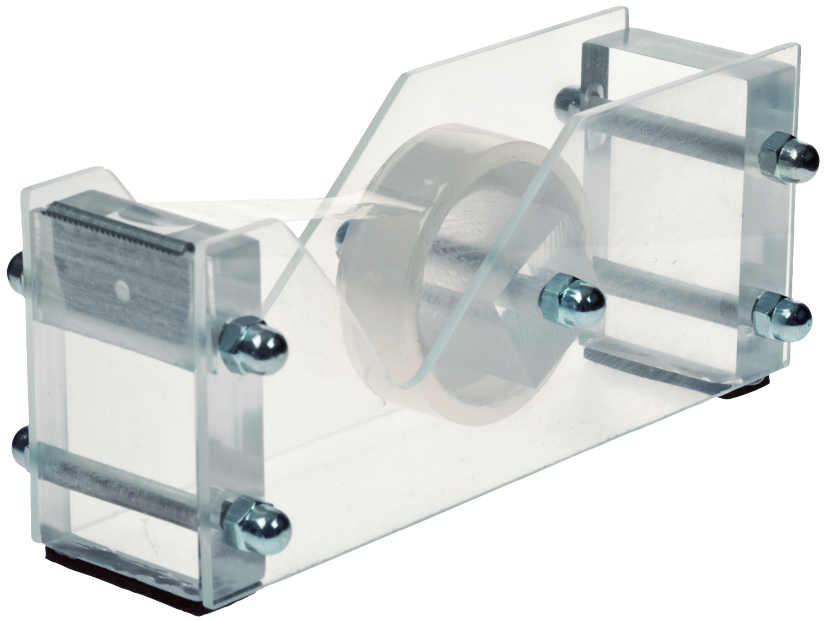
OPITEC

114.642

Acrylic Tape Dispenser



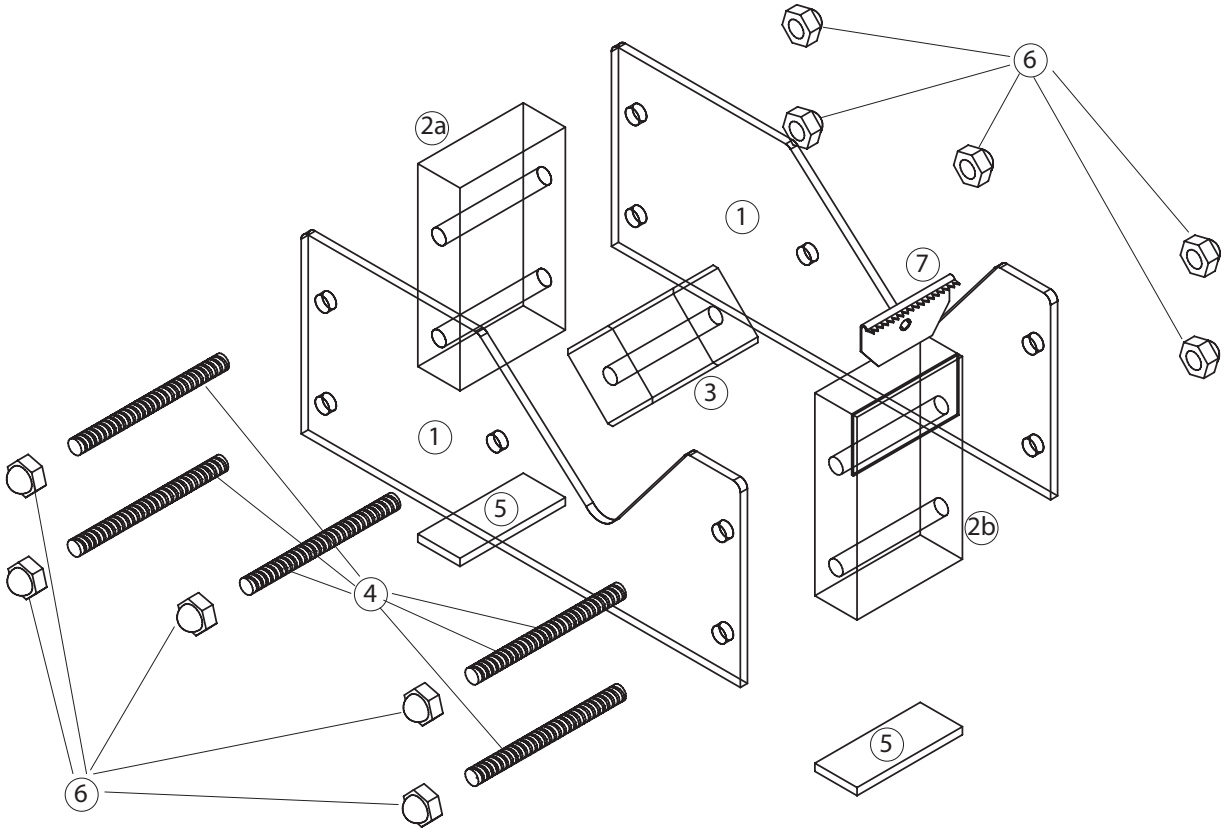
Tools requiered:
Jigsaw, mitre saw or scroll saw
Drills ø 4, 10 mm
Hacksaw
Engineer´s file, sandpaper (very fine)
Open-jaw wrench
Scissors
Pencil, ruler, fine-line permanent marker pen
Possibly polishing paste
Machine vice
Possibly Cooking oil

Please Note
The OPITEC range of projects is not intended as play toys for young children. They are teaching aids for young people learning the skills of Craft, Design and Technology. These projects should only be undertaken and operated with the guidance of a fully qualified adult. The finished projects are not suitable to give to children under 3 years old. Some parts can be swallowed. Danger of suffocation!

Contents list				
	Qty	**Dimensions (mm)**	**Designation**	**Part no.**
Acrylic glass	1	250x50x2	Side parts	1
Acrylic glass	1	100x30x12	Cross connector, blade holder	2
Acrylic glass	1	18x18x30	Roll cradle	3
Threaded rod	2	150x4	Screw connection	4
Foam sheets	1	95x99	Adhesive strips	5
Cap nut	10	M4	Screw connection	6
Cutting blade	1			7

Instructions

EXPLODED VIEW:



General: The acrylic glass parts are covered with a protective foil. Only remove the foil after having worked the parts!

Preparation of the side parts:

1. Take the jigsaw or scroll saw, and divide the acrylic glass strip (1) into two identically long pieces (125mm) as shown.

   Put both pieces on top of each other and attach them with adhesive tape.

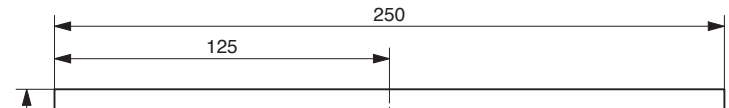
   Transfer the template (page5)

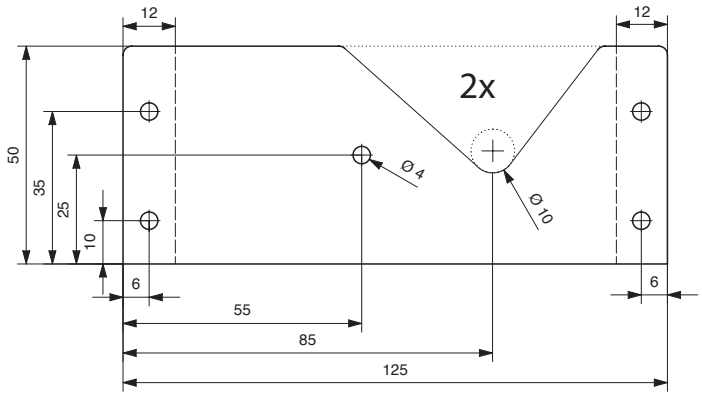
   Drill through the drill holes ø 4mm and ø 10mm. If needed, use some oil when drilling.

   Cut out the V-sector along both lines.

   Note: the saw cuts for the V-sector end at the outside edge of the ø10mm drill hole.

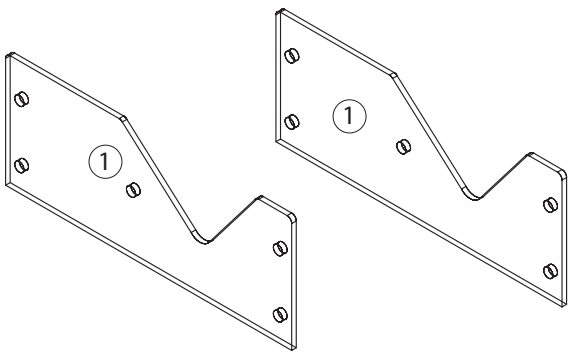
   Polish all saw cuts with polishing paste.





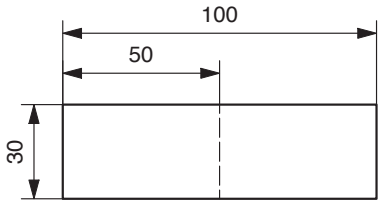
General:

For a tidy overall result all sawn edges should be polished. To achieve this, sand down all edges with fine sandpaper (grade 240 and 400). Then polish with polishing paste.



Instructions

Preperation of the blade holder and cross connector:



2. Use a mitre saw to cut the acrylic glass (2) into two identically long pieces (50mm) as shown.

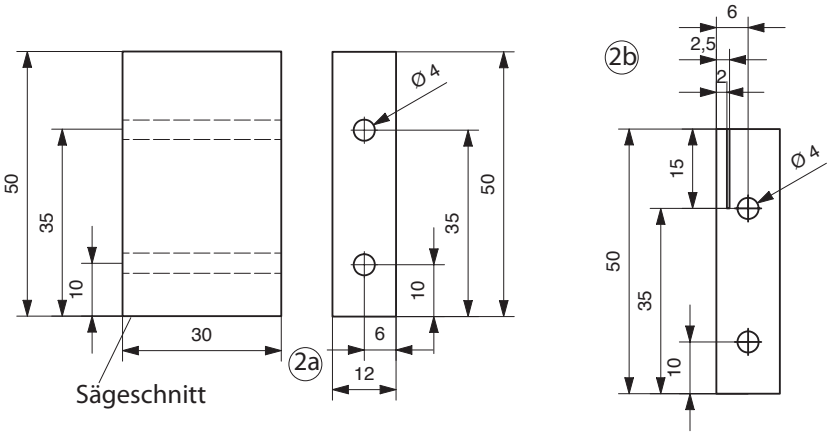
   Note: Do not use a scroll saw, because it creates too much heat and the acrylic glass will melt.

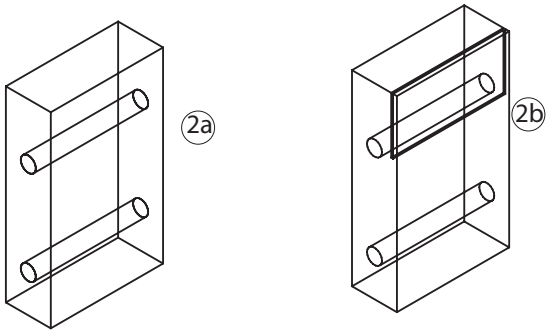
   The saw cuts from both parts (2a+2b) need to be on the bottom side. Now transfer the drill holes from the drawing on to the cross connector (2a) and the blade holder (2b). Drill through centrally ø 4mm.

   Note: acrylic glass must be secured in a machine vice when drilling and aligned vertically at an angle. Otherwise holes will not be straight.

   Measure 2mm on the upper side of part 2b (blade holder) as shown and saw approx. 15mm deep with a mitre saw.

   Polish the saw cuts with polishing paste.

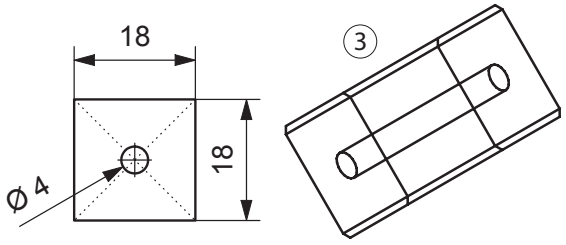




Preparation of the blade holder.

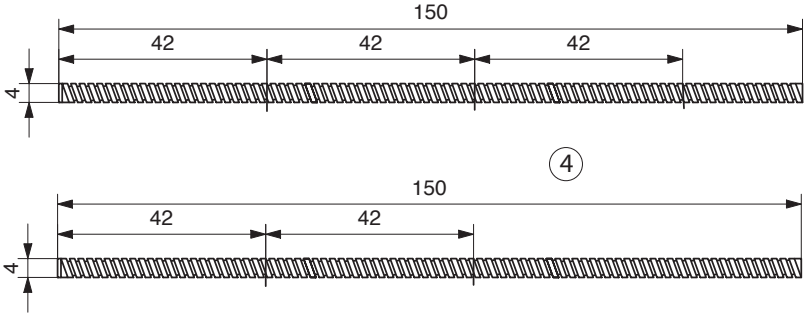
3. Mark the centre on the side of the acrylic glass (3) and drill a hole ø 4mm.

   Note: Clamp the acrylic glass into a machine vise and align vertically. Lightly chamfer the edges with sandpaper. Polish the sides.



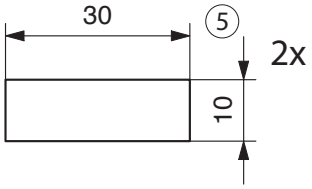
Cutting of the threaded rods:

4. Use a hacksaw to cut off five identical pieces (42mm) from the two threaded rods (4) as shown. Deburr the saw cuts.



Cut the adhesive strips:

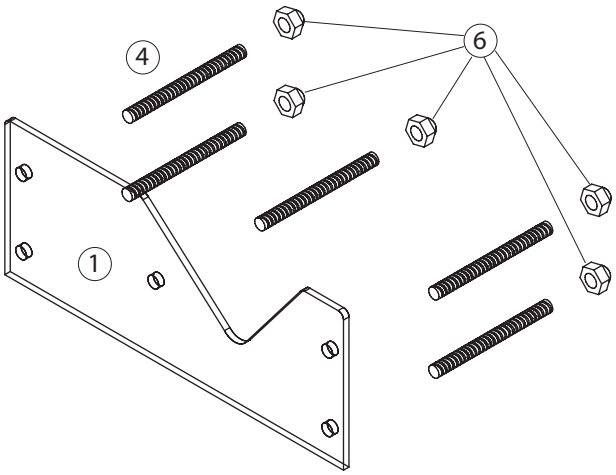
5. Cut two pieces (30x10mm) from the foam sheet (5)



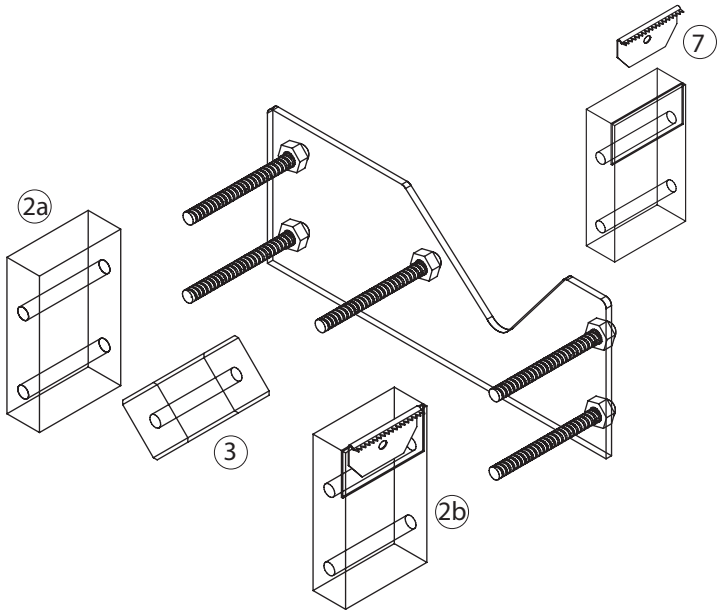
Instructions

Construction:

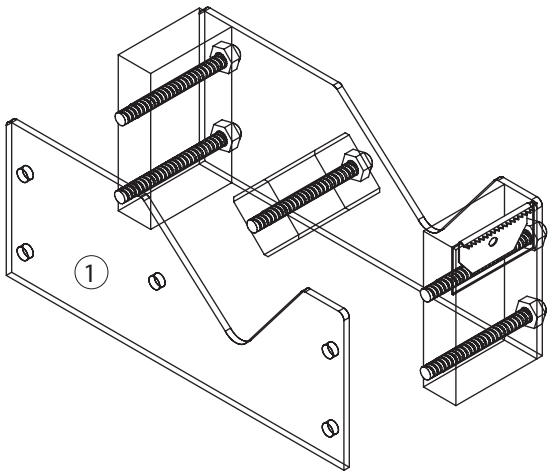
6. Take the five threaded rod pieces (4) and add a cap nut (6) to each. Stick the five threaded rods plus cap nuts through the drill holes in the side part (1)



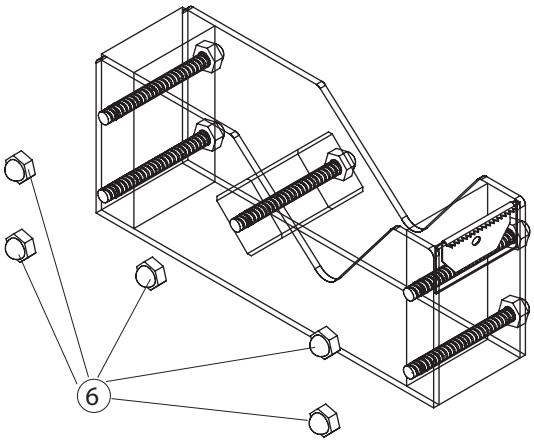
7. Stick the blade (7) into the saw cut in part 2b as shown. Add parts 2a, 2b, and 3 to the threaded rod pieces as shown.



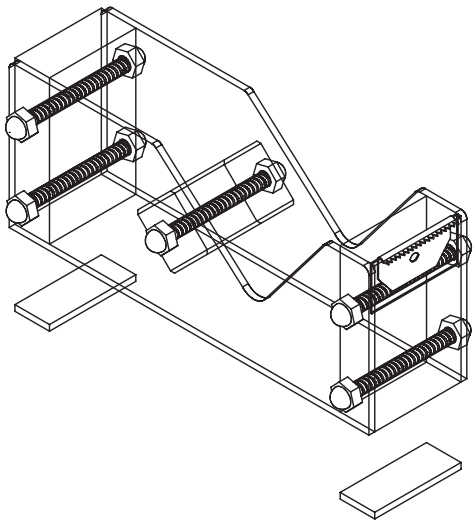
9. Add the second acrylic glass cutting (1) to the threaded rods as shown.



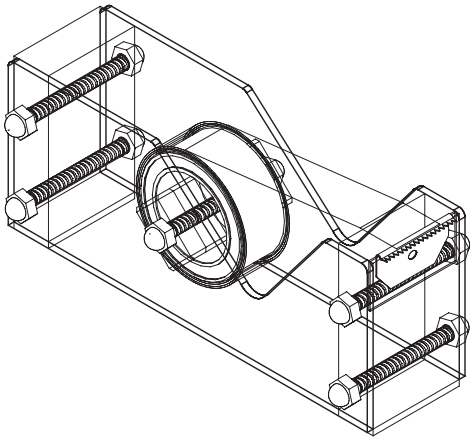
10. To fasten screw a nut (6) on each rod and tighten. See drawing!



11. Glue the cut adhesive strips (5) to the bottom of the cross connector as shown.



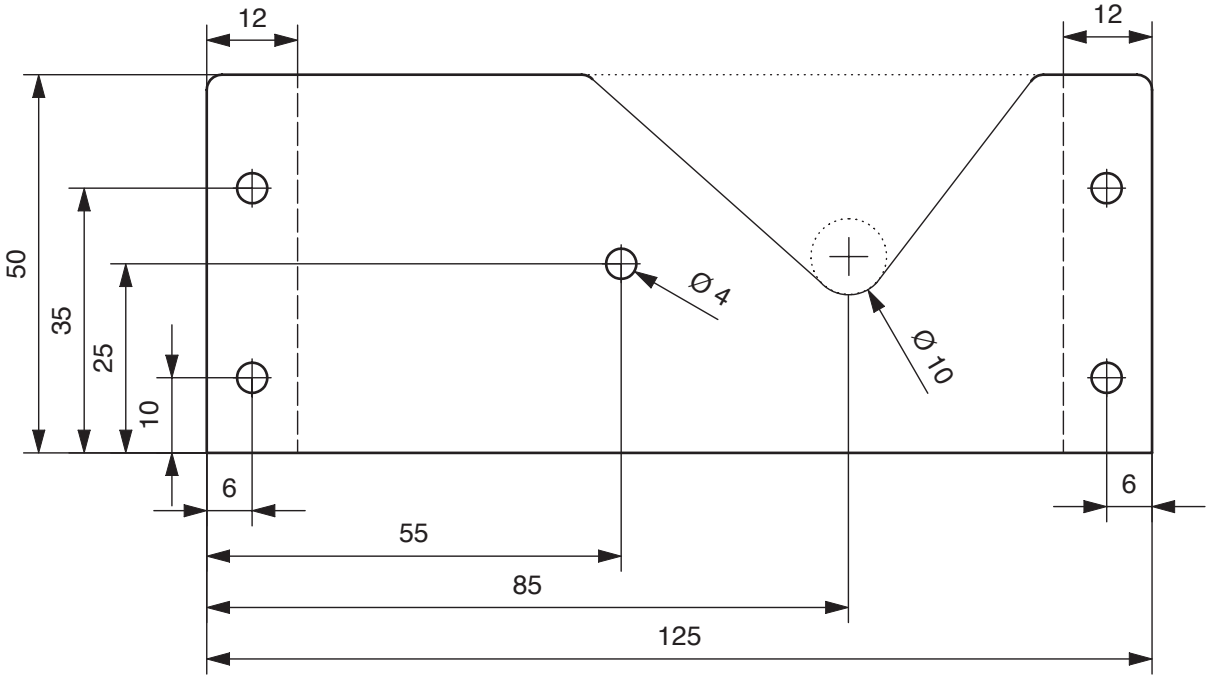
12. To add adhesive tape unscrew a nut from the roll holder and pull out the threaded rod. Stick adhesive tape on the roll holder, put thje threaded rod back and fasten the nut again. Done!



Instructions

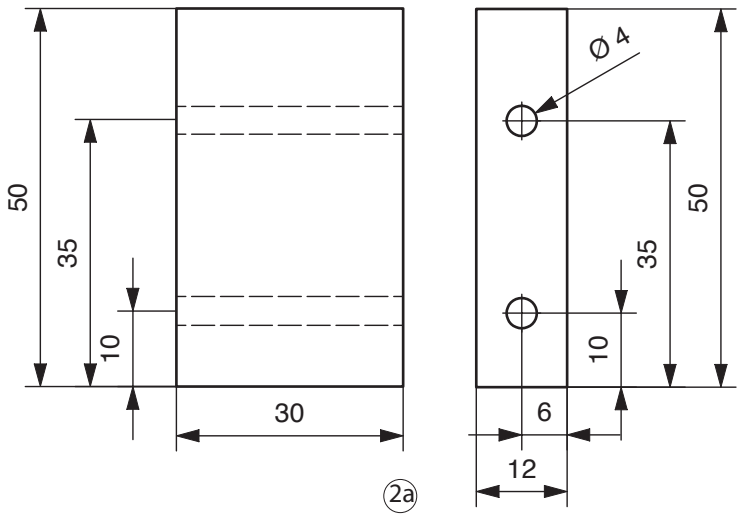
Template side parts

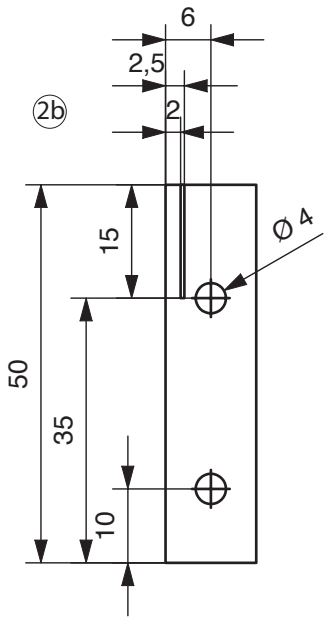
Scale 1:1



Template cross connector and blade holder

Scale 1:1





Template bearing

Scale 1:1