Slicer test: overhang, support and wall thickness.

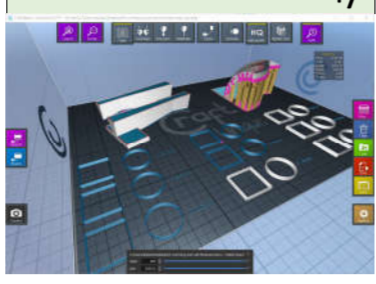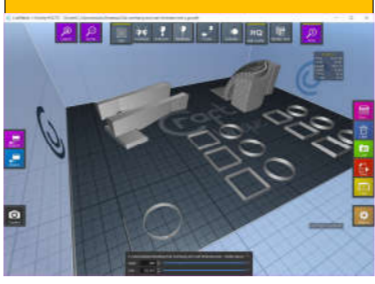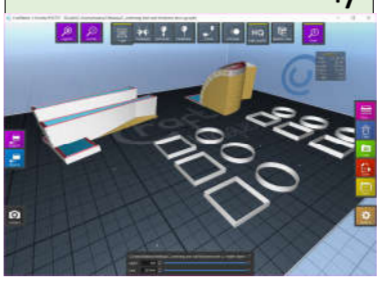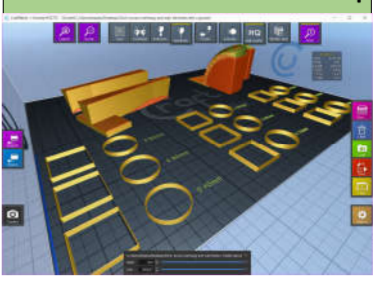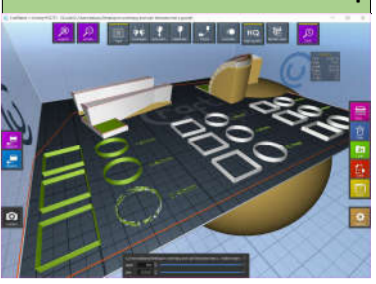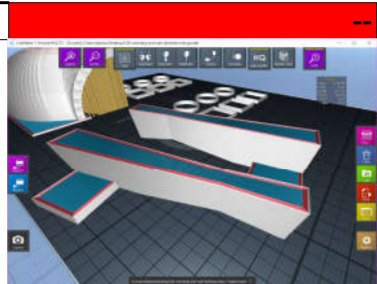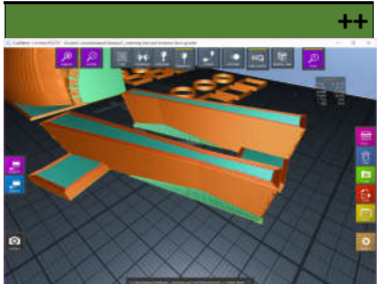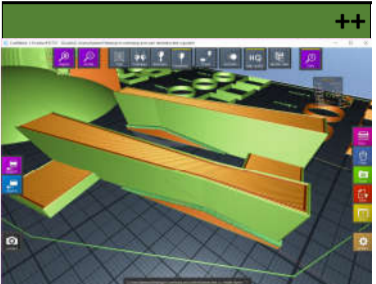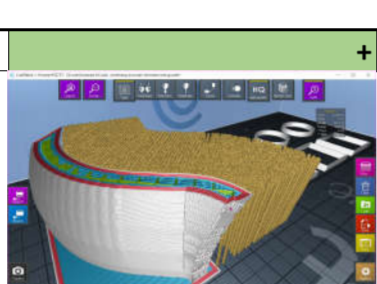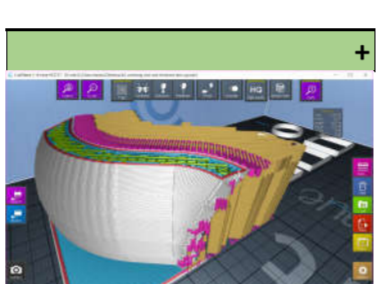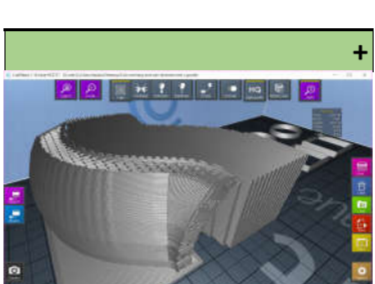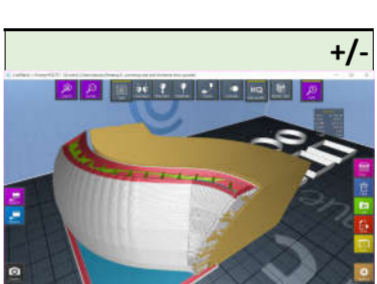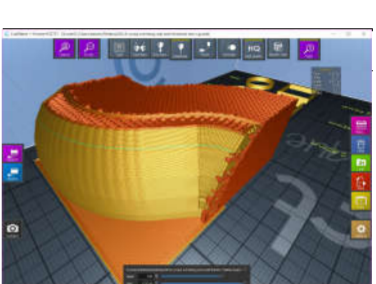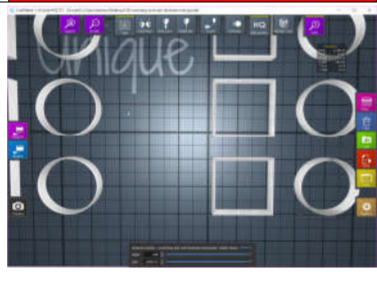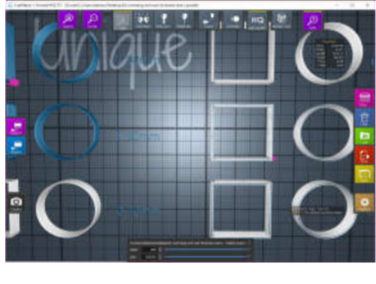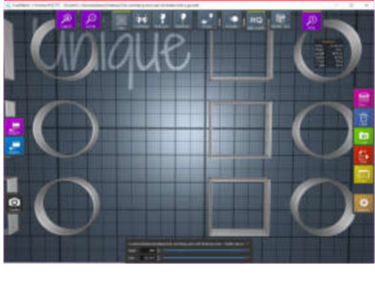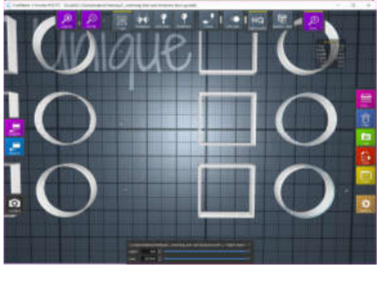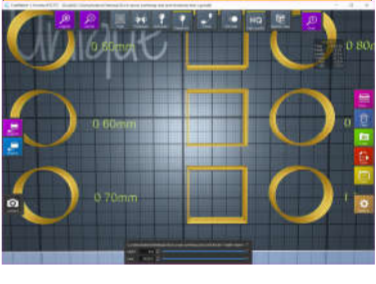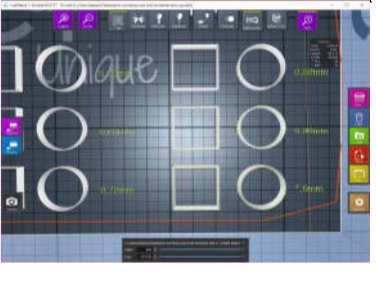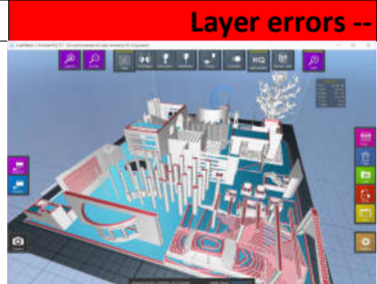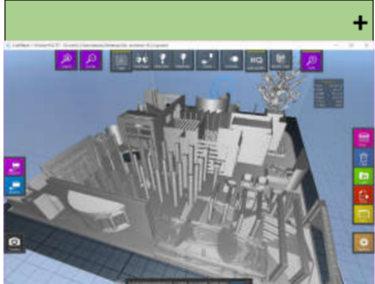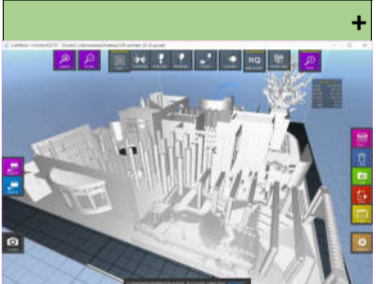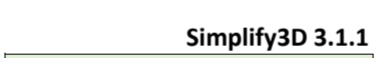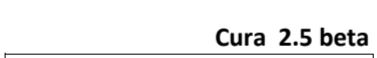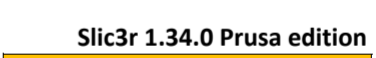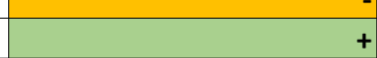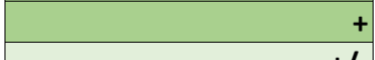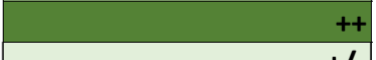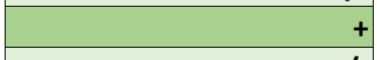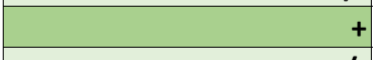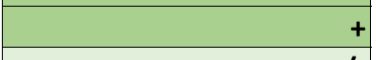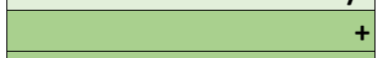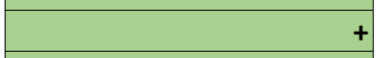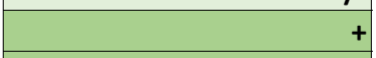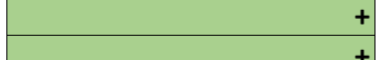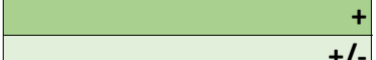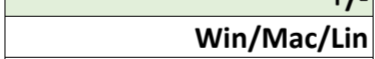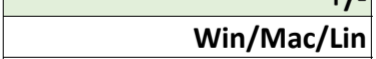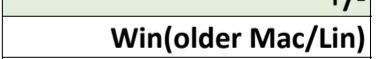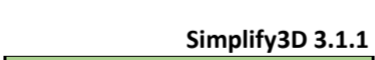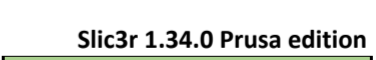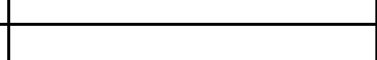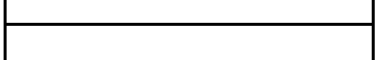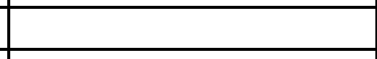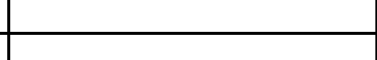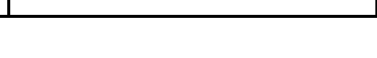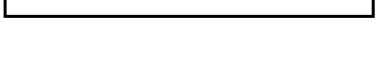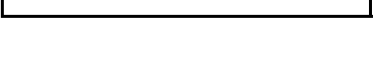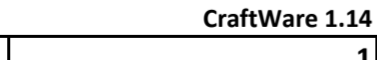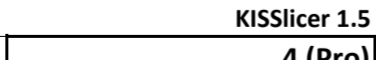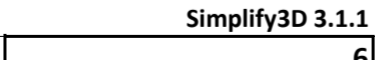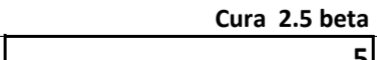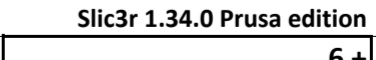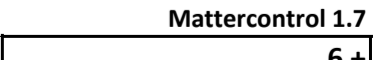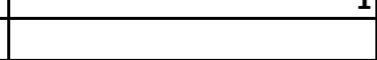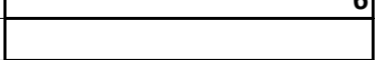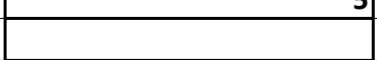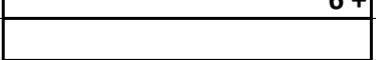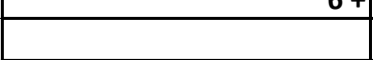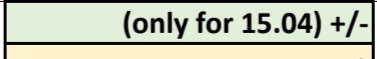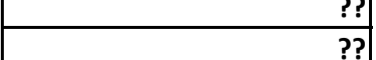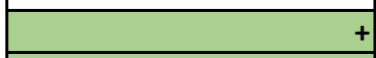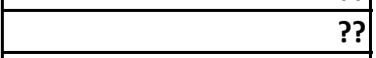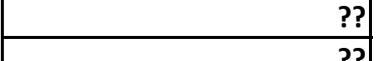**Bart ter Haar**   www.CraftBot.nl   5-4-2017

Using the Support test object of the great Sandor (Psanyi), and my own test objects.   http://www.thingiverse.com/thing:2225140
Settings: 0.2mm Layer height and 0.4mm Path width.   http://www.thingiverse.com/thing:875237
The Gcode imported in CraftWare to have the same 'look and feel'.   The test results are reviewed just as slice results. Some tweaking to do for some slicers to get printable Gcode for the CraftBot.

	CraftWare 1.14	KISSlicer 1.5	Simplify3D 3.1.1	Cura 2.5 beta	Slic3r 1.34.0 Prusa edition	Mattercontrol 1.7
General result	-	+/-	-	+/-	+	+

	CraftWare 1.14	KISSlicer 1.5	Simplify3D 3.1.1	Cura 2.5 beta	Slic3r 1.34.0 Prusa edition	Mattercontrol 1.7
Automatic support detection of small areas	--	-	++	++	++	++

	CraftWare 1.14	KISSlicer 1.5	Simplify3D 3.1.1	Cura 2.5 beta	Slic3r 1.34.0 Prusa edition	Mattercontrol 1.7
Automatic support generation with a given angle	+	+	+	+/-		

	CraftWare 1.14	KISSlicer 1.5	Simplify3D 3.1.1	Cura 2.5 beta	Slic3r 1.34.0 Prusa edition	Mattercontrol 1.7
Manual support placing	+	--	+	--	+	--
Support interface tweaking	-	++	+	+	+	+
Thin wall detection	-	+	-	-	++	+/-

	CraftWare 1.14	KISSlicer 1.5	Simplify3D 3.1.1	Cura 2.5 beta	Slic3r 1.34.0 Prusa edition	Mattercontrol 1.7
Filling extrusions in remaining gaps between loops (Crowning)	--	++	--	+	-	++

	CraftWare 1.14	KISSlicer 1.5	Simplify3D 3.1.1	Cura 2.5 beta	Slic3r 1.34.0 Prusa edition	Mattercontrol 1.7
Architectural objects slicing general	Layer errors --	-	+	--	+	-

	CraftWare 1.14	KISSlicer 1.5	Simplify3D 3.1.1	Cura 2.5 beta	Slic3r 1.34.0 Prusa edition	Mattercontrol 1.7
Printing small islands and logical path	+	--	++	+/-	++	+/-

	CraftWare 1.14	KISSlicer 1.5	Simplify3D 3.1.1	Cura 2.5 beta	Slic3r 1.34.0 Prusa edition	Mattercontrol 1.7
Influence seam placing	+	++	+/-	?	-	--
Bridging	-	--	?	?	?	?
Dimension tweak (XY compensation)	+	+	+	+	+	-
different layer height on layer range	--	-	+	--	++	--
Support accuracy using small Nozzles as 0.2mm	+/-	++	+/-	+/-	+/-	+
Support accuracy using large Nozzles as 0.8mm	--	++	+/-	+/-	+/-	+
Forgive small stl errors	+	--	+	+	+	+
Vase mode (spiraling the perimeter)	--	-	++	+/-	+/-	+/-
Speed of slicing	++	+/-	+	+	+/-	--
Number of settings / tweaks	+/-	+	+	+	+	+/-
3D Gcode preview	++	+	++	+	+	+/-
Simple Installation / first user / school slicer	+/-	+	-	+	+/-	+/-
OS	Win (old Mac and Lin)	Win/Mac/Lin	Win/Mac/Lin	Win/Mac/Lin	Win/Mac/Lin	Win(older Mac/Lin)
Price	Free	Free/$42	$140	Free	Free	Free

	CraftWare 1.14	KISSlicer 1.5	Simplify3D 3.1.1	Cura 2.5 beta	Slic3r 1.34.0 Prusa edition	Mattercontrol 1.7
Everyday General slicer	+	+	+	+/-	+	+/-
Thin Wall slicer with crowning		+			+/-	+
Architectural model slicer			+			
Tweakable specialist slicer		+	+		+	
Great support generating slicer		+/-	+	+	++	++
Out of the box performance as large layer heights		+	+		+	

	CraftWare 1.14	KISSlicer 1.5	Simplify3D 3.1.1	Cura 2.5 beta	Slic3r 1.34.0 Prusa edition	Mattercontrol 1.7
Dual or More extrusion	1	4 (Pro)	6	5	6 +	6 +
Stacking (small layer perimeter, large infill and support)		+				
Profiles available for the CraftBot	++	++	+	(only for 15.04) +/-	+	errors --
Bug solving / listening to customers	+/-	-	+	+	+	??
Host for direct steering the CraftBot	CraftPrint		??			??
Interface easy for different printer types	-	+	-	-	+	??
Logical Interface	+/-	+	-	-	++	??
Wow Interface and info feedback	+	-	-	+/-	+/-	??