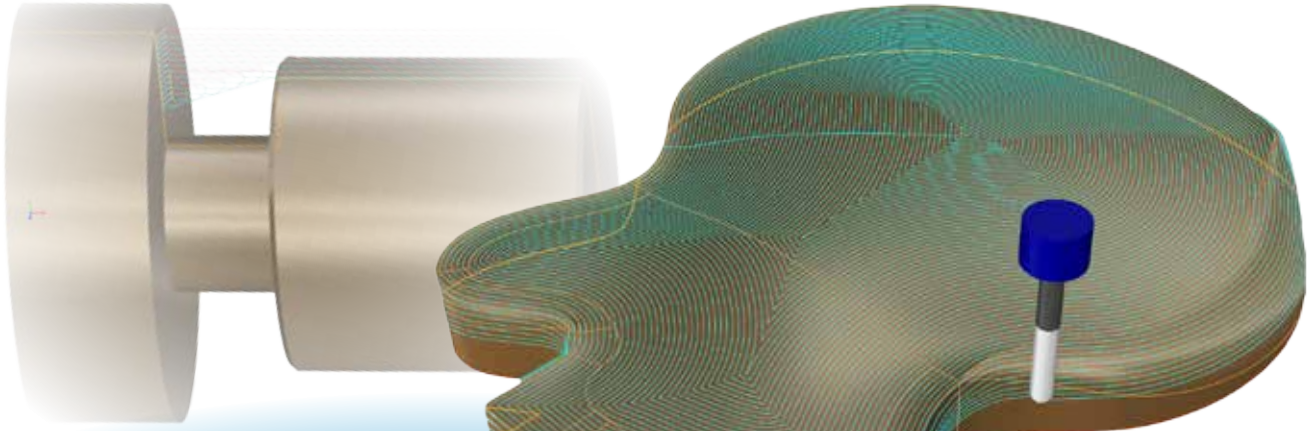
MecSoft Corporation

Your CAM Partner

RhinoCAM 2018

Computer Aided Manufacturing inside Rhino®5/6

Powerful | Easy To Learn | Easy To Use | Value Priced



RhinoCAM®

Includes MILL, TURN, ART, NEST & MESH modules

A complete CNC programming system running fully inside Rhino for rapid prototyping, mold & die, tooling, wood working, general machining, hobby & education

RhinoCAM's MILL module includes powerful 2.5, 3, 4 and 5 axis machining functionality to program CNC mills. Also includes automatic feature detection and machining! Comes with hundreds of free post-processors and the ability to create new ones.

RhinoCAM's ART module converts artwork to geometry suitable for milling. Used for modeling artistic shapes from raster images, extending the capabilities of the milling module.

RhinoCAM's NEST module, with both Rectangular & True Shape nesting, is used for optimally arranging and fitting arbitrary shapes onto sheets of stock material.

RhinoCAM's TURN module is a complete 2 axis CNC turning center programming system, including Roughing, Finishing, Grooving and other machining methods. Comes with numerous post-processors and the ability to create new ones.

RhinoCAM's MESH module offers efficient, easy and automatic tools for cleaning, fixing up and refining 3D mesh data for downstream applications such as toolpath programing as well as 3D printing.

MecSoft Corporation
18019, Sky Park Circle, Irvine, CA – 92614
Tel: 949.654.8163 Fax: 949.654.8164
www.mecsoft.com

RhinoCAM - MILL 2018

RhinoCAM's MILL module includes powerful 2.5, 3, 4 and 5 axis machining functionality to program CNC mills. Also includes automatic feature detection and machining! Comes with hundreds of free post-processors and the ability to create new ones. Ideal for rapid-prototyping, mold & die, tooling, metal & wood working, general machining, hobby and education industries. RhinoCAM - MILL delivers outstanding value for your investment.

Available Configurations

MILL Xpress (XPR)
A program ideal for hobbyists, makers and students, suitable for getting started with CAM programming. Includes 2 & 3 axis machining methods.

MILL Standard (STD)
A multi-purpose program ideal for production, rapid prototyping, panel-processing & general machining, where ease of use and a complete tool set is important. Includes 2 and 3 axis machining methods.

MILL Expert (EXP)
Includes all of STD functionality plus a wider range of 2, 3 axis methods as well as 4 axis Indexed and continuous roughing and finishing operations as well as advanced simulation.

MILL Professional (PRO)
For demanding users with sophisticated requirements such as mold, die & tooling, woodworking industries. Includes all of EXP plus indexed 5 axis machining and advanced 3 axis machining methods.

MILL Premium (PRE)
For demanding users with highly sophisticated manufacturing requirements such as aerospace, advanced mold making and woodworking. All of PRO functionality plus continuous 5 Axis machining.

2 1/2-Axis Milling	XPR	STD	EXP	PRO	PRE
Pocketing	●	●	●	●	●
Profiling	●	●	●	●	●
Facing	●	●	●	●	●
Engraving	●	●	●	●	●
V-Carving	●	●	●	●	●
V-Carve Roughing		●	●	●	●
Automatic Feature Detection		●	●	●	●
Automatic Feature Machining		●	●	●	●
Slot Milling		●	●	●	●
2-Axis Roughing		●	●	●	●
High Speed Pocketing		●	●	●	●
Chamfering		●	●	●	●
Hole Making		●	●	●	●
T-Slot Milling		●	●	●	●
Thread Milling		●	●	●	●
Fillet Machining		●	●	●	●
Re-Machining				●	●

3 Axis Milling	XPR	STD	EXP	PRO	PRE
Horizontal Roughing	●	●	●	●	●
Parallel Finishing	●	●	●	●	●
3 Axis Feature Detection		●	●	●	●
3 Axis Feature Machining		●	●	●	●
Horizontal Finishing		●	●	●	●
Radial Machining		●	●	●	●
Spiral Machining		●	●	●	●
Clear Flats Machining				●	●
Plunge Roughing				●	●
Horizontal Re-roughing				●	●
Plunge Re-roughing				●	●
Projection Pocketing				●	●
3D Offset Profiling				●	●
3D Offset Pocketing				●	●
Pencil Tracing				●	●
Valley Re-Machining				●	●
Plateau Machining				●	●
Steep Area Parallel Machining				●	●
Horizontal Hill Machining				●	●
Curve Machining				●	●
Between 2 Curves Machining				●	●
Reverse Post Machining				●	●

4 Axis Milling	XPR	STD	EXP	PRO	PRE
4 Axis Indexed Machining			●	●	●
4 Axis Create Round Stock			●	●	●
4 Axis Auto Multiple Indexing			●	●	●
4 Axis Continuous Facing			●	●	●
4 Axis Continuous Pocketing			●	●	●
4 Axis Continuous Profiling			●	●	●
4 Axis Continuous Engraving			●	●	●
4 Axis Parallel Roughing			●	●	●
4 Axis Parallel Finishing			●	●	●
4 Axis Radial Finishing			●	●	●
4 Axis Projection Pocketing			●	●	●
4 Axis Drive Surface Machining			●	●	●

5 Axis Milling	XPR	STD	EXP	PRO	PRE
5 Axis Indexed Machining				●	●
Locked 4 Axis Machining					●
5 Axis Curve Projection Machining					●
5 Axis Flow Curve Machining					●
5 Axis Between 2 Curves Machining					●
5 Axis Drive Curve Machining					●
5 Axis Surface Normal Machining					●
5 Axis Swarf Machining					●

Hole Making	XPR	STD	EXP	PRO	PRE
Automatic Hole Selection, Sorting	●	●	●	●	●
Drilling	●	●	●	●	●
Tapping		●	●	●	●
Boring		●	●	●	●
Reverse Boring		●	●	●	●
User Defined Cycles		●	●	●	●
4 Axis Drilling			●	●	●
4 Axis Tapping			●	●	●
4 Axis Boring			●	●	●
4 Axis Reverse Boring			●	●	●

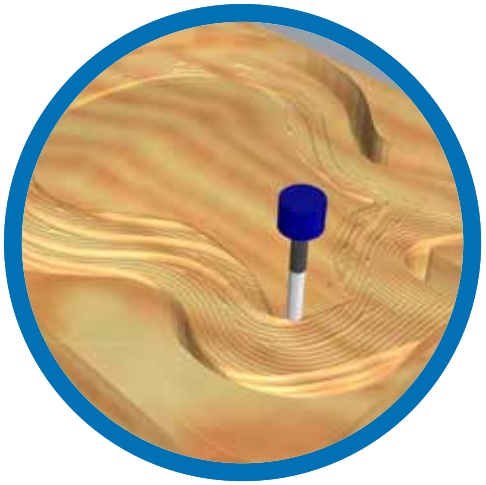
Simulation	XPR	STD	EXP	PRO	PRE
Toolpath Animation	●	●	●	●	●
Cut Material Simulation	●	●	●	●	●
Advanced Cut Material Simulation		●	●	●	●
Machine Tool Simulation			●	●	●

Tools	XPR	STD	EXP	PRO	PRE
Mill Tools (Ball, Flat, Bull, Vee)	●	●	●	●	●
Drill Tools (Drill, Counter Sink)	●	●	●	●	●
Other (Tap, Bore, R. Bore, Form)		●	●	●	●
Tool Holder Collision		●	●	●	●

Toolpath Editing	XPR	STD	EXP	PRO	PRE
Toolpath Graphical Viewing	●	●	●	●	●
Toolpath Graphical Editing				●	●
Toolpath Instancing				●	●
Toolpath Arc Fitting				●	●
Feed Rate Optimization				●	●

Post Processor Generator	XPR	STD	EXP	PRO	PRE
Customizable Post Generator	●	●	●	●	●
Simulate Cycles	●	●	●	●	●
Arc Output	●	●	●	●	●
Helix Output	●	●	●	●	●
Spiral Output	●	●	●	●	●
5 Axis Output				●	●

Miscellaneous	XPR	STD	EXP	PRO	PRE
64 Bit	●	●	●	●	●
HTML Based Shop Documentation		●	●	●	●
Stepped Tooling		●	●	●	●
Knowledge Base		●	●	●	●
Default Knowledge Base		●	●	●	●
Avoid/Pre-Defined Regions		●	●	●	●
Machine Control Operations		●	●	●	●
Explode Cabinet Model		●	●	●	●
Rotate Table Setups			●	●	●
Multiple Setups				●	●
Fixture Offset Programming				●	●
Check Surface Boundary Creation				●	●
Tool Silhouette Boundary Creation				●	●
Tool Double Contact Boundary Creation				●	●
Tool Holder Collision Boundary Creation				●	●



MecSoft Corporation
18019, Sky Park Circle, Irvine, CA – 92614
Tel: 949.654.8163 Fax: 949.654.8164
www.mecsoft.com

RhinoCAM - ART 2018

RhinoCAM - ART is a module within the RhinoCAM product suite used to convert artwork into geometry suitable for machining. It uses special modeling techniques for modeling artistic shapes using raster bitmap images. Used in conjunction with Rhino's modeling tools, it offers a complementary set of modeling techniques for jewelry design, sign making and model making.

Features & Functions
Create 3D Relief from bitmap image files
Ability to limit creation of reliefs using colors and/or curves
Create puffed up 3D volumes using closed curves
Create 3D sweep volumes using various profiles
Combine 3D volumes using various Boolean operations during creation
Export created 3D volumes as Mesh geometry to CAD system
Convert 3D CAD geometry to ART 3D volumes
Create 2D Curve geometry from image files using Raster to Vector operations
All operations are associative to CAD geometry used in creation
Save and reuse previously created 3D volumes using Shape Library functionality

ART is included in all configurations of MILL free of cost!

RhinoCAM - NEST 2018

RhinoCAM - NEST, another module of RhinoCAM, is a cost effective solution for optimally arranging and fitting geometric shapes onto sheets of stock or sheet material. It provides two primary nesting capabilities: Rectangular Nesting and True Shape Nesting. For both solutions, individual 2D CAD shapes can be arranged on sheets according to user-defined quantities, spacing, and with orientation control, including material grain restrictions.

Rectangular Nesting is useful in cases where shapes are rectangular, such as when nesting panels for the assembly furniture industry.

True Shape Nesting considers the true shape of parts to be nested and can place smaller parts within cutouts of larger parts and can also accept true shape remnants as material sheets. RhinoCAM - NEST saves the resultant nested geometry for follow-up applications' use such as machining or fabrication.

User Interface
Wizard Interface
Preview before output

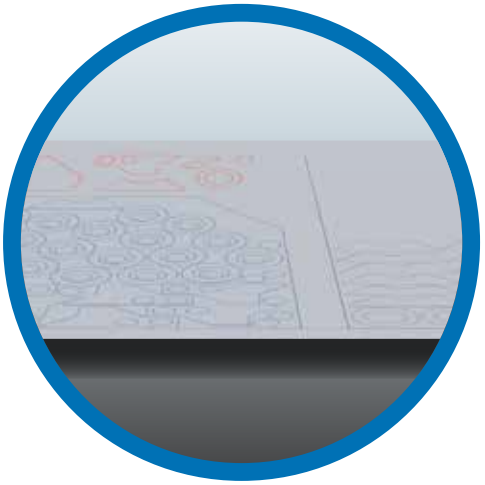
Nesting Methods
Rectangular/Block Nesting
True Shape Nesting

Global Parameters
Distance limits between part and sheet
Distance limits between two adjacent parts
Accuracy control of nesting

Sheet Parameters
Sheet start corner
Nesting direction
Grain direction
Unlimited number of sheets
Sheet layering by color

Part Parameters
Distance limits between part and part
Rotation limits
Mirroring
Island recognition
Part-in-Part

Miscellaneous
Tagging of parts
Nesting for cabinet making
Nesting for sign making
Estimate # of sheets,
Calculate Sheet Utilization
Export Sheets to Files



NEST is included in all configurations of MILL free of cost!

MecSoft Corporation
18019, Sky Park Circle, Irvine, CA – 92614
Tel: 949.654.8163 Fax: 949.654.8164
www.mecsoft.com

RhinoCAM - TURN 2018

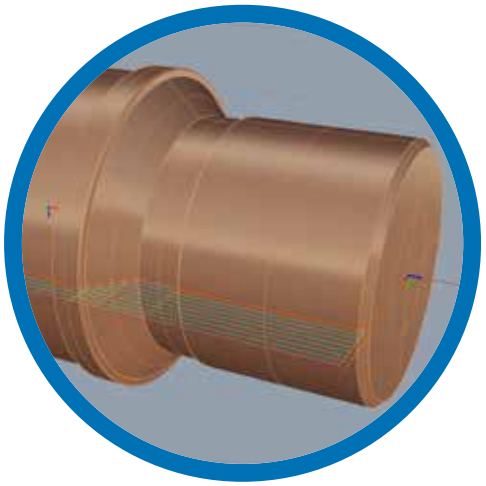
RhinoCAM - TURN is a powerful 2 axis turning center/lathe programming module that includes Turn Roughing, Finishing, Groove Roughing, Finishing, Threading, Parting, Hole Machining methods & free post processors.

2 Axis Turning
Roughing
Finishing
Groove Roughing
Groove Finishing
Threading
Follow Curve
Parting Off
Global Part Object
Curve or Solid Part Object
Materials for Stock Models
Knowledge Base Loading and Saving
Tool Path Viewer
MopSets
Machine Control Operations
Fixture Offset Operations
Drag and drop operations from Knowledge Base
Diameter Programming

Hole Making
Drilling
Tapping
Boring
Reverse Boring

Toolpath Simulation
Toolpath Animation
Cut Material Simulation
Part to Stock Comparison

Post-Processor Generator
User customizable post-processor generator

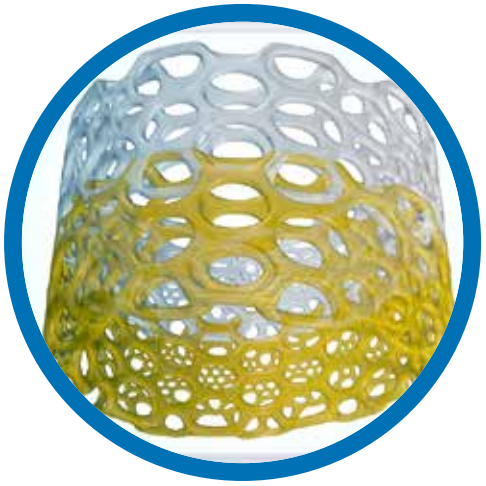


TURN is separately priced and can be bought independently or bundled with MILL

RhinoCAM - MESH 2018

RhinoCAM - MESH offers efficient, easy & automatic tools for cleaning and fixing up 3D mesh data for downstream applications such as toolpath programming and/or 3D printing.

Features & Functions
Import solids, surfaces, meshes & point clouds to create meshes
Create meshes using Rhino's powerful NURBS and mesh tools
Reduce density of large meshes while maintaining data integrity
Edit meshes by transforming, splitting and merging geometry
Edit local selections on meshes using a graphical manipultor
Combine meshes using Boolean Unite, Subtract and Intersect
Smooth meshes when data is noisy, such as data from a scanner
Refine meshes globally/locally using various criteria for print quality
Analyze meshes using reflection lines, curvature & comparison plots
Auto/Manual fix meshes to remove gaps, holes & self intersections
Find best orientation for printing with minimum overhangs
Create straight/tree supports in areas with overhangs
Output to STL/AMF/G-Code files or use Windows 3D print driver



MESH is separately priced and can be bought independently or bundled with MILL

System Requirements

- Runs on 64 bit versions of Rhino 5.0 & 6.0 (Windows only)
- CPU: Pentium class or higher processor
- RAM: Minimum: 1GB, Recommended: 4GB or higher
- Disk: 700 MB of free disc space
- OS: Microsoft Windows 7, 8, 8.1, 10
- Graphics: Requires OpenGL, Recommended OpenGL 2

Other

- Free Technical Support
- Training
- Support Forum
- Maintenance Services
- Value Pricing

MecSoft Corporation
18019, Sky Park Circle, Irvine, CA – 92614
Tel: 949.654.8163 Fax: 949.654.8164
www.mecsoft.com