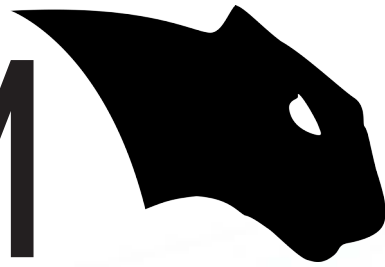


# BobCAD-CAM



CAD/CAM SOFTWARE

CAD | MILL | MILL TURN | LATHE | ROUTER | PLASMA | LASER | WATERJET | WIRE

**FEWER STEPS | BETTER CUTS | MORE PROFIT**



# EXPERIENCE THE POWER OF THE NEW BobCAD-CAM™

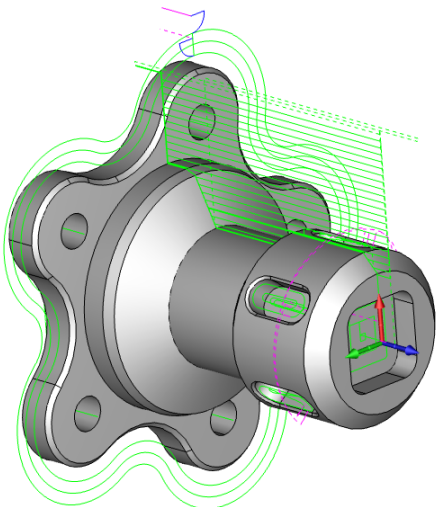
## The New Power in BobCAD-CAM

Version 28 comes with 30 years of CAD-CAM innovation including the popular wizard driven interface technology, a powerful CAD design system, Dynamic Machining Strategies™, 2-5 axis high speed adaptive toolpaths, realistic machine simulations, and much more.

The new version delivers greater design functionality, an improved intelligent hole drilling system, enhancements to milling functionality, a new simulation interface, and much more!

This release was all about developing and evolving high performance CAD-CAM functionality. We wanted to enhance the machining power, efficiency, and control of the software while maintaining the ease of use that BobCAD-CAM clients depend on to get their jobs done faster with superior results.

Whether you're new to BobCAD-CAM or a loyal customer, we're confident that our newest CAD-CAM software can improve your shop's efficiency, productivity, and profitability.



## 30 YEARS OF BOBCAD-CAM INNOVATION

### CAD DESIGN FEATURES

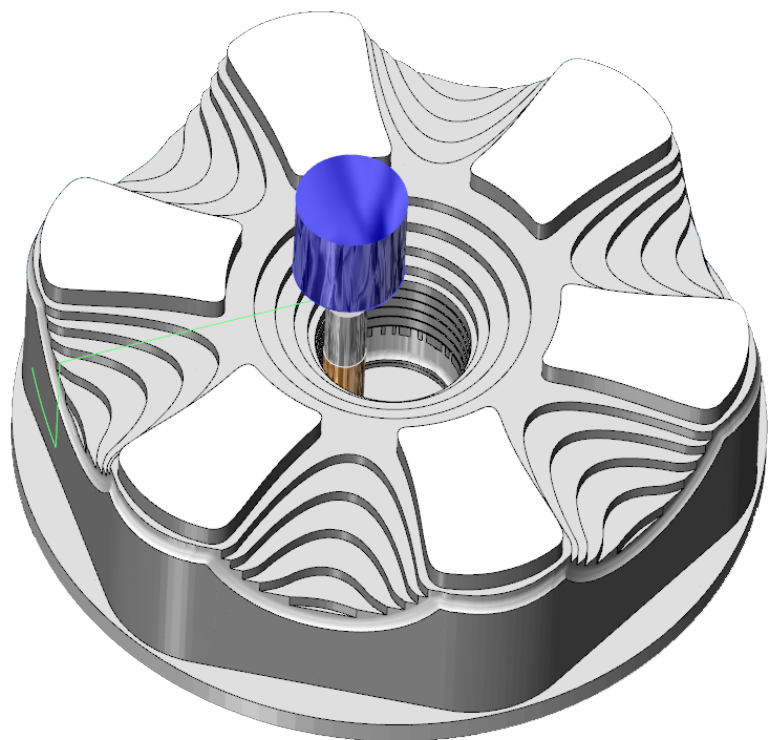
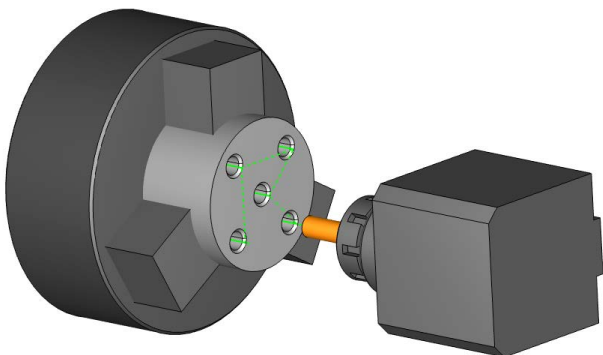
- CAD Design Tree
- Dynamic Drawing
- Shape Library
- 2D/3D Wireframes
- 2D Booleans
- Project to Z Plane
- Non-Uniform Scaling
- Section View
- 2D & 3D Geometry Creation Tools
- Surface Construction
- Solid Modeling
- Solids Boolean Operations & Surface Editing
- CAD Utilities, Translation, Mirroring, Stitching, & Unstitching
- Gear, CAMs & Sprocket Design Wizards
- Bolt Hole & Grid Patterns
- Text/Font Features & Complete Part Dimensioning
- Geometry Cleanup & Optimize with Erase Double Entities
- CAD Data Translation & Interoperability





### **CAM PROGRAMMING**

- Tool Crib
- Job Setup Wizard
- Advanced Tool Patterns
- Dynamic Machining Strategies™
- Copy & Paste Operations
- Expand & Collapse in Tree
- Customizable Setup Sheets
- Stock Wizard
- Multiple Machine Setups
- Material Speed & Feed Library
- Tool Holder Library
- Individual & Compound Drilling Operations
- Tool Database
- Material Based Calculated Feeds & Speeds
- Ability to Save & Load Features
- 3D Simulation Work Offset Selection
- Coolant Selection
- Sub Program Output
- 3D Arc Fit – G17, G18, & G19 Plane Cutting
- Associative CAM Tree



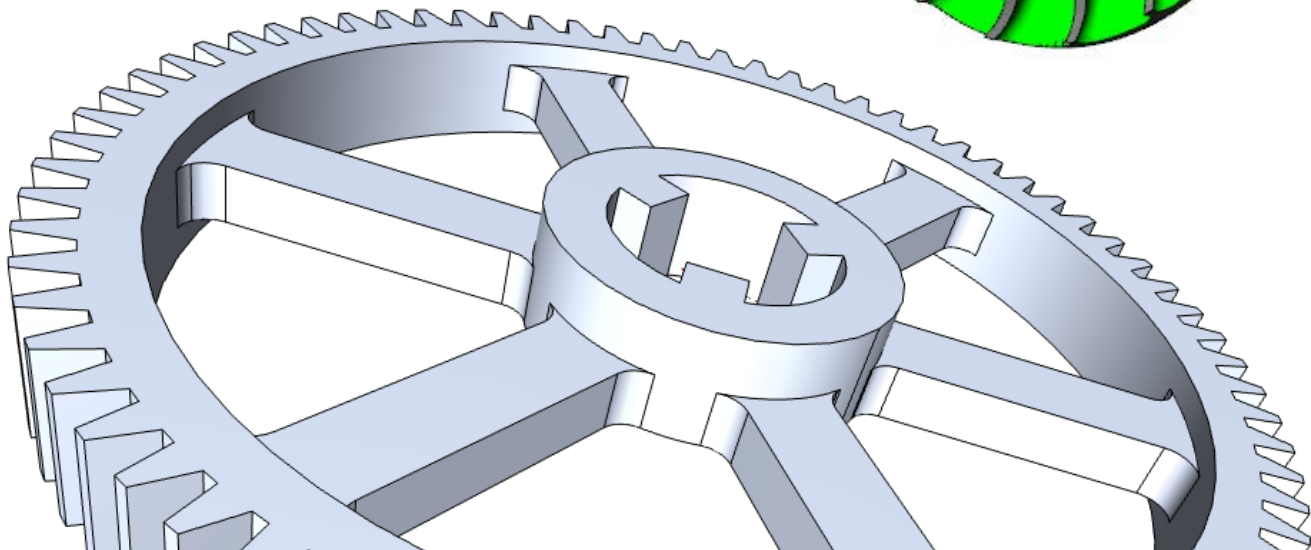
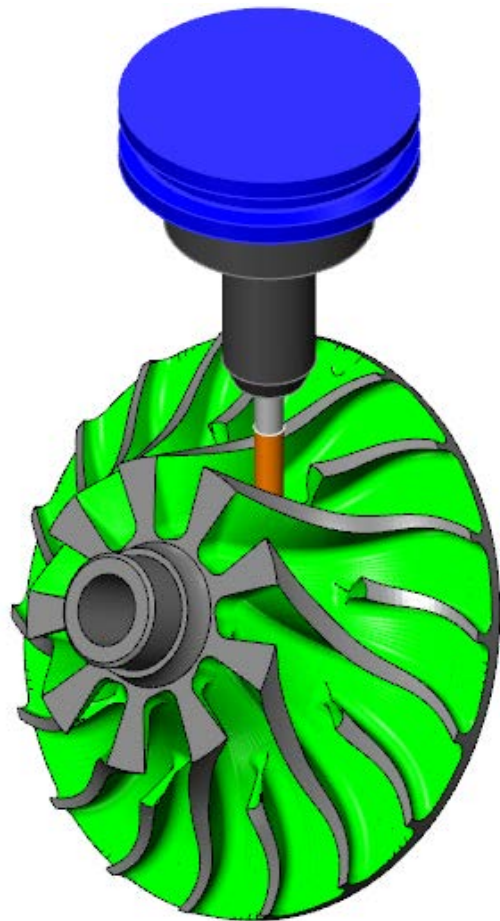


**The Features You Want. The Training You Need. The Support You Deserve.**

### **30 YEARS OF BOBCAD-CAM INNOVATION (continued)**

#### **SIMULATION CAPABILITIES**

- Set Travel Limits & Detect Over Travels
- Use Machine Kinematics
- Detect Part Gouges & Tool, Tool Holder, and Machine Collisions
- Calculate Cycle Times
- Dynamic Machine/Material/Tool Viewing
- Section View
- Tool Holder, Shank Arbor
- Tool Focus/Workpiece Focus
- Analysis – Tool #, Operation #, Deviation, Height Change, Orientation Change, Toolpath Length, Mark Parts, Single Marking, Gouge Excess
- Statistics (Move, Operation, Sequence) – Feed Rate Time, Rapid Time, Change Tool Time, Total Machine Time, Min/Max XYZ, Feed Rate
- Dynamic Elements/Workpiece & Holder Tree
- Deviation Analysis
- Move List
- Simulation Play Controls
- Toolpath Mode/Material Mode
- Time Based Mode/Length Based Mode
- Save Simulation Models As STL
- Measure Between 2 Points
- Remove Chips
- Works With Your STL Stock
- Customize Graphics & Background
- Launches Inside of BobCAD-CAM Software







## Available Toolpaths

### TURNING TOOLPATHS

- OD/ID Roughing
- OD/ID Finishing
- OD/ID Grooving
- Drilling
- Threading
- Cut Off with Chamfer & Fillet Corner Break Options
- Stock Feed
- Pattern Repeat Cycles
- Auto-Assignment of Finish Passes

### MILLING TOOLPATHS

#### 2.5 Axis

- Profiling
- Pocketing
- Engraving
- High Speed Pocketing
- Thread Milling
- Plunge Roughing
- Facing
- Chamfering
- Rest Machining

#### Surfaced Based Toolpaths (3, 4, & 5 Axis Output)

- Parallel Cuts
- Cuts Along Curve
- Morph Between 2 Curves
- Parallel to Multiple Curves
- Project Curves
- Morph Between 2 Surfaces
- Parallel to Surface

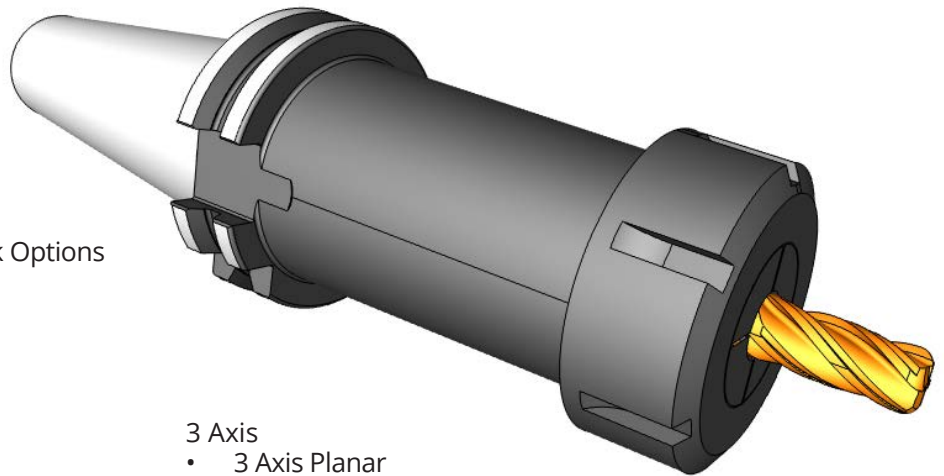
#### 4 Axis

- Indexing
- Wrapping
- Rotary

### HOLE DRILLING

#### Hole (Through/Blind)

- Center Drill
- Drill
- Chamfer Drill
- Chamfer Mill
- Bore
- Counterbore (Hole, Tap Hole)
- Ream

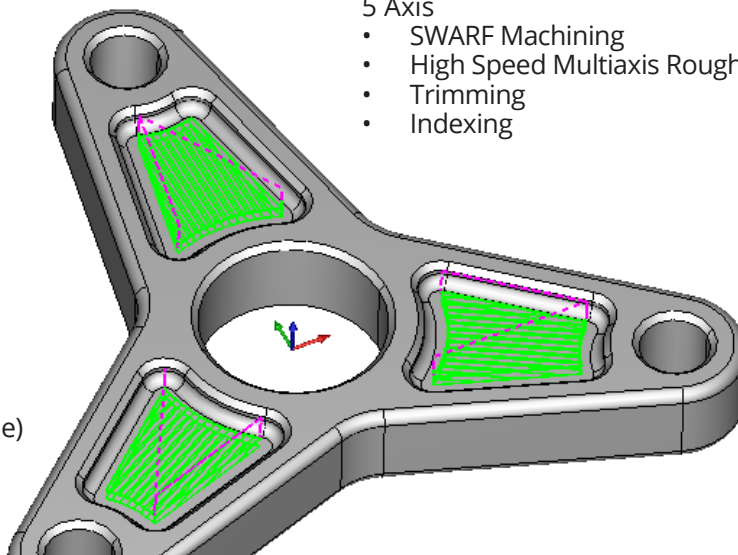


#### 3 Axis

- 3 Axis Planar
- 3 Axis Spiral
- 3 Axis Engraving
- 3 Axis Radial
- 3D Plunge Roughing
- Z Level Roughing
- Z Level Finishing
- Advanced Roughing
- Flatlands
- Equidistant Offset
- Pencil
- High Speed Roughing
- Rest Machining
- Advanced Planar
- Advanced Z Level Finish
- Project Curves

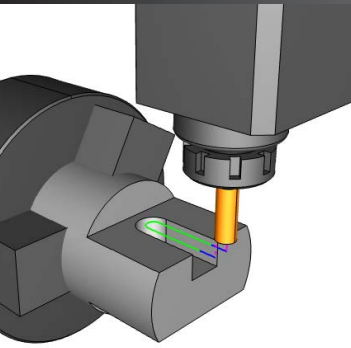
#### 5 Axis

- SWARF Machining
- High Speed Multiaxis Roughing
- Trimming
- Indexing



# ADD-ONS

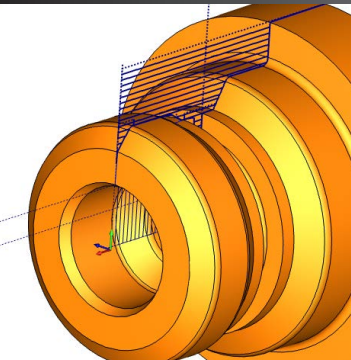
## MILL TURN



The Mill Turn module combines all of the power and functionality of CAD-CAM for both mill and lathe in a single streamlined programming software for multitask machining environments. Use it to perform everything from simple 2 axis turning and 3 & 4 axis milling to full 4 & 5 axis simultaneous operations. This mill turn machine programming solution provides the control to easily program the non-perpendicular multiaxis tool movements required to machine intricate features and compound angles found in many complex parts such as medical components, complex valves, tool holders, oil drilling tools, and many more.

- 2 Axis Turning & Live C Axis (XZC)
- Y Axis Milling
- 5 Axis Milling Head Support
- MDI Programming
- Multi-Turret & Multi-Spindle Support
- Supports Programmable Tailstocks & Steady Rests
- Full Mill Turn Machine Simulation

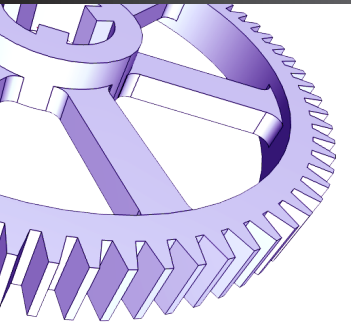
## LATHE



Lathe CAD-CAM makes it easy to set facing and OD/ID roughing, finishing, threading, and grooving 2 axis toolpaths on your CNC turning machine. Define custom tool holders, inserts and part holders for a realistic simulation experience to give you the peace of mind in knowing what will occur at your actual machine before ever cutting a chip.

- Supports Custom Tool Holders & Inserts
- Lead-In/Lead-Out Control
- OD/ID Roughing & Finishing Operations
- Grooving Cycles
- Threading Cycles
- Facing Cycles
- Cut Off & Stock Feed Operations

## WIRE EDM



Create precise 2 & 4 axis wirepath CNC programming quickly and easily with CAD-CAM for Wire EDM. This powerful software allows you to set up open & closed, inside & outside shape programming and gives you the ability to customize skim passes, independent lead-ins/lead-outs, glue stops, and more for a complete wire EDM programming solution that works with Mitsubishi, Japax, Brother, Fanuc, Sodick and other CNC Wire EDM machines.

- Customizable Cutting Condition
- 2 & 4 Axis Inside, Outside, & Open Shape Cutting
- Options For Skim Passes, Independent Lead-In/Lead-Out & Glue Stops
- Apply Land & Taper Calculations
- Coreless Cutting
- 4 Axis Syncing by Entity, Proportion, & Closest
- Specialized Corner Types

## ART



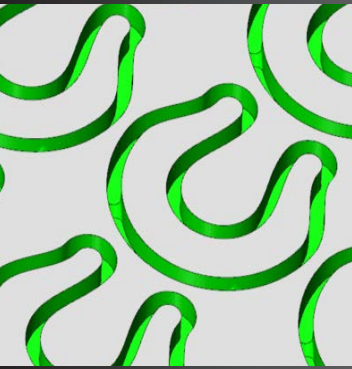
Turn your artistic imagination into a manufacturing reality! The BobART artistic CAD-CAM software allows you to take a picture or drawing and turn it into a relief model or vectorized geometry that can be machined by a CNC mill, router, laser, plasma, or waterjet machine. Simply open an image file with BobART and you're on your way to creating toolpaths and g-code for your creative engraving, carving, and embossing jobs.

- Raster to Vector Conversions
- Import EPS, AI, PSD & More
- Emboss From Component
- Emboss From Photo
- Texturing, Sculpting, Smoothing
- V Carving & X Cornering for Text
- Cylindrical Wrapping

**BobCAD-CAM, Inc.**  
**28200 U.S. HIGHWAY 19 N., CLEARWATER, FL 33761**  
**(877) 262-2231 | (727) 442-3554**

# ADD-ONS

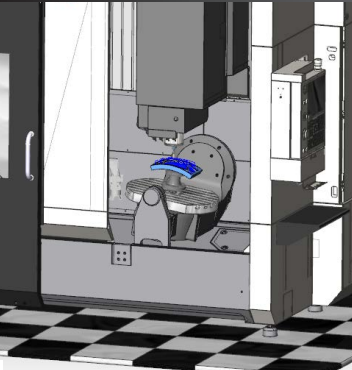
## NEST



Powerful true shape nesting algorithms provide faster and smarter sheet optimizing functionality to increase your per job profitability with higher sheet yields on your nesting jobs. Batch processing allows you to upload multiple part files to a single nesting job while part-in-part nesting lets smaller parts be positioned inside of larger parts to maximize overall sheet usage. This is an advanced shape cutting solution designed for CNC mill, router, laser, plasma, and waterjet shops.

- True Shape Nesting
- Part-In-Part Nesting
- Nesting with Tabs
- Batch Processing
- Part Priority
- Automatic Lead-In & Lead Out
- Multiple Part Import Options

## MACHINE SIMULATION



Visualize your machine in action within the CAM simulation window to test and confirm your toolpath programming on 2-5 axis CNC machines. This allows you to verify part fixtures are oriented correctly, machine movements are collision free, proper tool fixtures sizes are being used, and much more. The simulation play controls and move list allow you to easily isolate potential programming problems and quickly make the required adjustments.

- Full Machine Display
- Set Machine Travel Limits
- Calculate Cycle Times
- Dynamic Machine/Material/Tool Viewing
- Time Based Mode / Length Based Mode
- Works With Your STL Stock
- Play Control Buttons & Move List

### BobCAD-CAM, Inc.

As a worldwide leader in developing innovative solutions for CNC part programming, BobCAD-CAM remains at the forefront in providing both small and large shops with powerful and affordable CAD-CAM products. BobCAD-CAM software delivers cutting-edge CAD-CAM technology for shops looking for an efficient solution in toolpath and g-code programming.

### SYSTEM REQUIREMENTS

#### Windows (Minimum)

- 3GB RAM
- 128 MB Graphics Card\*
- Intel® or AMD® Processors\*\*
- 2GHz Processor
- Windows Vista, Windows 7, or Windows 8
- IE9 or Above
- When using physical media (disk) to install the BobCAD-CAM software, the optical drive must support DVD-ROM disks

### FIRST-CLASS TRAINING & TECH SUPPORT

Training Solutions – Webinars | Training Seminars |  
Video Tutorials | In-House & On-Site Training Sessions  
Live Tech Support - 8am – 7pm EST M-F  
Online Documentation - Available 24/7  
BobCAD-CAM Industry Forums - Connect & Share  
Helpful Tips & Tricks with Fellow BobCAD-CAM Users

#### Windows (Recommended)

- 6GB RAM or More on Windows 8 x64 Operating System
- 1GB Graphics Card\*
- Intel® or AMD® Processors\*\*
- 2GHz Processor (Multi-core) or Higher
- Windows 8 x64 Windows (Recommended)

### Specifications: Recommended vs. Minimum.

The Minimum specifications mean that BobCAD-CAM software will open and work. The minimum requirements do not gauge performance and stability. For BobCAD-CAM to preform reliably at its best, it is highly recommended to meet or exceed the recommended specifications.

Note: BobCAD-CAM V26 was the last version supported for windows XP. Windows XP is no longer officially supported.

\*BobCAD-CAM's stability is dependent on the graphics card ability to process information, integrated memory graphics cards may work but are not recommended.

ATI® or NVIDIA® graphics cards with dedicated memory are recommended. The graphics card's software driver must be updated to the current software drivers released by the graphics card manufacturer.

\*\*BobCAD-CAM is not supported on Apple Macintosh® -based machines. Some customers have shown success in running BobCAD-CAM in a Virtual Windows environment on Mac computers using Boot Camp. While the end user may choose to run Windows on a MAC®, this is not supported by BobCAD-CAM Inc.