



Cut2D, VCarve & Aspire

Comparison Chart



Summary of the functionality in Cut2D Desktop, Cut2D Pro, VCarve Desktop, VCarve Pro & Aspire

Functionality Summary	Cut2D	Cut2D	VCarve	VCarve	Aspire
	Desktop	Pro	Desktop	Pro	
Design and Drawing Tools					
Import Filters – DXF, EPS, AI, PDF, SKP, DWG Vector files	*	*	*	*	*
Export – DXF, EPS, AI, SVG	*	*	*	*	*
Layer Management – Visibility, Lock & Color	*	*	*	*	*
Draw Shapes – Circles, Rectangles, Stars & Polygons	*	*	*	*	*
Draw Lines, Arcs, Curves	*	*	*	*	*
Create Vector Texture Patterns	*	*	*	*	*
Text with TTF & OTF fonts to specified height	*	*	*	*	*
Single Line Engraving Fonts	*	*	*	*	*
Auto-Fit Text to selection	*	*	*	*	*
Interactive letter / line kerning and arc text tool	*	*	*	*	*
Fit Text to Curve	*	*	*	*	*
Image Tracing / Vectorization – JPG, BMP, TIF, GIF	*	*	*	*	*
Rulers & Guide Lines, Snap Grid + Snap Options	*	*	*	*	*
Interactive Snapping options	*	*	*	*	*
Transform Vectors: Move, Scale, Rotate, Mirror, Distort	*	*	*	*	*
Align vectors to model or other shapes	*	*	*	*	*
Node Editing – Interactive move, smooth, delete	*	*	*	*	*
Measuring Tools – distance, angle	*	*	*	*	*
Weld, Merge, Subtract vectors	*	*	*	*	*
Trim Vectors to a Boundary	*	*	*	*	*
Scissor Tool for interactive vector trimming	*	*	*	*	*
Fillet corners: T-Bone, Dog-Bone & Plasma Drag Knife Fillets	*	*	*	*	*
Extend Vectors to a Common Point of Intersection	*	*	*	*	*
Curve Smoothing / Node Reduction / Arc Fitting	*	*	*	*	*
Auto + Manual Join open shapes	*	*	*	*	*
Offset vectors: Open/Closed & Sharp/Rounded Corners	*	*	*	*	*
Create Circular and Linear Array of Copies	*	*	*	*	*
Copy shapes along vectors	*	*	*	*	*
Plate Production		*		*	*
True Shape Nesting with multiple sheets		*		*	*
Auto select Duplicate / Open vectors	*	*	*	*	*
Import Cut3D, PhotoVCarve & VA3D Machinists toolpaths	*	*	*	*	*

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Functionality Summary	Cut2D	Cut2D	VCarve	VCarve	Aspire
	Desktop	Pro	Desktop	Pro	
3D Modeling and Assembly Tools					
Build 3D relief from vectors – Add, Merge, Subtract					*
Two Rail Sweep					*
Extrude & Weave					*
Interactive Sculpting & Blending + Pressure sensitive control					*
Convert 2D image to 3D model					*
Import Multiple Vectric Clip Art Models (V3M file format)			*	*	*
Import Multiple 3 rd Party 3D Models (STL, OBJ, SKP etc.)					*
Import Single 3 rd Party 3D Model Only (STL, OBJ, SKP etc.)			*	*	*
Advanced Shape Editing (Cropping, Splitting to Vectors, Distort)					*
Basic Component Editing (Scale Height, Size, Rotate, Mirror)			*	*	*
Emboss Component (Reduce Height & Retain Surface Detail)					*
3D Model Smoothing with Interactive Control			*	*	*
Add Draft (Add Specified Angle to Vertical Walls in Model)					*
Offset Model (Create 3D offset of Composite Model)					*
Automatic 3D Model Z-Slicing			*	*	*
Export 3D model as STL mesh					*
Interactive 3D component Tilt and Fade			*	*	*
Independent 3D Component Color / Material Properties			*	*	*
Save 3D Model as 2D Grayscale Image File – bmp, jpg, gif					*
Export 3D Model as .3DClip File					*
Toolpath Functionality					
Profile Machining	*	*	*	*	*
Outside, Inside or On the line	*	*	*	*	*
Profile Left / Right Open vectors	*	*	*	*	*
Advanced Pass Depth Setting					
Separate Last Pass	*	*	*	*	*
Tabs for Holding Job in Place	*	*	*	*	*
3D Tabs for Smoother Cutting	*	*	*	*	*
Lead In/Out	*	*	*	*	*
Advanced Ramping options	*	*	*	*	*
Order of Cutting	*	*	*	*	*
Corners – Option for Sharp External & Internal corners	*	*	*	*	*
Pocket Machining	*	*	*	*	*
Two Tool Pocket Machining - Larger Area Clearance Tool	*	*	*	*	*
Offset or Raster Strategy	*	*	*	*	*
Ramp Plunge Moves	*	*	*	*	*

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Functionality Summary	Cut2D	Cut2D	VCarve	VCarve	Aspire
	Desktop	Pro	Desktop	Pro	
Drilling Toolpath	*	*	*	*	*
Peck cycle option	*	*	*	*	*
Quick Engrave Toolpath	*	*	*	*	*
Inlay Toolpath	*	*	*	*	*
Auto-Inlay Toolpaths with multiple option types	*	*	*	*	*
V-Carve/Engraving Toolpath			*	*	*
3D VCarving with single and multiple cutters			*	*	*
Flat Bottom VCarving			*	*	*
Fluting Toolpath			*	*	*
Ramp Options			*	*	*
Randomized Texture Toolpath			*	*	*
Use Vectors as Pattern			*	*	*
Prism Carving Toolpath			*	*	*
Project Toolpath onto 3D Model			*	*	*
3D Roughing Toolpath			*	*	*
Multiple Z Level and 3D Raster			*	*	*
3D Finishing Toolpath			*	*	*
Raster or Offset strategy			*	*	*
Production Plate / Merge Text Layout				*	*
Create Merged Toolpaths				*	*
Rapid Plunge Gap Height option	*	*	*	*	*
Tool Database – User definable	*	*	*	*	*
Form Cutters – User definable cutter shapes	*	*	*	*	*
Auto-Recalculate All Toolpaths	*	*	*	*	*
Vector Selector – Associate with Toolpath	*	*	*	*	*
Multi-color 3D Toolpath Preview	*	*	*	*	*
Toolpath 3D Preview with Material & Fill color	*	*	*	*	*
2D Wireframe Toolpath Preview with cutter direction	*	*	*	*	*
2D Solid Color Toolpath Preview	*	*	*	*	*
Estimate Machining Times	*	*	*	*	*
Wrapped Rotary Axis Postprocessor Support				*	*
Standard Postprocessors for most CNC Machines	*	*	*	*	*
Tape Splitting for large files	*	*	*	*	*
ATC - Auto Tool Change Support	*	*	*	*	*
Configurable postprocessor	*	*	*	*	*
Job Setup Sheets		*		*	*
Other Functionality					
64-Bit Support	*	*	*	*	*
Gadget- Scripting Support		*		*	*
Printing of 2D and 3D Views	*	*	*	*	*

