









# TurnMaster

cutter description and use table

Code	Cutter Description	Material	Use	Sharpening
 <b>RSTM-CT1</b>	Round Tungsten Carbide	Tungsten Carbide	Internal waste removal and shaping	✗
 <b>RSTM-CT2</b>	Detail Point Tungsten Carbide	Tungsten Carbide	Line detailing	✗
 <b>RSTM-CT3</b>	Square Tungsten Carbide	Tungsten Carbide	Initial external waste removal and straight edge shaping	✗
 <b>RSTM-TIP1</b>	HSS Round	High Speed Steel	Internal waste removal, shaping and finishing	✓
 <b>RSTM-TIP2</b>	HSS Detail Point	High Speed Steel	Line detailing and finishing	✓
 <b>RSTM-TIP3</b>	HSS Square	High Speed Steel	External waste removal, straight edge shaping and finishing	✓
 <b>RSTM-TIP4</b>	HSS French Curve / Inside	High Speed Steel	Internal shaping and finishing	✓
 <b>RSTM-TIP5</b>	HSS Box / Dovetail	High Speed Steel	Parallel side walls perfect for box making and creating dovetails	✓
 <b>RSTM-TIP6</b>	HSS Teardrop / Inside / Outside	High Speed Steel	Perfect for scraping / shear scraping inside and outside	✓
 <b>RSTM-TIP7</b>	HSS Mushroom	High Speed Steel	Undercutting small hollow forms	✓
 <b>RSTM-GT1</b>	HSS Excelsior Round	Titanium Nitride Coated HSS	Internal waste removal, shaping and finishing	✓
 <b>RSTM-GT2</b>	HSS Excelsior Detail Point	Titanium Nitride Coated HSS	Line detailing and finishing	✓
 <b>RSTM-GT3</b>	HSS Excelsior Square	Titanium Nitride Coated HSS	External waste removal, straight edge shaping and finishing	✓
 <b>RSTM-GT4</b>	HSS Excelsior French Curve / Inside	Titanium Nitride Coated HSS	Internal shaping and finishing	✓
 <b>RSTM-GT5</b>	HSS Excelsior Box / Dovetail	Titanium Nitride Coated HSS	Parallel side walls perfect for box making and creating dovetails	✓
 <b>RSTM-GT6</b>	HSS Excelsior Teardrop / Inside / Outside	Titanium Nitride Coated HSS	Perfect for scraping / shear scraping inside and outside	✓
 <b>RSTM-GT7</b>	HSS Excelsior Mushroom	Titanium Nitride Coated HSS	Undercutting small hollow forms	✓
<b>RSTM-HEAD</b>	TurnMaster head only - no cutter	N/A	Spare head for fitting additional cutters for extra versatility	N/A
✗ No sharpening required    ✓ Sharpening required				

For more information and to watch the video on the Turnmaster visit [www.robert-sorby.co.uk](http://www.robert-sorby.co.uk)

Robert Sorby Ltd, Athol Road, Sheffield, S8 0PA, England.

Tel: +44(0) 114 225 0700 Email: [sales@robert-sorby.co.uk](mailto:sales@robert-sorby.co.uk)

Registered in England: Company No 3464018, Registered office: Atlas Way, Atlas North, Sheffield, S4 7QQ. VAT No GB 172 4019 84

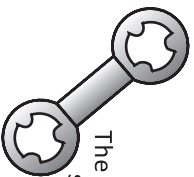
*Robert Sorby*  
SHEFFIELD ENGLAND

**TurnMaster**



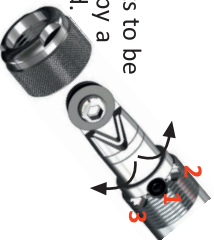
3 Cutting edge technologies    3 Indexable positions    1 Flexible woodturning tool system

The Robert Sorby TurnMaster has a patented three position indexable head that can be quickly and easily changed by loosening the locking collar with the unique wrench.



The three positions allow for standard scraping (1) as well as shear scraping to the right (2) and to the left (3).

This allows for projects to be shaped and finished by a simple turn of the head.



The head is designed so that TurnMaster cutters will fit one tool.

The large selection of cutters are available in Tungsten Carbide, High Speed Steel (HSS) and Titanium Nitride (TiN) coated HSS.

A table of all the cutters and their uses can be found on the back page of this leaflet.

The cutters are held in place with a high tensile torx screw which can be easily removed to change the cutter.



## Hard, harder, hardest, sharp, sharper, sharpest

### 1. Tungsten Carbide

These three throwaway\* cutters don't need sharpening. They make light work of removing waste material from resistant woods and give extended cutting edge life. Sharpens to 0.7 - 1 microns. Hardness: 90 RC. Material: micro grade tungsten carbide

### 2. High Speed Steel (HSS)

These cutters give the woodturner a material that can be sharpened to an ultra sharp edge. This steel provides unmatched quality for the discerning woodturner keen on getting the greatest detail from their tools. Sharpens to 0.2 - 0.4 microns. Hardness : 62 RC. Material: M2 HSS

### 3. Titanium Nitride (TiN)

These cutters provide the same advantages as HSS but give added longevity before sharpening is required. Sharpens to 0.15 - 0.2 microns. Hardness of coating up to 85 RC. Material: Titanium nitride coated M2 HSS

\*Tungsten Carbide tips can be sharpened using diamond abrasives

## How to use the TurnMaster

Set the head in a neutral position so that the cutter is horizontal when the tool is held flat on the lathe tool rest.

This is done by loosening the locking collar with the unique wrench and rotating the collar a minimum of two and half turns which will allow the head to be turned to the required position.

Once it is set into the correct position re-tighten the locking collar with the wrench to secure the head into place.

To assist with the tightening of the collar, the included small Tommy bar can be placed in the hole situated in the shank to give additional purchase but please do not over tighten.

The tool is now in standard scraping mode.

There are three positive stop positions to lock the head for standard scraping, shear scraping to the left and shear scraping to the right.

To remove the waste material and to create an initial shape use either the square or round cutter depending on the shape of the project being turned.

Once the required shape has been created, turn the head of the tool to the left or right following the instructions as above.

Now the TurnMaster is in shear scraping mode and a more refined shape and finish can be achieved.

To ensure the best available finish always cut with the grain using a freshly sharpened HSS cutter.

This will ensure that the grain is sliced to produce a clean surface finish.