Cassette

Scale one to four model

Scale model of a cassette, used for baroque machinery experiments and demonstrations. A cassette is used to lift sets on stage. The model can be built in a basic, but well equipped workshop.

Content

Cassette

Materials list

Circles					
Number	Type	thickness	diameter	center hole	remark
4	Cirkel	15 mm	40 mm	8mm	
12	Cirkel	15 mm	50 mm	8mm	

Slats					
Number	Type	thickness	width	lenght	
4	slat	15 mm	55 mm	202 mm	
2	slat	15 mm	55 mm	73 mm	
2	slat	15 mm	55 mm	70 mm	
2	slat	15 mm	55 mm	50 mm	
2	slat	15 mm	80 mm	1300 mm	45° groove, see drawing
1	slat	15 mm	60 mm	1300 mm	
1	slat	15 mm	55 mm	1300 mm	

Other					
Number	Type	Thickness			
2	front frame	15 mm			
1	back frame	15 mm			see drawing for details

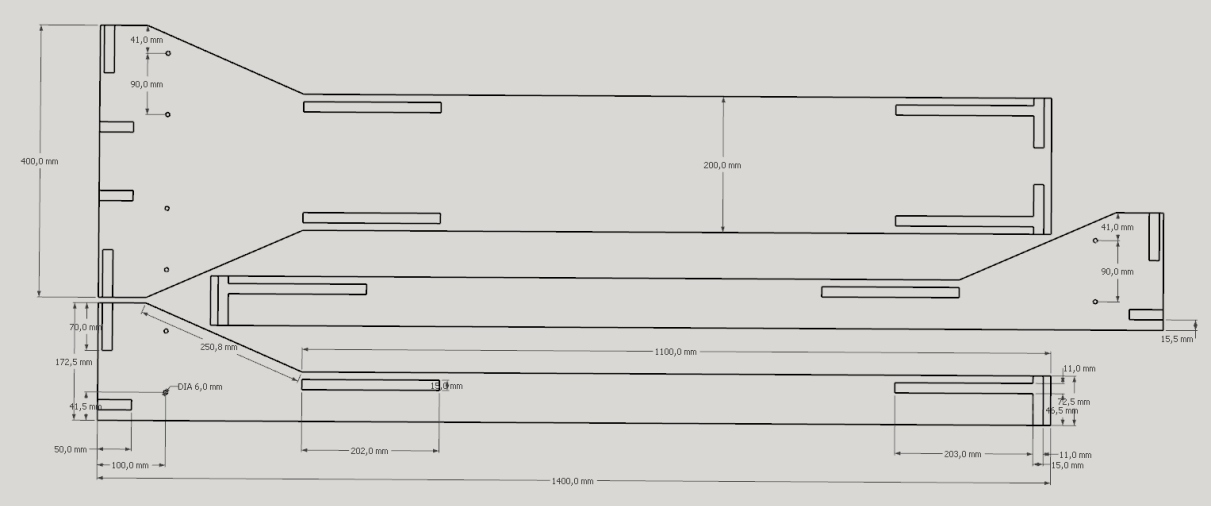
Other materials	
4 pc.	bolt M8 80 mm
4 pc.	nut M8
	glue

Notes:

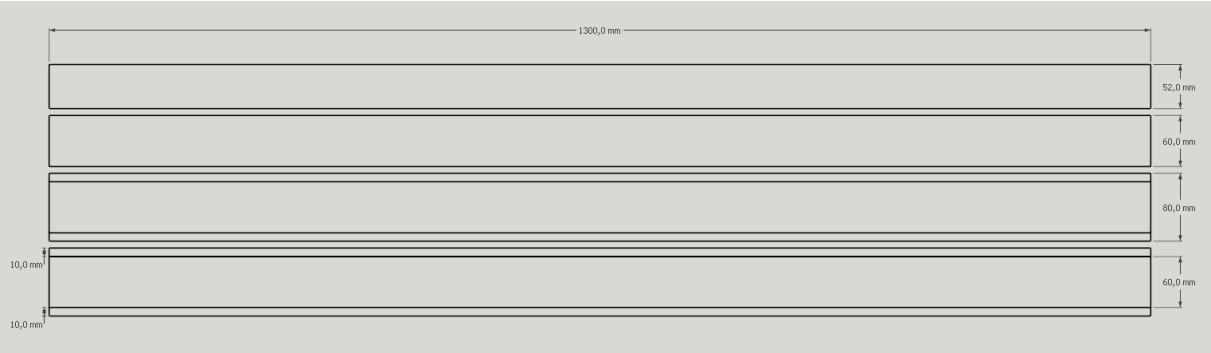
The different parts can be cut out of one 15 mm multiplex plate.

Cassette

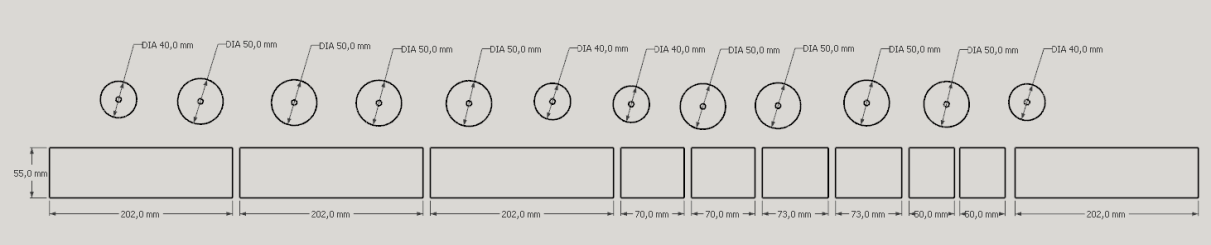
Detail drawings



Front and back boards



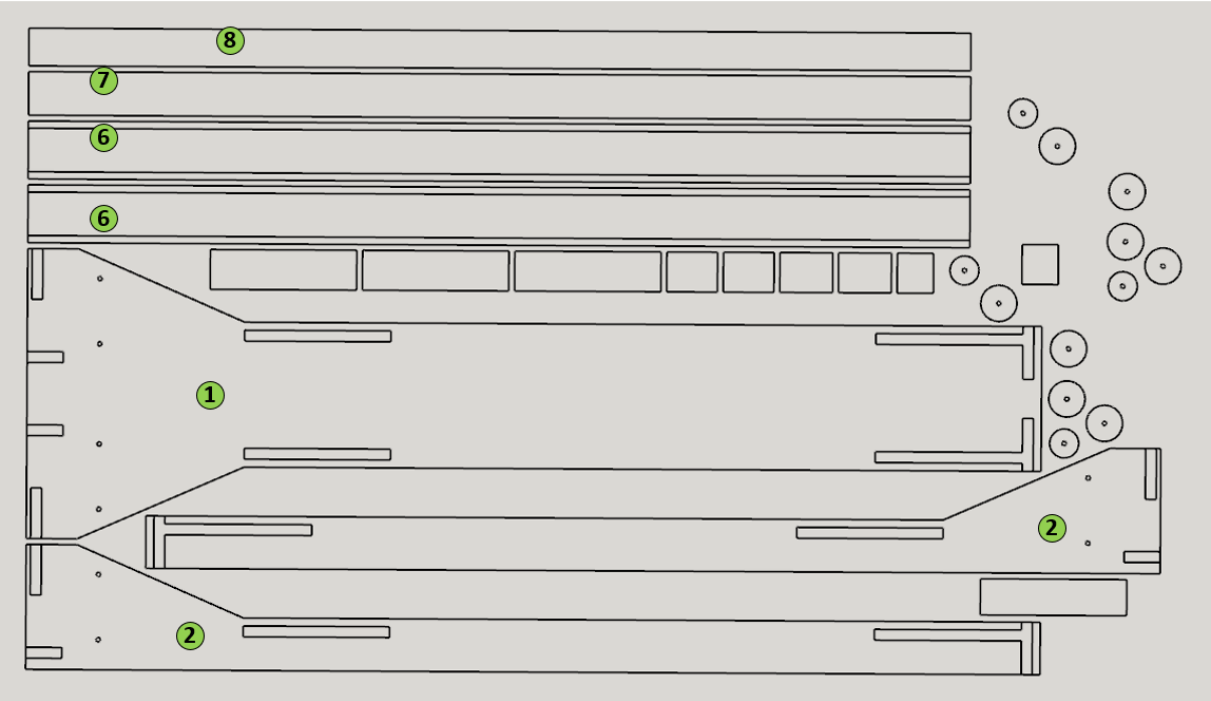
Beam



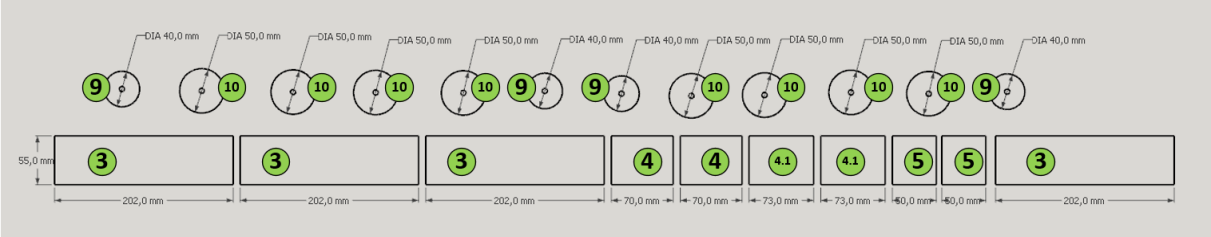
Small parts

Cassette

Construction



Overview cut-out



Small parts

1. Make sure that all milled-out areas are dust-free.
2. The milled-out slots are not perfectly straight in the corners, take a breaker knife and remove the remaining obstacles in the corners of these slots. Do this for boards 1 and 2.

3. Glue boards 3, 4, 4.1 and 5 into the milled slots of board 2
4. Take boards 1 and glue the milled-out slots on the other ends of boards 3,4 and 5.
5. Now attach some glue clamps to the glued section and let dry for a few hours. If you don't have glue clamps make sure you put at least 5kg/cm of pressure on the glued parts.
6. The Basic structure of the cassette is now ready.

7. Now take boards 6 and 7.
8. Glue board 7 between the 2 milled boards 6.

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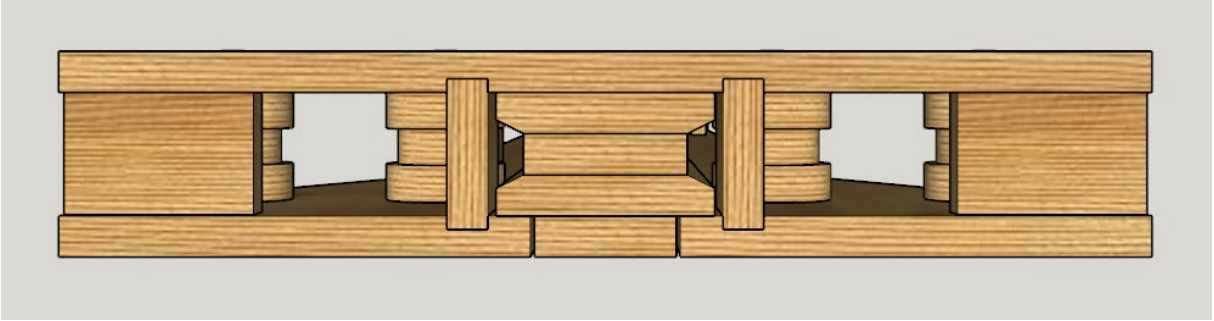
9. Glue board 8 to board 6, making sure there is equal space along both sides.
10. Now attach some glue clamps to the glued section and let dry for a few hours.
11. The sliding beam is now ready

12. Glue one disk 9 between two disks 10. Repeat this four times. Use a M8 bolt to ensure the drilled holes are in line.
13. Clamp and let dry.

14. Take the basic structure
15. Mount the combined disks 9 and 10 between boards 1 and 2.
16. Insert a bolt through the drilled hole in board 1, the combined disks 9 and 10, and board 2. Place a nut, and tighten it.
17. Repeat this operation for all four wheels.



18. Attach the screw eye to the bottom of the sliding beam.
19. Slide the beam in the cassette structure.
20. The cassette is finished now.

Credits

The drawings and construction method are based on the Final work of Rens Plankaert, RITCS 2014.

The drawings are remade, updated and transformed in 3D Sketchup by Beno van Goethem, Signyture design.

Translation, text and lay-out is done by Chris Van Goethem, RITCS.