# MDF Rose Engine Lathe 2.0 with Stepper Motor Drive

# Frequently Asked Questions

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# MDF Rose Engine 2.0 – FAQs

This document is intended to answer frequently asked questions about the rose engine lathe kit sold on <a href="https://www.ColvinTools.com">www.ColvinTools.com</a>.

If you have any questions, please contact us at <a href="mailto:ColvinTools@Gmail.com">ColvinTools@Gmail.com</a>.

Good luck.

Rich Colvin & Jack Zimmel

# MDF Rose Engine 2.0 – FAQs

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## MDF Rose Engine 2.0 - FAQs

## **Frequently Asked Questions**

The questions below are commonly asked, and responses are given to help the reader.

#### General

#### Does this design accommodate both rocking and pumping?

This kit provides for rocking, and there have been a number of people who have adding pumping capabilities. That capability is not provided by this kit at this time. As this evolves over time, we will evaluate and consider adding it to the kit.

None-the-less, if you are new to ornamental turning, there are so many capabilities provided by this machine that it will probably be a long time before you find the lack of pumping to be a limitation to your artistic endeavors (at least I haven't yet).

#### Does this design accommodate a barrel approach with more than two rosettes?

The use of more than two rosettes at one time is something not accommodated by the design of this lathe. Instead, the ability to easily switch rosettes is a design feature for this machine. And what are unique features for this machine are:

- 1. The ability to easily change the phasing of the rosettes without having to perform any calculations.
- 2. The ability to change the alignment of one rosette against another.

So, if you are new to ornamental turning, this machine will enable you to pursue your artistic endeavors easily and without having to spend great amounts of time learning how.

#### Where can I learn more about ornamental turning?

There are a number of great good options:

- Join the Ornamental Turners International (<a href="http://ornamentalturners.com">http://ornamentalturners.com</a>). There is a forum on the web site which allows for questions to be posed and are typically answered relatively soon.
- Attend the Ornamental Turners International Symposium. There, you will meet many other users of the MDF rose engine lathe.
- Check out the "Ornamental Turning Book of Knowledge" (<a href="https://www.otbok.info">https://www.otbok.info</a>). There is also a list of additional resources on that site.

### Spindle

#### May I get a spindle with spindle threads of 1-1/4"-8 (or M33)?

The kit as designed is for a spindle with threads of 1"-8. That is a standard for almost all rose engine lathes. Offering multiple options would also increase the cost of the kit too much, and that was a design criterion for the offering. A machine shop should be able to make a spindle for you with this threading if that is desired, but all the other variables will have to be examined.

#### May I get a spindle with a Morse taper?

This is being catered for in the design.

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#### **Spindle Drive**

#### Do you sell a kit with the hand crank as an option?

Haven spoken with a large number of MDF rose engine lathe users, all have motorized the spindle drive. Many have used geared motors with the speed controlled by changing the frequency of the power feed. Whilst that works, it is problematic at slower speeds as torque is lost. So the hand crank gets used when cutting at very slow speeds (e.g., when making the final passes on a cut).

Stepper motors provide a much better option as they maintain torque when running across the speed range used on the rose engine lathe. And, using stepper motors ensures a constant rotational speed at slower speeds, speeds measured in multiple minutes per revolution.

#### Do you sell a kit which accommodates multiple stepper motors?

The controls implemented will control the spindle stepper motor and one or two more at the same time. These are outlined in the user manual.

#### Can I get a different sized (or different amperage) stepper motor in my kit?

That is not an option we support at this time. The supplied kit is designed to work along known parameters. You are certainly welcome (and encouraged) to experiment.

#### Can I use a different sized (or different amperage) stepper motors?

That is not an option we support at this time. The supplied kit is designed to work along known parameters. You are certainly welcome (and encouraged) to experiment.

#### Can I get a different stepper motor controller or driver in my kit?

That is not an option we support at this time. The supplied kit is designed to work along known parameters. You are certainly welcome (and encouraged) to experiment.

#### Can I use a different stepper motor controller or driver?

The kit has been designed to easily utilize a very cost-effective approach to having a stepper motor drive the spindle. If you want to use a different controller or driver, you may, and are welcome to experiment.

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