

## Stacker puzzle plan – Version 3



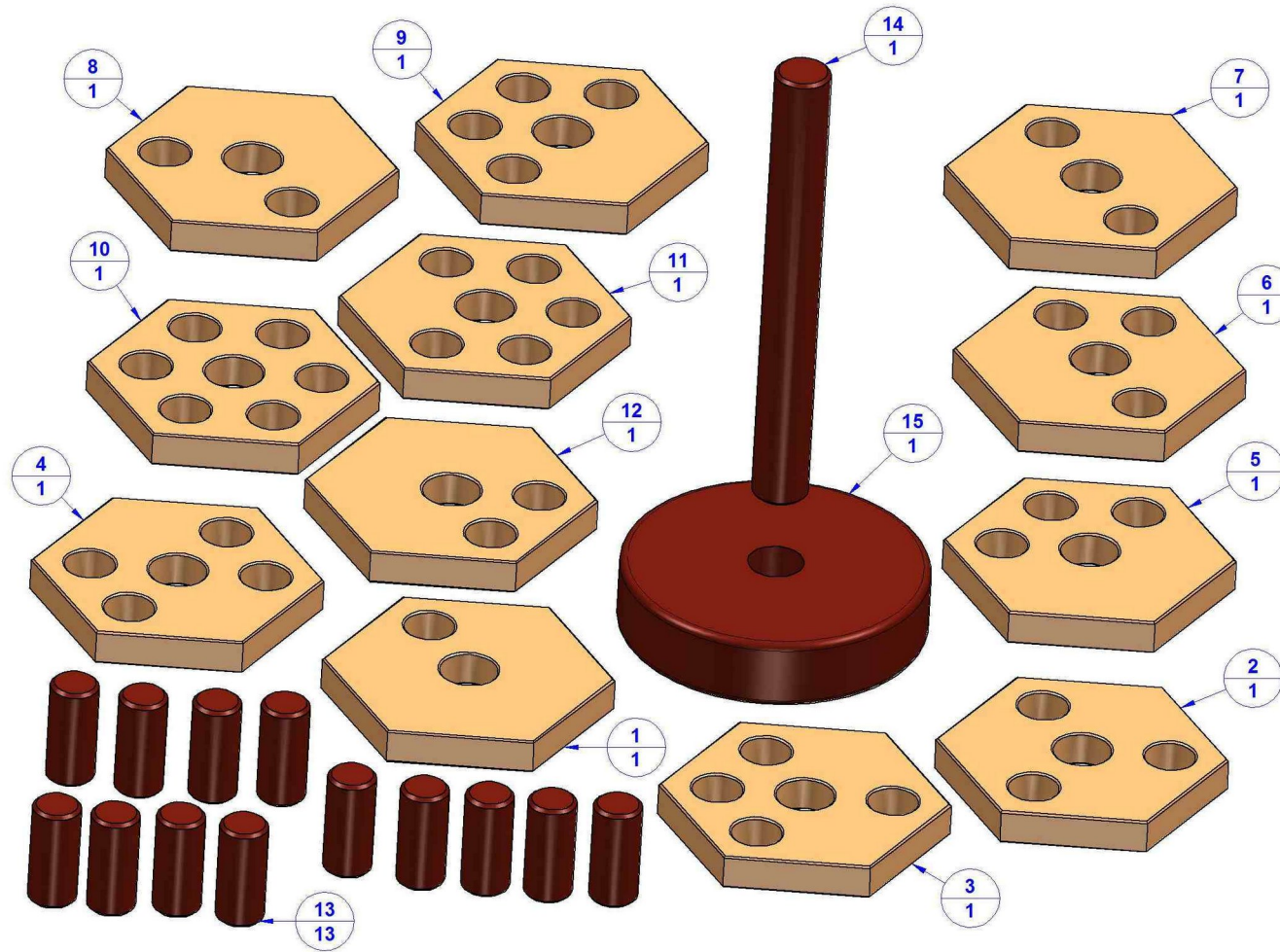
Here you can download a plan to create a stacker puzzle. The puzzle consist of: bottom, mast, dowels and discs of hexagonal shape that have drilled holes. The mast and bottom parts are glued together to form a stand on which hexagonal disks are stacked.

The goal is to find the stacking order of the disks that will allow you to use dowels to fill all the blank spaces forming holes in the disks. If you want to make this puzzle more difficult, you can add a restriction and forbid putting two Dowels on each other. At first glance, this puzzle may seem easy to solve, but don't get tricked. A good feature of this puzzle is that it is very easy to make and all parts are of simple geometry. You have to pay a lot of attention to drilling holes in the discs, though. For this you will need a drill press, and we advise you to make some simple fixture to allow you to drill with precision. Prior to drilling, carefully examine the appearance of the disks, and if some have holes of the same diameter in the same place, drill the holes in them at the same time.

You can use various types of wood to make this project. We recommend purchasing some wood with a nice, interesting texture like Rosewood, Teak, Oak, Walnut, Chery, Ash etc.

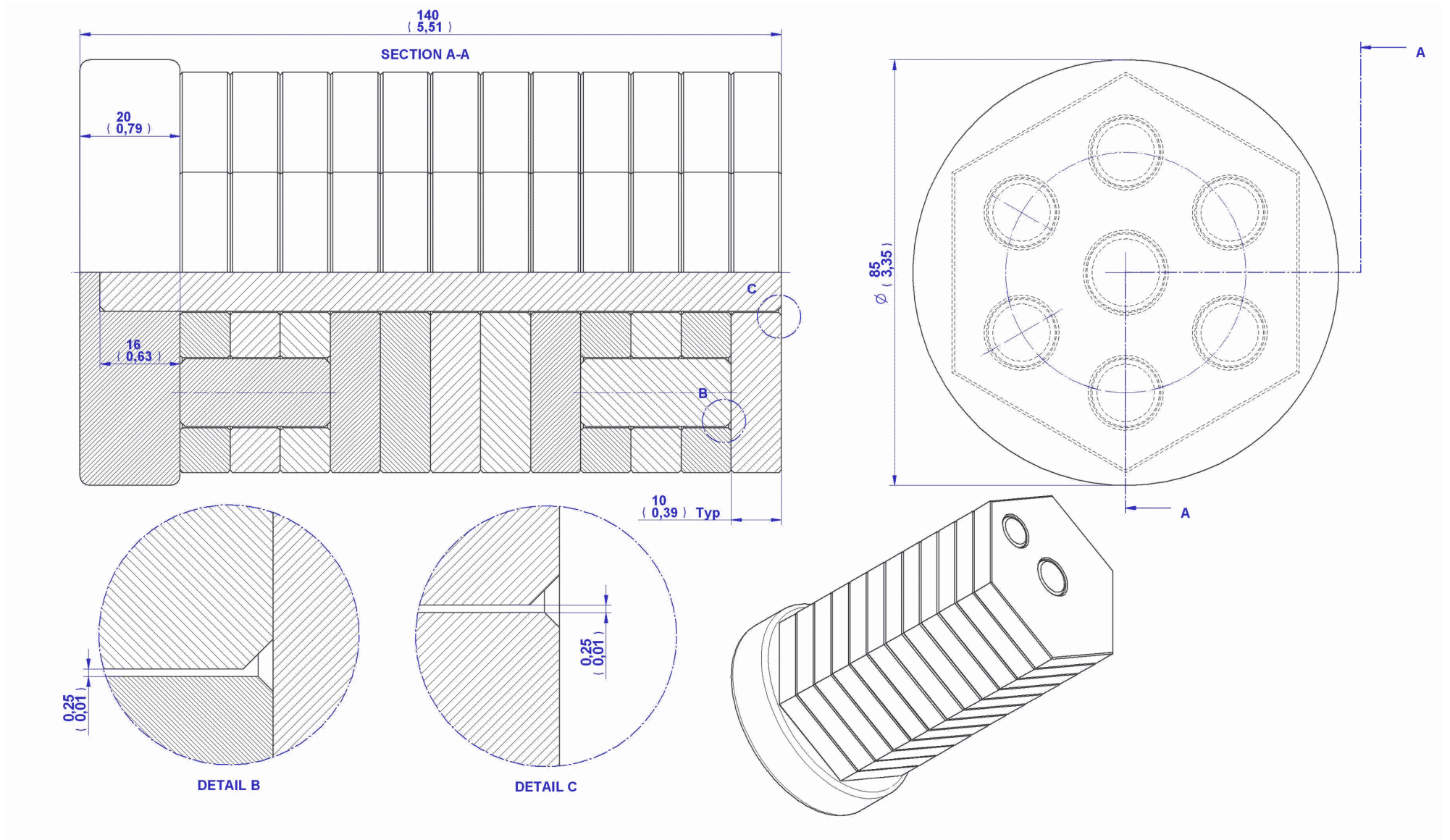
This is a very simple project with which you can make an interesting puzzle that can be a nice gift for someone, or you may sell it at various craft fairs and the like. This is an ideal woodworking project for beginners because they can learn precision drilling and how to make multiple pieces that look the same.

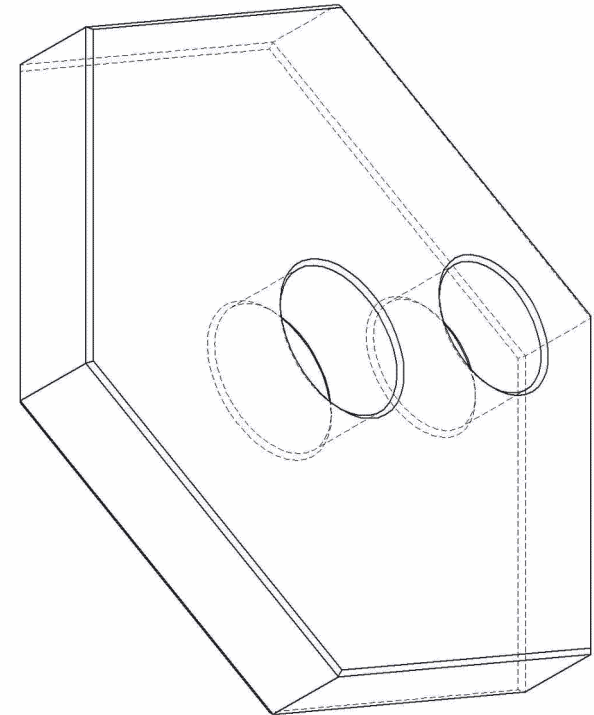
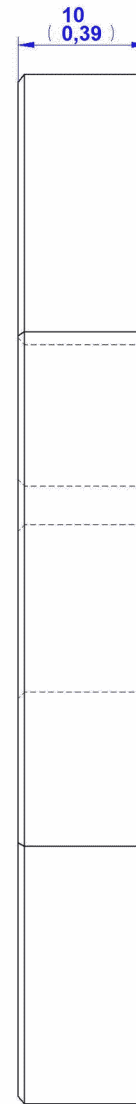
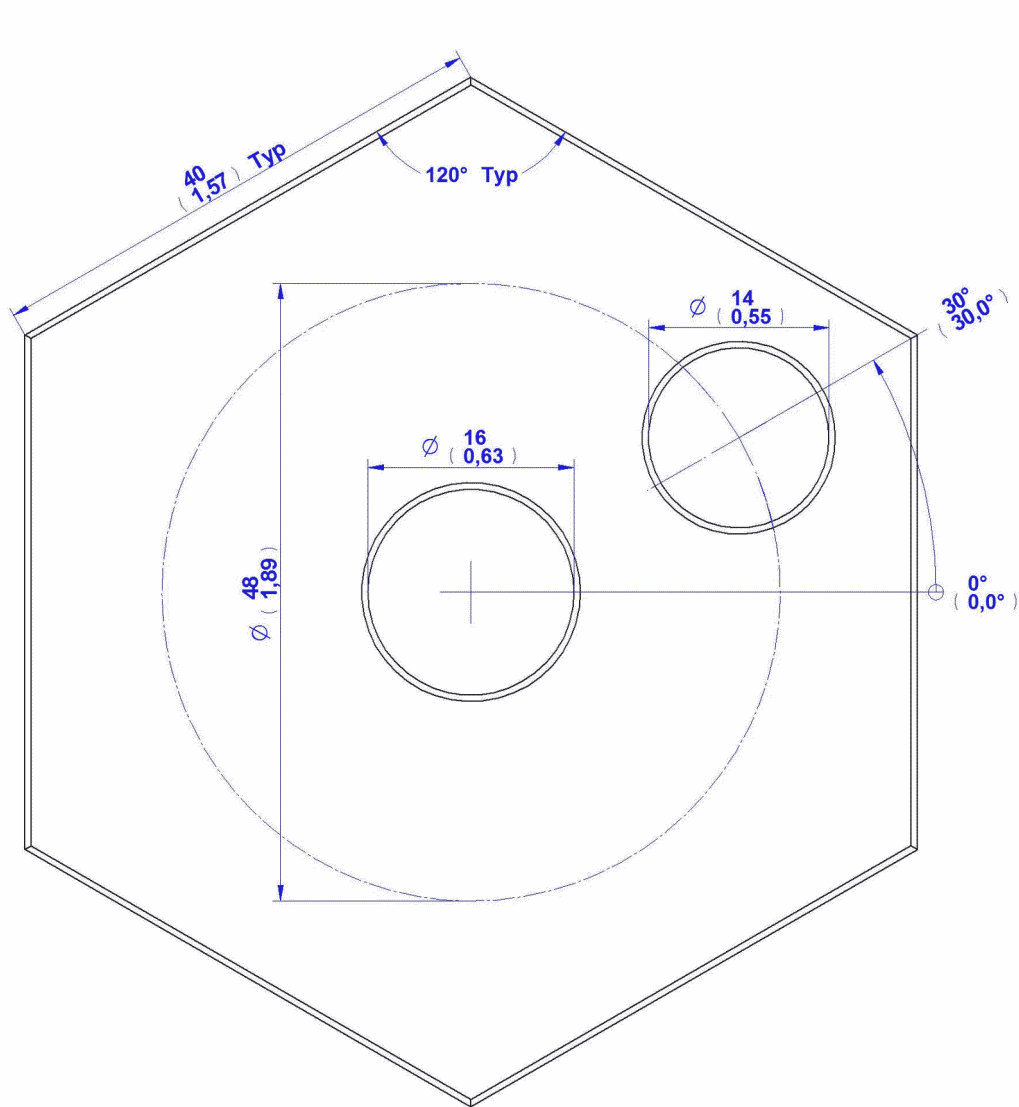
### Parts List



Item Number	Title	Material	Quantity
1	Hexagon 1	Wood	1
2	Hexagon 2	Wood	1
3	Hexagon 3	Wood	1
4	Hexagon 4	Wood	1
5	Hexagon 5	Wood	1
6	Hexagon 6	Wood	1
7	Hexagon 7	Wood	1
8	Hexagon 8	Wood	1
9	Hexagon 9	Wood	1
10	Hexagon 10	Wood	1
11	Hexagon 11	Wood	1
12	Hexagon 12	Wood	1
13	Dowel	Wood	13
14	Mast	Wood	1
15	Bottom	Wood	1

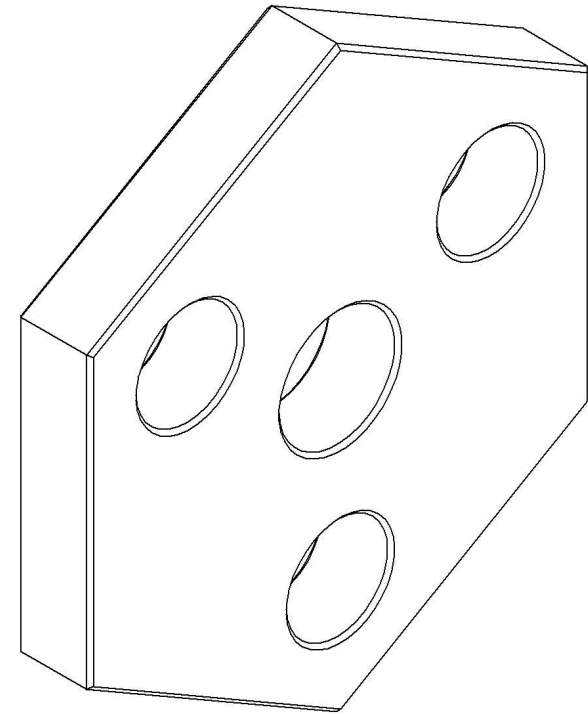
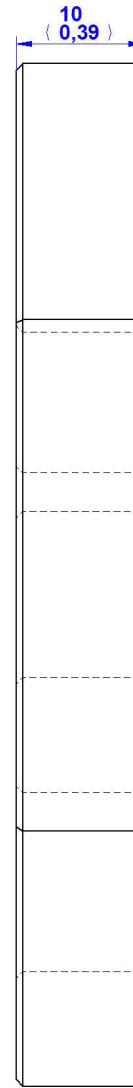
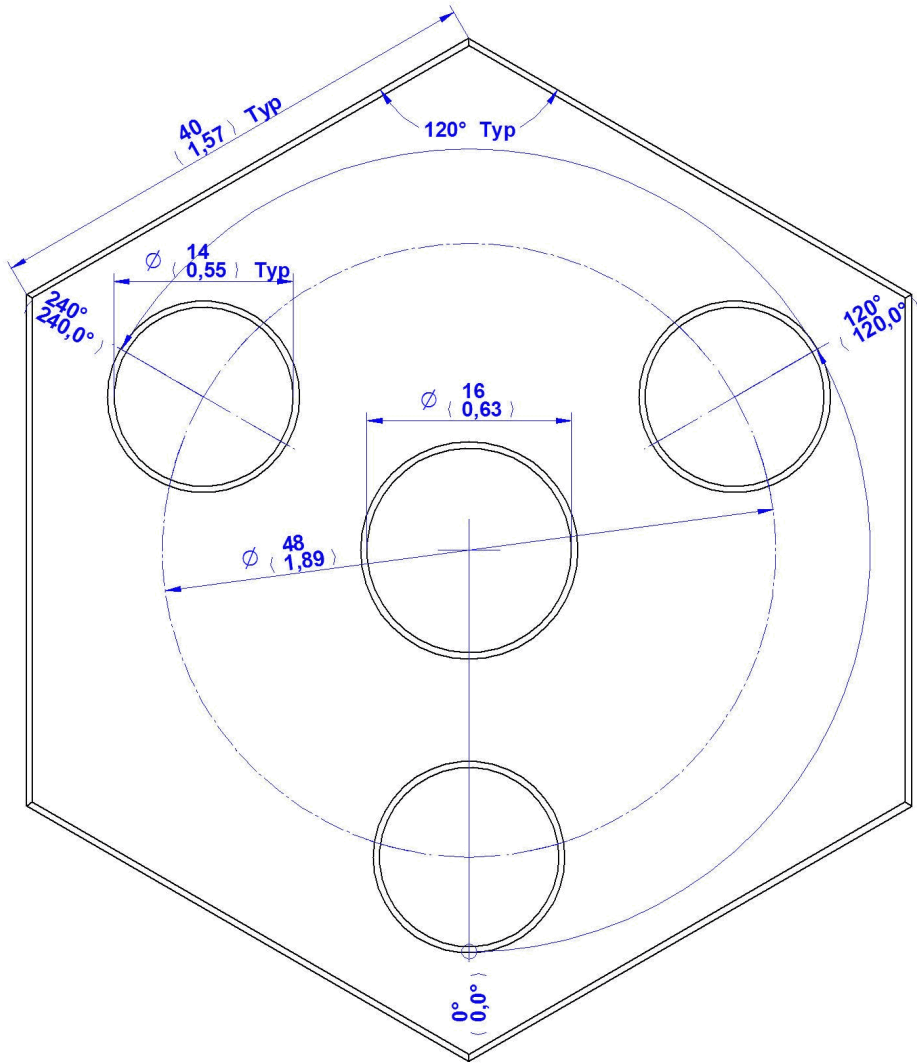
### Assembly Drawing





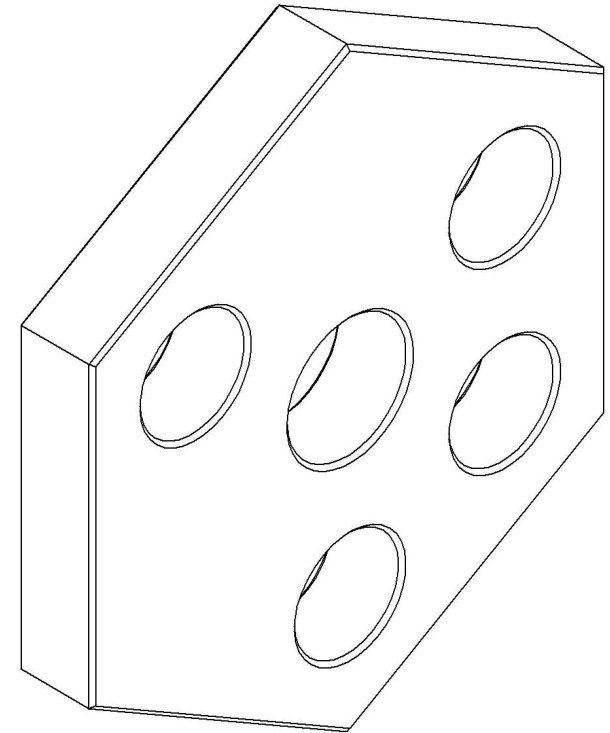
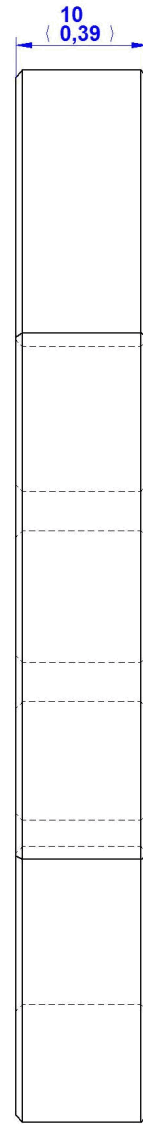
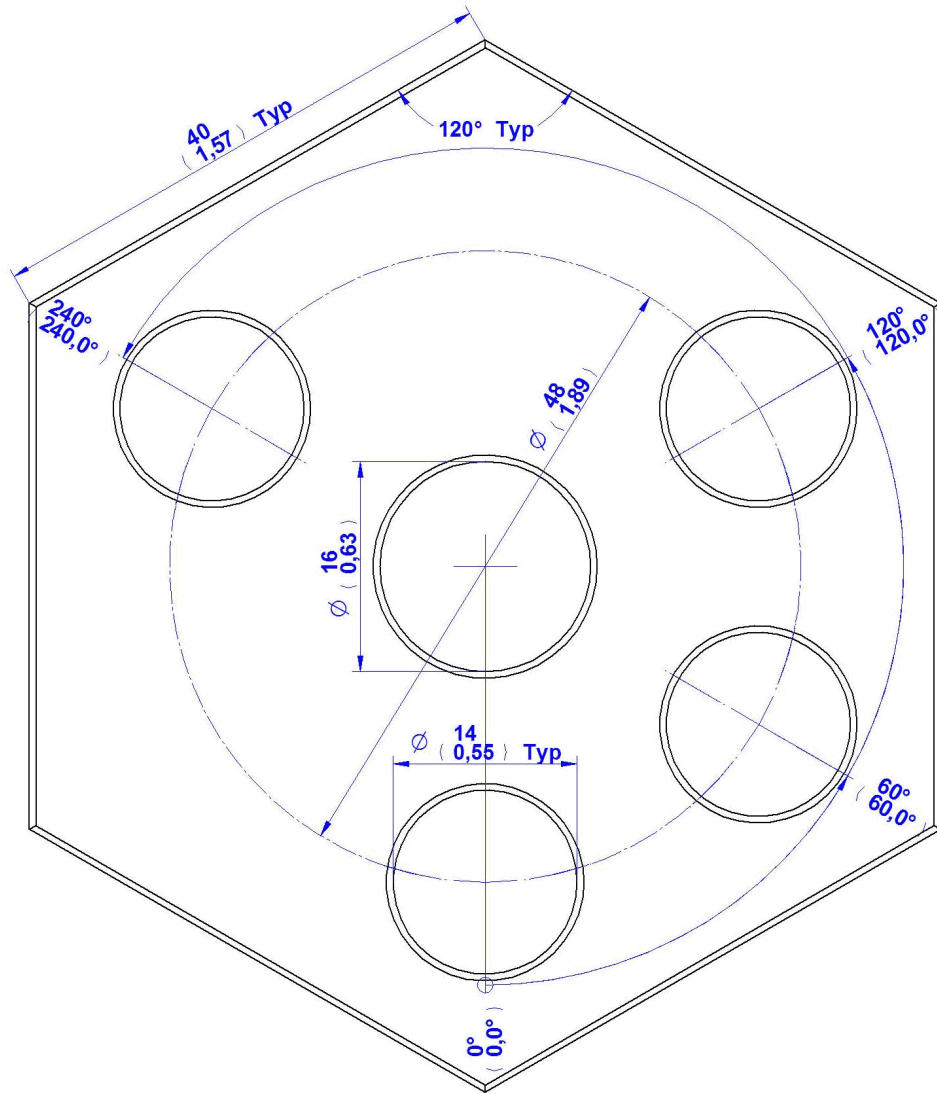
# 1. Hexagon 1

Chamfer = 0,5mm (0,02in)/45°



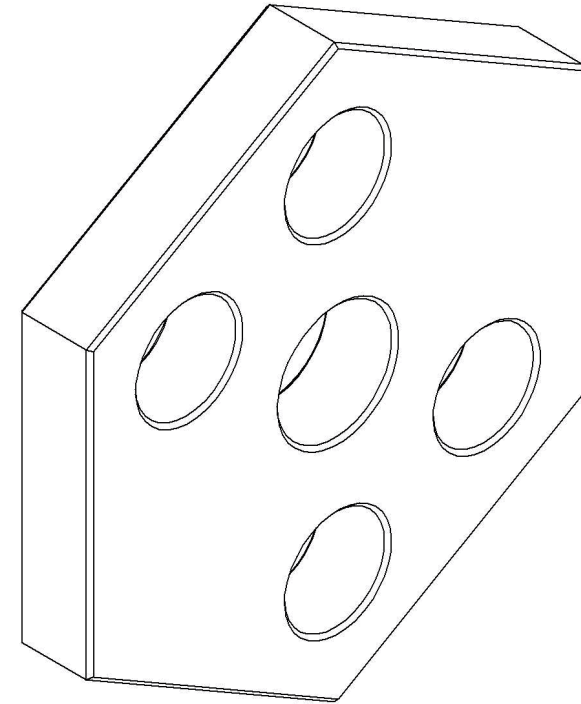
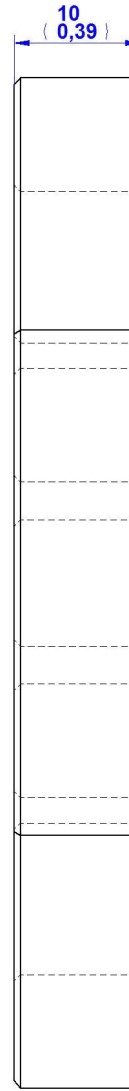
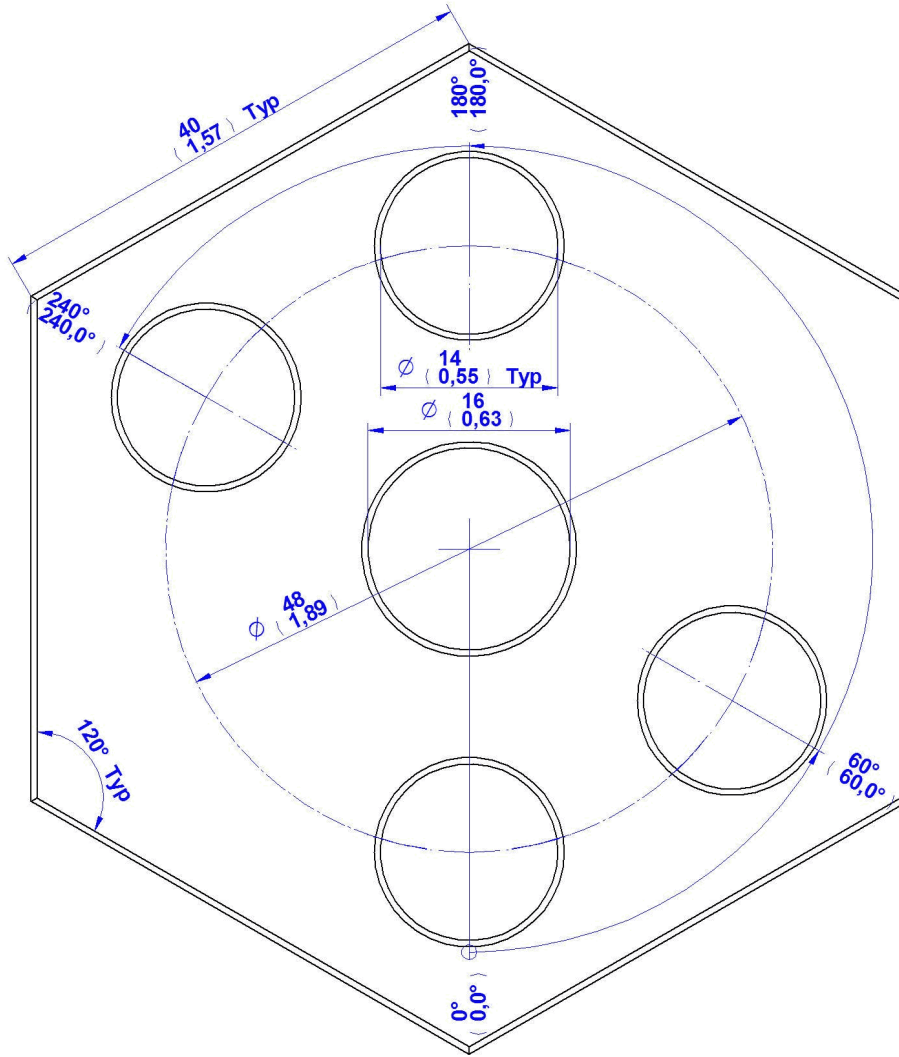
## 2. Hexagon 2

Chamfer = 0,5mm (0,02in)/45°



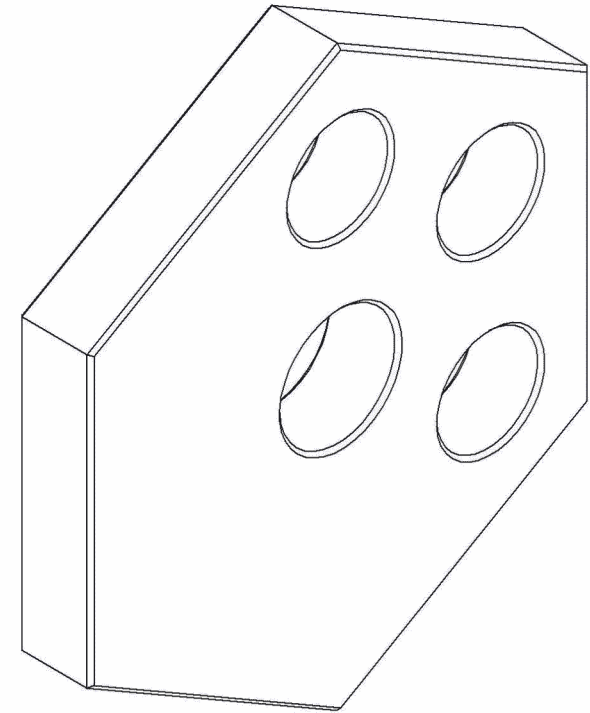
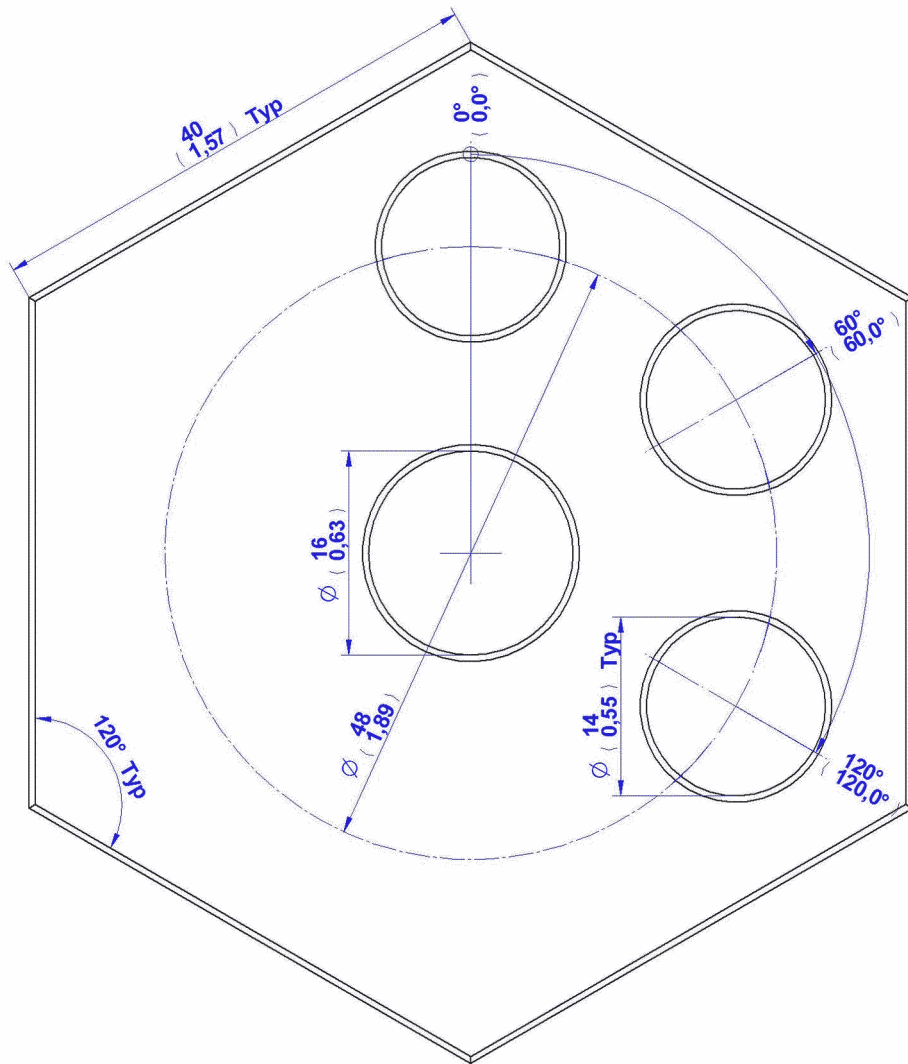
### 3. Hexagon 3

Chamfer = 0,5mm (0,02in)/45°



## 4. Hexagon 4

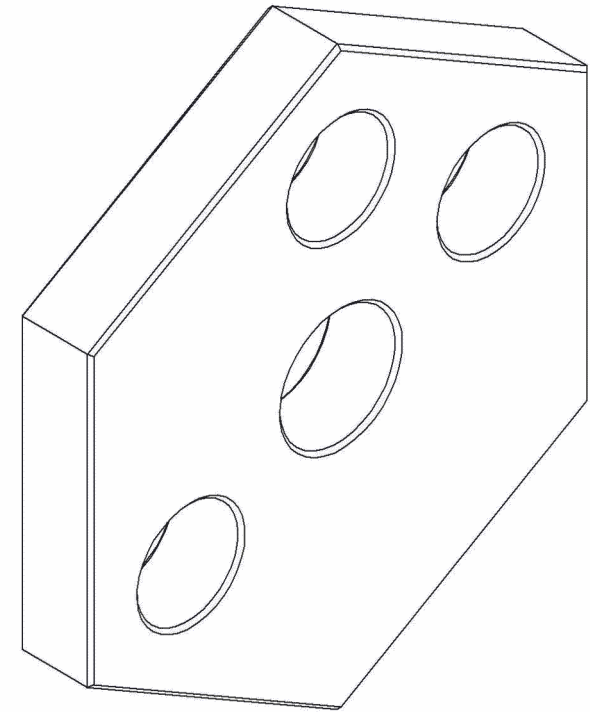
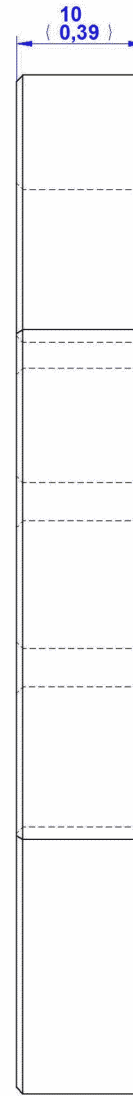
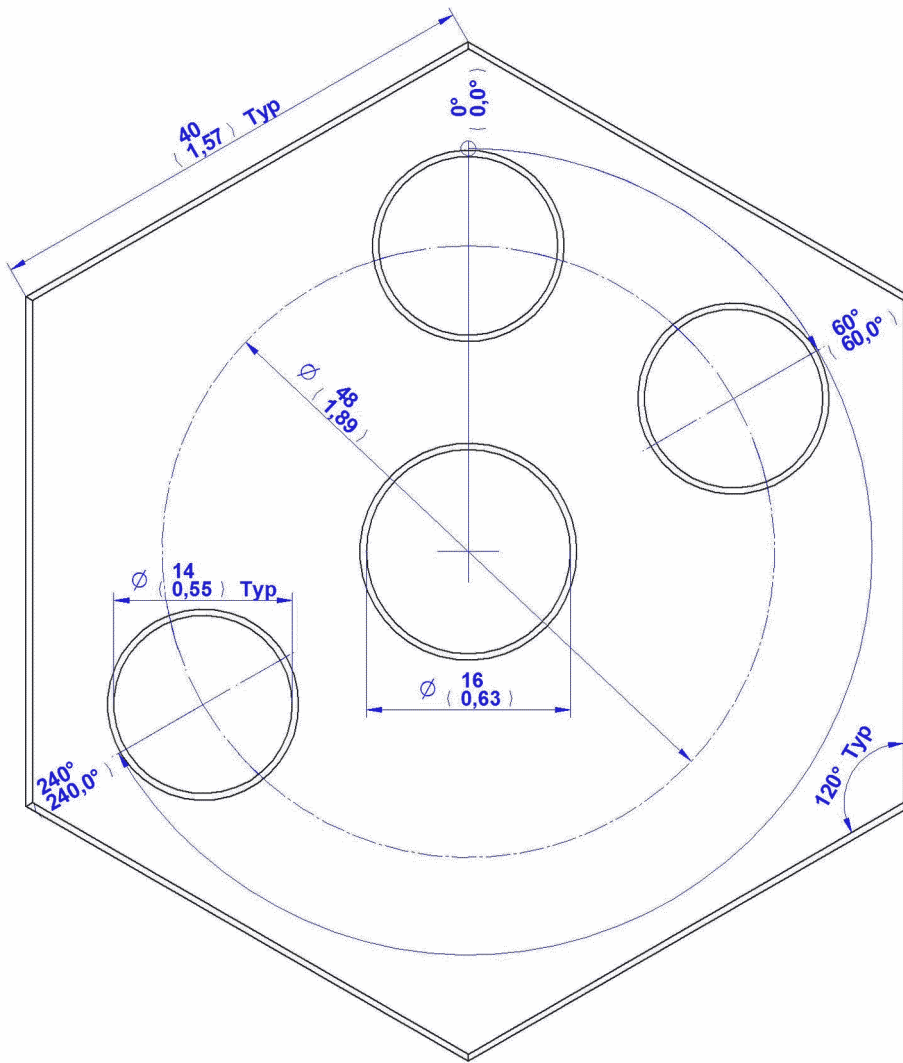
Chamfer = 0,5mm (0,02in)/45°



## 5. Hexagon 5

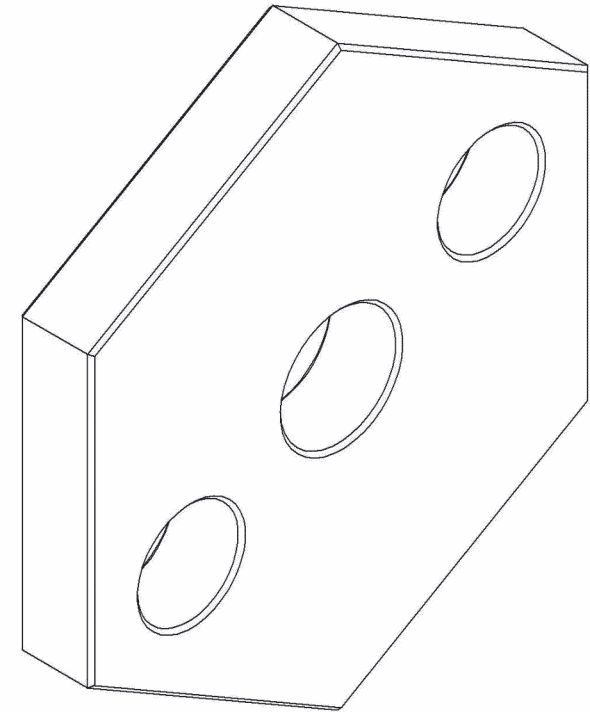
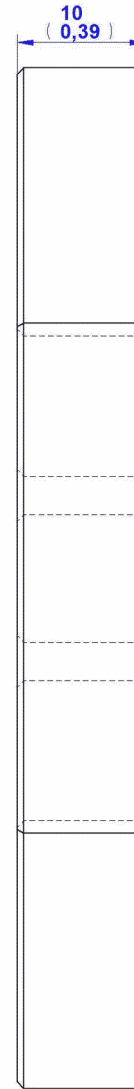
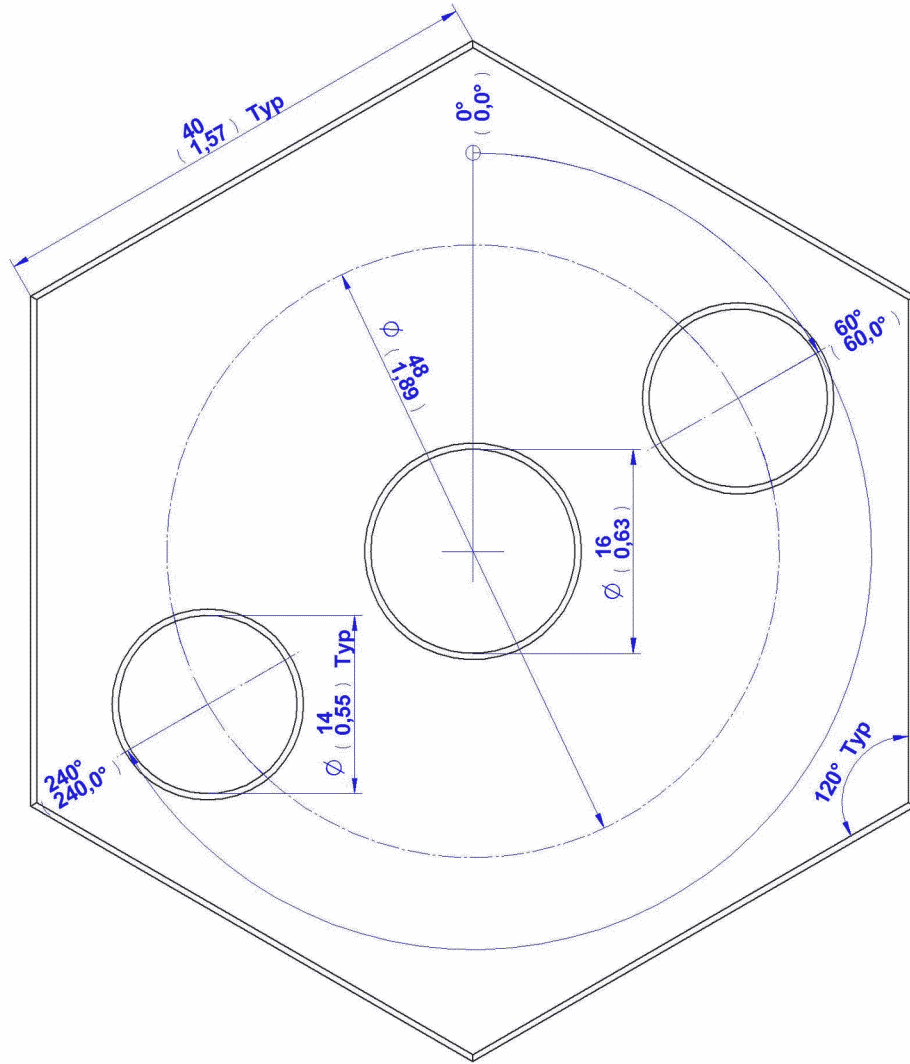
Chamfer = 0,5mm (0,02in)/45°





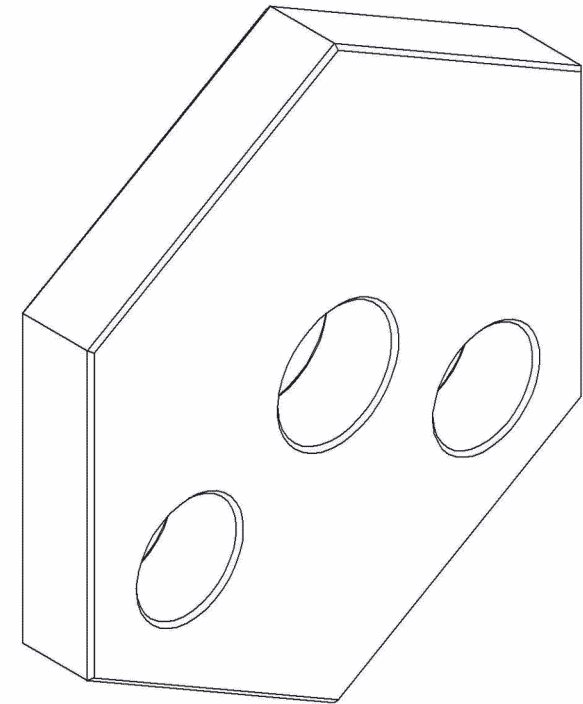
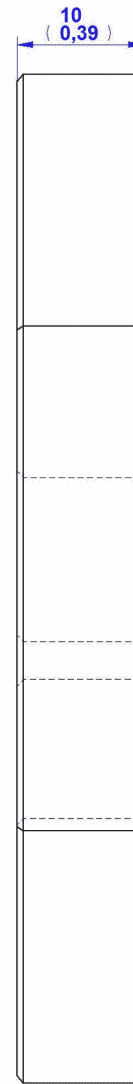
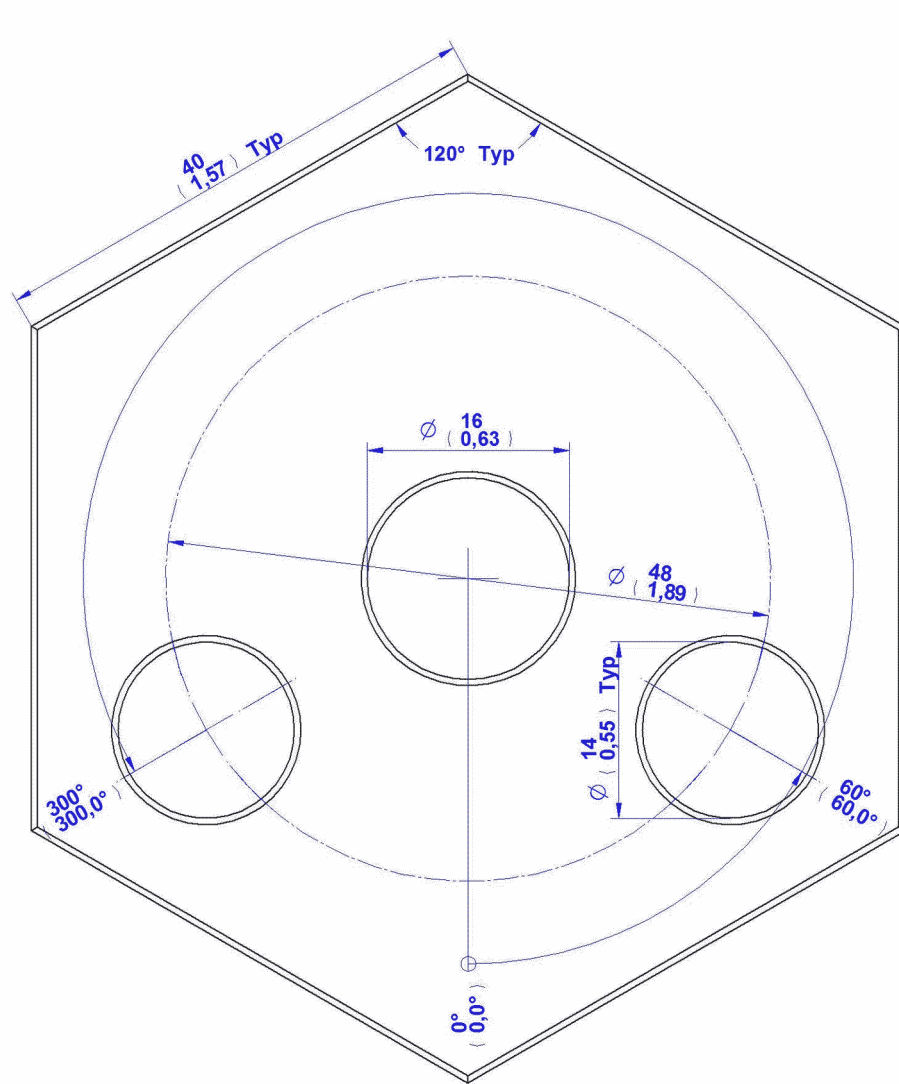
## 6. Hexagon 6

Chamfer = 0,5mm (0,02in)/45°



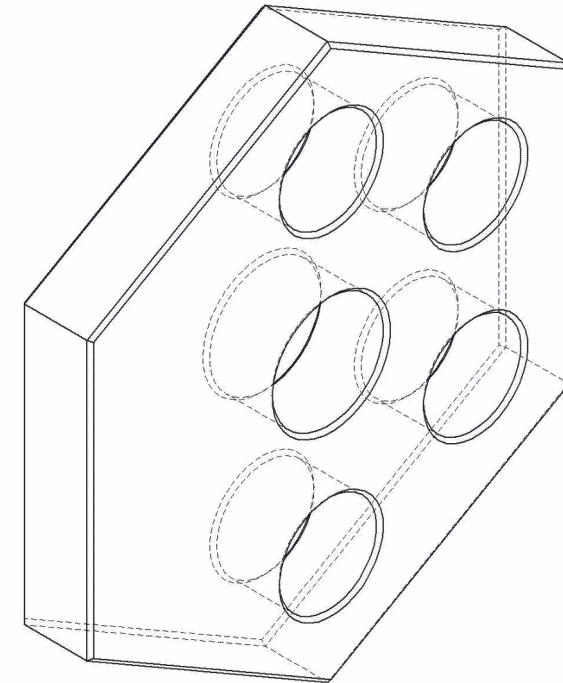
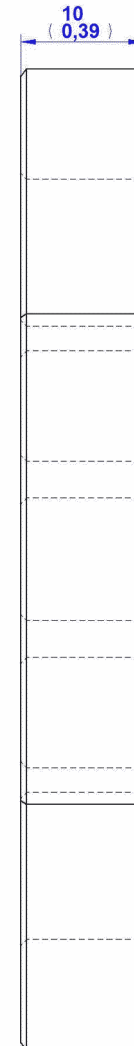
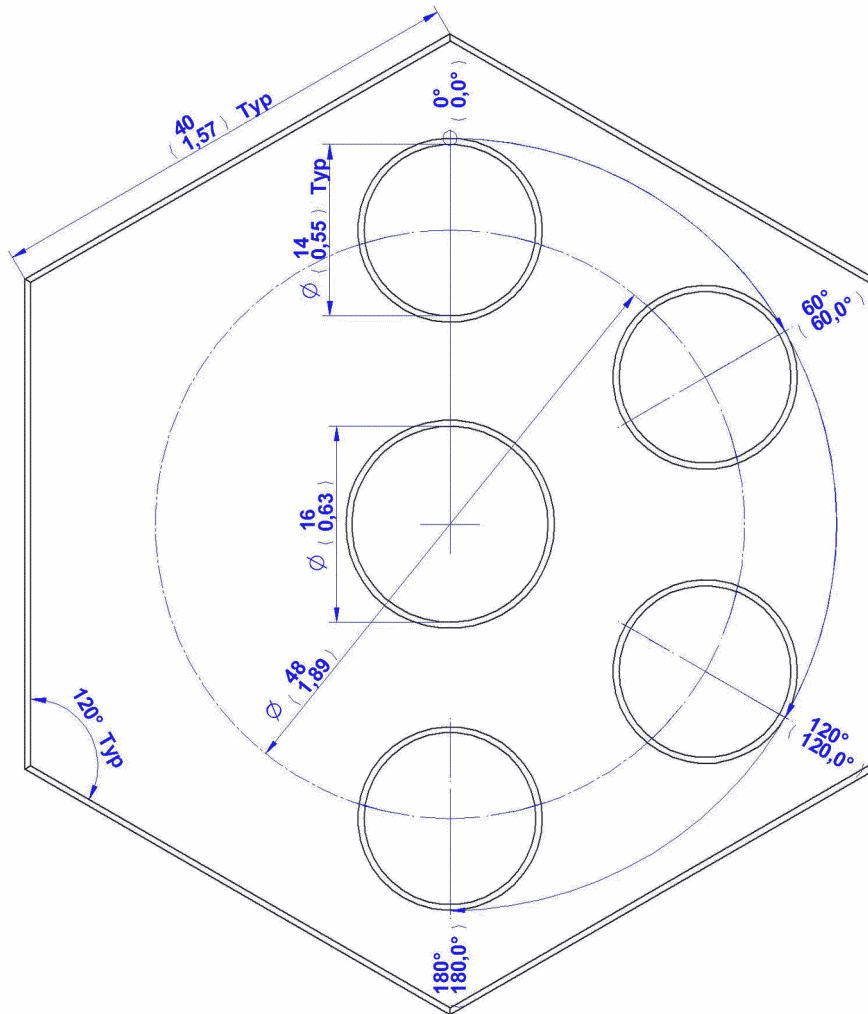
## 7. Hexagon 7

Chamfer = 0,5mm (0,02in)/45°



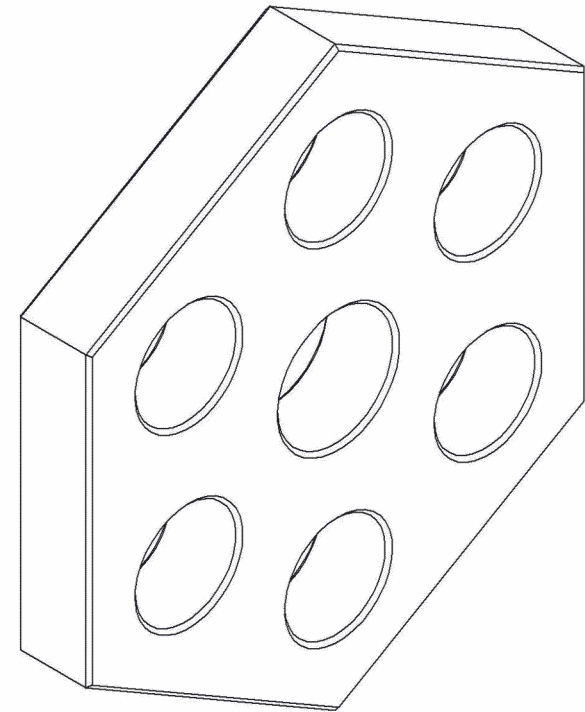
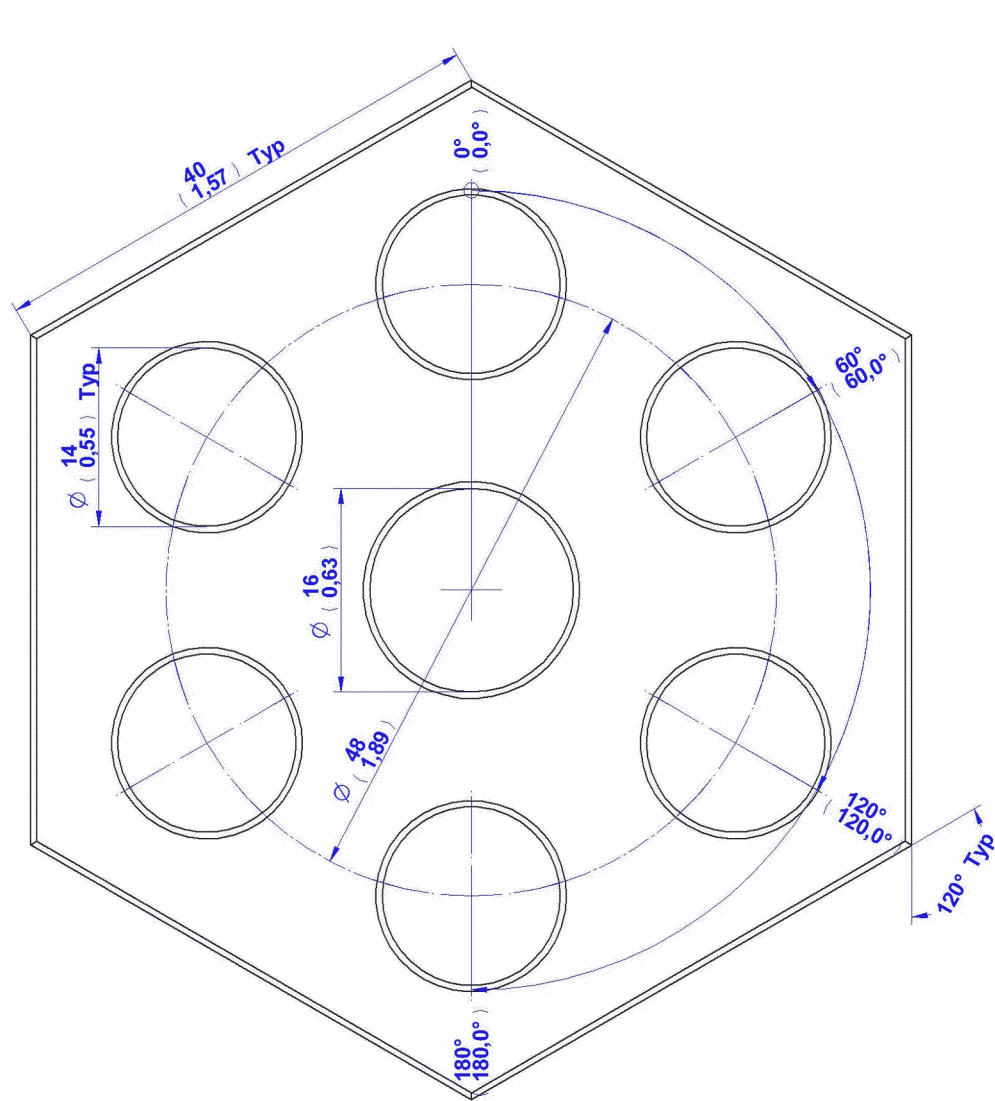
## 8. Hexagon 8

Chamfer = 0,5mm (0,02in)/45°



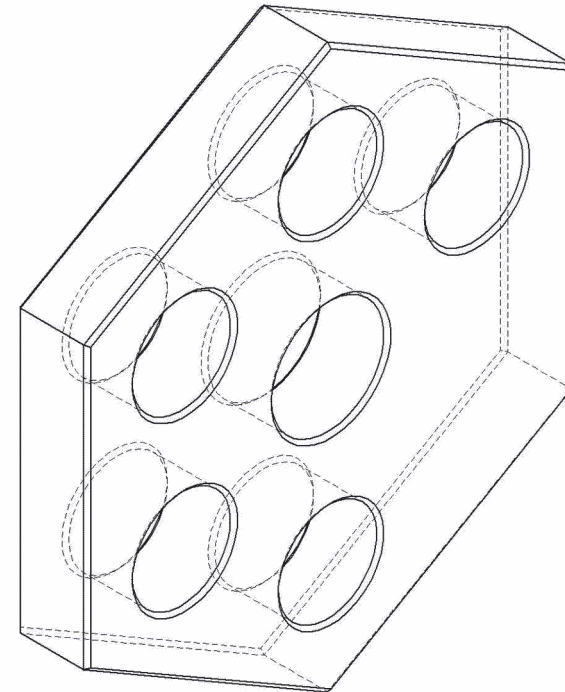
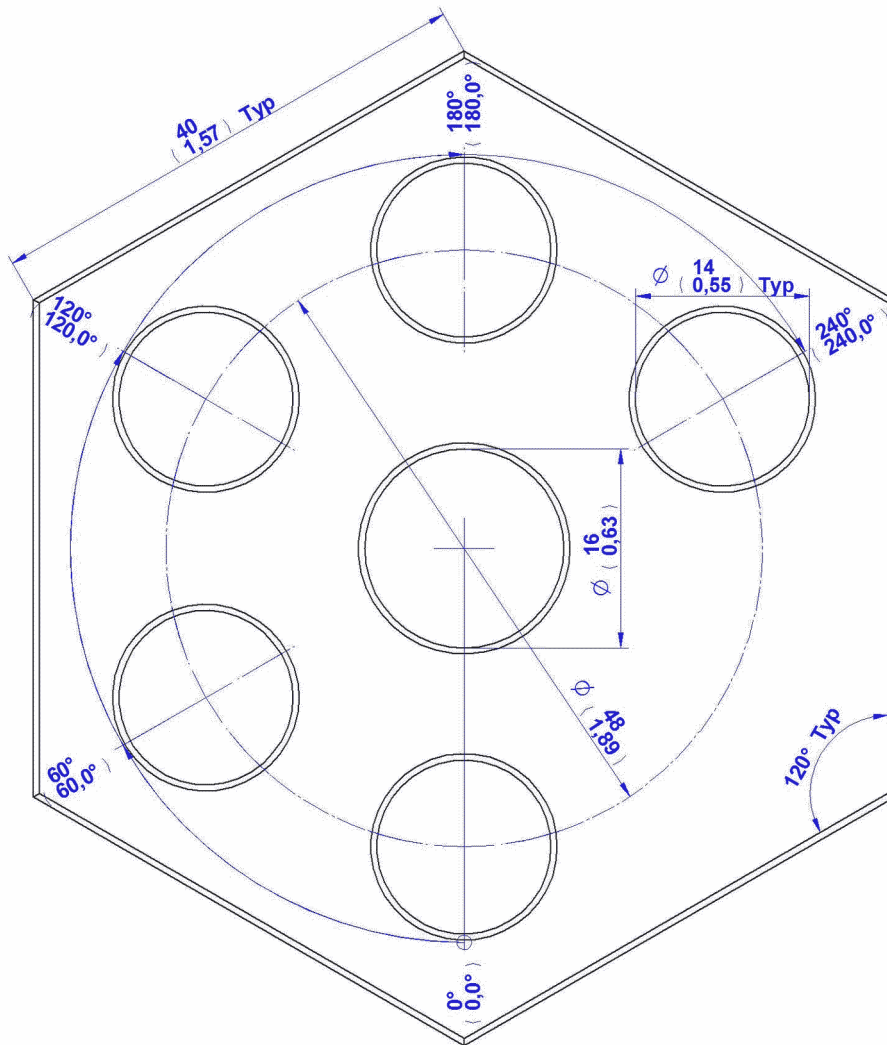
## 9. Hexagon 9

Chamfer = 0,5mm (0,02in)/45°



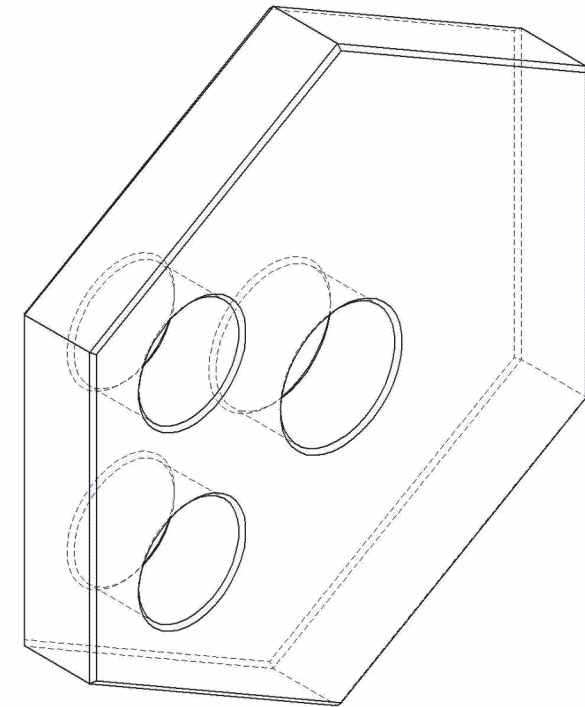
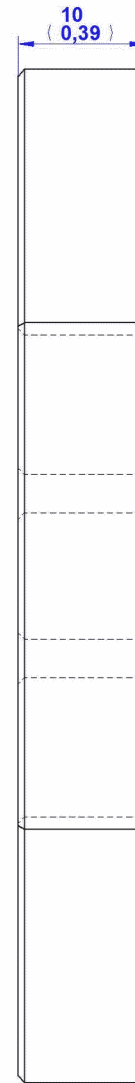
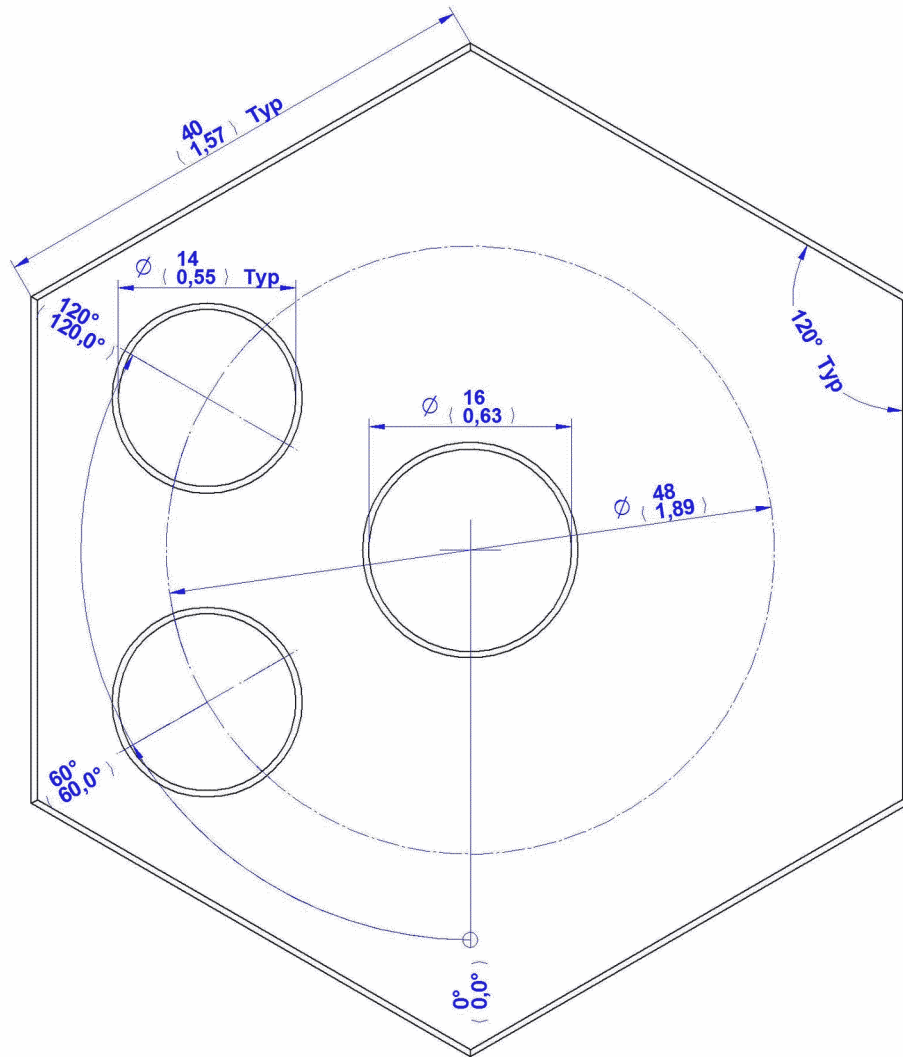
## 10. Hexagon 10

Chamfer = 0,5mm (0,02in)/45°



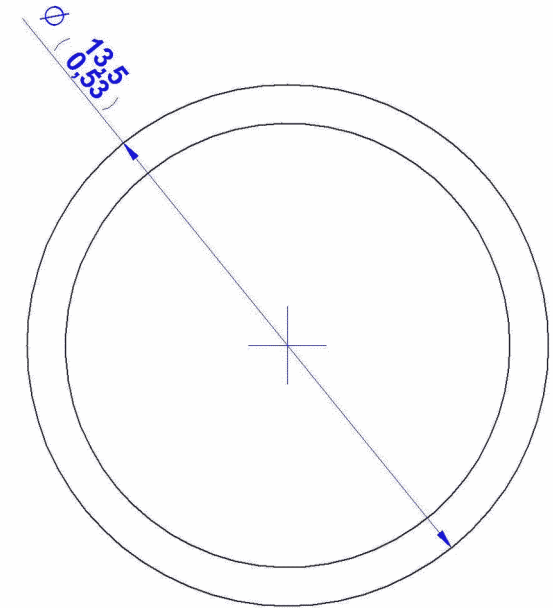
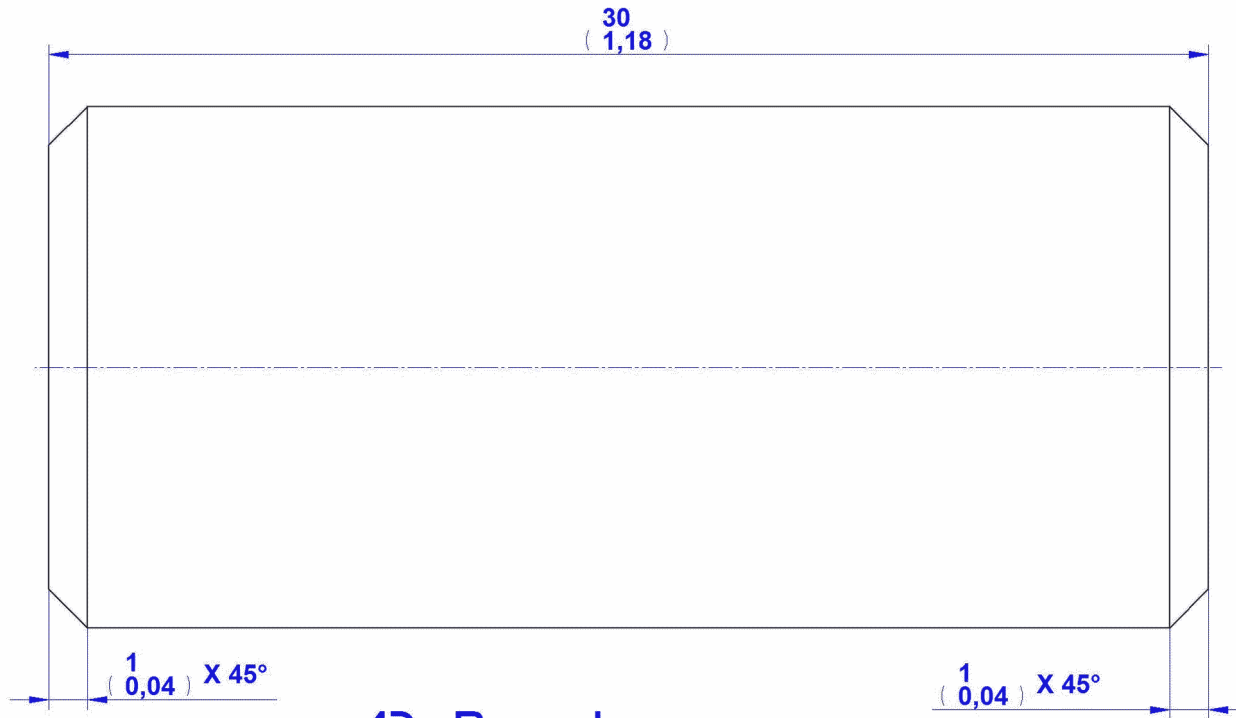
## 11. Hexagon 11

Chamfer = 0,5mm (0,02in)/45°



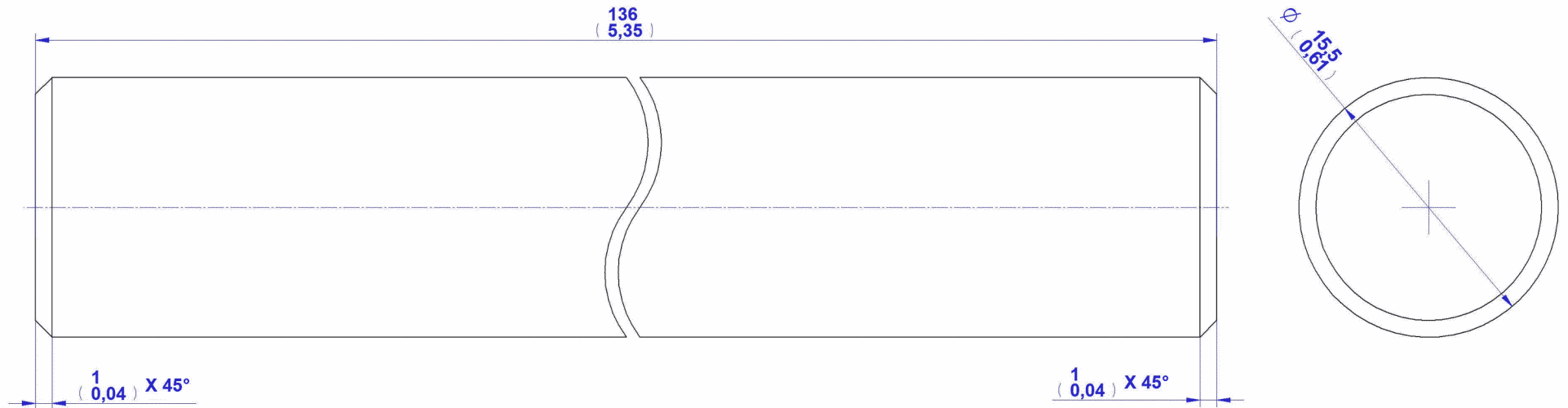
## 12. Hexagon 12

Chamfer = 0,5mm (0,02in)/45°

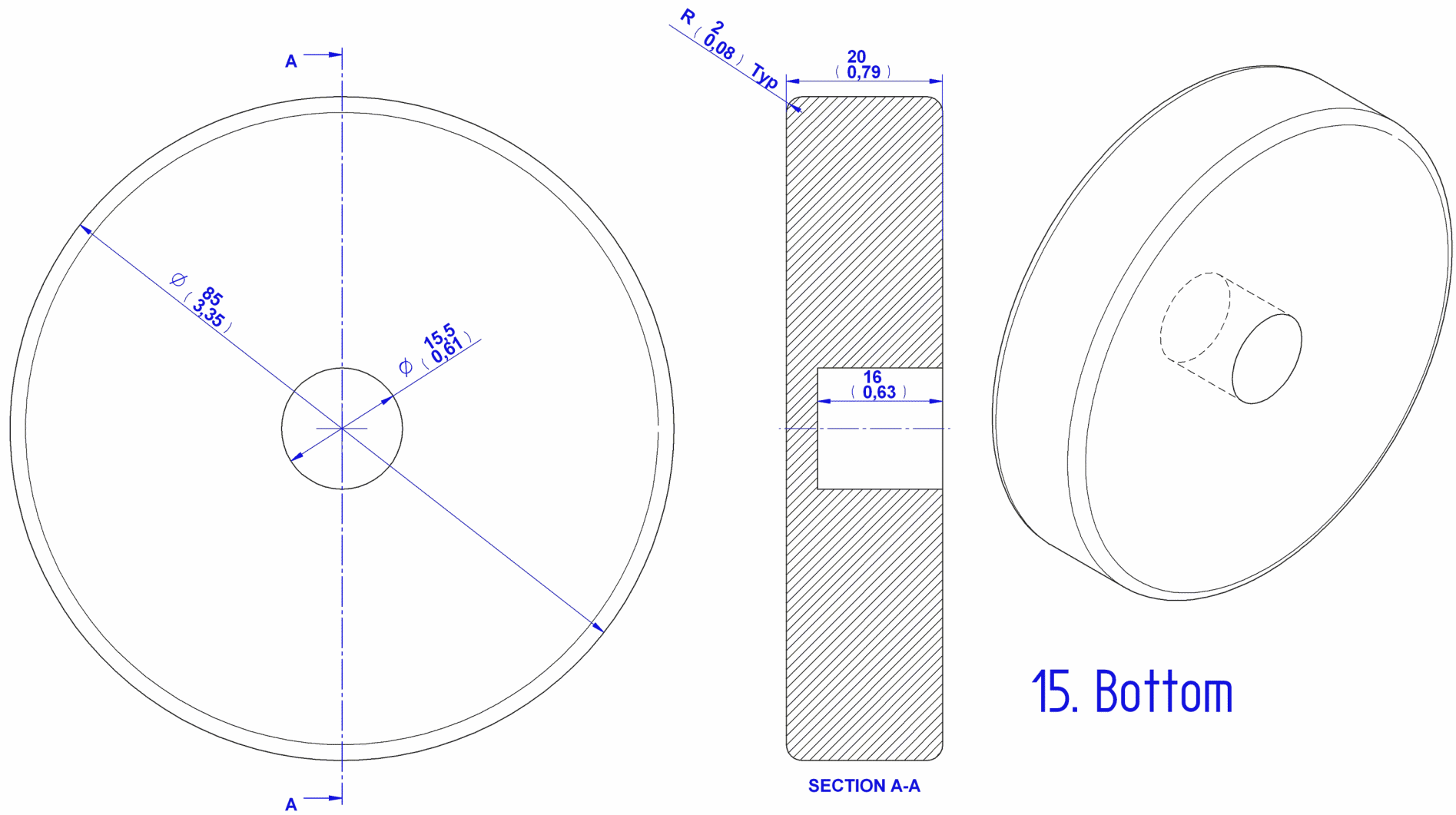


13. Dowel





14. Mast

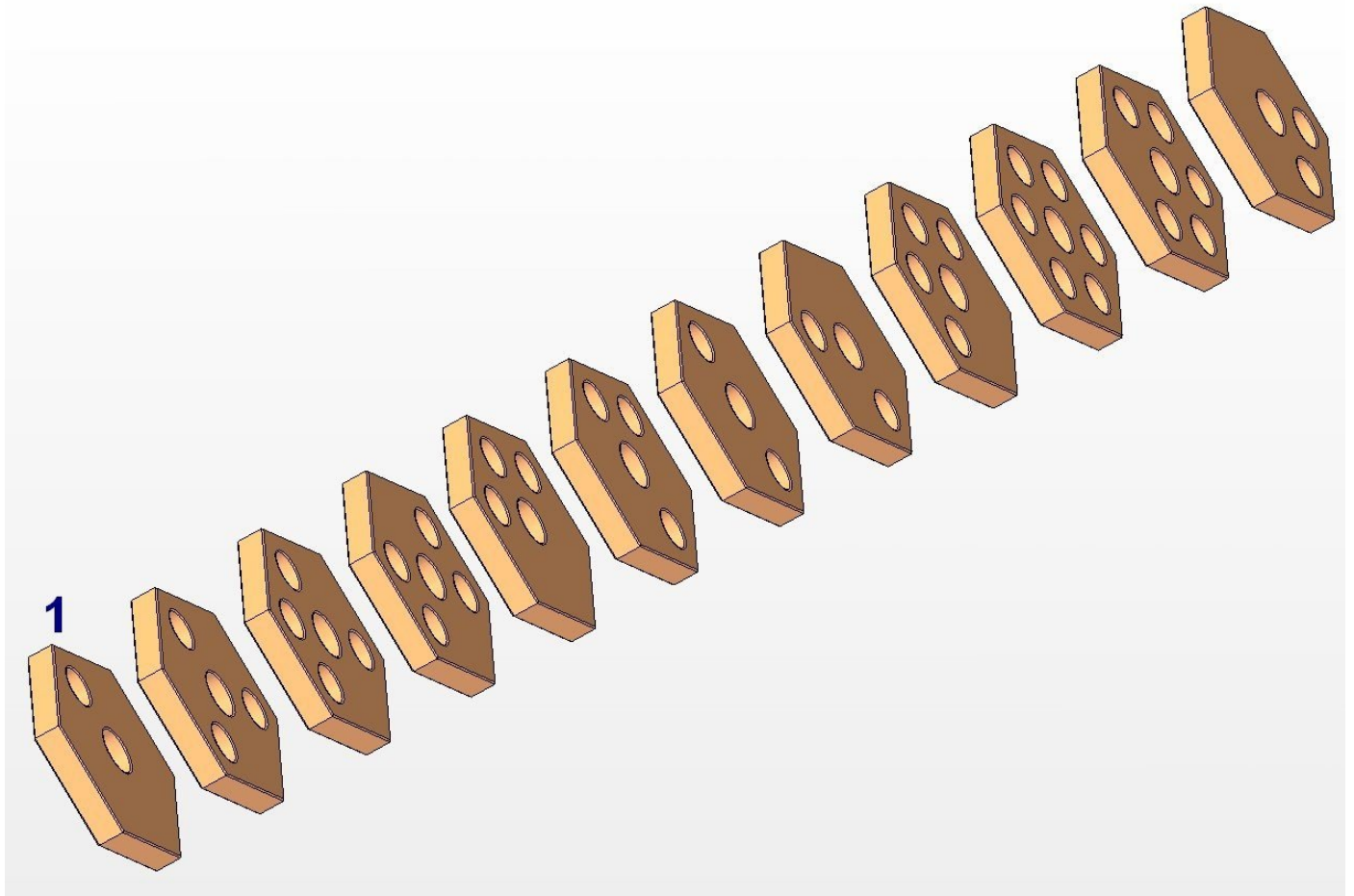


15. Bottom

## Assemblage images

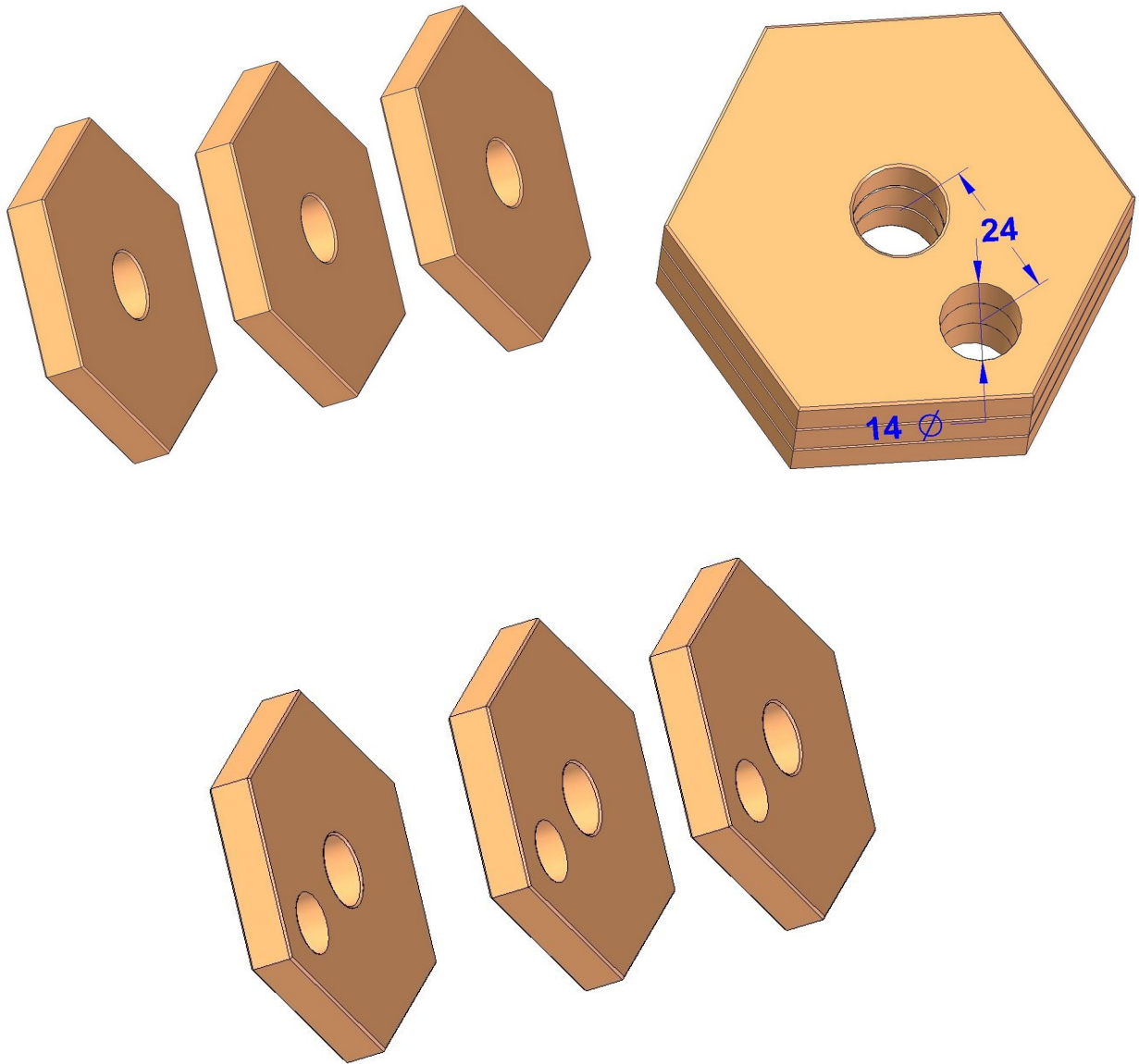
Making this puzzle is not difficult, but you have to drill the holes very precisely.

### SOLUTION

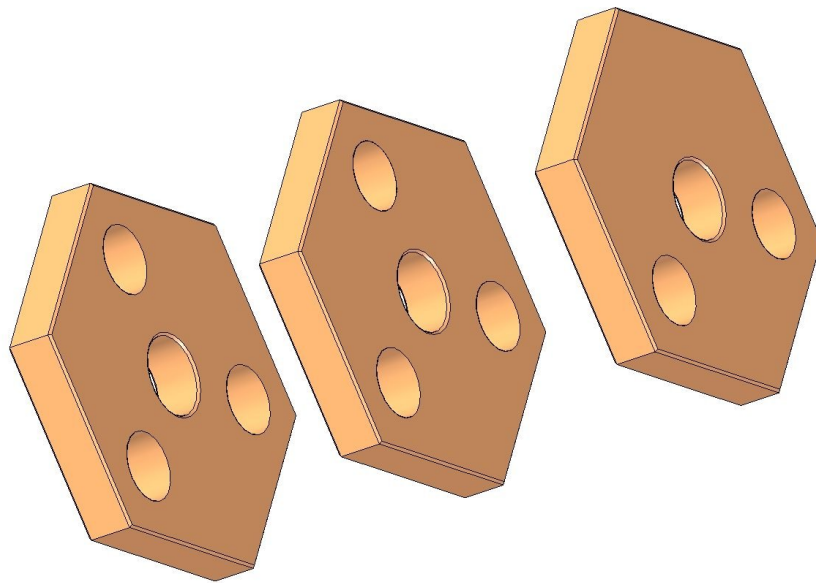
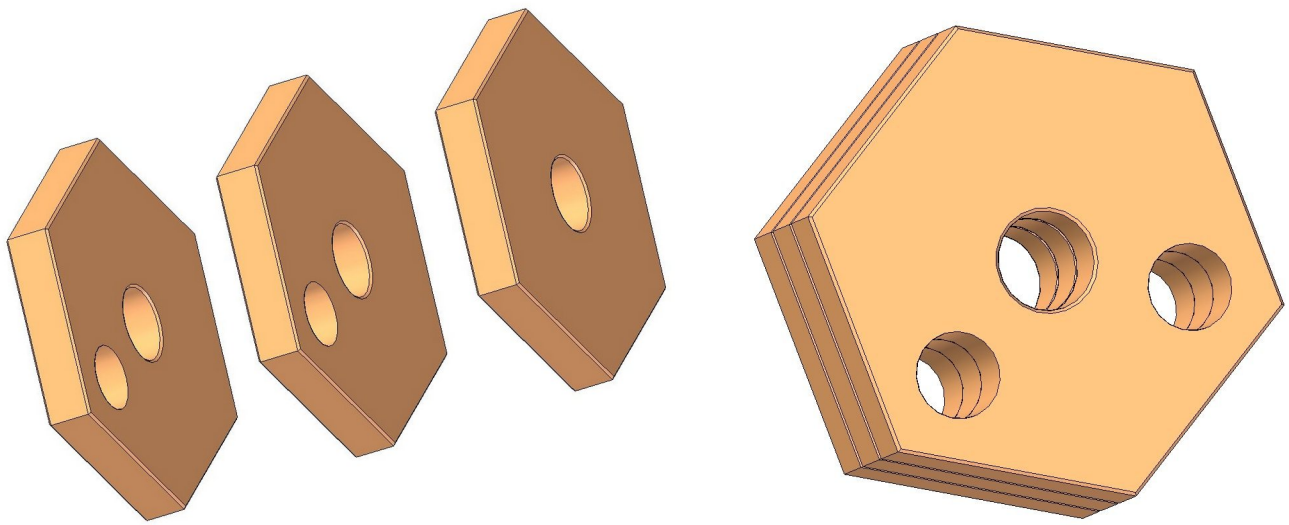


The easiest way to drill the holes is:

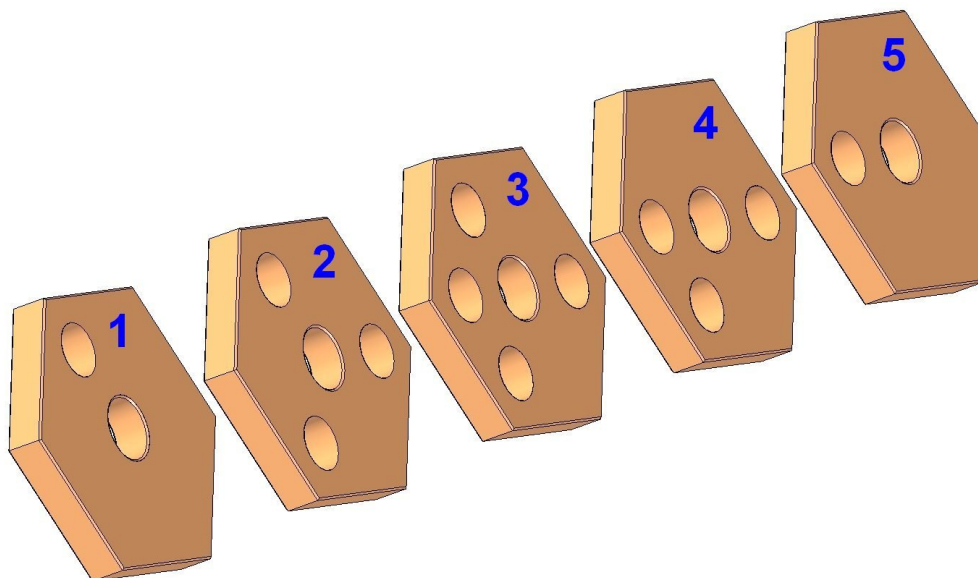
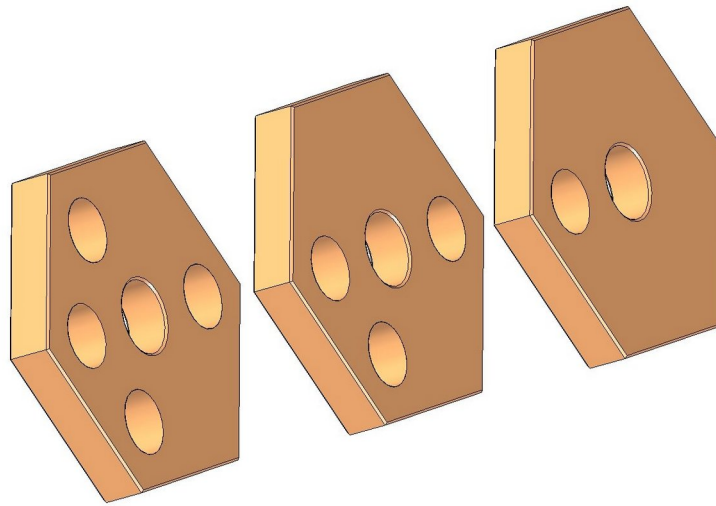
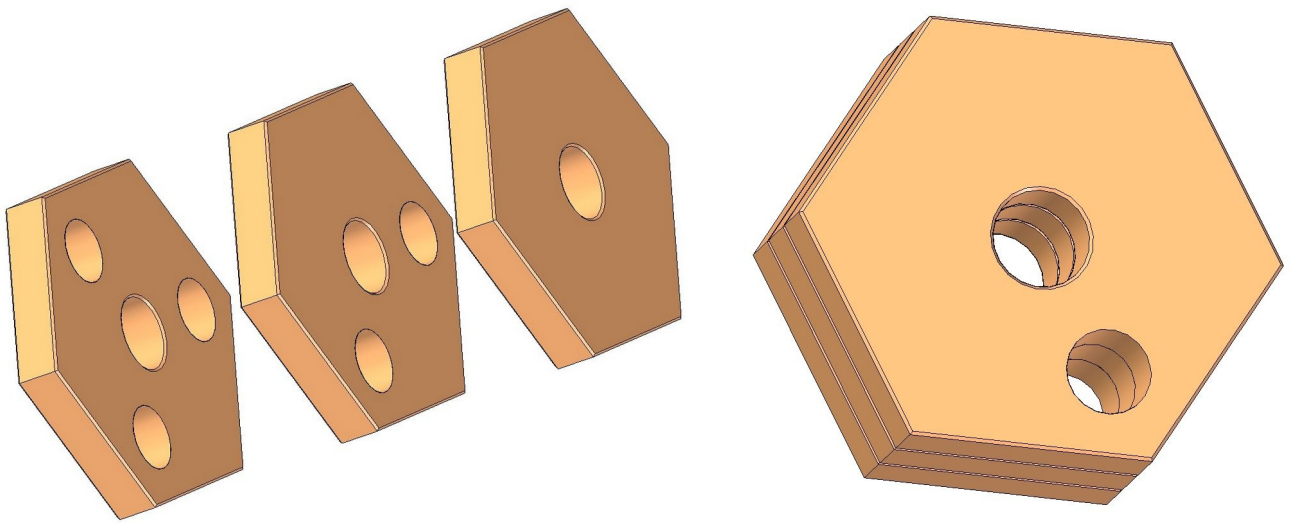
- Look at the picture with the puzzle solutions (above), take the first three Hexagon Discs and put it in the vise. Drill the first hole through all three items, as it is shown on the picture and of course by the exact measurements given in the 2D documentation.



- Take the first Disc out and replace it with the new one. Fasten it again in the vise, look at the picture with the puzzle solution and drill the hole going through all of these three Discs.



- Take the second Hexagon Disc out and replace it with new one. Fasten these three Discs in the vise, look again at the picture with the puzzle solution and drill the hole that is going trough all of these three Discs.



- Do the same procedure with all of the Hexagon Discs.

The item Base, on which you are arranging the discs, should be formed by joining the items Mast and the Bottom with glue.

