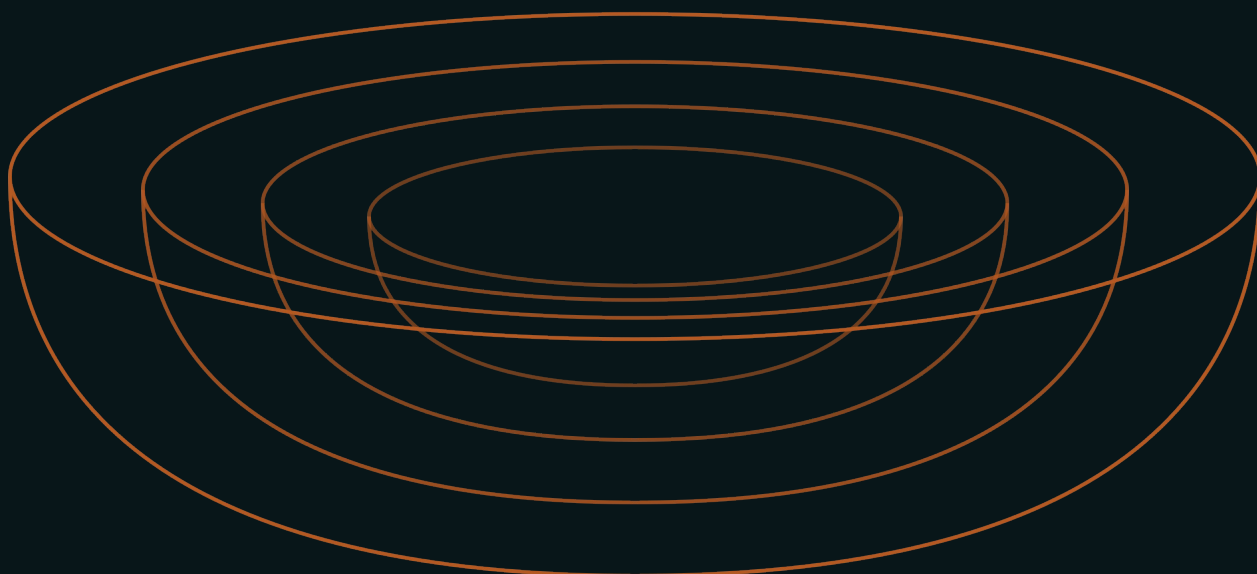




TIMBERBITS

HELPING YOU CREATE WITH WOOD

A TIMBERBITS WORKSHOP GUIDE



BOWL CORING

Get three or four bowls from a single blank

FEATURING THE WOODCUT TOOLS BOWLSAVER

timberbits.com

OVERVIEW

Bowl coring is one of the most satisfying skills a turner can pick up. Instead of turning the middle of a blank into a barrow of shavings, you remove a series of nested bowls from inside it. One blank becomes a stack of finished bowls, the figured timber or burr you have been saving goes much further, and you end up with a matched nest you can keep or sell as a set.

It looks daunting the first time. It is not, once someone walks you through it. This guide takes you from choosing a system, through setup and the cut itself, to drying the blanks afterwards, so you can give it a go with confidence.

Both the Original and the Max4 pivot on a rotation post, so the knife follows a fixed arc rather than a path you steer by hand. If you have cored on a McNaughton before, that is the difference you will notice first. The shape is set at setup rather than found as you go, which makes the results repeatable and suits nesting well.

We have written it around the Woodcut Tools Bowlsaver because it is the system we use, sell and teach on. Woodcut are a family business based in Hawkes Bay, New Zealand, and the Bowlsaver has been in production for over 25 years.

1.0 WHAT YOU'LL NEED

A bowl coring system

A coring system holds a curved knife on a fixed arc so the cut follows a predictable path. The Bowlsaver Original cores bowls from 3" to 12" in diameter. Rated to 5" deep, though around 4" is typical once the pivot clears the blank. The larger Bowlsaver Max4 takes that out to 18".

A tool post to suit your lathe

Banjo bores vary, so the post is bought separately. Check your lathe manufacturer's specifications for the size. We stock 1", 25mm and 30mm, with the rest of the Woodcut range available to order. The Max4 post has a straight taper for extra stability.

A lathe with enough grunt

Coring is a heavier cut than normal turning, so power and mass matter. The Original suits lathes of 12" to 16" swing with 1HP and up. The Max4 wants a flat bed, 16" to 25" swing and 1.5HP minimum.

A chuck with dovetail jaws

Holds the blank securely against the coring load.

A full face shield

Not safety glasses. Essential kit for coring.

The right blank to start on

The Bowlsaver cores wet or dry timber and natural edge blanks, but for your first cores pick something wet, not dense and free of defects, the sort that gives creamy shavings. Camphor laurel, jacaranda, silky oak and red cedar are good starting timbers here. A dry blank can be soaked in a tank of water for weeks or months to make coring less of a fight.

A Bowlsaver Light Guide

Optional, but it makes planning the nest far easier. It traces the path the cutter will take across the outside of the blank. Now supplied with a USB rechargeable light pen.

A CBN wheel

For keeping the cutter keen between bowls. A diamond hone will do at a pinch, but CBN holds the edge longer.

End grain sealer

To slow the drying and reduce cracking once the blanks are cut.

An air line or brush

Keeps shavings clear of the cut.

2.0 WHICH BOWLSAVER SUITS YOU

The honest answer is that most turners are well served by the Original. Step up to the Max4 when the blanks you want to core are bigger than your current system can reach, and your lathe can carry the load.

Check the size before you order. The tool post is the one part that has to match your lathe. Consult your lathe manufacturer's specifications for the banjo bore. We stock 1", 25mm and 30mm, and other sizes in the Woodcut range can be ordered in.

	Bowlsaver Original	Bowlsaver Max4
Bowls it cores	3" to 12" diameter, around 4" deep in practice (rated to 5")	3" to 18" diameter
Knives included	Small and Large, both with Stellite cutters	Small, Large and Max, all with Stellite cutters
Lathe it suits	12" to 16" swing, 1HP and up	16" to 25" swing, 1.5HP minimum, flat bed
Also included	Platform, No. 2 Morse taper, hex key kit, user guide and planning templates	20" handle, platform, No. 2 Morse taper, threaded rod, hex key kit, user guide and planning templates
Tool post	Sold separately. Available in 1", 25mm and 30mm	Sold separately. 1", 25mm and 30mm, with a straight taper for extra stability
Best for	Most home workshops, and anyone coring nests up to salad bowl size	Big blanks, burrs and platter stock on a serious machine

Match the knife to the machine. On a lathe at the smaller end of the Max4 range, around 16 inches, start with the Small and Large knives rather than the Max. The Light Guide retro-fits to both systems, and spare knives and cutters are available separately.

BEFORE YOU BUY

TWO MINUTES NOW SAVES A RETURN LATER

- **Check the swing and horsepower of your lathe against the table above.** Coring asks more of a machine than normal turning does.
- **Check your banjo bore against your lathe manufacturer's specifications, so the right tool post goes in the box.** It is the one part that has to match.

3.0 PREPARATION

Step 1: Form a generous foot

Turn the blank with a solid tenon to grip in the chuck. The foot carries the whole load of the cut, so it needs to be substantial.

Important: Aim for a tenon at least half the diameter of the bowl, held in dovetail jaws. As a guide, at least 84mm across and 5mm deep, which suits Vicmarc 100 jaws. A small or shallow foot can shear off under the coring load.

Step 2: Mount and lock everything down

Seat the blank in the chuck, then fit the coring system: Morse taper into the tailstock, tool post into the banjo, platform set. Check the chuck, tool post, tailstock and drawbar are all tight.

Pro Tip: If you set the work up the day before, check every fitting again before you switch on. Things can relax overnight.

Step 3: Plan the nest

Decide how many bowls you want and how thick each wall needs to be. The Light Guide traces the path the blade will take across the outside of the blank, so you can see exactly where each cut will land before any timber moves. Both systems also ship with printed planning templates for the same job.

Step 4: Gear up

Full face shield on. Clear the area, and have your air line or brush handy to keep shavings out of the cut.

BEFORE YOU START

ONE STEP YOU CANNOT SKIP

- **Match the cut to the lathe.** Power and mass carry the load, so use a knife size your machine can drive, and do not push a cut that bogs the motor down.
- **If it is labouring, drop a belt setting for more torque, ease the feed, or step down to a smaller knife.** Forcing it is how blanks let go.

4.0 THE CUT

Lathe Speed: 300 to 500 rpm, then feel your way.

Step 1: Set a sensible speed

Start in the 300 to 500 rpm range. As the core gets smaller and the diameter drops, you can lift the speed. Coring wants torque more than speed, so drop to a lower belt setting before you begin. Running on the fastest belt setting is the most common reason a lathe struggles through a cut.

Step 2: Start at or just above centre

Begin the cut on the centreline, or 5 to 10mm above it.

Important: Never start below centre. It invites a grab.

Step 3: Make a relief cut

Open the entry slightly wider than the blade so the shavings have somewhere to go and the blade has clearance.

Pro Tip: A blade that binds is usually a blade choked with shavings. Give it room to clear and it will cut freely.

Step 4: Let the tool do the work

Feed steadily and let the blade pull through. No aggressive cuts, keep the movement slow. You should not need to lean on it.

Step 5: Keep the cut clear

Pull the cutter out a few times during each core to clear the shavings rather than waiting for it to pack. A hollow ground cutter helps by crushing them as it goes. If the cut does pack, withdraw the knife, stop the lathe and blow it out before you go back in.

Step 6: Ease back on a grab

If the blade catches, do not force it. Pull back out through the shavings, then re-enter gently. A second light pass to widen the slot usually clears the bind.

Step 7: Check as you near the centre

Lift the lathe speed as you come through the transition from side grain to end grain. The core is about to release as you approach the middle, so check more often that nothing is loosening. The core pops free when the cut meets the centre.

5.0 AFTER CORING

Release and repeat

Lift the cored bowl out, mount the blank in the recess you have left, and repeat for the next bowl in the nest.

Keep the cutter sharp

A coring blade cuts better and safer when it is keen, so sharpen it as often as you would a bowl gouge rather than waiting for it to go blunt.

Every Bowlsaver knife carries a Stellite cutter. Woodcut looked at what the local sawmills were running and chose Stellite for the same reasons they do: it resists knots, grit and stones, and it holds an edge a long time. It also takes a hollow grind, and that hollow ground edge crushes the shavings as it cuts so they do not pack in and block the knife.

Sharpen the front only, at about 10 degrees. Not the side, not the top. A CBN wheel is the better tool for the job. It raises a hollow grind, holds the edge far longer and leaves the cutter cutting cleanly. A diamond hone will sharpen it, but it burnishes the edge, which goes dull sooner and stops cutting the timber efficiently. Avoid an aluminium oxide wheel altogether, since it takes away far more material than you need to lose.

How do you know when it is dull? Run the back of a finger across the edge, or touch the cutter to the timber and watch for a peel starting to form. If it will not raise one, give it a light sharpen and carry on.

Seal and dry

Cored bowls are blanks, not finished pieces. They will move as they dry. Seal the end grain, set them aside to air dry, and remount each one for final turning only when it is fully dry.

MORE FROM EVERY BLANK

Cored and dried, those nested blanks become a matched set: same timber, same figure, finished as a family. That is good wood saved and a set to show for it, all from one blank.

6.0 COMMON QUESTIONS

Q: How many bowls can I get from one blank?

A: From a deep blank, commonly three or four. It depends on the diameter and depth you start with and how thick you leave each wall. Plan the nest before you cut and you will know the answer before you start.

Q: Will it fit my lathe?

A: Almost certainly, as long as the swing and power are there. The part that changes lathe to lathe is the tool post, which is why it is bought separately. Check your banjo bore against your lathe manufacturer's specifications and order the post to match.

Q: Why is the tool post sold separately?

A: Because banjo bores vary across manufacturers. Woodcut make posts in a full range of diameters so the system mounts solidly on your lathe. We stock 1", 25mm and 30mm, and can order the other sizes in.

Q: Why does the blade grab, and what do I do?

A: Usually a choked cut or a dull edge. Back the blade out through the shavings, open a relief cut for clearance, and make sure the cutter is sharp. Then re-enter gently.

Q: Do I need the Light Guide?

A: Not essential, but it makes planning a nest far easier. It shows you where each cut will land, so you can space the bowls without cutting through the wall of the next one. It fits both the Original and the Max4.

Q: How do I dry the cored blanks?

A: Seal the end grain to slow the drying, then air dry the blanks before you finish them. Remount and turn to final shape only once they are fully dry.

Q: What timber should I start on?

A: Wet wood that is not dense and free of defects, the sort that gives you nice creamy shavings. Camphor laurel, jacaranda, silky oak and red cedar are good choices here. If the blank is dry, soak it in a tank of water first and it will be less of a challenge.

PRO TIPS

SMALL THINGS THAT MAKE A BIG DIFFERENCE

- **Keep the cutter keen.** Sharpen as often as you would a bowl gouge, rather than waiting for it to go blunt.
- **Let the tool feed itself.** Leaning on the cut is what invites a grab.
- **Core green where you can.** Wet timber cuts easier and loads the machine less.
- **Listen to the cut.** The sound changes from side grain to end grain, and tells you what the blade is doing.
- **Torque beats speed on a big cut.** Drop a belt setting before you force the lathe.

7.0 THE RANGE AT TIMBERBITS

Everything below is Woodcut Tools, a family business based in Hawkes Bay, New Zealand, and available here from Timberbits.

Bowlsaver Original

Two knives, Small and Large, both with Stellite cutters. Cores 3" to 12", rated to 5" deep and around 4" in practice. Supplied with the platform, hex key kit, user guide and planning templates.

Bowlsaver Max4

Three knives, Small, Large and Max, cutting 3" to 18". The curved Max knife is Bisalloy steel, strong enough that it needs no separate knife rest to follow. Comes with the 20" handle, planning templates and full user guide.

Bowlsaver Light Guide

Fits the Original and the Max4, including systems you already own. USB rechargeable light pen.

Replacement knives

Small and Large knives fit both systems. The Max knife is Max4 only. All supplied with the Stellite cutter fitted.

Stellite cutters

Available to order, with solder already on the base so a saw doctor can fit one for you. Most turners never need one.

Tool posts

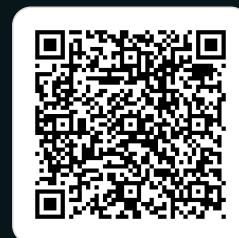
Stocked in 1", 25mm and 30mm for both systems, with the rest of the Woodcut range available to order. The Max4 post has a straight taper for extra stability.

The first nest is the one that makes it click.

From there, your good timber goes a lot further. The Woodcut Bowlsaver range is available at Timberbits, with the tool posts, knives and Light Guides to go with it.

timberbits.com/brand/woodcut-tools

Scan to shop the Woodcut range



Watch it on Video

Scan to watch Dan from Woodcut core a nest of bowls on the Max4, start to finish

