# Starting Woodturning

A Beginners Guide



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# Introduction

Woodturning is a very satisfying and rewarding hobby. Unique items that are both decorative and functional can be quickly and easily produced from a rough piece of timber. With suitable tools and equipment a huge range of items can be turned – such as bowls, boxes, platters, vases, goblets, clocks, lamps, candle sticks, salt & pepper mills, pens, jewellery and hollow forms.



Always purchase the best tools and equipment you can afford – a quality lathe and tools will give many years of service and avoid problems caused by inferior materials or poor manufacturing. Although at first glance many brands of machines and tools look similar, they are often manufactured to different specifications and can vary greatly in quality. Always read specifications carefully and only purchase trusted quality brands.

# **Woodturning Lathes**

When looking at purchasing a woodturning lathe there are several key factors that should be considered. Firstly the build quality - a lathe with thick cast iron components is ideal as vibrations will be greatly dampened by the weight of the castings. The bedways of the lathe should also be made of cast iron to ensure stability and accuracy.



A powerful motor suitable for extended periods of use is ideal. Lathes with electronic variable speed will save the time and frustration of having to move the belt along pulleys to achieve the correct spindle speed. Slower speeds need to be used for roughing and initial shaping, higher speeds need to be used for finishing — a variable speed unit allows the speed to be changed instantly while the lathe is running.

For a lathe to work correctly the two centres must be aligned when brought close together. If the centres are not aligned this can cause excessive vibration on the

work piece and greatly reduce the accuracy of the lathe. We highly recommend using a lathe with a solid cast iron bed – this eliminates the possibility of the bed twisting and being misaligned.

Lathes sometimes have a swivelling headstock to allow larger bowls or platters to be turned off the front of the lathe. Although this gives better access for bowl turning the stability of the lathe can be affected, especially with larger pieces. It is recommended that swivel head lathes have a locking mechanism to help bring the headstock back into alignment with the tailstock - this should eliminate any issues when spindle turning. Professional lathes often have a sliding headstock that allows large pieces to be turned off the end of the lathe.

There are many other features that shouldn't be overlooked when purchasing a lathe. The tailstock should ideally be hollow to allow for long hole boring (particularly useful when making table or floor standing lamps). Lathe beds should be made from thick cast iron with a finely ground surface to ensure accurate and smooth operation. An integrated spindle lock and indexing system aides in the quick removal of accessories and locks the spindle at specific intervals for creating decorative effects.

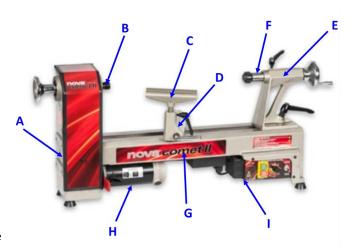
### **Woodturning Lathe Parts**

It is important to understand the terms used to describe the different parts of a woodturning lathe. Below is a list of the main components found on a lathe.

**Headstock (A)** – The headstock of a woodturning lathe holds the bearings and spindle in place.

**Spindle (B)** – The spindle is supported in the headstock by bearings at each end. It is usually driven by a belt and pulleys connected to the motor.

The spindle has a thread machined on the outside and a Morse taper hollowed on the inside – this allows many different lathe accessories to be fitted.



**Tool Rest (C)** – An adjustable tool rest is used for supporting most woodturning tools.

**Tool Rest Banjo (D)** – The tool rest is held in position by the tool rest banjo. The banjo can slide freely along the lathe bed and be securely locked in the most convenient position with a quick release cam-lock lever.

**Tailstock (E)** – The tailstock slides along the bed of the lathe and can be locked securely in position with a cam-lock lever. The end of work pieces can be supported by fitting a revolving centre in the Morse taper of the tailstock quill. A drill chuck (or Jacobs chuck) can also be fitted for boring central holes on the lathe.

**Tailstock Quill (F)** – A handle on the tailstock is used to extend the tailstock quill (and any fitted accessory) towards the headstock. This is extremely useful for drilling on the lathe as well as making small adjustments when supporting work pieces. When in the correct position the quill can be secured with the locking handle to prevent any movement whilst turning. A Morse taper is machined on the inside for fitting accessories.

**Lathe Bed (G)** – The headstock, tailstock and tool rest banjo are all fitted onto the lathe bed. Bedways are sometimes made from two steel bars, but the most robust and accurate lathes usually have a finely ground cast iron bed.

**Motor (H)** – Woodturning lathe motors are usually connected to the spindle using a v-belt and two pulleys. The speed and torque can be adjusted by moving the belt to different steps on the pulleys. DVR (Digital Variable Reluctance) motors are usually connected directly to the headstock spindle. They run very smoothly as there are no pulleys or belts to vibrate.

**Variable Speed Control Unit (I)** – Electronic variable speed control allows the RPM (revolutions per minute) of the spindle to be adjusted without needing to move the drive belt.

# Lathe Accessories

Many different lathe accessories (such as drive centres, revolving centres and drill chucks) can be secured into the lathe by a taper fit (known as a Morse taper). The gradual taper on the accessory matches the taper hollowed into the headstock spindle or tailstock quill. Woodturning lathes usually have a #1 or #2 Morse taper.

Woodturning chucks or faceplates are fitted to the lathe using the thread on the headstock spindle so they can be used without tailstock support. Various sizes of spindle threads are produced but the most common sizes are as

follows: ¾" x 16 tpi, 1" x 8 tpi, M33 x 3.5mm. It is important to know what size spindle thread and Morse taper your lathe has when purchasing accessories.

# **Woodturning Chucks**

A four jaw self-centring scroll chuck is ideal for securing work pieces to the lathe without the need for unsightly screw holes in the base. Single key operation scroll chucks are a much better choice than lever operated chucks as

they allow the work piece to be held with one hand while tightening the chuck with the other.



Scroll chucks with a solid back plate will require much less maintenance as the gears are protected from dirt and dust. A chuck with jaws that are capable of gripping internally and externally is recommended as this greatly reduces the number of jaw sets required.

Chucks often have either 'dovetailed' shaped jaws or gripper teeth to give an extremely secure hold.

To enable the chuck to be moved between lathes with a different spindle thread some chucks use an inserted system – this means when changing or upgrading to another lathe the whole chuck will not need to be replaced, only the insert/adaptor in the back.

### **Drill Chucks**

A 13mm drill chuck (also known as a Jacobs chuck) with a Morse taper arbor is useful for projects that require a central hole to be bored (e.g. salt & pepper mills, hollow forms, nut crackers and pens). The Morse taper arbor allows the drill chuck to be mounted in the tailstock of a lathe to safely and accurately drill central holes.



### **Drive Centres**



Drive centres (also known as spur centres) are usually fitted into the headstock spindle Morse taper and are used for between centre (spindle) turning. 4-prong drive centres provide better contact and reduce the risk of splitting but require that the ends of the blank are accurately cut square. 2-prong drive centres may be used when the end of the spindle is not properly squared off or on particularly hard timber.

# **Stebcentres**

Robert Sorby Stebcentres use razor sharp serrated teeth to grip the work piece, without the need for pre-marking the wood with the drive prior to putting it into the lathe.

The greatest benefit the Stebcentre has over any other drive available on the market is the spring-loaded centre point. Pressure can be applied so the wood can be driven with only the tip of the teeth biting, so that the turner can practice taking cuts with a skew for example with the knowledge that if a dig-in occurs the wood will stop turning without any danger. When more confidence is achieved for the more advanced turner the tailstock can be wound in so that the teeth give an extremely positive drive.



### **Revolving Centres**



A revolving centre (live centre) spins with the work piece when fitted into the tailstock Morse taper. This prevents burning or damage to the end of the spindle.

Hollow revolving centres allow for long hole boring through the tailstock. These are most commonly used when boring a hole for the power cable when turning table or floor standing lamps.

# **Faceplates**

Most bowls and platters are initially turned whilst mounted to a faceplate. Screw holes in the faceplate allow blanks to be secured onto the lathe without the need for tailstock support. Faceplate rings are available for fitting onto the jaws of standard 4-jaw chucks, allowing projects to be completed without needing to remove the chuck from the lathe.



# **Woodturning Tools**

Quality high speed steel (HSS) woodturning tools will outlast the edge life of carbon steel tools by up to six times. Inferior quality or incorrectly sharpened tools will lose their edge quickly and can cause frustration or injury to the woodturner. Second-hand tools are best avoided as they usually require re-grinding back to their original profiles, which can be a difficult or even impossible task without an accurate sharpening system.

# **Woodturning Tool Sets**



The six basic woodturning tools are much better value when purchased together as a set – a good tool set will have the correct sizes included for undertaking a wide range of bowl and spindle projects. More tools can be added as and when you require them. We recommend starting with the following tools:

3/4" Spindle Roughing Gouge

3/8" Spindle Gouge

3/4" Skew Chisel

1/2" Round Nose Scraper

1/8" Parting Tool

3/8" Bowl Gouge

# **Spindle Roughing Gouge**

Used for turning spindle blanks from square to round. The shape of the roughing-out gouge enables the tool to cut safely with the wings (the name given to the tips of the side walls) well back from the work piece.

Tips: Begin with the tool handle low and rub the heel of the bevel against the wood. Slowly raise the handle until fine shavings appear then rotate and angle the tool slightly in the direction of travel. The depth of cut can be adjusted by raising or lowering the handle. Always cut downhill (from the highest point to the lowest point) and work out towards each end.



Spindle roughing gouges must not be used on bowl projects. These gouges are not intended to withstand the rigours of changing grain direction and could easily break at the weakest point (the tang).

Standard Bevel Angle: 45°

Standard Tool Rest Height: Just below centre

### **Skew Chisel**

Used to create a fine finish on spindle work. Can also be used to clean the end grain of spindles, cut shallow curves, beads, pummels and v-cuts. A skew chisel with rolled edges allows greater manoeuvrability and reduces the risk of catching an edge.

Tips: When using the skew chisel to produce a planing cut, the toe of the tool (the long tip) is normally at the top with the cutting edge intersecting the axis of the wood at 45°. Start with the tool handle low and rub the heel of the bevel against the wood.

Slowly raise the handle until fine shavings appear then move the tool across the wood. The depth of cut can be adjusted by raising or lowering the handle. Always cut on the lower half of the cutting edge to maintain control.

Always cut downhill (from the highest point to the lowest point) and work out towards each end. The long tip of the tool should never come into contact with the wood during a planing cut.

Cutting beads and shallow curves is similar to a planing cut except the tool rest is lower and the tool is rolled until it is cutting on the tip of the heel (the short tip).

Producing v-cuts, pummels and cleaning end grain is achieved using the toe of the skew (the long tip). The tool is used on its edge (with the long tip edge on the tool rest) and pushed into the wood in an arcing motion. Only a small amount of the bevel near the toe should be rubbing the wood to avoid taking too larger cut.

Standard Bevel Angle: 15°

Standard Tool Rest Height (Planing Cuts): 13mm (1/2") below top of timber

Standard Tool Rest Height (Beads & Shallow Curves): Just above centre

Standard Tool Rest Height (V-Cuts, Pummels & Cleaning End Grain): Just below centre

# **Spindle Gouge**

Also known as shallow flute gouges. Ideal for shaping and detailing on spindles. Used to create coves, beads and other profiles on goblets, vases and egg cups etc. A fingernail grind reduces the danger of the tool catching when working in confined areas.

Tips: Begin with the tool handle low and rub the heel of the bevel against the wood.

Slowly raise the handle until fine shavings appear then rotate and angle the tool slightly in the direction of travel. Always cut downhill (from the highest point to the lowest point) and work out towards each end.

Standard Bevel Angle: 45°

Standard Tool Rest Height: Just above centre

### **Bowl Gouge**

Also known as deep flute gouges. Used for initial shaping of bowls and other faceplate work. They can produce either massive profiling cuts or delicate finishing cuts as necessary. A fingernail grind gives increased flexibility and allows the turner to perform 'pull cuts' without catching the lathe bed.



Tips: Begin with the tool handle low and rub the heel of the bevel against the wood. Slowly raise the handle until fine shavings appear then rotate and angle the tool slightly in the direction of travel. Always cut downhill (from the highest point to the lowest point).

Standard Bevel Angle: 45°

Standard Tool Rest Height: Just below centre

### **Round Nose Scraper**

Used on bowls and spindle work for finishing and to create smooth flowing curves.

Tips: Adjust the tool rest so it is approx. 13mm (1/2") away from the work piece. Present the tool with the handle raised so that the blade is angled down by about  $10^{\circ}$ . The depth of cut is controlled by the pressure applied as the bevel does not rub when using scrapers.



Standard Bevel Angle: 80°

Standard Tool Rest Height: Just above centre

# **Parting Tool**

Used to part the finished project off from the waste material and add detail (e.g. beads & fillets). Can also be used to cut spigots for fitting into a chuck.

Tips: Begin with the tool handle low and rub the heel of the bevel against the wood. Slowly raise the handle until fine shavings appear then push the tool in an arcing motion towards the centre. To avoid binding when parting off make a second cut next to the main one.



Standard Bevel Angle: 20°

Standard Tool Rest Height: Just below centre

# **Hollowing/Undercutting Tools**



Vases, hollow forms and undercut rims on bowls can easily and safely be produced using a hollowing tool. For small to medium sized projects a hollowing tool with swivelling scraper tips is ideal. Scraper tips are easy to sharpen and can be replaced if needed. For larger pieces a deep hollowing tool should be used with a cutter system that slices through the wood rather than scraping it.

The Robert Sorby Multi Tip Hollowing Tool is our recommendation for those who wish to take their first steps in hollowing and those working on projects of 6" and

under. This excellent value tool includes three interchangeable scraper tips – two are for hollowing/undercutting and the other is a multi-sided scraper (combining round, curved, and square scrapers into a single swivelling cutter). This is one tool which is a must for each and every turner.

# **Tungsten Carbide Tipped Tools**

Woodturning tools with interchangeable tungsten carbide cutters are becoming increasingly popular, particularly with those who find it difficult to learn the different tool techniques for standard turning tools. Tungsten carbide tips are extremely



hardwearing and have excellent edge retention. When a cutting edge eventually becomes dull the cutter is simply rotated to a new position.

The Robert Sorby TurnMaster is a unique tungsten carbide tipped turning tool which incorporates a patented interchangeable cutter head that locks into three positions allowing for simple scraping and shear scraping options. Projects can be turned from start to finish using just the one tool.

### **Interchangeable Tool Systems**



An interchangeable tool system will provide much better balance and vibration dampening qualities compared to wooden handled tools. A huge range of tools can be fitted into the one handle by using the appropriate collet adaptor. The length of round shanked tools can be adjusted to the most convenient size by sliding the blade in or out of the handle. Some tool systems allow an additional counter weight and side handle to be fitted for even more control when using larger blades or hollowing tools.

### **Woodturning Tool Parts**

It is important to have well manufactured tool parts produced from quality materials. Below is a list of the parts found on a standard woodturning tool.

**Handle (A)** – The handle should be of a suitable length to help balance and control the tool in use.

**Ferrule (B)** – The ferrule prevents the handle splitting when the blade is inserted.

**Tang (C)** – The section of the blade which is fitted into the handle is referred to as the tang.

**Blade (D)** – Blades should ideally be made from triple tempered high speed steel (HSS).

Flute (E) – The flute of a gouge defines the shape of the cutting edge and helps to eject shavings.

**Bevel (F)** – The bevel is the part of the blade which is sharpened to produce the cutting edge.

**Cutting Edge (G)** – This is the sharp edge that is formed when the bevel is ground on the blade.



# Sharpening

Having correctly sharpened woodturning tools is just as important as learning correct turning techniques. Blunt or poorly sharpened woodturning tools can often lead to the woodturner becoming frustrated with the hobby.

Bench grinders are often adapted to sharpen woodturning tools (with additional jigs & grinding wheels). The grey wheel supplied with most bench grinders is not suitable for sharpening woodturning tools as it will quickly overheat and damage the tool. Even with suitable grinding wheels the accuracy of a bench grinder will be reduced as the wheels are ground down – small grooves in the wheel also need to be removed using a grind wheel dresser to ensure the front of the wheel is flat.

A common problem with bench grinders is overheating of the tool steel – this will greatly affect the steel structure and performance of the tool. Water cooled grinders are much less likely to overheat the tool but still need constant adjustment and maintenance as the wheels reduce in size.

Diamond honing files are commonly used to help maintain the cutting edge on turning tools. They are a quick and



efficient way to hone the cutting edge, however tools will still require regular re-grinding using a sharpening system.

The Robert Sorby ProEdge is a dedicated sharpening machine - its unique design incorporates many years of experience in producing the keenest of edges accurately and efficiently. Rather than conventional grinding wheels the ProEdge utilises efficient abrasive belts which reduce over-heating and subsequent damage to your tools giving a clean and consistent finish. The patented angle setter allows for quick selection of the desired angle, coupled with the simple to fit jigs.

# **Timber**

Timber is grouped into two main categories - hardwoods and softwoods. Hardwoods are usually broad leaf deciduous trees that are preferred for turning as they are often dense and take a good finish. Softwoods are usually evergreen trees and are not normally used for turning quality items as they are too soft to take detail or a good finish.

Many species of timber can be used for turning from the UK and around the world. Native timbers such as Ash, Beech and Oak are easily available and generally more cost effective. Turning exotic species gives access to a huge range of colourful and figured timbers otherwise unavailable in the UK.



When turning projects that will come into contact with food make sure you use a suitable timber. It is best to avoid exotic woods as they may taint the food. Ash, Beech and Sycamore are the most commonly used timbers for making kitchen and food utensils.

# **Unseasoned Timber**

Turning unseasoned timber (fresh sawn or green wood) is easier than turning dried wood and can be an excellent way to practice techniques and shapes. However, the high moisture content of unseasoned wood will cause finished pieces to warp as they dry. Splitting is also likely if green wood is dried too quickly.

To help avoid warping or splitting, turn the timber to a rough shape of the finished item (with a wall thickness of approx. 19mm – 25mm). Wrap the piece in brown paper and store in a cool, dry place for several months until dry. Then re-mount the piece and finish turning to the final shape. Although this can be cost effective, the results are often unpredictable and the choice of timbers very limited.

If unseasoned timber is to be stored for a period of time before being turned, the end grain can be sealed with molten paraffin wax or a paraffin wax emulsion (such as Chestnut End Seal).

### Part Seasoned Timber

Timber that is not yet fully seasoned is referred to as part seasoned. Some turning blanks (usually exotic timbers) are supplied as part seasoned when fully dried blanks cannot be obtained. Care should be taken when turning part seasoned blanks as they can be susceptible to splitting and warping. To prevent this it may be necessary to part-turn and slowly dry the piece – the same as with unseasoned timber.

Part seasoned timber should not be left unsealed – if the wax coating has been removed it is a good idea to apply some Chestnut End Seal or Food Safe Finish (mineral oil). This will slow down the drying process and prevent cracking.

# **Air Dried Timber**

Timber is usually dried in a shaded area protected from rain and direct sunlight. When dried, the timber will have reached the equilibrium moisture content (EMC). The EMC will vary depending on the surrounding conditions but is usually around 20%. Air dried timber is easier to work and produces less dust than kiln dried timber. The main disadvantages of air drying are the risk of insect and fungal attack, as well as the time it takes to dry.

### **Kiln Dried Timber**

Industrial kilns are used to dry timber quickly and efficiently by controlling the temperature, relative humidity and air flow. Timber is usually kiln dried to a moisture content of between 6-12%. As timber is hygroscopic it will absorb moisture when removed from the kiln until it reaches the equilibrium moisture content (EMC). The EMC varies depending on the relative humidity and temperature of the surrounding air. Kiln dried timber is more stable than air dried timber and best suited for use inside heating buildings.

# **Woodturning Blanks**

Using prepared woodturning blanks allows the woodturner to quickly produce pieces without the worry of them warping or splitting due to rapid moisture loss. It also gives the turner access to many different species of timber from around the world.



Woodturning blanks are normally separated into two different grades: 1<sup>st</sup> grade blanks are supplied free from defects such as large knots, splits or insect holes etc. 2<sup>nd</sup> grade blanks may contain knots, small splits or insect holes etc. Although 2<sup>nd</sup> grade blanks are suitable to turn they are not recommend for beginners or inexperienced turners.

Bowl blanks are usually turned with the direction of the timber grain perpendicular to the axis of the lathe bed. They are normally secured to the

lathe using a chuck or faceplate. Circular blanks are much easier to turn than square blanks; they also allow for larger pieces to be mounted over the lathe bed as there are no corners to catch.

Spindle blanks usually have the grain running parallel along the length of the lathe bed. They are normally mounted on the lathe between a drive centre and revolving centre. Turning spindles is slightly easier than turning bowls as the grain direction does not change as the wood spins.

Mixed timber packs are very popular with beginners and those wanting to sample a variety of timbers. They contain a colourful mixture of native/exotic hardwoods and offer excellent value. The selection of sizes makes them ideal for many different turning projects.



# **Abrasives**



An aluminium oxide cloth backed abrasive is ideal for sanding turned items to remove rough grain and tool marks. Abrasives with a stearate coating are less likely to clog and will last much longer. Cloth backed abrasives are very flexible making them suitable for sanding hard to reach areas.

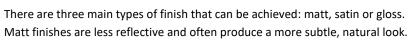
Most cloth backed abrasives range in grits from 100 (coarse) up to 600 (fine). For an extra fine finish use foam backed sanding pads. Abralon from Mirka is a unique

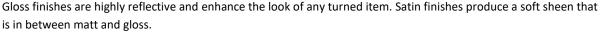
multifunctional patented sanding material developed for the flexible sanding of both smooth and profiled surfaces. Available in 1000, 2000 and 4000 grit.

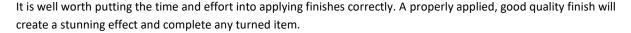
A common problem when sanding on the lathe is concentric rings appearing on the surface. This can be avoided by ensuring that the lathe is running at a high speed and the abrasive is constantly kept moving across the work piece. The easiest way to eliminate unsightly sanding lines when turning simple shapes or larger pieces is to use a sanding tool such as the Robert Sorby Sandmaster. The Sandmaster utilises abrasive discs fixed to a velcro sponge pad that freely rotates in a phosphor bronze bushing. As the disc spins it helps to reduce clogging of the abrasive.

# **Finishes**

A wide range of finishes are available for turned items. The finish required will depend on the project being turned and your personal preference. If an item is decorative a long lasting finish that shows the timber to its full potential is recommended. For practical items that will be handled regularly a hardwearing finish that can easily be repaired should be considered. Projects that are to come into contact with food should always be sealed with a food safe finish.







# Oils

For a matt or satin finish that can easily be repaired, an oil (such as finishing oil or food safe finish) is ideal as it penetrates deep into the timber and will not crack or peel over time. Several coats should be applied for oil finishes to work effectively.

### Waxes

Wax finishes are very popular – they can be applied directly to small items with the lathe running or mixed into a paste wax for easy application. Pure carnauba wax (one of the hardest natural waxes) can be applied directly to turned pieces using a buffing wheel to produce a long lasting, all natural high gloss finish.

# **Polishes**

To produce a gloss finish beginners usually start with Chestnut Friction Polish – it is an easy to apply finish with a high concentration of shellac which produces stunning results. Friction polish is normally used on small decorative pieces. For larger pieces we would recommend French polish.



### Lacquers

For a hardwearing and high gloss finish lacquers are usually best suited. They are easy to apply (particularly when in an aerosol form) and quick drying. Although long lasting it can be difficult to repair lacquers if they become damaged.

### **Sanding Sealers**

Sanding sealers give a higher build, increased gloss and a more hardwearing finish to your final coat. Oils should not be applied over a sanding sealer as they will be unable to penetrate the surface.

# **Safety Cloth**

Care should be taken when applying or buffing finishes with the lathe running as ordinary cloth could get tangled with the work piece or chuck. Chestnut safety cloth is ideal for lathe work as it tears easily if caught in any moving parts.

# Safety Equipment



Personal protective equipment (PPE) is required when woodturning to reduce exposure to hazards such as fine airborne dust, flying debris and excessive noise.

Eye protection is essential when woodturning. Safety spectacles offer adequate protection when turning small pieces, however a full face visor offers a higher level of protection and should be used for larger pieces to protect against chips or debris.

Respiratory protective equipment (RPE) is very important, particularly when sanding on the lathe. Disposable respirators are the most popular as they are lightweight and offer reliable, effective protection against fine dusts. Re-usable half mask respirators are often used by professionals. They can be more comfortable and cost effective if used regularly. Filters in half mask respirators should be replaced every 30 days or more frequently if breathing becomes restricted.

Ear protection is not usually required as woodturning lathes are fairly quiet in use. However, it's a good idea to have a pair of ear defenders in case of excessive noise from a dust extractor or certain tools.

Gloves should not be worn whilst turning due to the risk of getting tangled with the spinning work piece or chuck.

# **Dust Extractors**

A dust extractor should be used when sanding to remove the majority of dust particles. A powerful extractor with an induction motor is ideal – carbon brush motors should be avoided if possible as they will not cope with longer running times and can be very noisy. Some extractors can be upgraded with optional micron filters for collecting finer dust.

Vacuum extractors are ideal for connecting to smaller machines and can filter down to 0.5 microns. They are also ideal for keeping the workshop clean.



# **Air Filtration Systems**



A workshop air filtration system will quietly and efficiently remove the finest (and most dangerous) dust particles from the workshop. Use in conjunction with a dust extractor for maximum dust control.

Jet air filtration systems can be positioned anywhere in the workshop, either on a bench, a shelf or suspended from the ceiling. These units are easy to operate and have three speeds simply activated by the push of a button or by using the convenient remote control. For best results the built in timer can be set to run the filter after you leave the workshop.

# **Health & Safety**

Health and safety is extremely important when woodturning and should not be overlooked. Below is a list of some essential health and safety tips:

- Don't wear loose clothing or jewellery
- Tie back long hair
- Use eye protection and a dust mask
- Wear ear protection when necessary
- Ensure you read all manuals provided with equipment
- Only use tools for their intended purpose
- Keep the tool rest as close to the work as possible
- Before starting the lathe rotate the work piece by hand to ensure it clears the tool rest and lathe bed
- Always start the lathe at a low speed
- Remove the tool rest when sanding on the lathe
- Wood shavings are a potential fire risk so should be cleaned up regularly
- Oil soaked cloth should be stored/disposed of safely to avoid spontaneous combustion









# Summary



The main topics including woodturning lathes, tools, sharpening systems, timber, finishes and safety have now been covered. There are many other tools and techniques that can be explored such as spiralling, texturing, eccentric turning, deep hollowing, staining/colouring, and segmented turning. As your skills develop you could try adding some hand carved detail or combine the beauty of timber with valuable metals or stones - the possibilities are endless.

With a small amount of time and effort it is easy to turn highly valued works of art. Turned items are always greatly appreciated as gifts and many things can be made for around the house. Those that enjoy woodturning often start businesses selling their pieces at local craft fairs and galleries. Whether you are turning personal items, gifts or selling pieces through galleries, the most important thing is to learn as you turn and have fun.

# Website / About Us

All of the equipment required to start woodturning is available to purchase from our website (www.ockenden-timber.co.uk). An extensive range of products can be ordered 24/7 and paid for securely. All items are in stock and available for express delivery unless clearly stated.

We offer a wide range of native and exotic timbers, with thousands of woodturning blanks/carving blanks available for delivery throughout the UK and Europe. Blanks are processed on site to the highest standards using the latest industrial machinery.

Friendly and knowledgeable staff are always available to answer any technical questions you may have on our products. Many of our staff are woodturners and carvers so we are able to offer honest advice from first-hand experience.



### Why Choose Ockenden Timber?



**Wide range of quality products** - Official stockists of many premium brands including Robert Sorby woodturning tools, Nova lathes, Flexcut woodcarving knives and Chestnut Products finishes.



**1st grade native and exotic timber blanks** - Woodturning and carving blanks are produced on site to the highest standards.



**Automated real time stock control** - Up to date stock control - all items are held in stock ready for dispatch unless clearly stated.



**Knowledgeable and friendly customer service** - With over 25 years of experience in the timber industry we can answer any technical questions you may have on our products and offer honest advice from first-hand experience.



**Easy and secure online ordering** - Place orders 24/7 and pay securely using 128-bit SSL - the highest level of security used online.



**Quick and reliable delivery service** - Orders are usually dispatched within 1-2 working days via Royal Mail or Parcelforce.

For more information and project instructions visit:

# www.ockenden-timber.co.uk

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