



# Sharpening

## Basic Woodturning Chisels

# Introduction

- Sharpness a compromise
  - smoothness of cut
  - time spent to sharpen
  - speed of blunting chisel
- Virtually all sharpening direct off the grinder
- Exceptional cases honing



# Basic woodturning chisels

- 1 Bowl gouge / Deep fluted gouge / *Bakguts*
- 2 Skew / *Skuinsbeitel*
- 3 Parting tool / *Afsnybeitel*
- 4 Scraper / *Skraper*
- 5 Spindle gouge / shallow fluted gouge / *Spindelguts*
- 6 Spindle roughing gouge / *Voordraaiguts*

Carbon steel

**High Speed Steel (HSS)**

# Grinders for sharpening turning chisels

Sharpening on sand paper wheel on the lathe



# Beltsander



# Wet wheel grinder



# Bench grinder





### Cubic Boron Nitride plated metal wheel

- The Coolest Cutting wheel
- Sharpens fast without effort
- Cuts like new after many years of use and never needs dressing
- Leaves the best, sharpest, longest lasting edge on your tools
- You can grind on face and edge
- Better than a diamond plated wheel



### Microcrystalline wheels

- Very cool cutting
- Leaves a sharper longer lasting edge on your tools than white wheels
- Self sharpening -seldom need dressing
- Lasts much longer than white wheels
- Grinds fast without effort



### Pink, Red and White aluminium oxide wheels

- Cool cutting
- Economically priced
- Better than the grey wheels which come as standard on most bench grinders



### Grey grindstones

- Burns the steel and draws the temper on your expensive tools
- Needs frequent dressing
- Not suitable for HSS tools
- OK for grinding nuts and bolts and bits of tractor!



# Wheel specs



Dimensions: 150x32x31.75 or 200x32x31.75

- 150 = diameter (150mm or 200mm depending on grinder)
- 32 = width. ~~19mm-25mm~~. Use 32 mm (With recess)
- 31.75 = Diameter of hole + Bushing for grinder axle

Specification: 38A80KVS

- 38 Manufacture symbol
- Abrasive: A = Aluminium Oxide (White)
- 80 = Grit size: course – fine. use (80 or 100)
- K = Grade: (A = soft X = hard) Use J or K

# Wheel dressing



Normal wheel dresser



Single diamond wheel dresser



Diamond wheel dresser

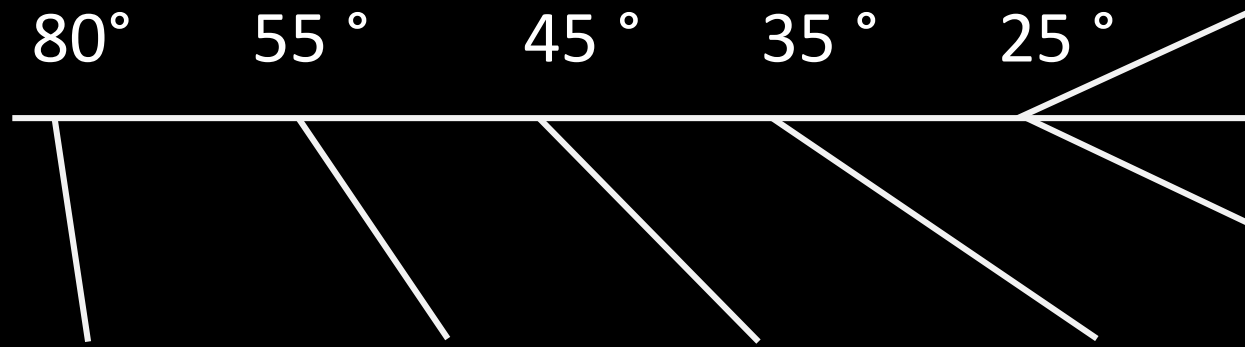
# Jigs



# Grinding angles

- The harder the wood the greater the angle
- Approximate!!
- Experiment and determine angle that suits you best

# Sharpening angles



80 °	Scrapers	70 - 80 °
55 °	Bowl gouges	50 - 60 °
45 °	Spindle roughing gouges	40 - 50 °
35 °	Spindle gouges	35 - 45 °
25 °	Skew & Parting tool	25 - 30 °