

ProfileLab Details

- **ProfileLab 2D**

ProfileLab 2D produces fast toolpath generation and drill functions with machining simulation for Windows 98, NT, 2000 and XP. Easily drill, mill or cut out parts.

- Import DXF, EPS, AI, and many more file formats
- Online, male, female and hog / milling toolpaths
- Lead-ins, lead-outs, bridges, block nest
- Machining strategies can be saved for later use

- **ProfileLab 3D**

With ProfileLab 3D, create and output 3D graphics and text quickly and easily.

- Powerful toolpath algorithms generate Chiseled and Beveled graphics and text.
- Multiple tool support allows for creating raised and flat-bottomed graphics and text.

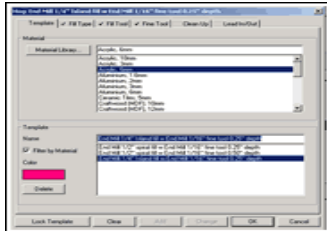
- **Tools You Can Use**

Sequence Control



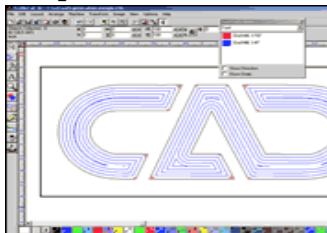
One of the most important keys to trouble free cutting is setting the best sequence for cutting shapes, and it has never been easier. Manually sequence shape by shape or by vector. Automated sequencing routines include sorting by depth, tool or location. After sequencing, start points can be edited to optimize the way parts are held during the cutting process.

Template System



This powerful feature allows you to fine tune your settings for tool selection, feed rates, and direction of cut, and then save them for use whenever, and by whomever, the job is done again. You will find that you will be more likely to develop better techniques working with a system that saves them for you, and you will get infrequently done jobs right the first time, every time.

Toolpath Generation



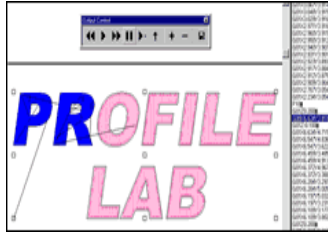
Specialized toolpath generation drives the machine exactly the way it has to be driven to get the best results for your job. Control every aspect of the cutting process including setting online, male, female and hog / milling toolpaths, lead-ins, lead-outs, bridges, and block nest. Nine different fill types ensure high quality output. Toolpath generation helps you get the most out of your machine

Graphics & Editing Features



ProfileLab includes powerful graphics creation, input, and editing tools. Import DXF, EPS, AI, and many other file formats directly into ProfileLab. Use powerful creation and editing tools to modify shapes..

Output Simulator



Before sending instructions to the computer, the cutting of the job can be completely simulated on screen, and any last minute changes can be made manually to the cutting file. This way, before you start cutting expensive material, you can be sure you will get what you expect.

3D Simulator/Preview Modes



Preview your job prior to generating your output file using our 3D Simulator. See your job in either wireframe or fully animated. Other options allow for previewing tools motioning through the job.

Chisel Toolpath Generation



Powerful 3D chisel algorithm quickly and easily generates "V" or hand carved looking graphics and / or text. Select different conical or V-Bit tools and with the click of a mouse, automatically figure out the depth required to create "V" grooved artwork. Toolpaths do not have to be generated to know the depth required.

The 3D chisel was generated using a 90° V-Bit with a 1.25" inch cutting diameter. The text was generated in ProfileLab 3D using the Times New Roman True Type font set at a height of 1.547 inches. The maximum cut depth is 0.1317 inches.



An example of a two tool job using a 3D chisel and a S-sweep fill. A 1/8th inch end mill is used with the S-sweep fill to mill out the logo at a depth of 0.2 inches. A 90° V-Bit with a 1.25" inch cutting diameter and flat bottom tip of 0.02 inches is used with the 3D chisel toolpath to create a hand carved look. The maximum cut depth is 0.2 inches. Two tool jobs are easily managed either

automatically using ProfileLab's ATC (Automatic Tool Change) support or by enabling / disabling tools using the Toolpath Viewer.

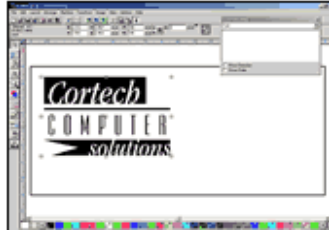
Text Compose/Special Effects



Enhance your ProfileLab package with powerful text and layout tools including WYSIWYG entry, auto kerning, spell checker, fit to path, fit to arc, and over 1100 fonts.

Give your graphics impact with powerful graphics tools including shadows, outlines, and an endless array of special effects.

AccuScan



Scan in artwork and output to a router, engraver or CNC machine. Save hours of editing time with the world's most accurate tracing software.

World class raster to vector algorithm generates clean vector artwork from monochrome bitmaps.

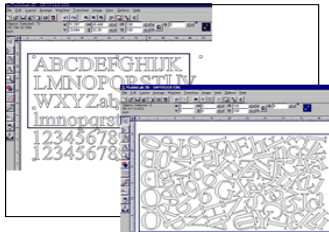
Import files or use ProfileLab's TWAIN scanning interface to load monochrome bitmaps. Above is an example of a TIF file that was imported into ProfileLab. With a click of the mouse, clean, editable vector artwork is produced.



If required, use node and segment editing tools to make changes to the vectors. Scale the image up or down. Otherwise Make Path so that the file is toolpath ready.

The vector image was scaled up and a two tool Hog fill was generated. The Fill Tool was a 1/4" End Mill and the Fine Tool was a 1/16th inch End Mill. A Spiral fill type with a 50% tool overlap was used.

Advanced Nesting



Optimize material use with our true shape-nesting module. This powerful module allows user defined angles of rotation for parts, fitting of parts within parts, and nesting parts on non-rectangular sheets.