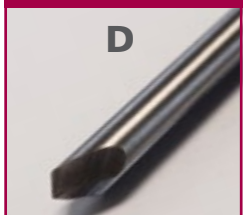
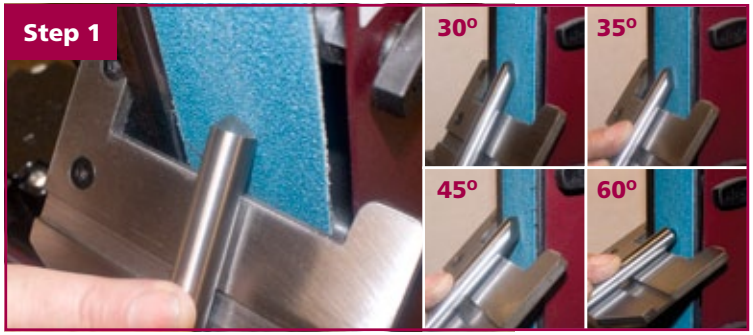
Robert Sorby Sharpening Gouges

This guide covers standard 45° bevel grinds and fingernail (swept back) grinds. It is our strong belief that you will never need anything other than this range as it covers 99.9% of projects and turning styles.

NONE FINGERNAIL	FACTORY FINGERNAIL	LONG FINGERNAIL	EXTRA LONG FINGERNAIL
A	B	C	D
			
BEVEL ANGLE 45° FLUTE DOWN 60°	BEVEL ANGLE 45° FLUTE DOWN 45°	BEVEL ANGLE 45° FLUTE DOWN 35°	BEVEL ANGLE 45° FLUTE DOWN 30°

To create your preferred grinding style firstly choose from the options above. Remember the bevel angle at the tip of the gouge is relevant to the project being turned; a more acute angle on your gouge can be used on a shallow bowl where as a steeper angle will be needed for a deep bowl. The bevel should remain in contact behind the cut. A deep bowl with a shallow angle on your tool will mean that it is not possible to keep the bevel in contact. All the shown grinds are 45° at the tip. This angle can be changed as required without changing the shape.

Step 1



Step 2

To mark out your tool and give a guide line to follow when grinding, set your sharpening table to the angle given in the key above. Turn your gouge upside down on the grinding rest (flute down). Using a square guide to stabilise the tool on the platform, grind a flat on the cutting edge. This should be done until there is a visible flat all the way round the cutting edge.

DO NOT TWIST THE TOOL
(The inverted grind for marking out is referred to as flute down in the photographs on the opposite page)

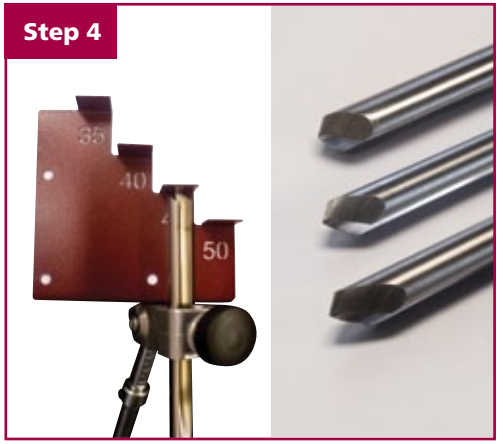
IMPORTANT
This guide and the use of the inverted grind (flute down) is designed to help you return your gouge to the factory grind as well as a range of other useful profiles. This should only be used when your gouge is damaged, loss of profile or to change your profile. Subsequent sharpening should be done little and often using the same settings used to re-profiled your gouges using the final finishing steps only.

Step 3

If you have chosen profile B,C or D skip this and move to step 4

With your grinding table set at 45° use a rough belt and begin to re-profile your gouge. Working on the thickest portion, begin to reduce the flat until it is as small as possible without breaking through to form a cutting edge. Once the flat is thin and even change to a finer belt. Again paying attention to the flat continue to reduce it until a cutting edge is formed.

Step 4

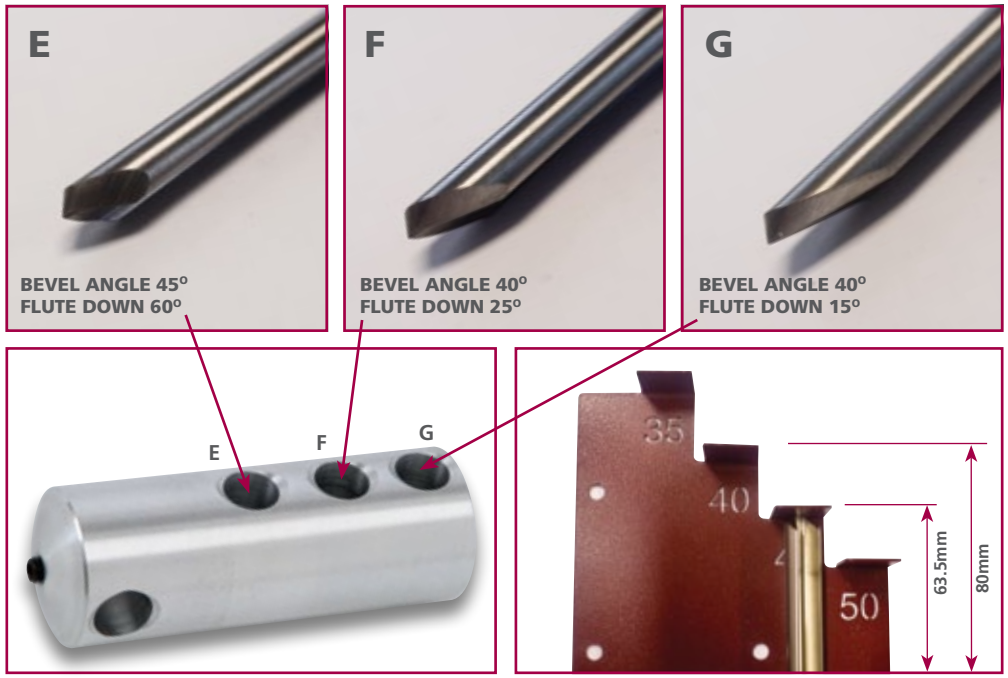


In order to produce a fingernail grind follow the above instruction, the method is the same but with your gouge clamped in the fingernail attachment.

NOTE: The protrusion shown in the photographs opposite will produce a 45° bevel at the tip. For other cutting angles the protrusion is changed. The ProSet shown in the photo enables repeatability for many different angles. If you don't have a ProSet a simple block of wood with a stop will aid repeatability. For longer fingernail grinds, you will need the Robert Sorby Long Grind Jig, further details of which can be seen over the page.

Robert Sorby

Fingernail grinds and use of the Robert Sorby fingernail boss.



Refer to Step 4 on the previous page to show the grinding method. Please note the fingernail arm and the tool you are grinding should be swung gently from side to side in a flowing motion. Take care not to grind more from the tip than you grind from the sides. You will probably need to spend a little more time on the sides than the tip as there is a much bigger surface area to grind.

Hundreds of different shapes and compound angles can be achieved by varying the first angle where the tool is marked out upside down as well as the protrusion of tool. Further variances can be achieved using the Long Grind Jig.

Remember repeatability is the key to long tool life and easy sharpening. Stick with the same protrusion once you have a shape you are happy with: note this protrusion on the tool handle if you need to. The Robert Sorby ProSet or a simple block of wood used as a stop will give you this repeatability. It is also a good idea to note the hole used in the fingernail boss.

We do **NOT** recommend you change the knuckle angle on the fingernail arm. This is unnecessary and will only serve to add confusion. The factory setting will give you the desired profiles on your tools.