

99-353 SolidWorks and Laser Cutting

Making 3D Models

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Cardboard

- Ambiguous term avoided by professionals because it covers a wide range of materials.
- For our purposes: brown corrugated paper around 1/8 inch thick.
- Lighter and cheaper (and weaker) than wood.
- Foldable! Laser cut parameters:
 - 20 mm/sec at 45% power to cut
 - 50 mm/sec at 25% power to fold
- But unlike origami, all folds must be in the same direction.

Laser Cut 3D Plate Models

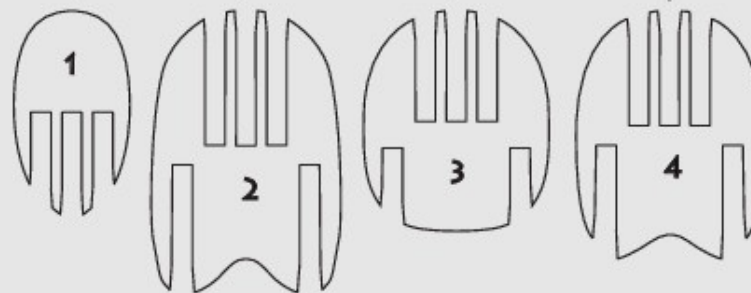
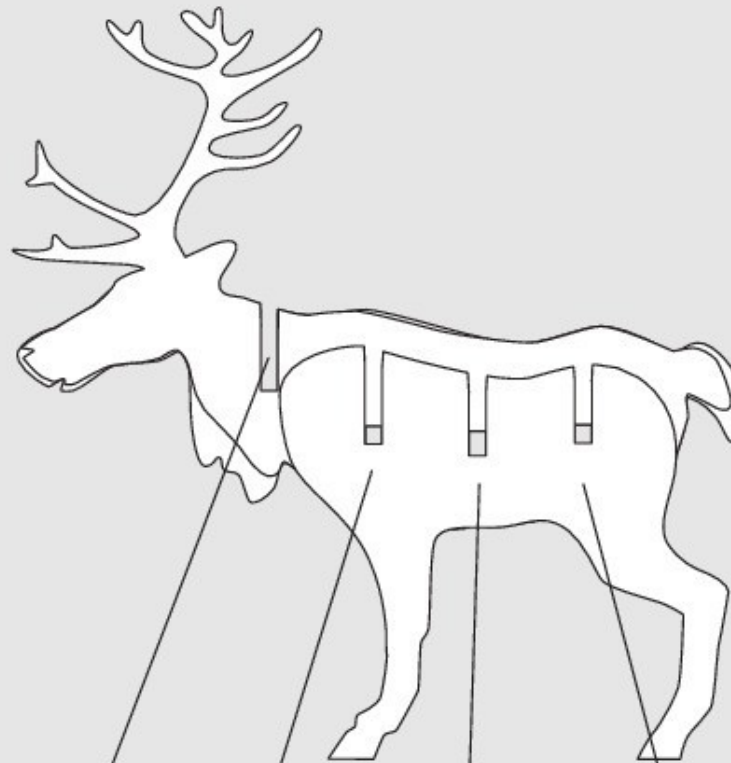


Dinosaurs Are Always Popular



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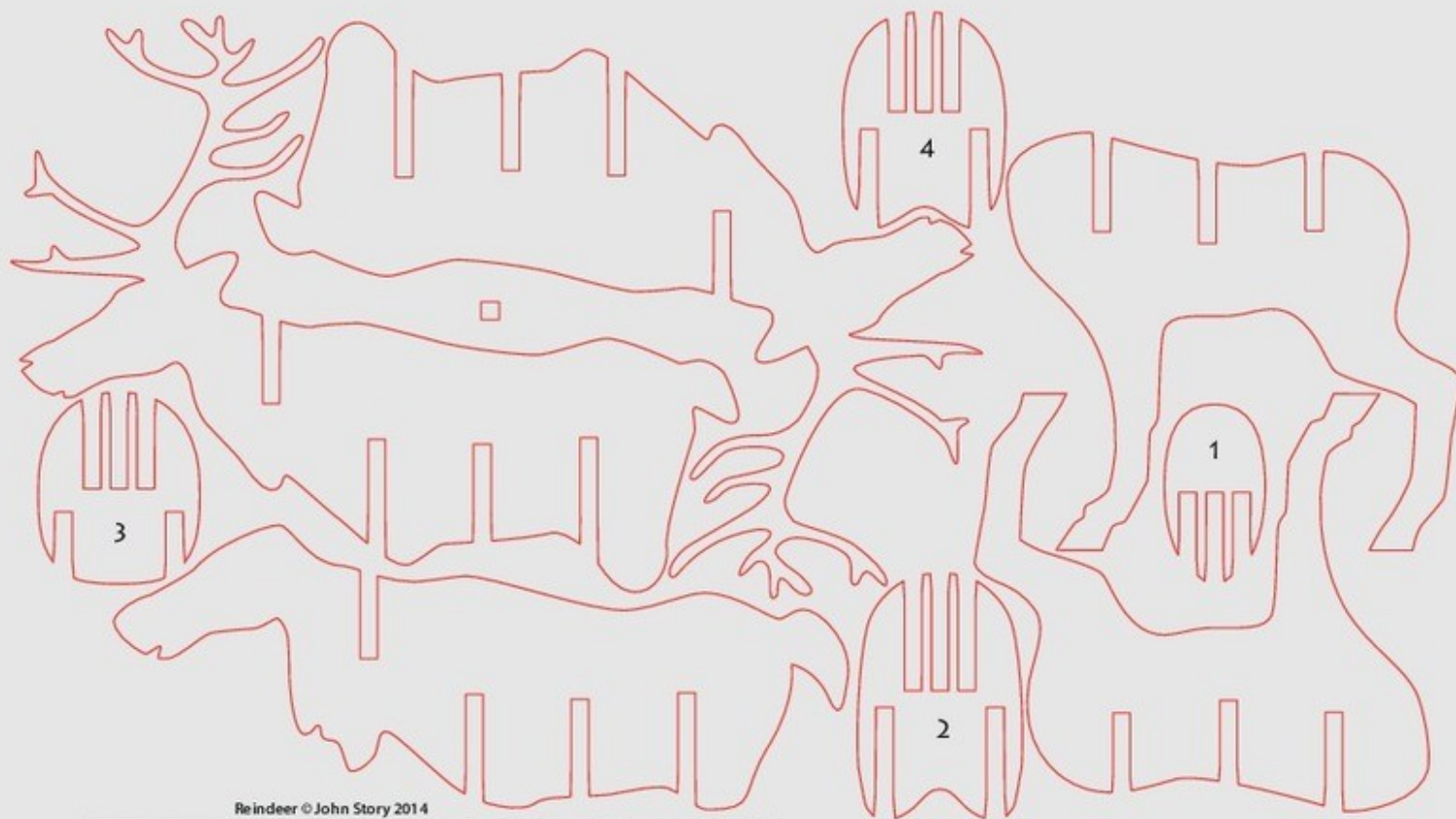




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Hand Bowl Sculpture



Modeling the Hand

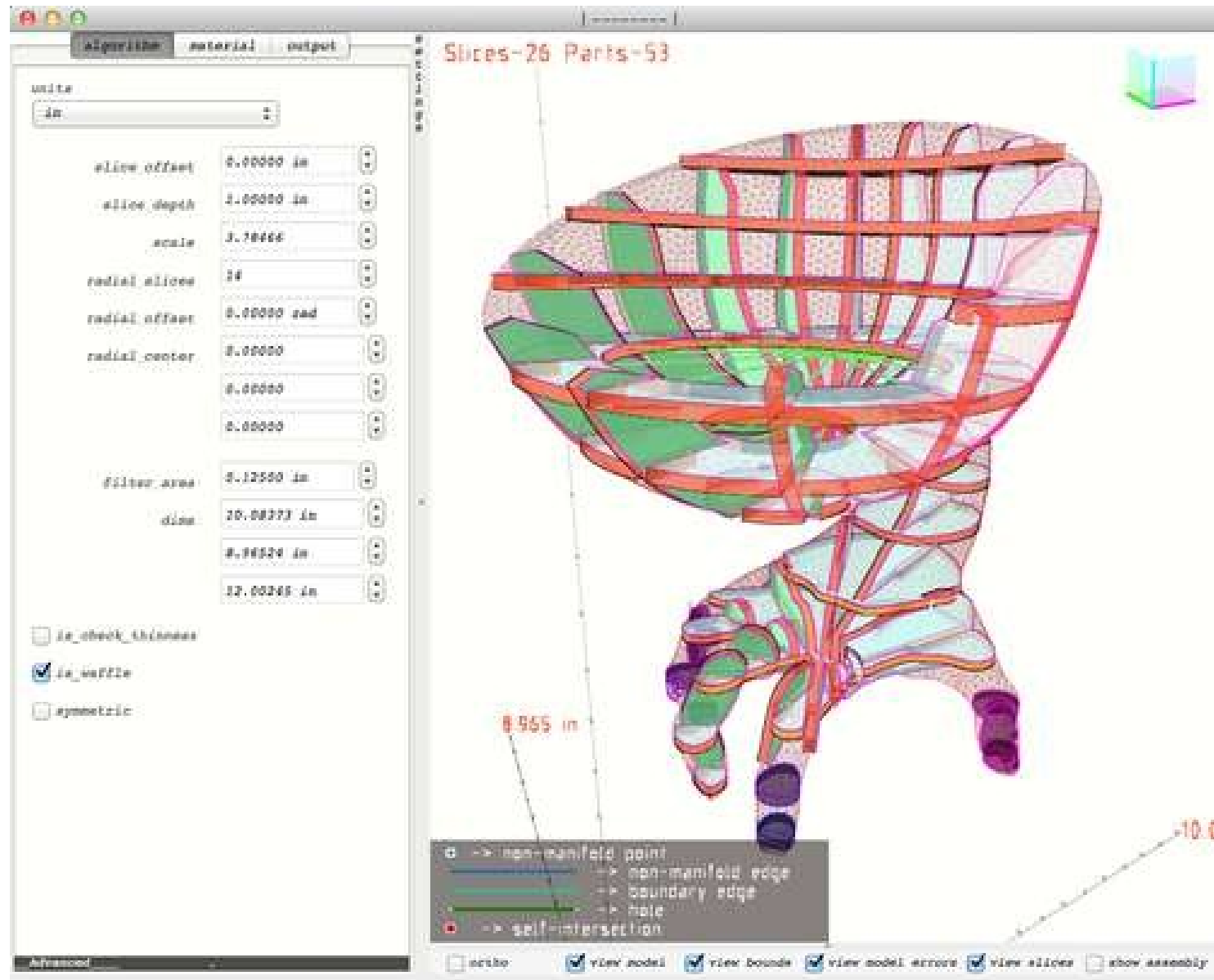


Images from
Ponoko.com

Adding the Bowl (Blender)

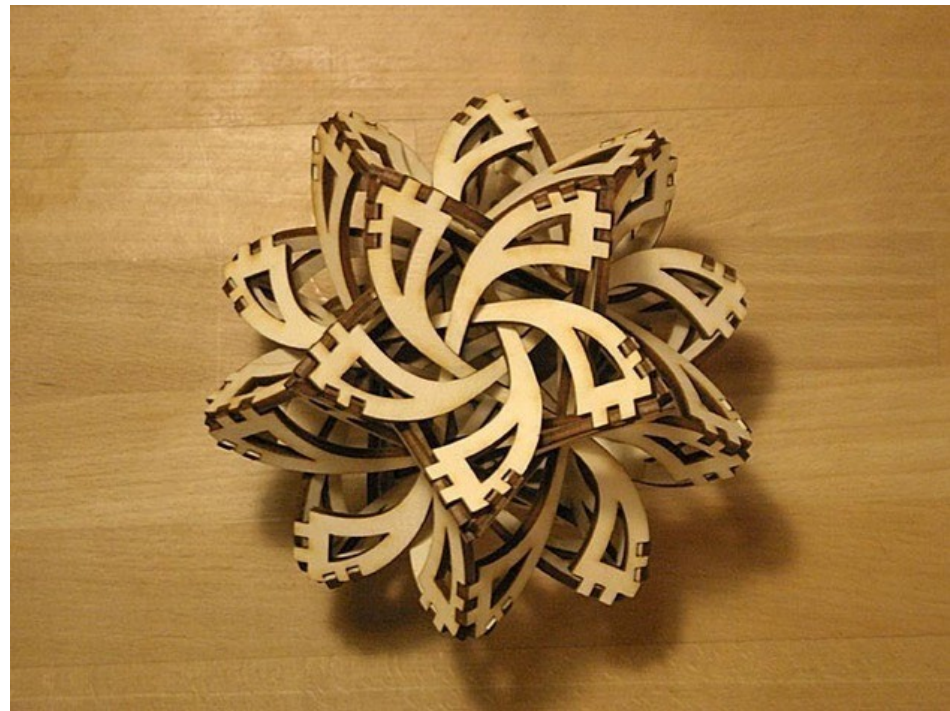


123DMake Slice Tool



Thingiverse

- Site for exchanging designs of make-able things: artwork, puzzles, toys, tools, etc.
- Mostly 3D printing, but some laser cut stuff.
- www.Thingiverse.com (owned by Makerbot)
- Frabjous sculpture:



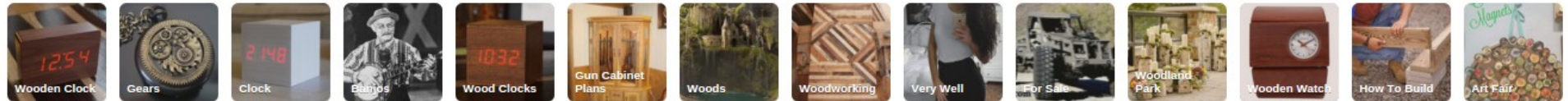
Pinterest

- Pinterest has a huge collection of laser cut projects.
- Many are available for purchase via Etsy.
- Example: wooden gear clocks.
- Google “Pinterest laser cut”.

Wooden Gear Clocks

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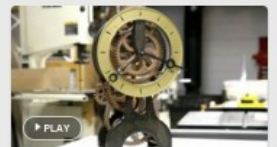


Wooden Clock Gears | first clocks and watches were made from wood yes wood

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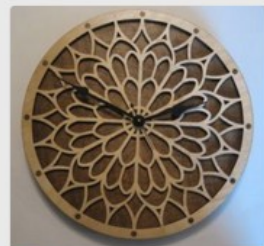
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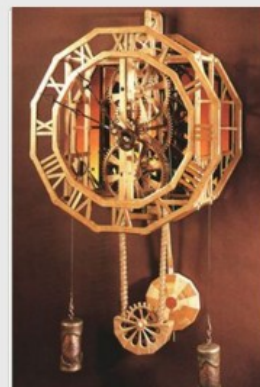
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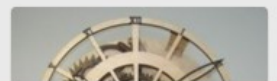
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