LuBan

2D Window

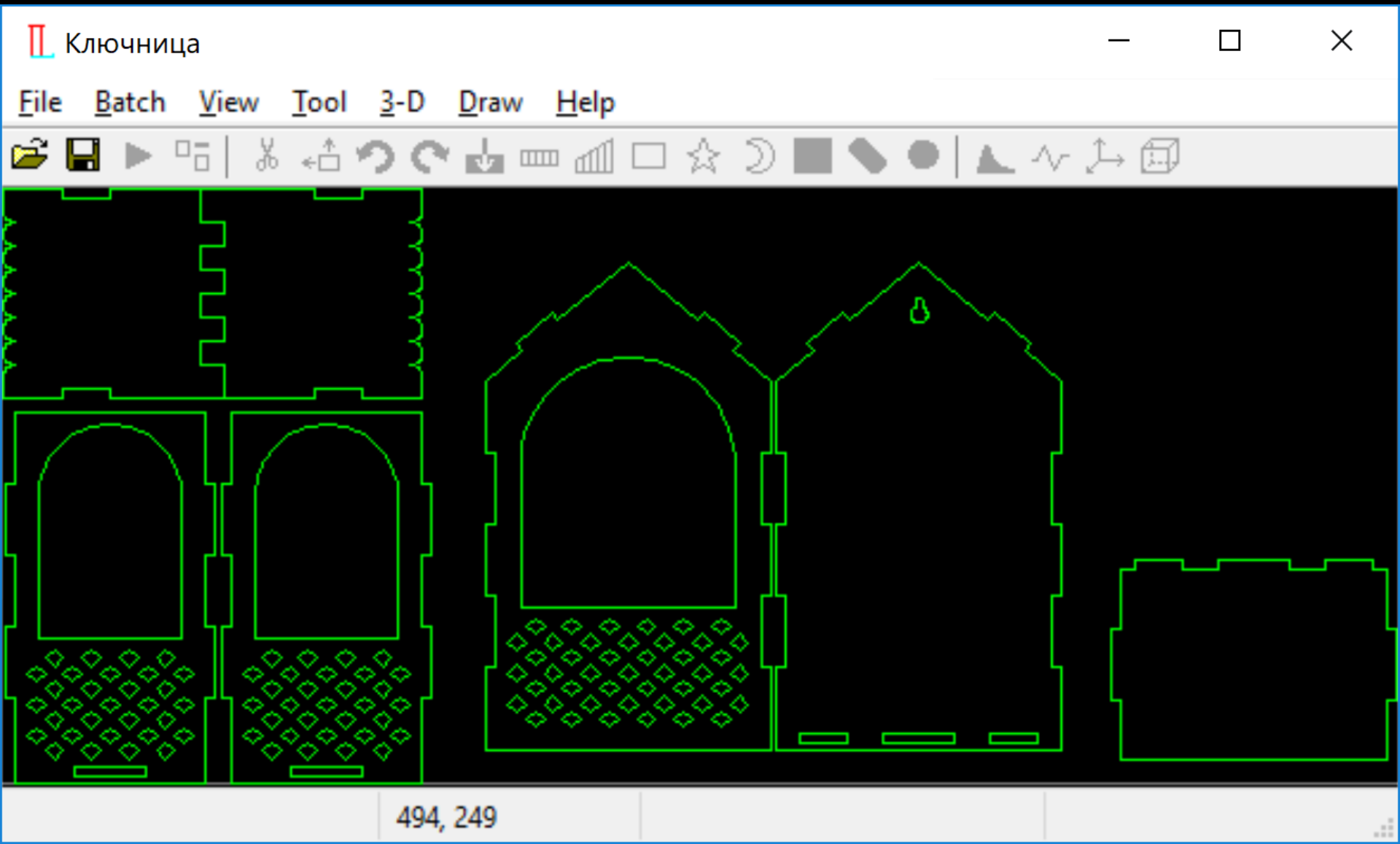
Draw → Nesting

LuBan has a 2D nesting function to optimize the layout of 2D shapes on a rectangle sheet. (There is also a 3D nesting function, 3D window “Mesh → Nesting”.)

First, “File → Import → DXF figure”, import a DXF file that has some 2D shapes. (“Bird house.pdf” shared by Thomas from www.XYZfab.com.au is used.)

Select the advanced importing method.

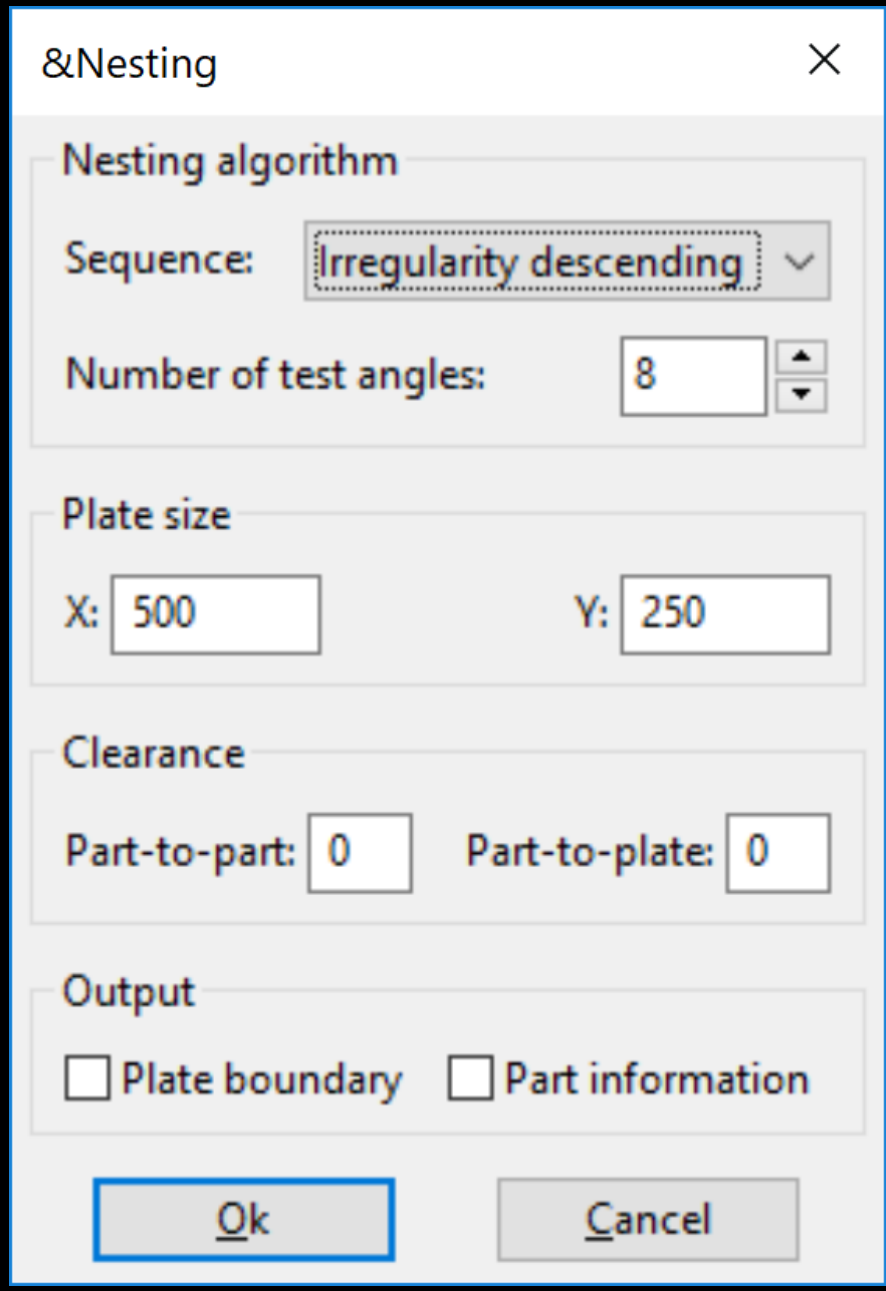
A closed polygon will contain inner shapes.



“Draw → Nesting” invokes a dialog box.

The default sequence usually leads to good results. Try different sequences as you wish.

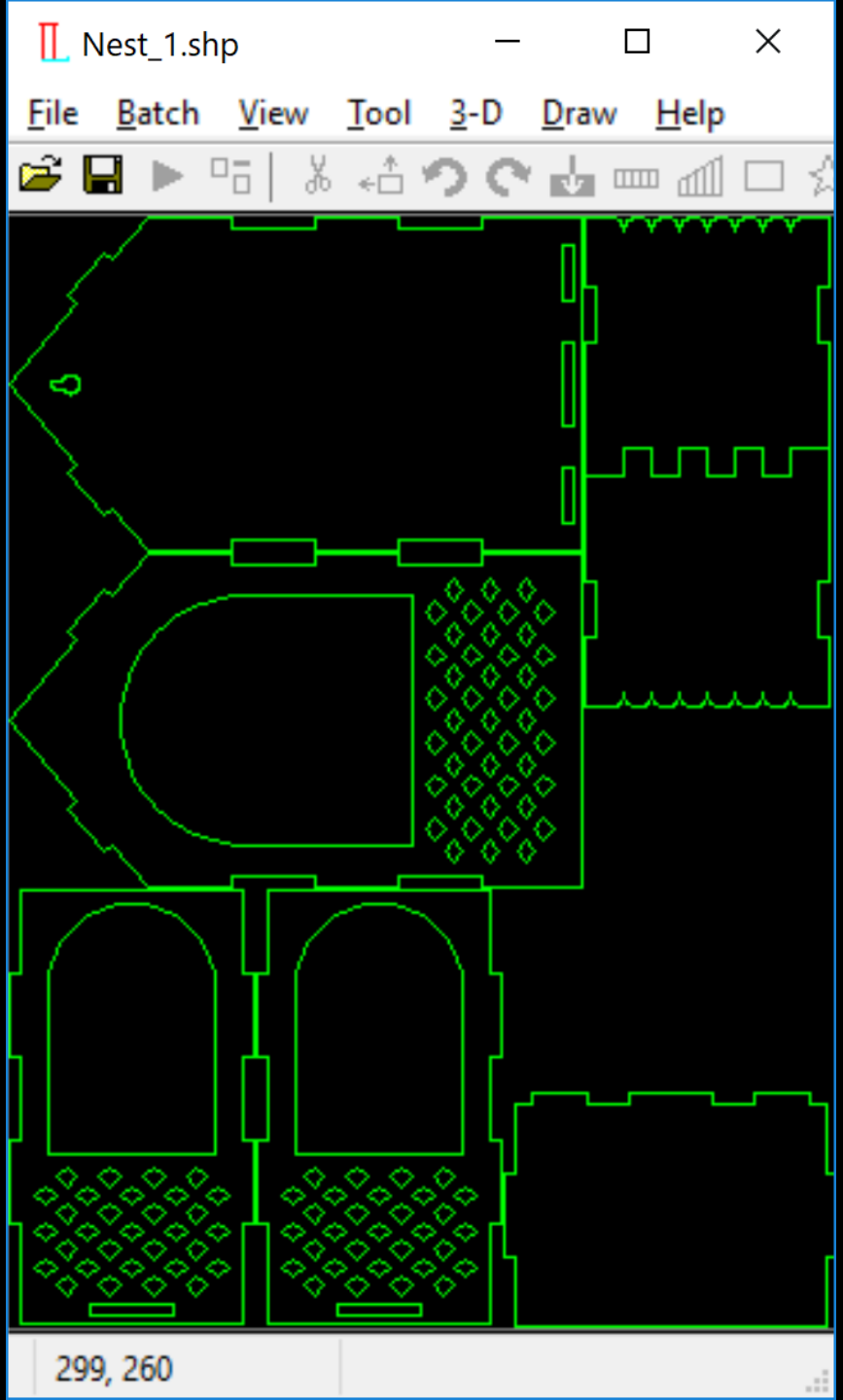
Plate size and clearance can be set as needed.

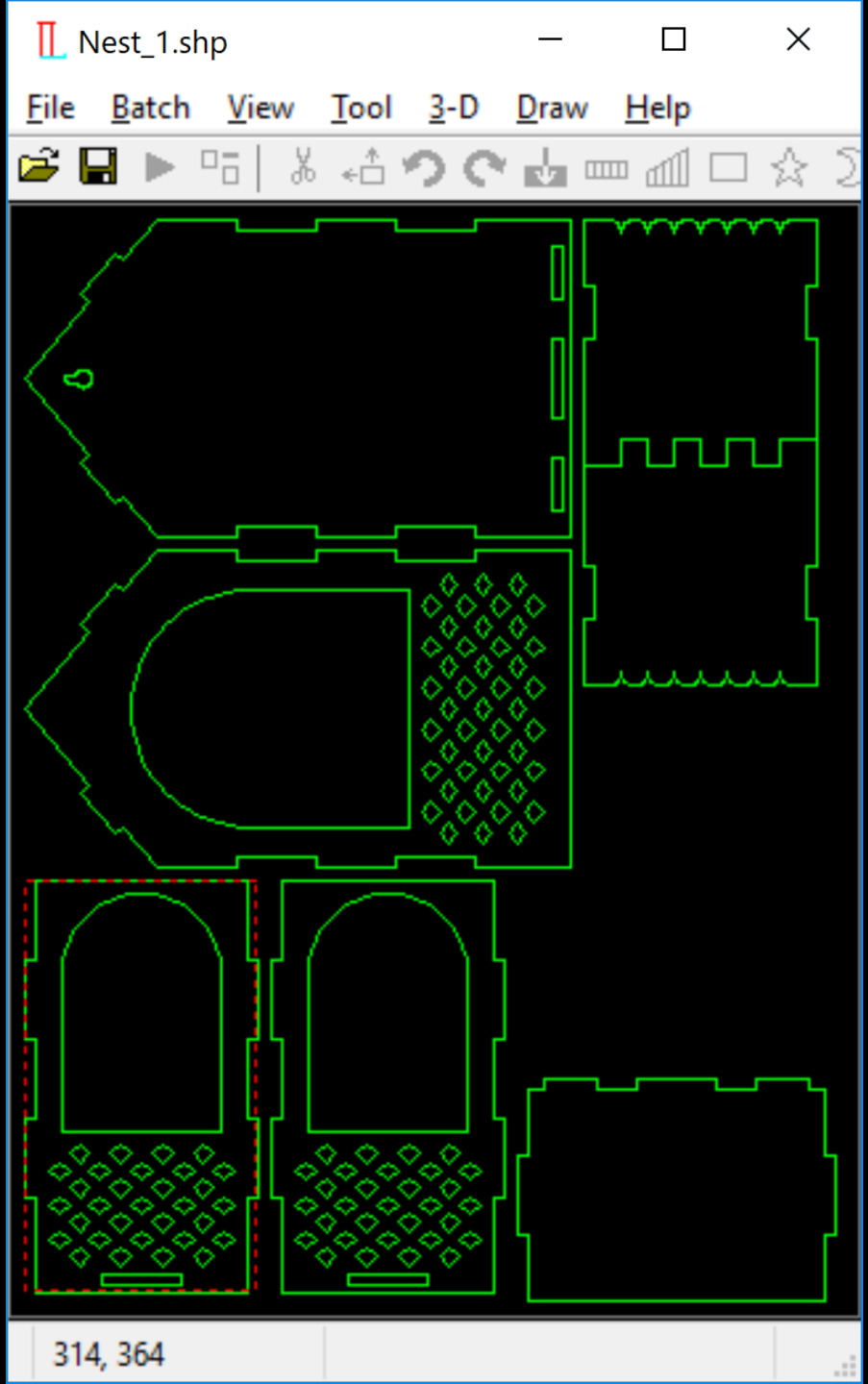


Resuts (Nest_1.shp, Nest_2.shp, ...) are saved in a user-specified folder. A new window also displays the results in a batch.

If all shapes cannot be nested in one plate, they are saved in multiple plates, i.e. files.

The following two images show the results when clearance is set to 0 (plate size 300*400) and 5 (plate size 320*420).


Nest_1.shp
File Batch View Tool 3-D Draw Help
299, 260


Nest_1.shp
File Batch View Tool 3-D Draw Help
314, 364

Nesting Shapes in Multiple Files

"File → Import → DXF figure" can import several DXF files in one go. They will be converted to SHP files in a user-specified folder and loaded as a batch in a window.

When LuBan detects that a window contains a batch, "Draw → Nesting" will be applied to shapes in all files of the batch, not just the one displayed in the window.