

Rose Engine Lathe Demo

Woodturners of the Virginias

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By:

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History of the Rose Engine Lathe

Complex lathes started to be developed as early as the 15th century when the nobility of Europe commissioned and collected the beautiful wood and ivory turnings made on them. During the 16th to 18th centuries, kings and princes employed the best turners and engineers to produce ever more complex machines and fantastic artifacts and many of the nobility took up ornamental turning as a hobby. Following the French Revolution the centre of interest in this hobby transferred from France to England where it spread widely, not only among the aristocracy but later to the wealthy middle classes. This change was largely influenced by John Jacob Holtzapffel, an engineer of Alsatian descent who moved from Strasburg to London in 1792 and set up a lathe-making business that was to flourish until the First World War. With the advent of the motorcar the hobby of ornamental turning was largely abandoned until 1948 when the Society of Ornamental Turners was formed.

General Interest in Rose Engine Lathes - Today

Due in large part to the efforts of Jon McGill, Steve White and David Lindow and Gorst Duplisse there is a significant resurgence of interest in Rose Engine Lathes in general. There is an international association for ornamental turners OTI based in the UK. There is a chapter of the American Association of Woodturners devoted strictly to Ornamental Turning. <http://www.ornamentaltturners.info/index.php> They have members from all over the world and meet once every two years in a different city.

The AAW publication, American Woodturner, has featured articles on ornamental turning in several issues. Many AAW chapters in America has at least one member who either has built or is in the process of building a McGill MDF rose engine. There are Ornamental Turning forums on the internet so the buzz is constant.

Design and Construction of my Rose Engine Lathe



After several years and many hours of research and several months of design and construction my Rose Engine Lathe is up and running. During the design phase, the one part I was having design issues with was the headstock. In the summer of 2013 I was prowling through the surplus metal at a machine shop in Bridgewater, VA and found a piece of extruded aluminum rectangle tube, 6" X 4" with .5" walls, this fit the bill perfectly. With the headstock problem solved I began to get serious about starting the final design and construction. The lathe has been operational for several months as I continue to work on it and experiment with it. Can't say it's finished because on-going enhancements and modifications are planned.

Design Criteria

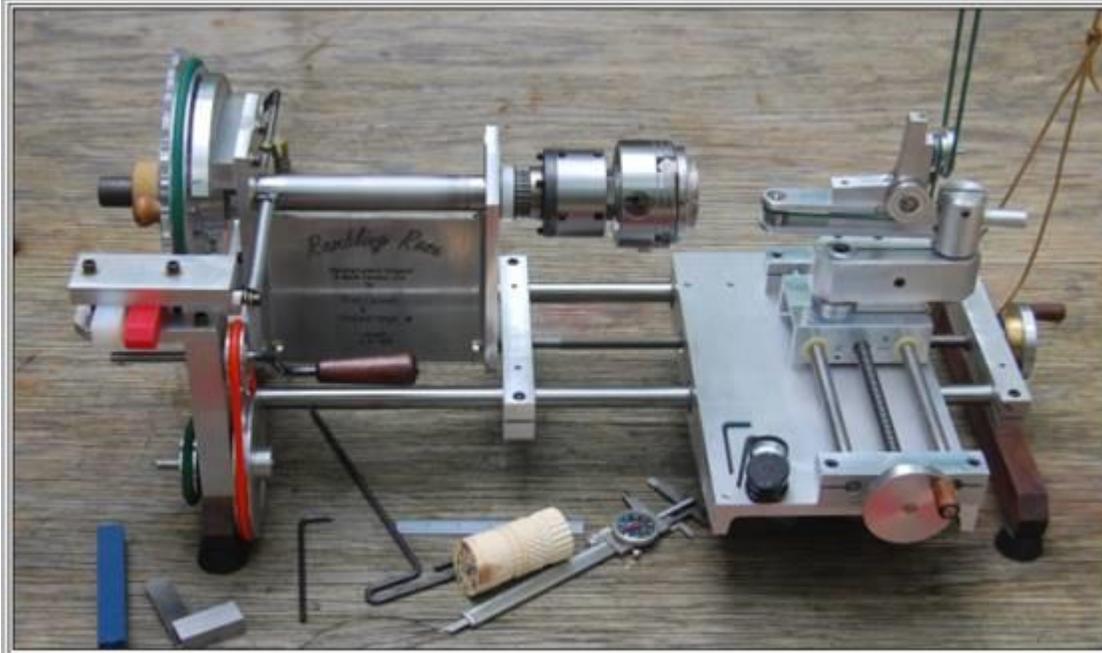
- Designed as a rocking rose engine lathe. May consider adding pumping action in the future.
- Designed to be motor driven. The spindle is driven by a Leeson 90V DC gearmotor with an Automation Direct Drive that provides variable speed with reverse capability.
- The Index Wheel has 36 holes with a one degree vernier scale that allows the spindle to be indexed to 1 degree.
- The compound cross slide is a Rockwell/Delta accessory that was designed to give limited metal turning capability to the older 12" wood lathes. The top cross slide can be rotated 360 degrees.
- A router is used with various router bits and end mill bits as the cutters. The router can be adjusted or rotated to any position.
- Belts – Made with ¼" Round Urethane Belt material.
- Rosettes – made with 1/4" Acrylic or Polyethylene Cutting Boards. I have purchased several rosettes from Mandala Rose Works and have made several.

The Holtzapffel Rose Engine Lathe



“A beautiful example of the finest work put out by the Holtzapffel is in this Rose Engine Lathe, one of only 8 ever made. These were a specialized type of ornamental lathe in which the headstock rocked back and forth as controlled by a rubber moving against a rosette or cam-like pattern mounted on the spindle at the same time as the lathe spindle rotated. Rose engine work often reveals flower patterns and convoluted, symmetrical, multi-lobed organic patterns. It has the potential to be very complex and to produce beautiful and unique patterns unlike any other on the ornamental lathe. Excellent engraved plates of ornamental turning and an extensive depiction of various OT apparatus can be found in Holtzapffel Vol. V (see Bibliography). Much of the historic ornamental turning machinery that has survived is now held by collectors or is in museums. Only a small number of machines are still being used for their intended purpose. Most of this machinery bespeaks an era of unbounded optimism and is beautifully made and a joy to view and use. They represent a time in history when quality still meant "excellence." To my view, the makers and users of this machinery were obviously on a quest to participate in the experience of beauty and "a thing done well," and from our own perspective in time, succeeded admirably.”

Custom Rambling Rose Engine & Ornamental Lathe



[*OrnamentalRoseEngine.com*](http://ornamentalroseengine.com)

<http://ornamentalroseengine.com/rre/index.htm>

Photographs and notes on the design and construction of a custom Rose Engine
Ornamental Lathe & other wood turning stuff

Fred Connell & Roland Hege

Lindow-White Machine Works is the result of the collaboration of Steve White and David Lindow.

Lindow Rose Engine Lathe

Rose Engine Lathe - \$4350.



<http://www.roseengineturning.biz/index.php>

Released in the spring of 2005, the Lindow Rose Engine has set a new standard in the world of Ornamental Turning. This Rose Engine is a modern translation of the original Victorian machines.

Jon McGill Design Medium Density Fiberboard Design



MDF Do-It-Yourself Rose Engine promoted by Jon McGill. This design was published in the American Association of Woodturners Magazine and demonstrated at one of the national symposiums in approximately 2007. The reception was very enthusiastic and several dozens have been built and are currently in operation all across America, the UK and Australia.

Mandala Rose Engine – Starting at \$2595.00



The Mandala Rose Engine is manufactured of 6061 aircraft aluminum and steel.

Features included in the base model are:

Small Shop Frindly – Under 35 pounds makes it easy to store when not in use.

Pumping System – For 3D Turning and Decoration.

360 Degree Phasing – Allows you to phase the cuts of rosettes in 1 degree increments.

Motorized Drive System – Variable speed with no hand ranking.

12 Acrylic Rosettes – 12 rosettes included with the base model.

Quick Removal Rosette Barrel – Allows changing rosettes in a matter of minutes.

Standard 1” x 8 tpi Spindle – Enables most standard lathe chucks to be used.