Vectric

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Project Tutorial
Featuring compatibility with nearly all CNC Machines

It is our pleasure to provide our customers with fun and useful projects to enjoy!

Vectric Project Tutorial
www.vectric.com

Created with:

VCarve Pro v6

Also Compatible with:

Aspire v3

Sample Carved with:
ShopBot Buddy
PRSalpha BT48

ShopBot®
www.shopbottools.com

Vintage Wooden Spoon Wall Rack
Designed for Vectric™ by Michael Tyler

This month's Vectric project was inspired by a 100+ year-old, hand chip-carved silver spoon holder wall rack of Dutch (Frisian) origin. This near-replica project can be enjoyed by VCarve Pro owners and Aspire owners alike!

The Vintage Spoon Rack provides unique as well as convenient and decorative access for up to four wooden spoons. The plaque can be mounted on a wall or cabinet near the cooking/mixing area of your kitchen.

The overall finished dimensions of the assembled project are about ¾"D x 9"W x 12"H.

It is important to use a very sharp V-bit and a close-grained hardwood for this project, as it features many narrowly spaced and delicate V-carves. The sample was made from Maple. Equally important is to verify your CNC table surface is completely flat before running the project!

Main items you will need:

1) The Project Files (included):
• Vintage_Spoon_Rack.crv
• Spoon_Shelf.crv

2) Boards with the following dimensions:
• Spoon Rack: 0.75"x 11"x 13"
• Shelf: 0.75"x 2"x 9"

3) Sandpaper, wood glue, wood stain and/or paint and clear finish

4) A Dremel-type rotary tool with assorted sanding wheels and bits to sand small details and speed up preparation for finishing.

CNC Bits used for the Sample:

Main V-Carves: 60° V-Bit*
Cut Profiles: 1/4"Down-Cut

*CMT-brand "laser-point" 60° V-Bit was used to create the sample

Designed by Michael Tyler - May 2011

STEP 1 - Open and Review the Project Files
Start your VCarve Pro or Aspire software and open the project files. (fig. 1)

Vintage_Spoon_Rack.crv

Spoon_Shelf.crv

fig. 1

Carefully review all the toolpaths and make any necessary changes to suit your particular bits and machine. The toolpaths are currently set with feed and speeds that were used in creating the original sample. Please don't use them directly until you review them for your own setup.

The existing toolpaths on the Vintage_Spoon_Rack.crv file include repeating the main V-Carve tooling to yield the cleanest result. Of course, this means the project will take about twice as long to run, but for me, the improvement of the finished product is worth the extra time.

Also, you will notice my own Feed and Plunge rates are set really low at only 0.5" per second.

This is intentional, as I found that faster feed rates may tend to cause excessive chipout on delicate v-carves, and these feed/plunge rates are my "sweet-spot" for a near-perfect carve on the Maple wood I used.

You can edit the tools and change the settings to your own preferences and requirements. **It is very important to recalculate all toolpaths after making any edits/changes.** Once you have recalculated for your own machine and bits, reset the preview, then preview all toolpaths again to visually verify the project outcome on-screen.

The project is designed with tabs to hold parts in place during the final part cut outs. You may delete the tabs if you use some other reliable hold-down method.

STEP 2 - Run the Project
When you are satisfied with your settings, save the toolpaths using the appropriate Post Processor for your machine, place your material on your machine bed and proceed to run the project. (fig. 2a, 2b)

fig. 2a

fig. 2b

(cont.)

STEP 3 - Release, Sand and Prep Parts
Your boards will look something like this...
(fig. 3a, 3b)

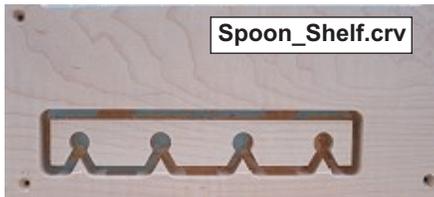Vintage_Spoon_Rack.crv

fig. 3a

Spoon_Shelf.crv

fig. 3b

Separate all the parts from the boards with a utility knife or saw. Sand off the tab remnants and any undesirable tool marks. Use a Dremel-type tool with various abrasive wheels/tips to make the job of detail sanding go faster.

STEP 4 - Part Assembly
At this point, you can decide what type of hanging technique to use. You may route a keyhole slot on the back or use a couple of screw eyes and chain to hang the plaque.

It's your choice - the original antique used a cord to simply hang the plaque from a nail. You can also make a choice as to "which side is up"! The original had the flats at the top, but the rounded part could be the "top" if you wish! (fig. 4a, 4b)

fig. 4a

fig. 4b

Glue the spoon shelf to the main plaque and apply weight or clamps until set. (fig.4c, 4d)

fig. 4c

fig. 4d

STEP 5 - Apply Finish
Apply your choice of finish. Here's what I used on the sample "Vintage Spoon Rack" project made from Maple:

• Minwax Natural stain #209
• Minwax Colonial Maple stain #223
  (applied 10 minutes after Natural stain)
• 4 coats of Krylon Crystal Clear Gloss Acrylic spray
• One coat water-based Zinsser Bulls Eye Ultimate
  Polyurethane Satin (brushed)

IN CONCLUSION
I hope you have enjoyed your Vintage Spoon Rack project!

Happy Carving!

Michael

(cont.)

Materials Source Page

• **3M Radial Bristle Discs from** www.mcmaster.com
(stack 3 discs at a time on your rotary tool mandrel)
    80-grit: part # 4494A19
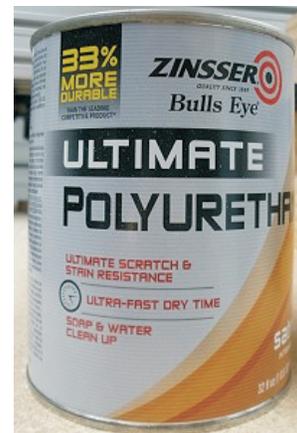   **220-grit: part** # 4494A18

Krylon Clear Gloss Acrylic
from WalMart™

Miscellaneous Items Purchased at Home Depot™

• **Minwax Natural Stain #209**

• **Minwax Colonial Maple Stain #223**

Miscellaneous Items Purchased at Lowes™

• **Water-based Zinsser Bulls Eye Ultimate**
   Polyurethane Satin (quart can)

• **Disposable Brushes and Paint Rags**

Additional Resources

RESOURCES...

There are numerous resources for Vectric software owners to make their experience with their products more enjoyable. The Vectric website includes videos and tutorials to provide a good overview of the software products and how to use them. (http://www.vectric.com/WebSite/Vectric/support/support_vcw_tutorials.htm)

As well as the resources available from the Tutorial page, please also visit the 'FAQ' and 'How To' pages for more support information...

'How To' webpage
http://www.vectric.com/WebSite/Vectric/support/support_how_to.htm

'FAQ' webpage
http://www.vectric.com/WebSite/Vectric/support/support_faq.htm

Vectric User Forum
Every Vectric software owner should join the Vectric User Forum (http://www.vectric.com/forum/) where fellow users share their experience and knowledge on a daily basis. It is a FREE service that you will surely appreciate. A handy Search Feature helps you find answers to any questions you may have. There are Gallery sections as well, where you can post and view photos of projects created with Vectric software.