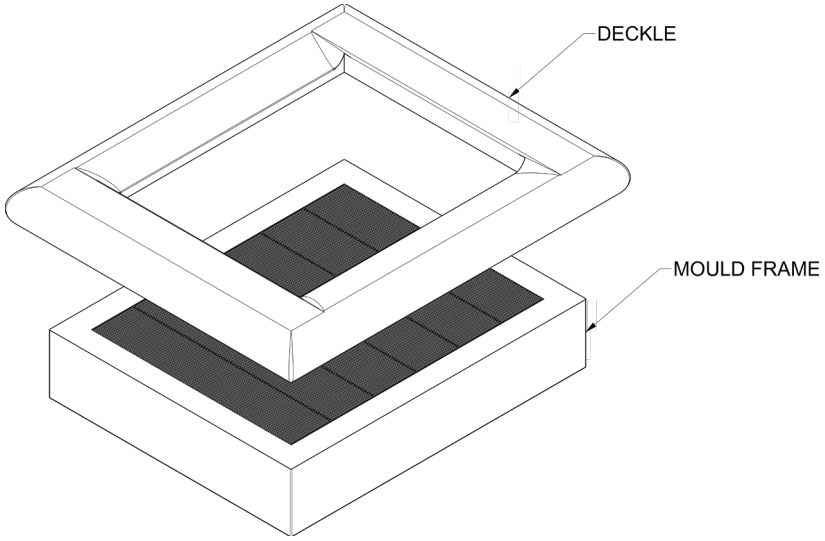
3D Printed Papermaking Mould Version 1

Dataset Overview:
Presented here is version 1 of a 3D printed hand papermaking mould creating a 4 ¼ x 5 ½" sheet of paper. While the size of sheet this mould produces is small the mould frame, its ribs and the deckle are full size as found in larger traditional European papermaking moulds. Although there is no standard for the construction of a papermaking mould the profiles used here mirror those used in Great Britain and parts of Europe over the last two centuries.



Orientation
When describing the orientation of a part to be printed we refer to its natural orientation during use.

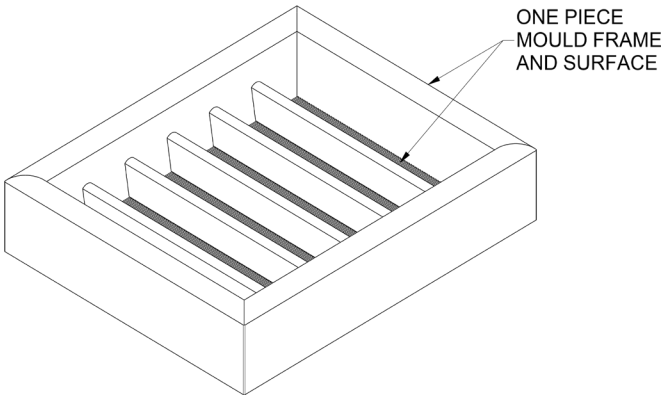
This illustration shows the orientation of a papermaking mould except the deckle is floating above the mould frame for clarity. If a part is described as being printed right side up its orientation will be as pictured as above. If a part is to be printed upside down it is rotated 180 degrees.

Printer Settings
All versions of these models have been successfully printed on an Ultimaker S5 printer using a 0.4mm nozzle and 0.2mm layer height.

Version 1

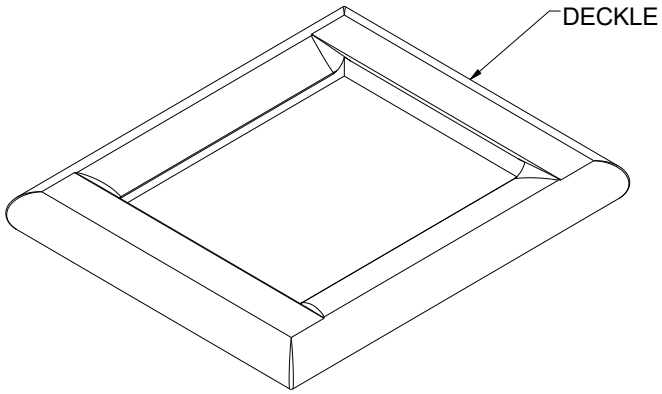
One Part Mould

In this version the mould frame and mould surface are printed together as one piece. The mould is printed upside down as pictured below and it does not require support.



Deckle

The preferred orientation for printing the deckle is as pictured below, right side up. This requires support for the underside. Printed in this orientation the more finished surface is the topside. Any roughness on the underside resulting from the support structure can be sanded and is hidden during use. The deckle is the same for all three versions of this mould.



Files information:
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pmv1_deckle_stl.stl
Vertices: 41,009
Faces: 82,012

pmv1_mould_stl.stl
Vertices: 10,086
Faces: 22,328

The Files:

1.pmv1_deckle_stl : 3.91 MB
2.pmv1_mould_stl : 1.06 MB
3.README.pdf : 326 KB