chamfer corners easily.
- Extend lines, arcs, splines, and surfaces.
- Trim single or multiple surfaces with full undo capability.
- Quickly translate, mirror, and scale (uniformly or with separate factors in X, Y, and Z).
- Offset entities by a given distance.



Fast geometry creation and powerful surfacing tools give you the best in flexible part modeling.

Powerful Surface Modeling

- Create parametric and NURBS surfaces using loft, ruled, revolved, swept, draft, Coons patch, and offset creation methods.
- Create blend surfaces for complex tasks such as ball corners and blending between surfaces.
- Instantly create a flat surface simply by creating a rectangle or selecting a closed boundary of any shape.
- Create swept surfaces with an unlimited number of cross-sections.
- Trim single and multiple surfaces to curves, planes and surfaces.
- Undo surface trimming all at once or one boundary at a time.
- Easily extend and split surfaces.
- Flexible surface filleting offers constant radius fillets and point-and-click variable radius fillets.
- Automatic parting line calculation for mold making.
- 3D primitives allows easy parametric creation of surfaced blocks, spheres, cylinders, cones, and other shapes.
- Create, edit, and manipulate realistically shaded surface models.



Quickly create dimensions that automatically update with your model.

Easy Drafting Tools

- One pick dimensioning.
- Modify dimensioned geometry and its dimensions automatically update.
- Create horizontal, vertical, parallel, baseline, chained, angular, diameter, radius, ordinate and point coordinate dimensions, as well as notes and labels.
- Easily drag and place drafting notes as they are being created and change their attributes on the fly.
- Plot or print drawings in full color.
- Choose from a library of line and cross-hatch styles.



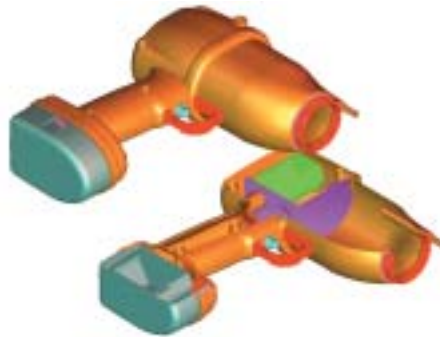
Mastercam's powerful surfacing tools let you create even the most demanding models accurately.

File Management and Data Exchange

- Built-in data translators for IGES, Parasolid®, SAT (ACIS solids), AutoCAD® (DWG, DXF™ and Inventor) CADL, STL, VDA, and ASCII. Direct translators for STEP, Catia, and Pro-E® are also available.
- Save a description of your files for easier browsing and loading.
- View files before opening them.

Selection Options

- AutoCursor™ snaps to commonly used points to simplify construction.
- AutoHighlight changes the color of entities when the cursor is over them, making selection easy.
- Quickly access common functions using the right mouse button.
- Smart chaining selects an entire chain of entities at once and automates other selection tasks.
- Restrict your selections to specific entity types, colors, levels, line styles or line widths.
- Group and ungroup entities for easy selection.
- Select entities inside, outside, or intersecting a rectangular window or a polygon sketched with the mouse.
- User-definable grid simplifies detailed construction.



Mastercam delivers dozens of tools to simplify construction, such as letting you see inside of your model.

Analyzing Geometry

- Instantly analyze any entity for size, location, entity type, and other attributes.
- Measure distance between points and angles between lines in 2D or 3D.
- Check the integrity of surface models and trimmed surface boundaries.
- Measure minimum and maximum radius of curvature anywhere on a surface, and calculate surface area for single or multiple surfaces.
- Draft angle analysis (from vertical) anywhere on a surface.

System Requirements

- Pentium™-based PC
- Windows compatible mouse
- Windows™ NT® 4.0 or higher, Windows 98, 2000, ME or XP.
- Minimum 800 x 600 monitor resolution
- Minimum 64 MB RAM; Minimum 80 MB free disk space in addition to Windows requirements

“Mastercam makes it easier to design on the fly than any other mechanical CAD package I’ve seen. It’s powerful stuff.”

- Jim Bruhns, President
Hogue Tool & Machine
Paso Robles, CA

Mastercam®

When Second Best Won't Cut It.

cnc software, inc. 671 Old Post Road Tolland, CT 06084 USA
(800) 228-2877 • Fax (860) 872-1565 • www.mastercam.com • mcinfo@mastercam.com