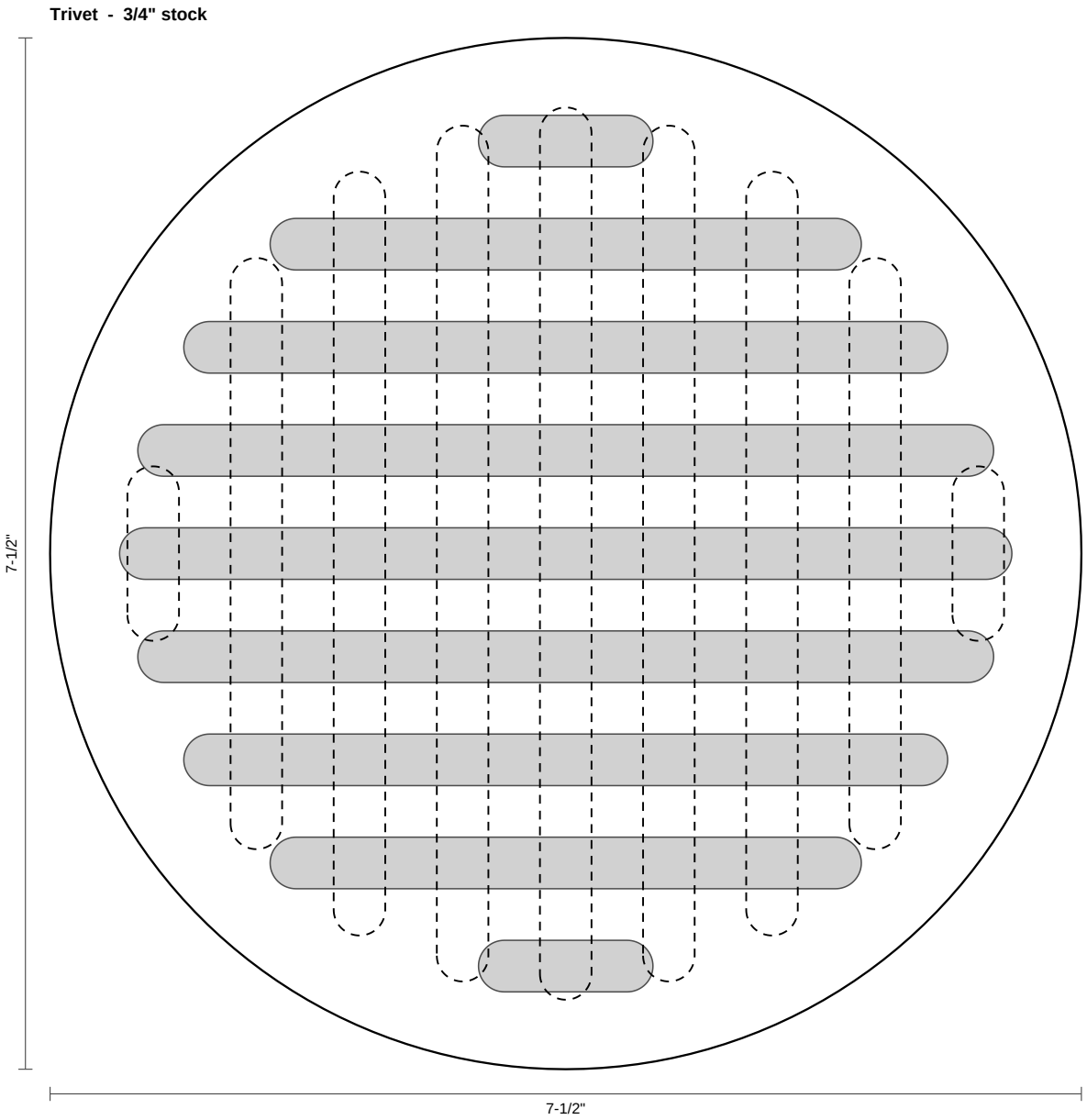
Lattice Trivet

7-1/2" round trivet. Grooves 7/16" deep on each face cross at right angles; where they meet, 3/8" square windows open through.



Machine & stock

CNC router, two-sided job. 3/8" end mill makes each groove in one pass (a 1/4" end mill pocket works too).

Each face is grooved 7/16" deep in 3/4" stock, so the grooves overlap by 1/8" and open through. If your stock is thicker, deepen both to keep that overlap.

The solid 1/2" rim keeps it strong and hides the groove ends.

Steps

1. Cut the underside grooves first (run across the grain is fine either way).

2. Flip, register, and cut the top grooves at right angles, then profile with tabs.

3. Sand the windows with a strip of sandpaper; ease every edge.

4. Finish with DuraGrain Walnut Oil or DuraGrain Hardwax Oil (100% food-contact safe; cures inside the grain and won't soften under hot cookware).

VCarve toolpaths (in this order)

Underside first: in VCarve Pro use a double-sided job and import the -underside file onto the bottom side; otherwise run it as its own job, aligned on REFERENCE_OUTLINE.

Pocket, layer POCKET_0.438: cut depth 0.438", 1/4" end mill. Select every vector on the layer together so islands are left standing.

Profile, Outside, layer PROFILE_OUTSIDE_0.750: cut depth 0.750" (through), 1/4" end mill, with tabs.

Files

dxf/lattice-trivet.dxf, dxf/lattice-trivet-trivet-underside.dxf

Plan view, drawn at about 1:1.3. Grey = pocket (depth noted), dashed = underside pocket, light fill = through cut. Cut files are full size.