



TIMBERBITS
HELPING YOU CREATE WITH WOOD

A TIMBERBITS WORKSHOP GUIDE

THIN CA FINISHING GUIDE

The Timberbits method for pen makers

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OVERVIEW

A thin CA (cyanoacrylate) finish is a hard, glossy coating you build up on the pen blank while it's still mounted on the lathe. Get it right and the finish looks professional and stands up well to years of daily use. This guide takes you through the full process: preparing the blank, applying the glue, cutting it back, polishing it out, and dealing with the issues that come up most often along the way.

1.0 TOOLS & MATERIALS

Lathe

Variable speed.

Synthetic Bushings

Prevents CA glue from bonding to your standard turning bushings.

Thin CA Glue

Required for this method; thick CA will not work.

CA Activator

Aerosol is highly recommended for achieving an even coverage.

Paper Towel

For spreading the CA glue efficiently.

Standard Abrasives

From 150 to 600 grit, used for initial prep sanding.

Ultra-Fine Mesh Sanding Kit

1,500 through to 12,000 grit for high-gloss finishing.

Water Trough or Spray Bottle

Required to facilitate wet sanding.

Scrap Wood or Ply

Used to cover and protect the lathe bed.

2.0 PREPARATION

Step 1: Protect Your Lathe

Lay scrap wood or ply across the lathe bed to catch CA glue and activator overspray.

Pro Tip: Dried CA glue and activator residue are incredibly difficult to clean off cast iron later.

Step 2: Fit Synthetic Bushings

These keep glue off your regular turning bushings and make it much easier to slide the finished blank free once you're done.

Step 3: Sand the Bare Timber

Before applying any CA glue, work the turned blank through your prep grits from 150 up to around 600. The surface must be completely smooth and dust-free.

Important: Any remaining scratches or torn wood fibres will be magnified and show through every single layer of the finish.

Step 4: Mount the Blank

Slide the blank onto the mandrel with the synthetic bushings in position, then tighten everything down securely. You are now ready to start applying the finish.

3.0 APPLICATION

Lathe Speed: 200 RPM

Step 1: Apply the First Coat

Put a couple of drops of thin CA onto a folded square of paper towel. With the lathe running slowly, hold the towel against the spinning blank and spread the glue across in one smooth pass from one end to the other.

Step 2: Set the Coat

Hold the activator can 15 to 20 cm back from the blank and give it a light spray. The CA cures in seconds, and the activator prevents bubbles from forming under the surface.

Step 3: Repeat the Process

Keep going like this for up to 20 coats, depending on how thick a finish you want. More coats give you more depth and a thicker layer to sand back later without breaking through to bare timber.

4.0 CUTTING BACK & POLISHING

Lathe Speed: Around 700 RPM.

Step 1: Initial Cut-Back

Start with your coarsest ultra-fine mesh pad. Wet it in your water trough, then work the pad lightly from side to side across the spinning blank to smooth out any high spots or rough patches in the CA finish.

Pro Tip: Dip the pad back into the water frequently to keep it cool and clear of dust buildup.

Step 2: Progress Through the Grits

Work sequentially up through every grit from 1,500 to 12,000. Do not skip any stages.

Important: Each grit level removes the scratches left by the preceding one. If you jump steps, those deep, early scratches will remain permanently visible in the final surface.

Step 3: Final Buff

Keep working through the progression until the surface yields a completely clean, high-gloss finish.

BEFORE ASSEMBLY

ONE STEP YOU CANNOT SKIP

- Before you press the pen components into the blank, lightly sand the very ends of each tube with your prep abrasive.
- This knocks off any overhanging CA that would otherwise crack and separate from the timber under pressure from the press. It is a small step that prevents a frustrating finish-lift right at the end of the build.

5.0 COMMON QUESTIONS

Q: How many coats should I apply?

A: Around 20 coats hits the sweet spot for both depth and durability. Treat this number as a guide, not a hard rule. Build up enough finish to give the pen good protection and enough depth that you can safely sand it back without cutting through to bare timber.

Q: Do I really need activator?

A: Not strictly, but it makes the whole job much easier. Activator stops bubbles, speeds up curing between coats, and keeps the wet glue from smearing as you spread it. Aerosol cans give the most even coverage. Pump sprays can leave small white dots on the finish.

Q: How do I stop the finish lifting during assembly?

A: The short answer is to sand the ends of the blanks before pressing in the components (see the Before Assembly section above for full details).

Q: How do I stop glue bonding to my bushings?

A: The best preventative measure is to use synthetic bushings. If you have already turned the project with standard bushings and the CA glue has bonded them together, carefully run a sharp knife around the joint between the bushing and the blank before trying to separate them.

Q: What sanding grits should I use?

A: The sanding process is split into two distinct stages:

- Before applying CA: Sand the bare timber from 150 through to 600 grit.
- After applying CA: Work the ultra-fine mesh kit from 1,500 through to 12,000, ensuring you hit every single step in sequence.

PRO TIPS

SMALL THINGS THAT MAKE A BIG DIFFERENCE

- Keep the activator can 15 to 20 cm back from the work. Closer than that and you will over-wet the surface, which can cloud the finish.
- Rotate the paper towel to a fresh section after each coat. Dried glue on the towel will drag through the next layer and leave you chasing imperfections.
- Wipe each coat on in one smooth pass. Stopping mid-rotation leaves a visible ridge that is hard to sand out later.
- Always wet sand with the ultra fine mesh. Dry sanding builds up heat, which softens the CA and leaves scratches you cannot polish out.

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