

BobCAD-CAM V20 Software

BobCAD-CAM Version 20 introduces new external file compatibility, powerful CAD wireframe, surface and solids technology and user friendly machining operations for 2D & 3D part making. Version 20 proves that advanced CAD-CAM software can be powerful and loaded with part making functionality, yet still easy to use while also being affordable enough for any shop! From basic 2D machining operations to model design and mold making BobCAD-CAM Version 20 provides you the toolpath and g-code to cut your parts FASTER...SMARTER & EASIER!

The following list of features has been added to give you an idea of what Version 20 can do for your design & manufacturing requirements.

File Import

- DXF Import
- IGES Import
- STEP Import
- AutoCAD DWG Import (including surfaces & solids)
- Rhino CAD 3DM Import
- SAT/ACIS File Import
- DGN (Early BobCAD file format)

Surface Creation

- Rectangular & Circular Plane
- Planar
- Extrude Curve
- Extrude Surface (with or without draft angles)
- Revolved
- 3 Edge
- 4 Edge
- Sweep
- Cross Section
- Skin Surface
- Multi-Sided Patch

CAD & Solid Modeling

- CAD-2D & 3D Design with Wireframe, Surfaces & Primitive Solids
- Solid Edit-Boolean Operations – Union, Difference & Intersection
- Independent/Constant & Variable Radius Filletting
- Independent & Constant Chamfering
- Automatic Stitch surfaces to Solid
- Automatic Un-Stitch surfaces from Solid
- Offset Surface & Solid
- Automatic Hole Removal
- Solid Model Rendering

Toolpath & Machining Operations

- Definition boundary machining
- Auto CUT, CUT Single & CUT ALL machining options
- 3 Axis Solid or Surface Toolpath wizard for high speed machining
- Solid part rendering
- Isolation Surface Machining
- Use Full Part & To Part Edge toolpath options
- 2 Axis Milling
- Pocketing with island avoidance or Tapered Wall

- Automatic Spiral & Horizontal toolpath
- Profiling - Open & Closed Shapes. Automatic Profile Wizard including variable linear and radial approach & depart. Automatic cutter compensation included
- Engraving with solid fonts, true type fonts and Single Line Fonts
- Bolthole Patterns – Grid & Circular
- Planar, Radial & Spiral Toolpath Creation Wizards for solid models and Surface roughing and finishing.

3 Axis Milling

- Horizontal Z Level Roughing
- Horizontal Z Level Finishing
- Spiral Z Level Roughing
- Spiral Z Level Finishing
- Surface Roughing – Skin Surface, Revolved Surface, Swept Surface, Ruled Surfaces, Radial Surfaces
- Surface Finishing – Skin Surface, Revolved Surface, Swept Surface, Ruled Surfaces, Radial Surfaces
- Spiral Skin Surface Toolpath
- Gears Creation & Machining
- Clean Circle – Roughing & Finishing
- Project Text Onto Surfaces – Roughing and Finishing
- Project Text To Curves – Roughing & Finishing
- Surface Machine Around Raised Text – Roughing & Finishing
- Direct Surface Toolpath To Wireframe

4 Axis Milling

- 4th Axis Indexing

5 Axis Milling

- 5 Axis Tool Positioning
- 5 Axis Surface Finishing

CAM & Communications

- RS 232 Communications – Fully Customizable by the operator
- DNC Communications - Fully Customizable by the operator
- Post Processor Configurations - Fully Customizable by the operator
- Post Processor Library – Available to all customers at no extra charge
- Customizable CAM Menus
- Customizable Drill Cycles
- Customizable Tool Library
- Customizable Tool Boxes & Icons
- Graphical Tool Rendering
- G-Code Editor
- Color Coded NC Codes – Operator Definable

Verification

- Solid NC Verification/Part Simulation
- NC Code Backplot
- Run Time Estimator
- Hole Making
- Drilling
- Tapping
- Boring
- Reverse Boring
- Peck Drilling
- Reaming

Visual Basic

- Visual Basic Scripting Capability
- Create & Record Operations
- Script Library

2 Axis Lathe

- Customizable Tool Library
- Roughing
- Finishing
- Grooving
- Slotting
- Facing
- Collision Detection
- Diameter Programming
- NC/G-Code Generation

Training

- Complete Training Manual
- Multimedia Training CD Videos