

## Stacker puzzle plan – Version 2



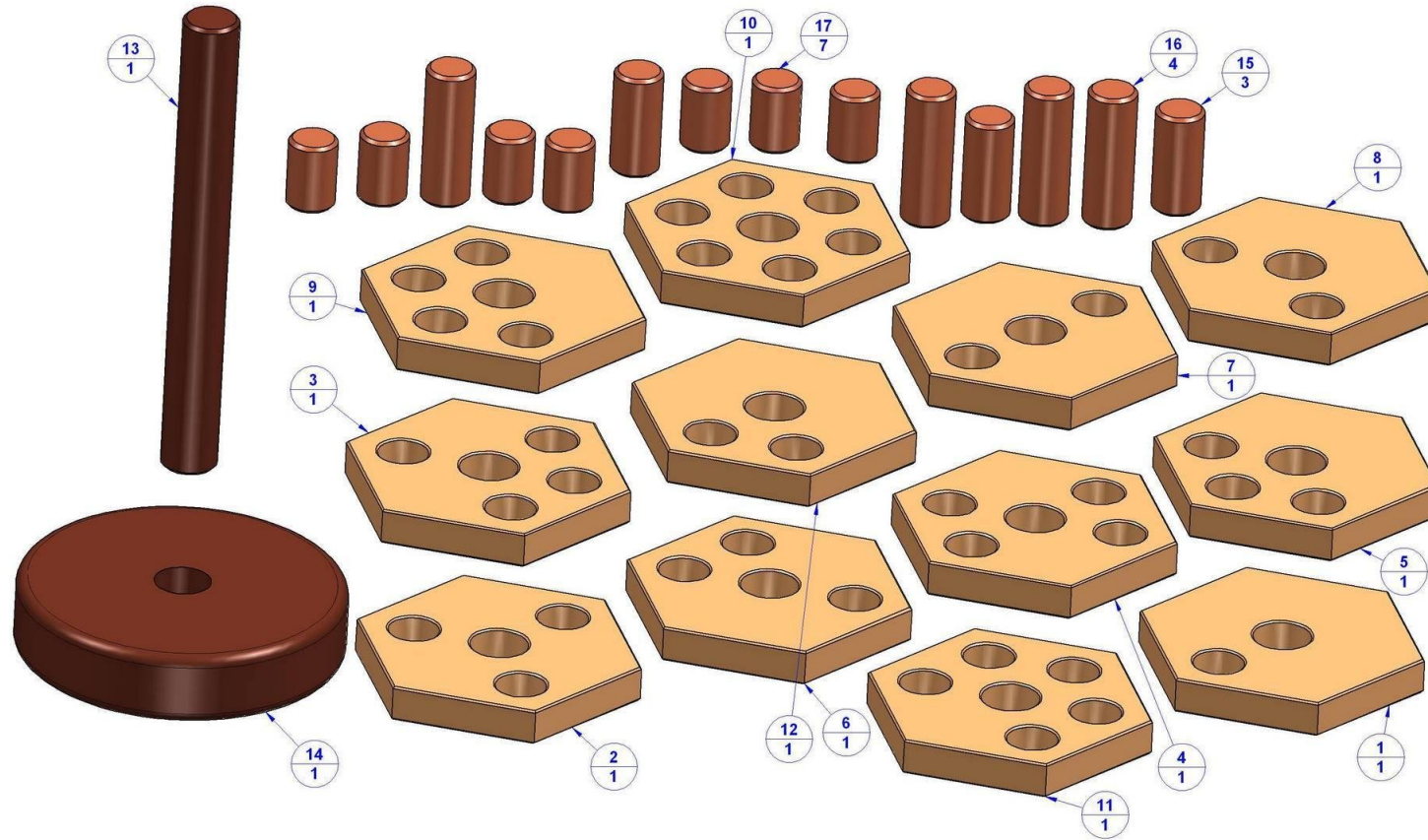
Here you can download a plan to create a stacker puzzle. The puzzle consist of: bottom, mast, dowels and discs of hexagonal shape that have drilled holes. The mast and bottom parts are glued together to form a stand on which hexagonal disks are stacked.

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.

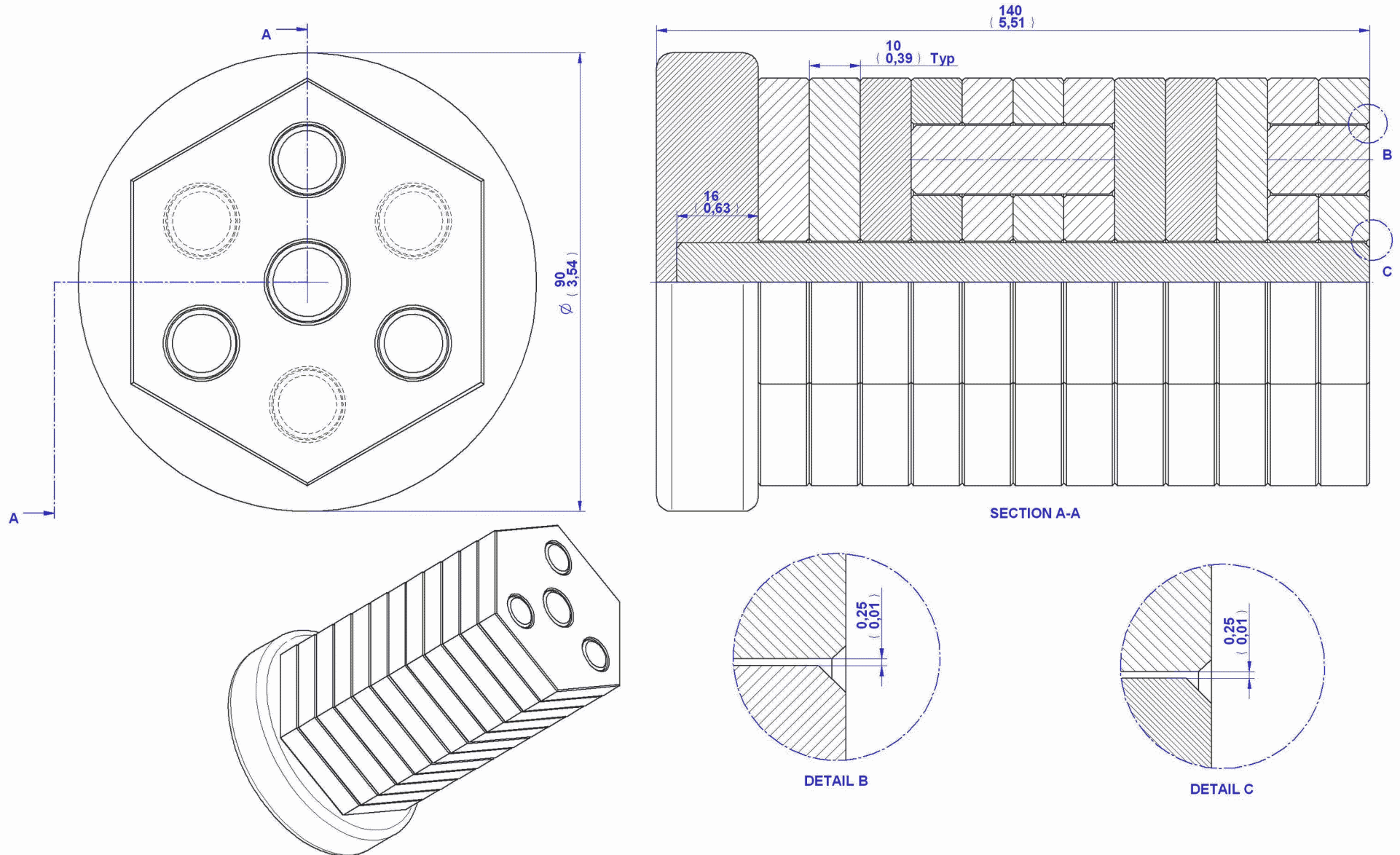
This is a very simple project with which you can make an interesting puzzle that can be a nice gift for someone, or you may sell it at various craft fairs and the like. This is an ideal woodworking project for beginners because they can learn precision drilling and how to make multiple pieces that look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

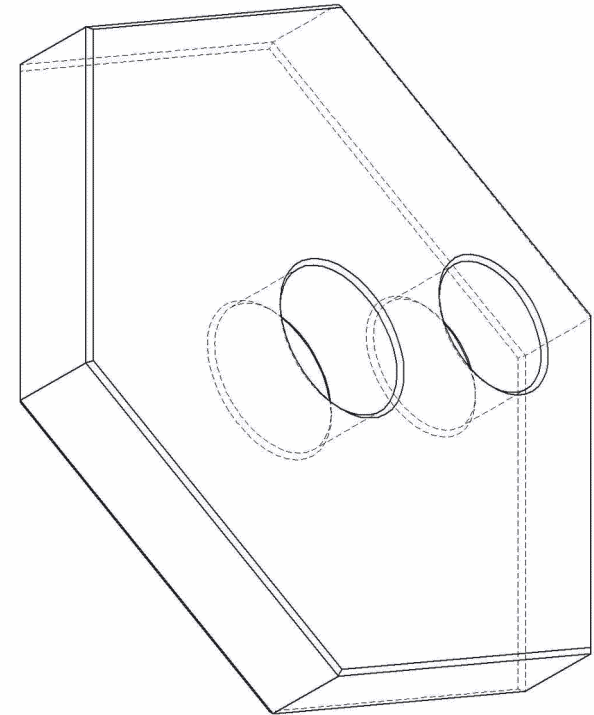
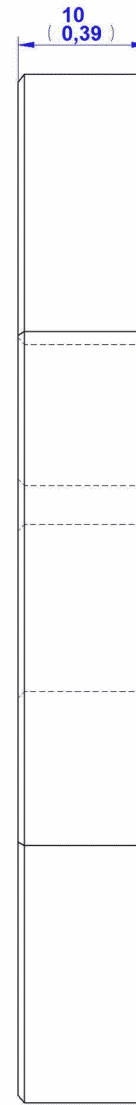
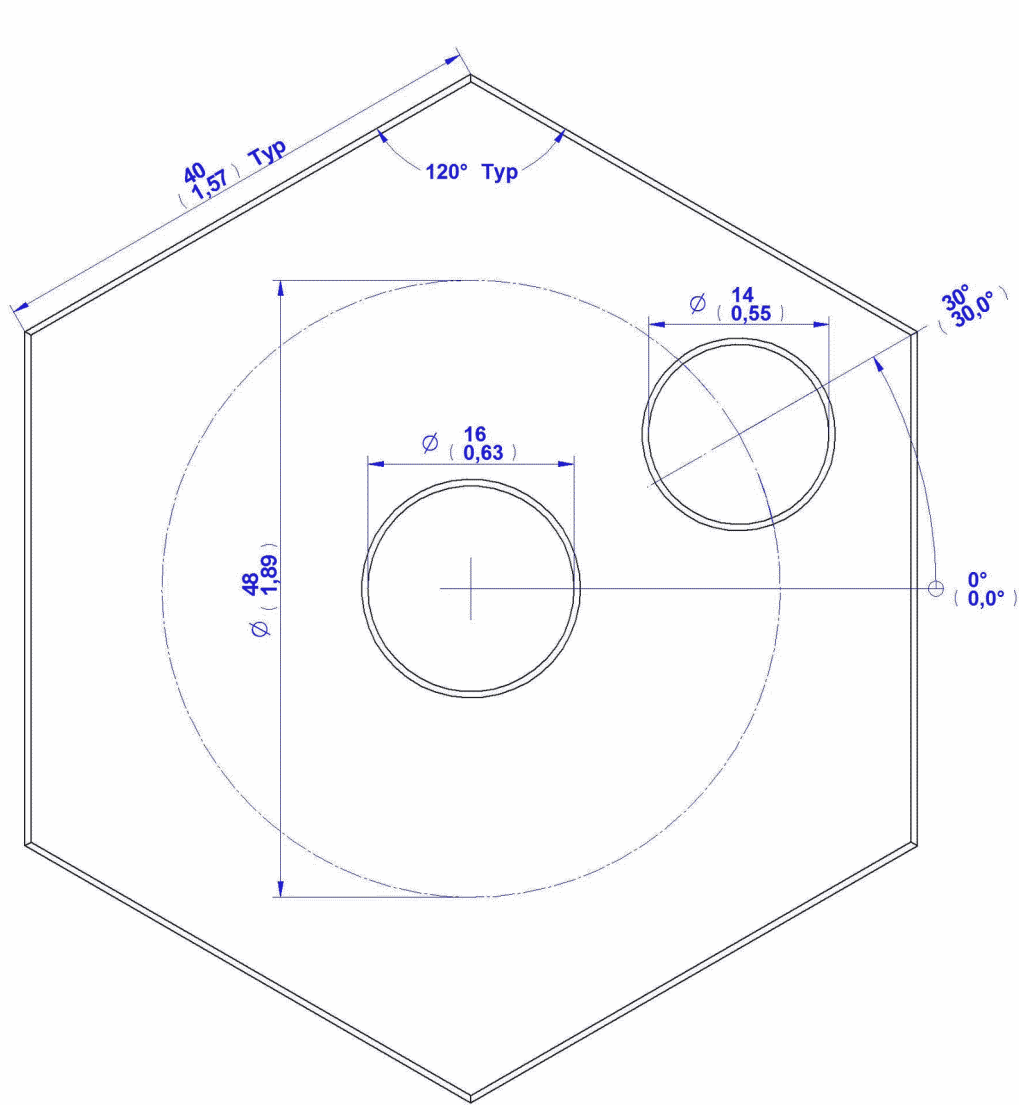
## Parts List



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	Mast	Wood	1
14	Bottom	Wood	1
15	Dowel 30mm	Wood	3
16	Dowel 40mm	Wood	4
17	Dowel 20mm	Wood	7

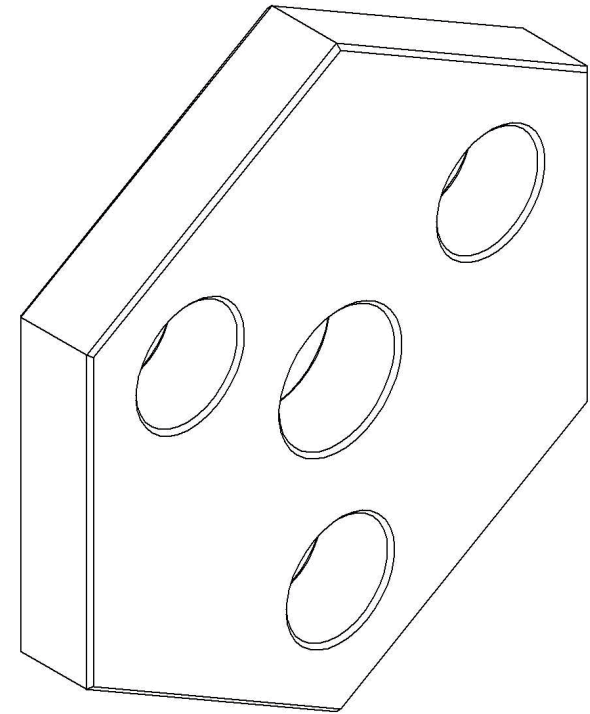
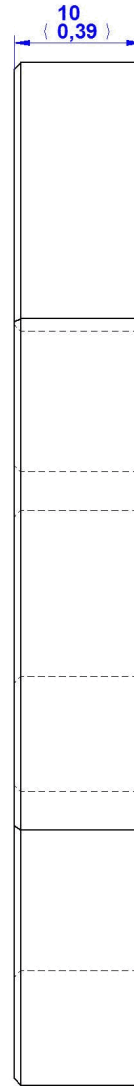
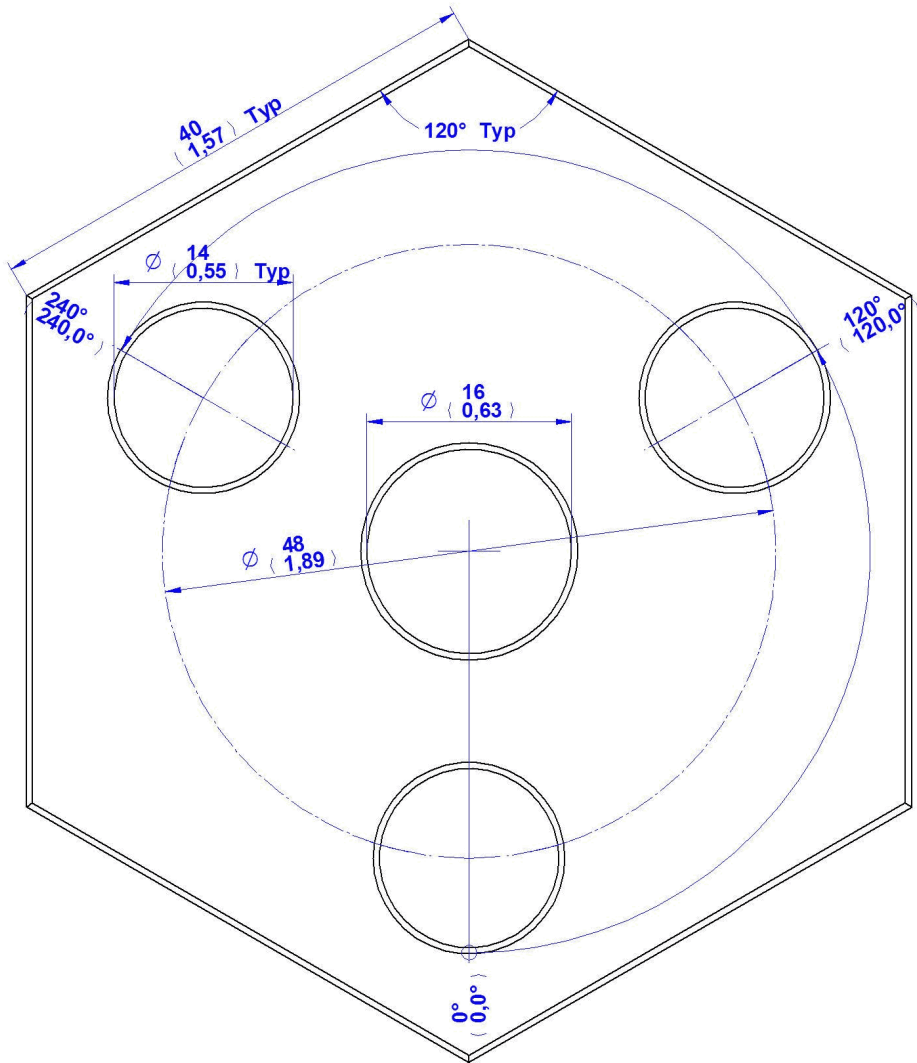
### Assembly Drawing





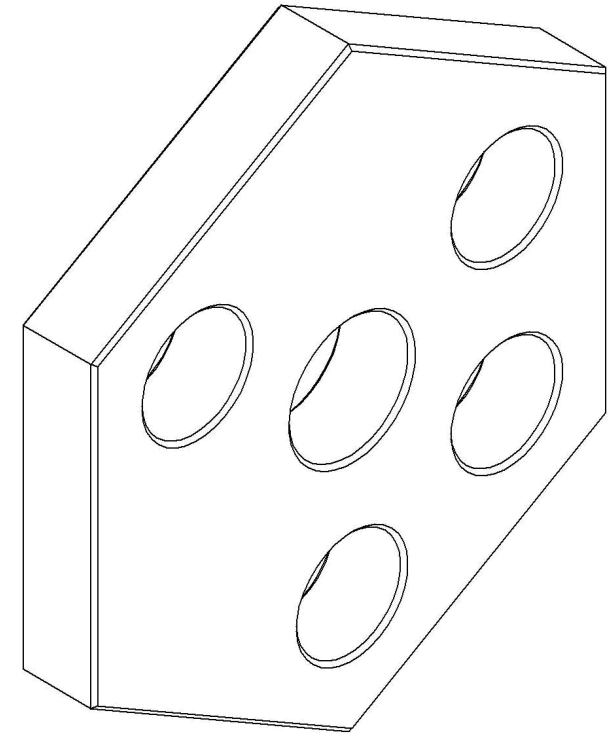
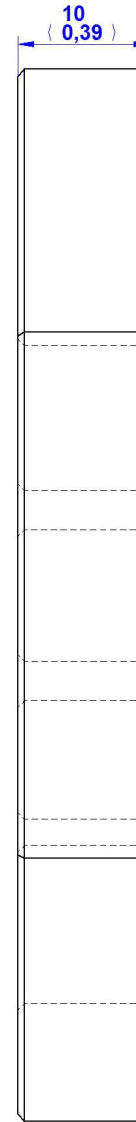
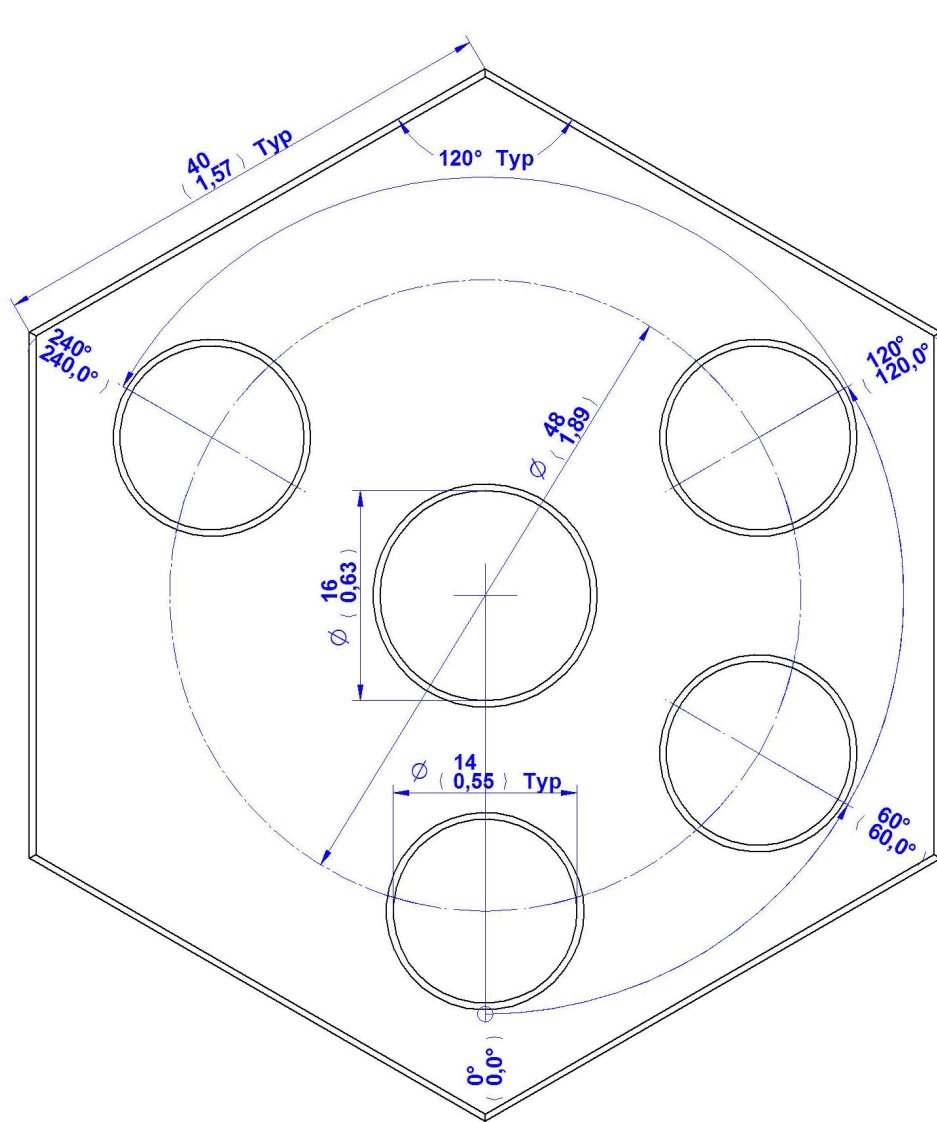
# 1. Hexagon 1

Chamfer = 0,5mm (0,02in)/45°



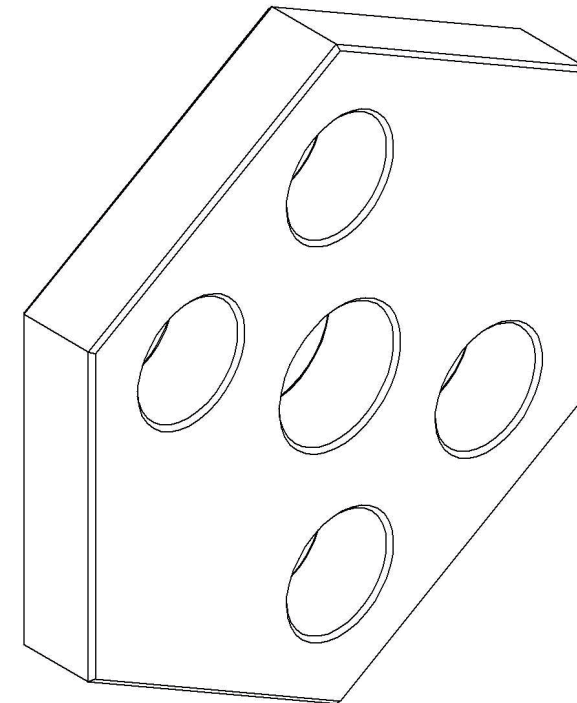
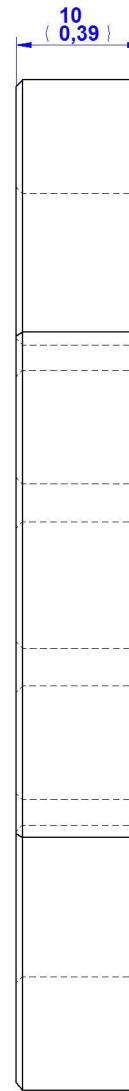
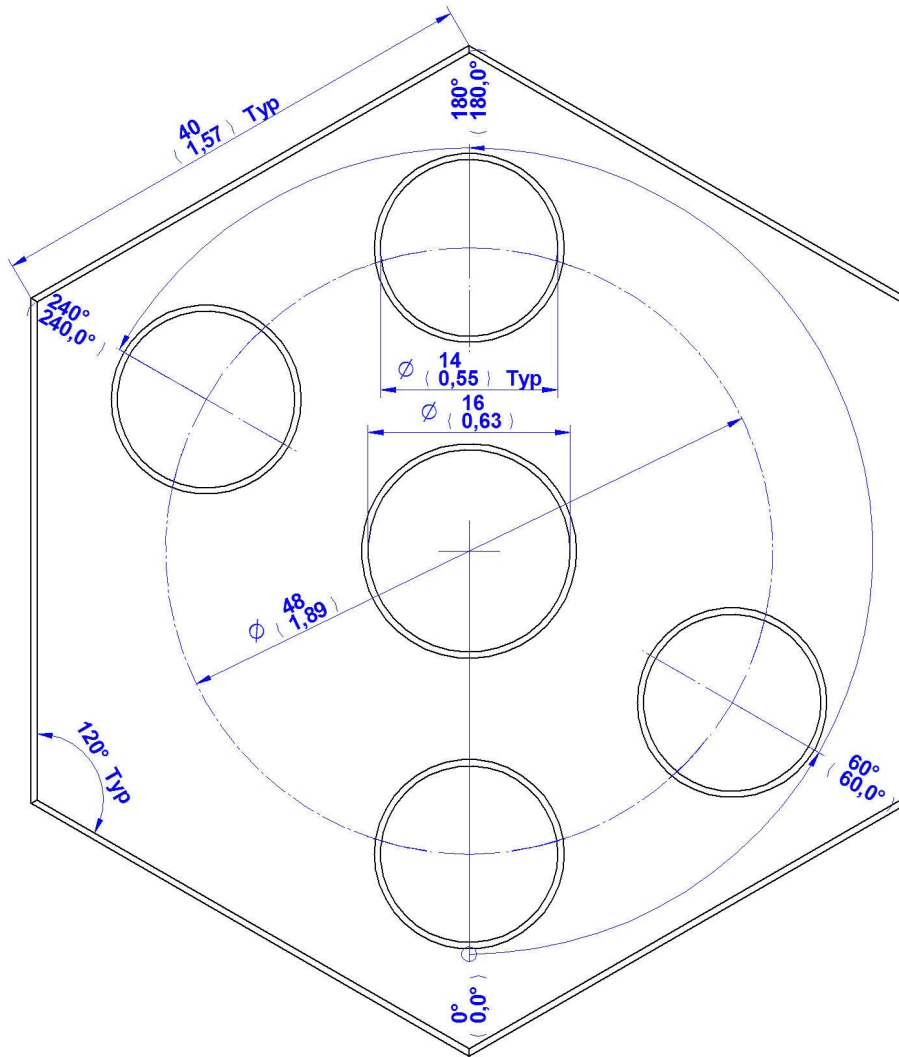
## 2. Hexagon 2

Chamfer = 0,5mm (0,02in)/45°



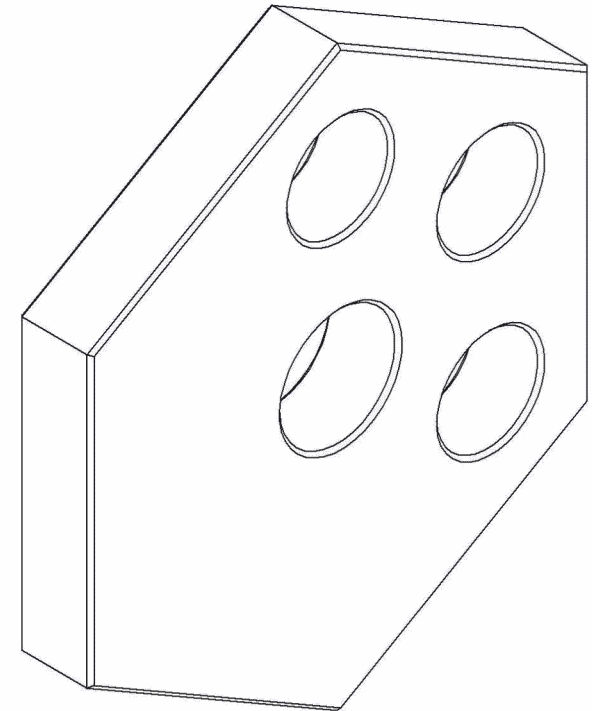
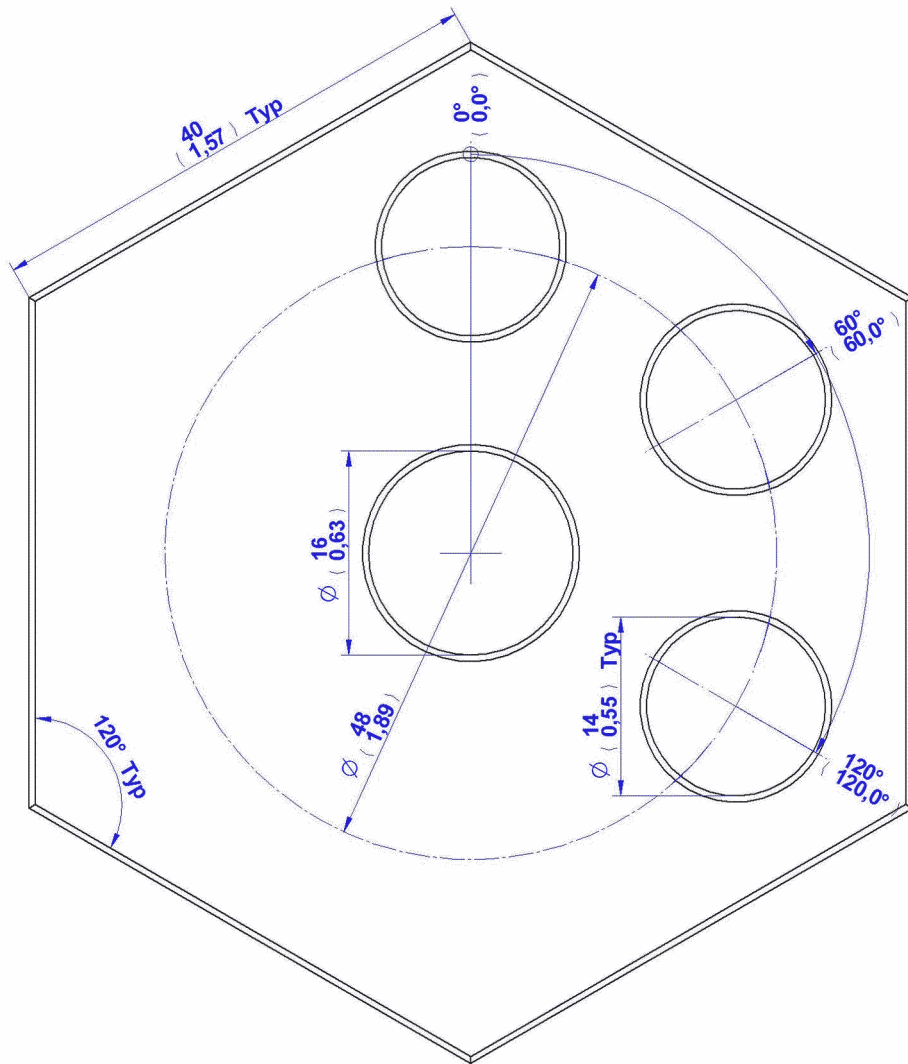
### 3. Hexagon 3

Chamfer = 0,5mm (0,02in)/45°



## 4. Hexagon 4

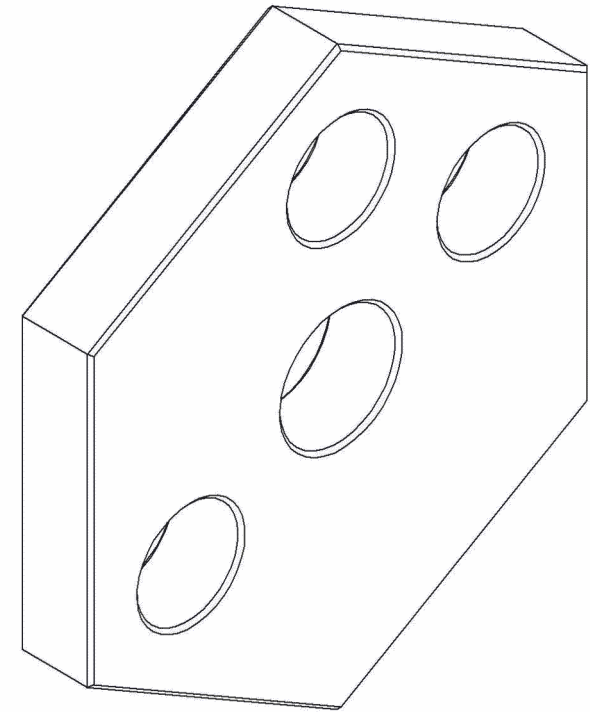
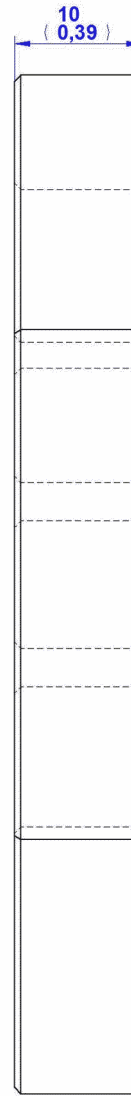
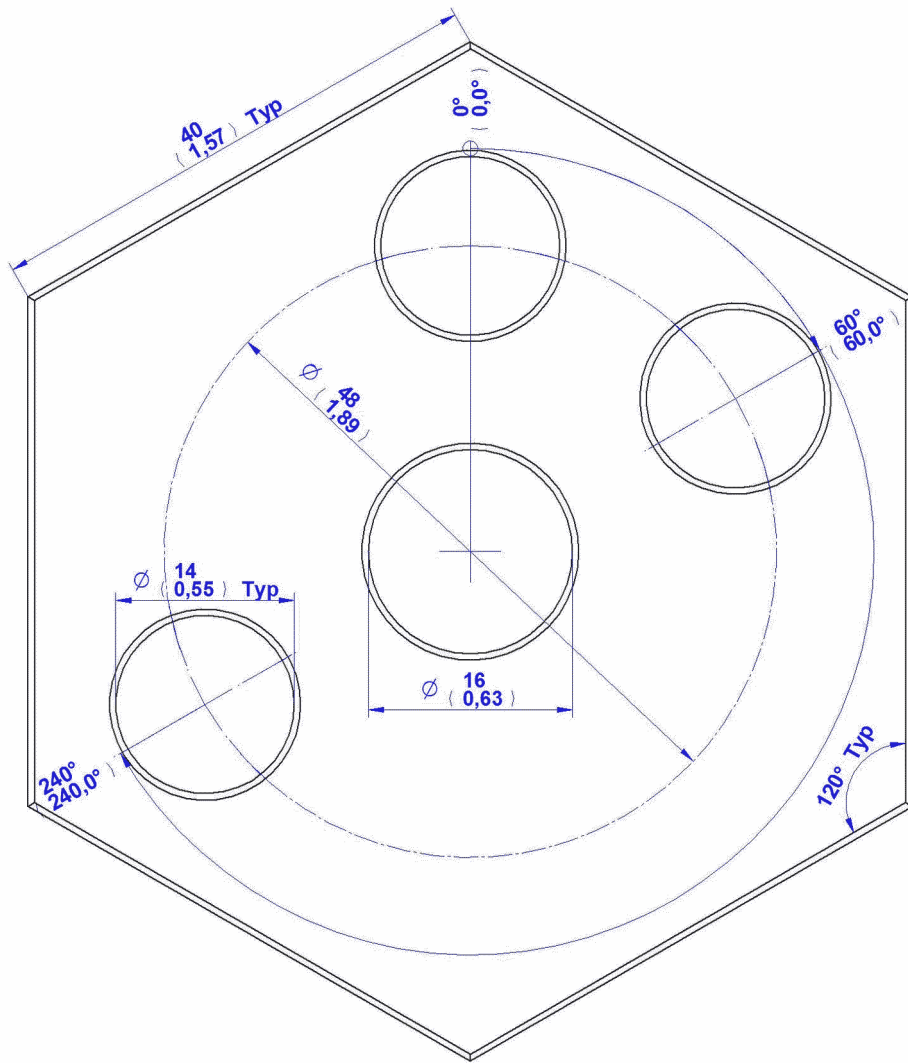
Chamfer = 0,5mm (0,02in)/45°



## 5. Hexagon 5

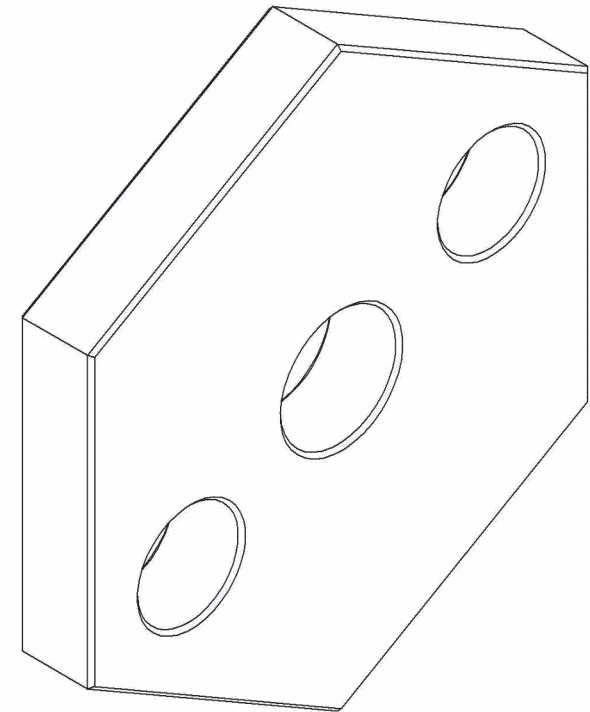
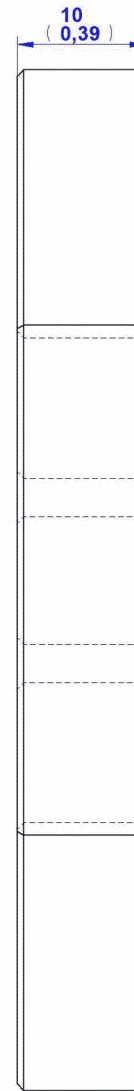
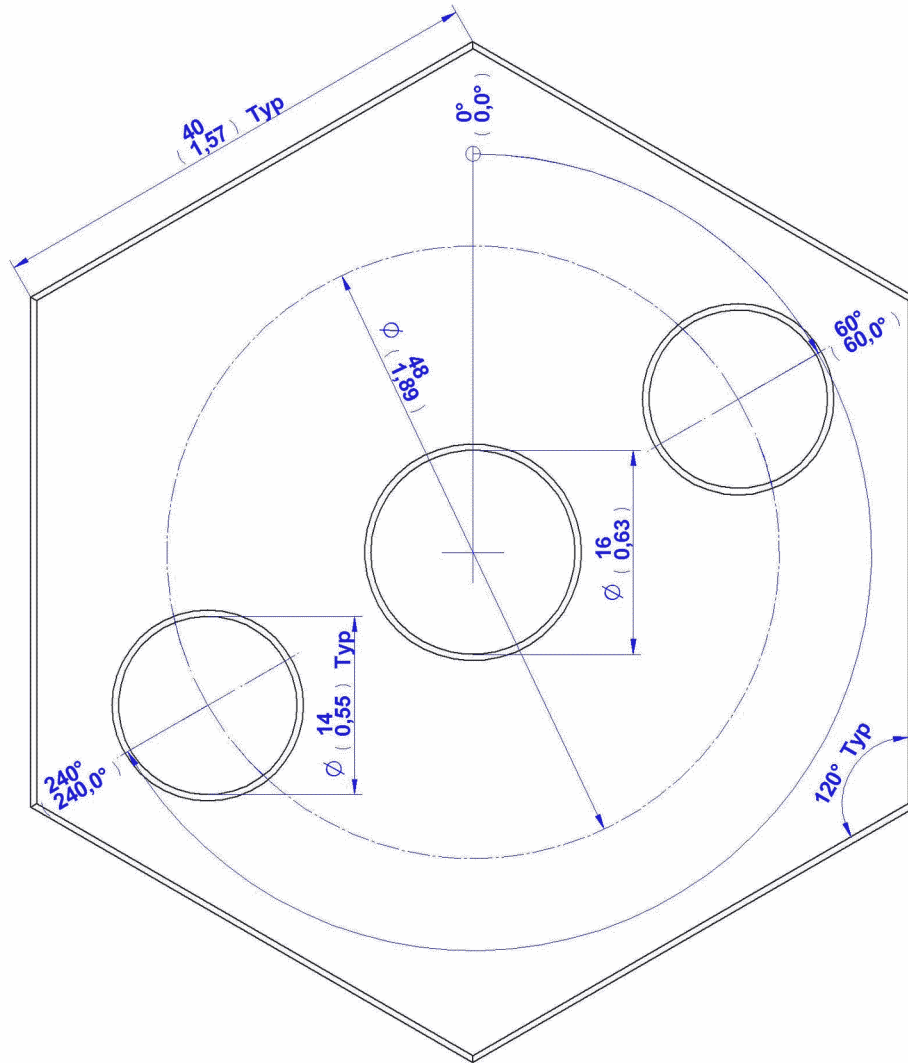
Chamfer = 0,5mm (0,02in)/45°





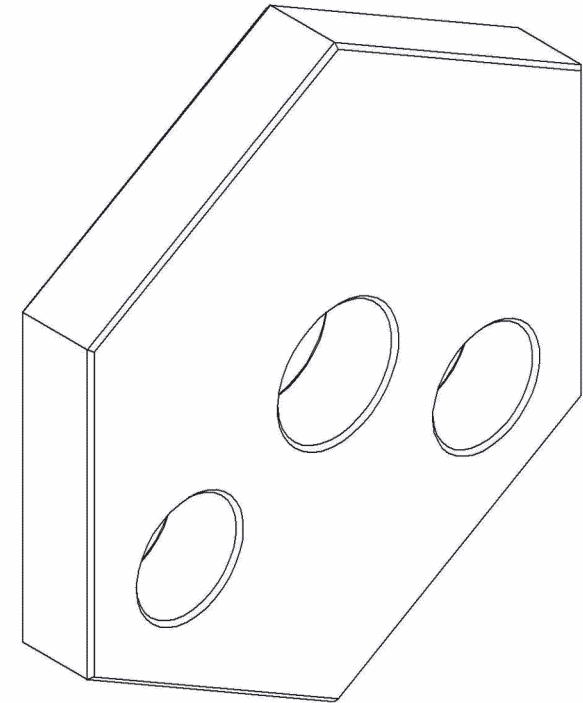
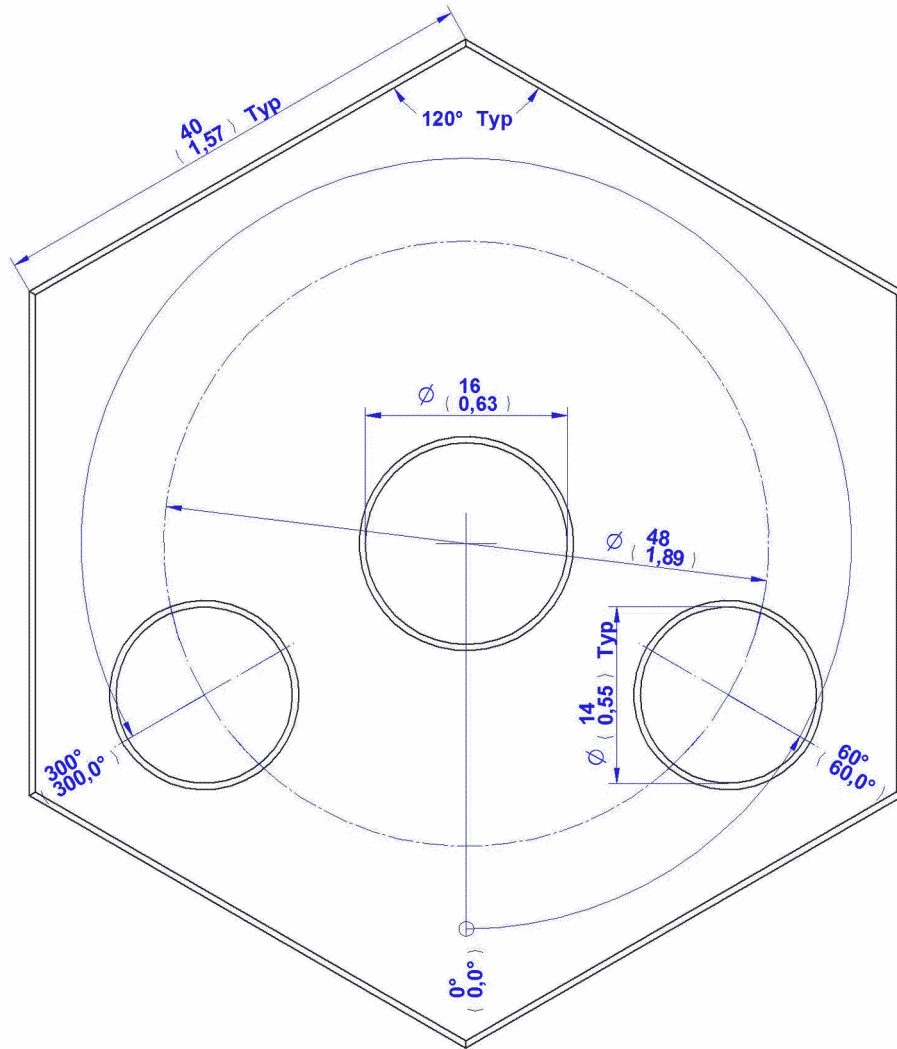
## 6. Hexagon 6

Chamfer = 0,5mm (0,02in)/45°



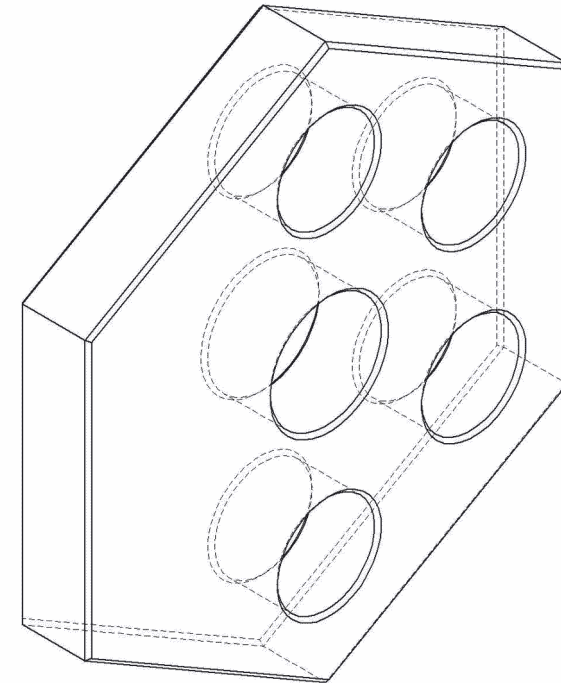
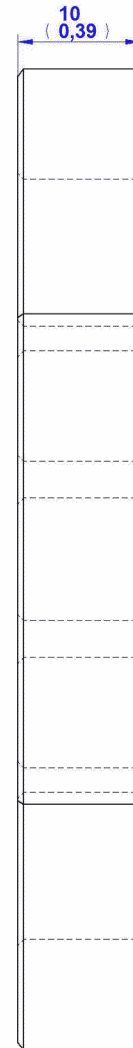
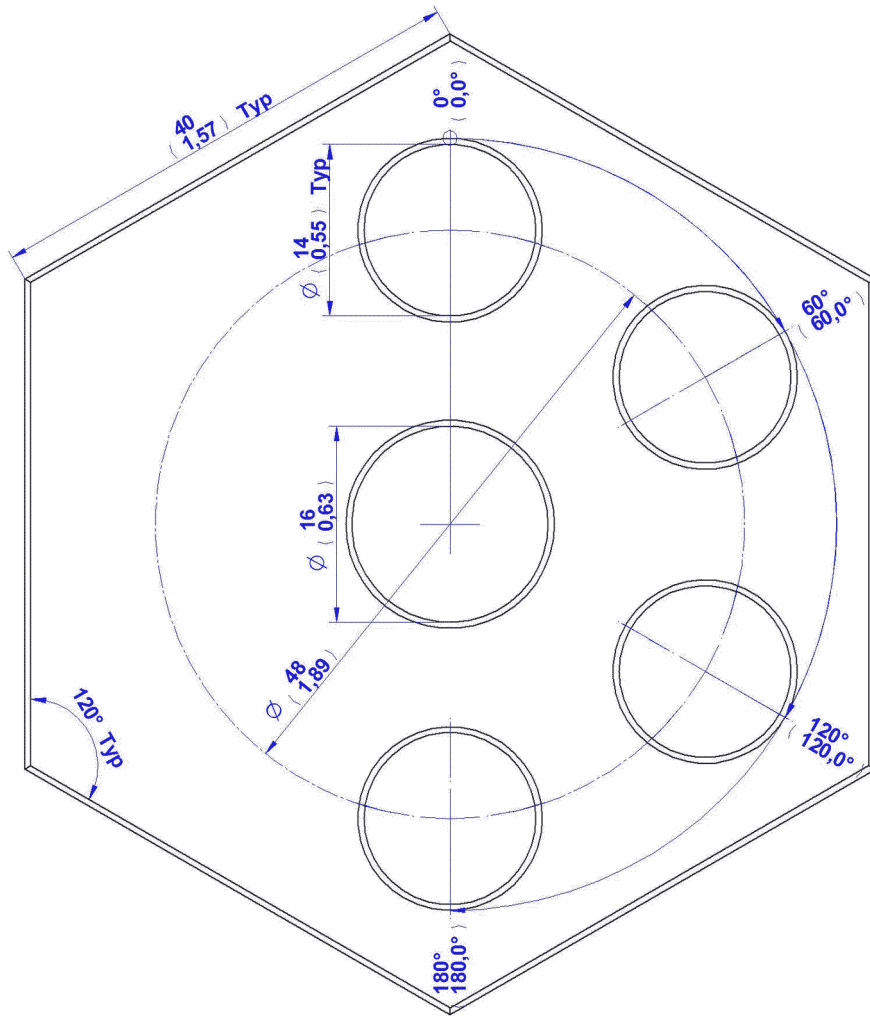
## 7. Hexagon 7

Chamfer = 0,5mm (0,02in)/45°



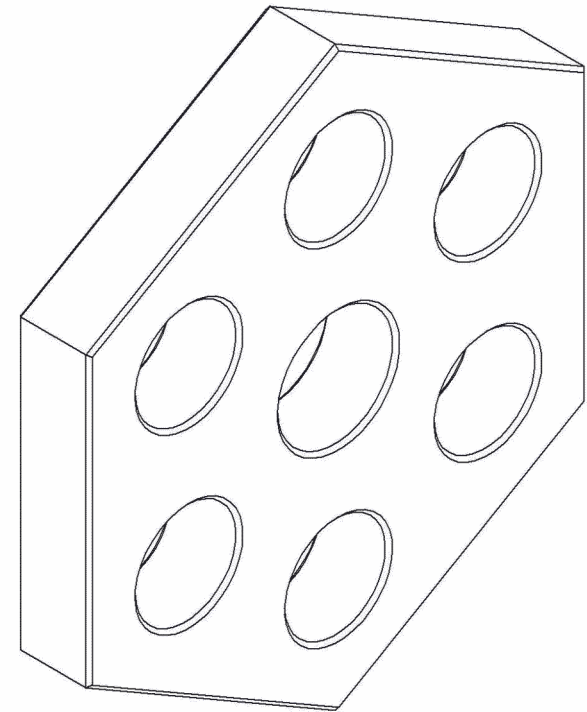
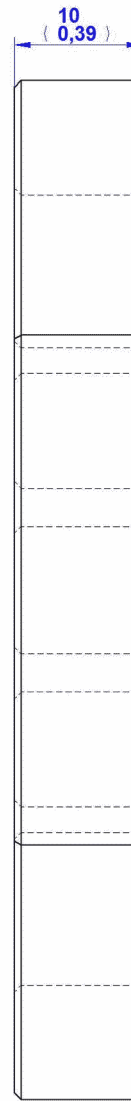
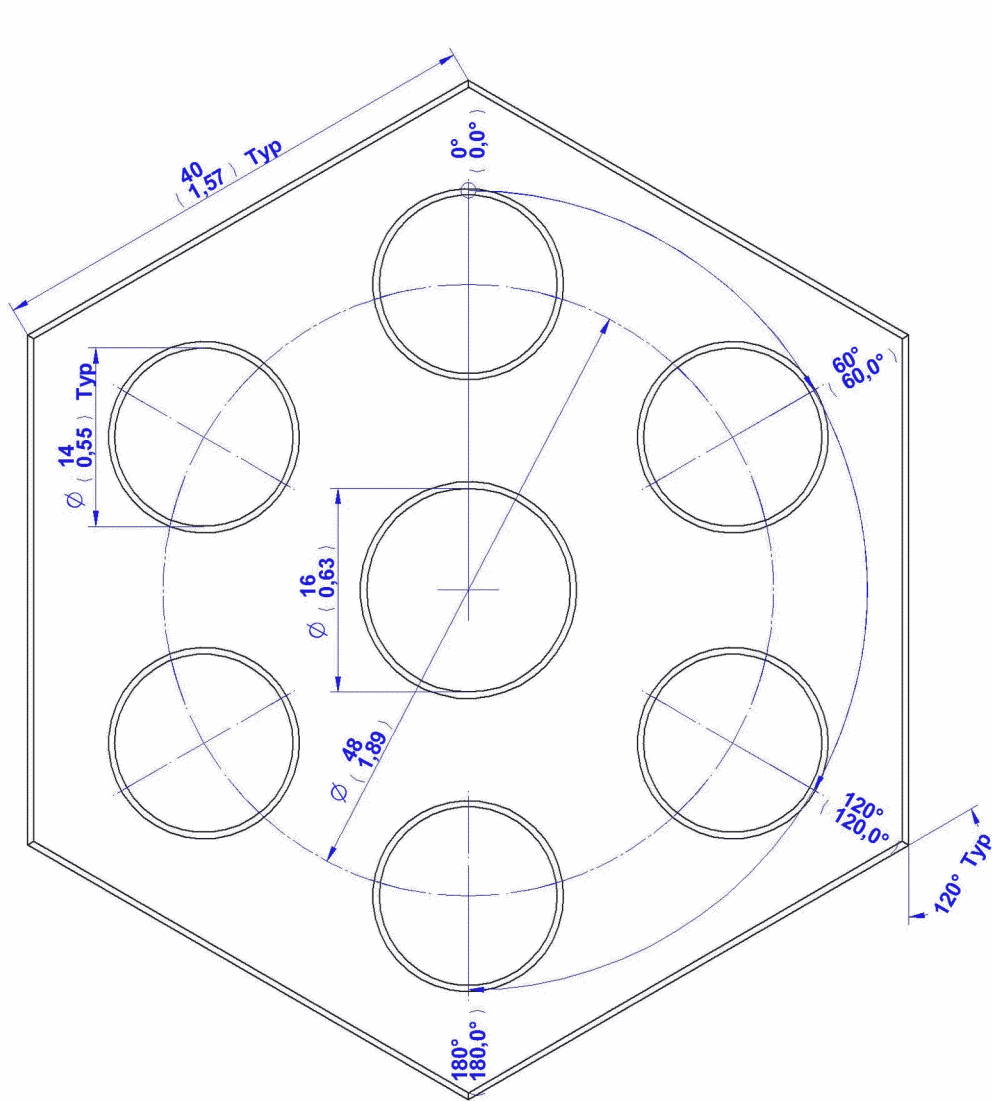
## 8. Hexagon 8

Chamfer = 0,5mm (0,02in)/45°



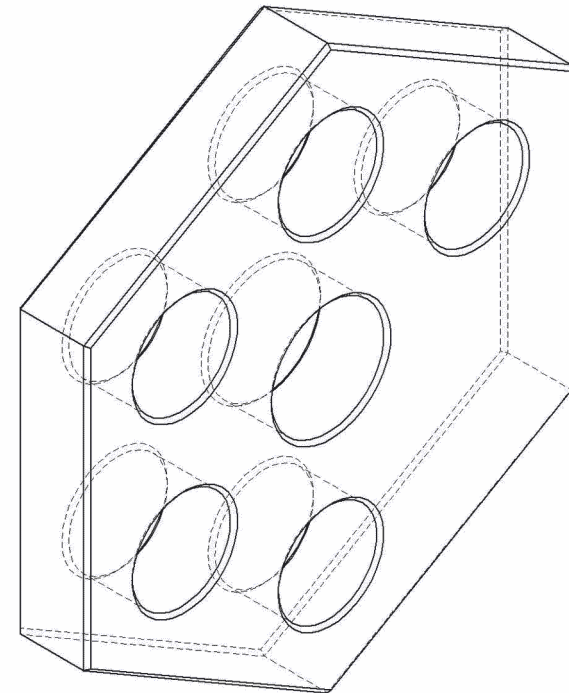
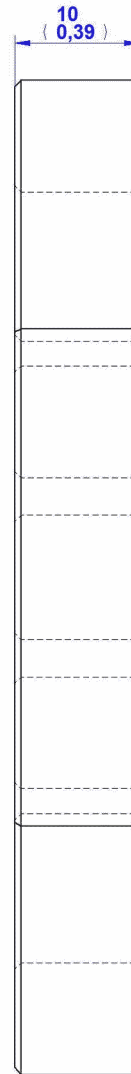
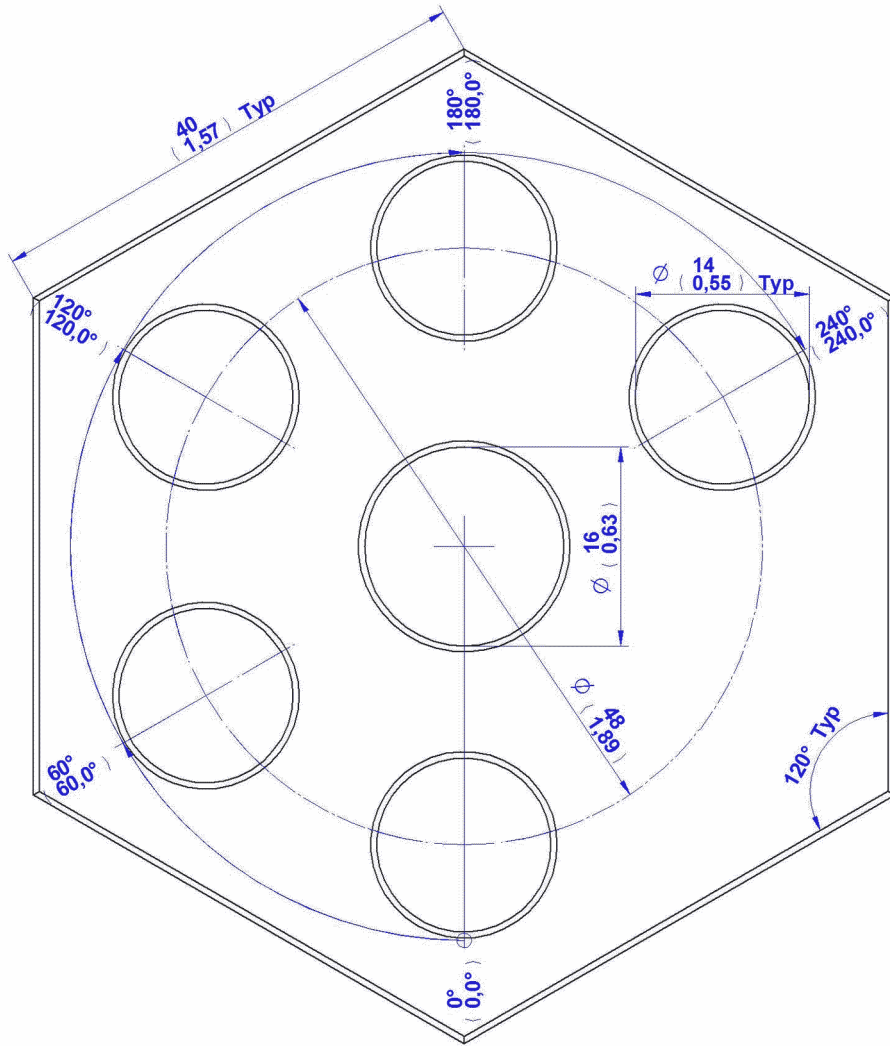
## 9. Hexagon 9

Chamfer = 0,5mm (0,02in)/45°



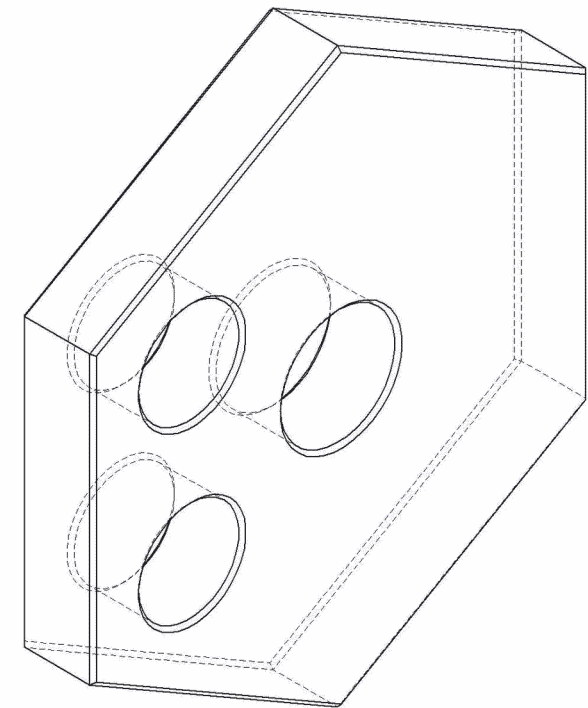
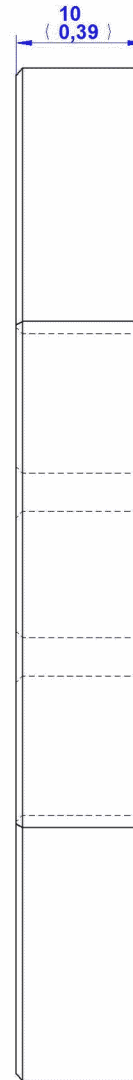
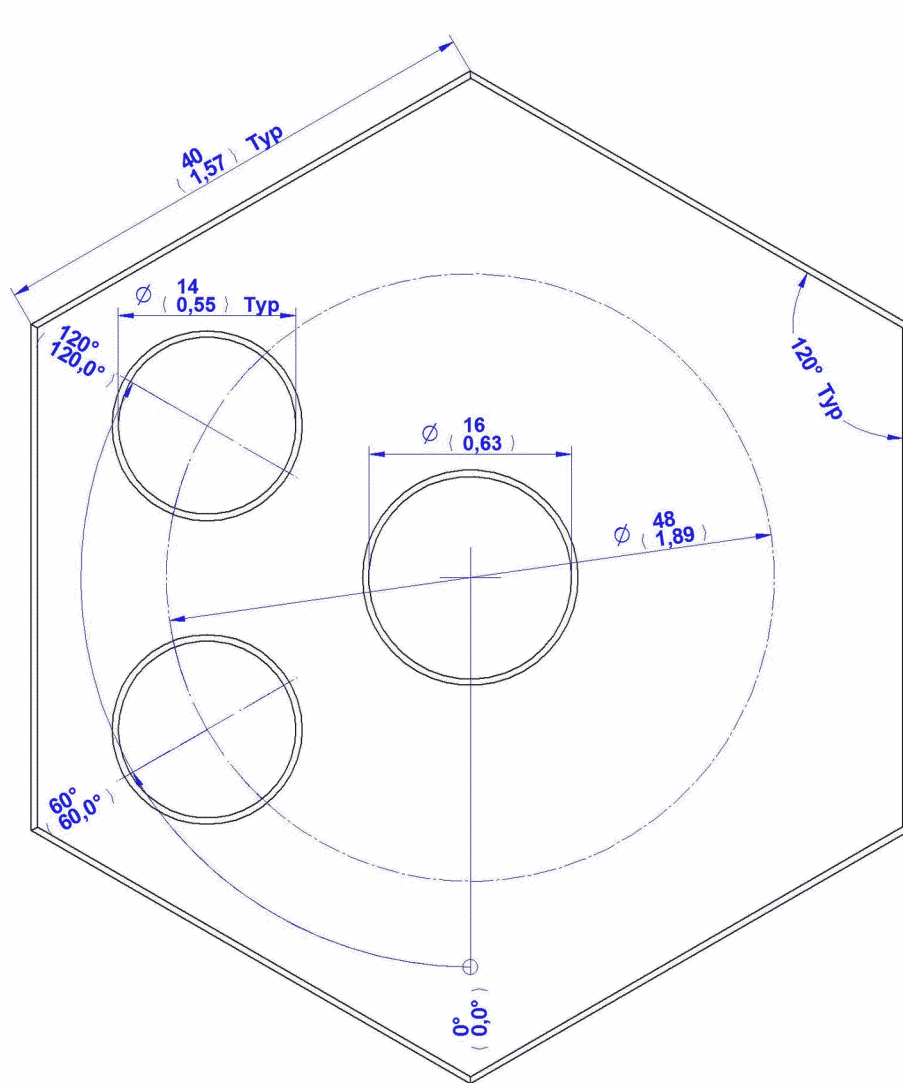
## 10. Hexagon 10

Chamfer = 0,5mm (0,02in)/45°



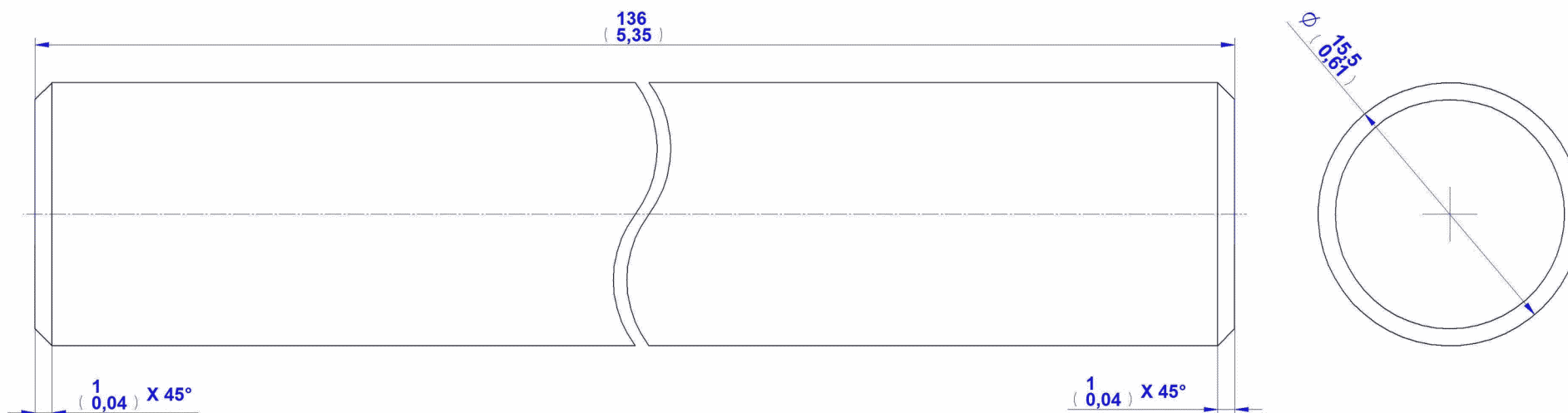
## 11. Hexagon 11

Chamfer = 0,5mm (0,02in)/45°



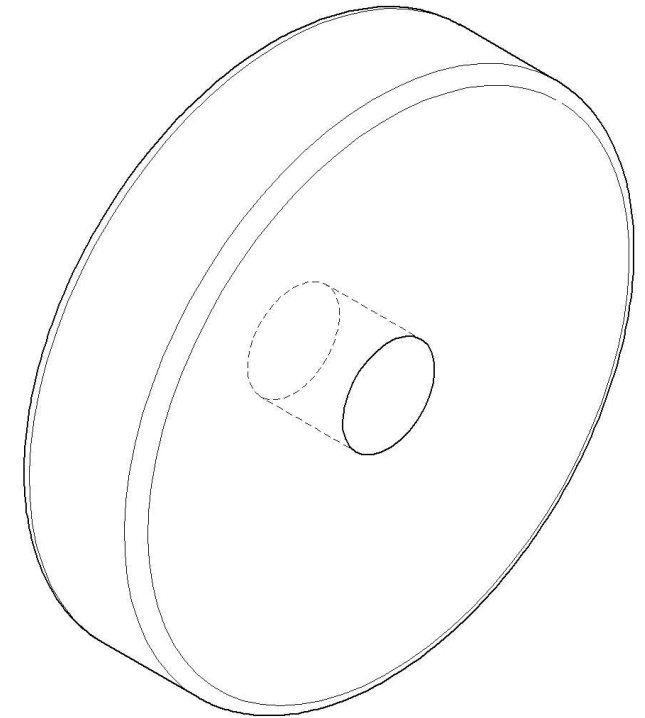
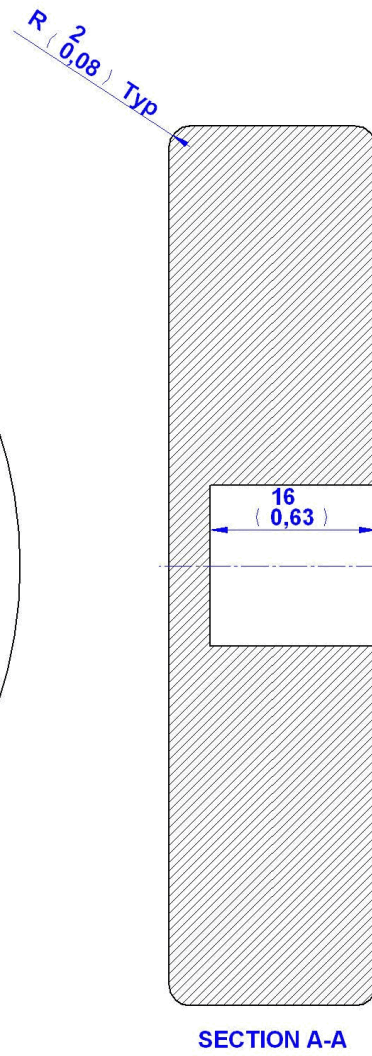
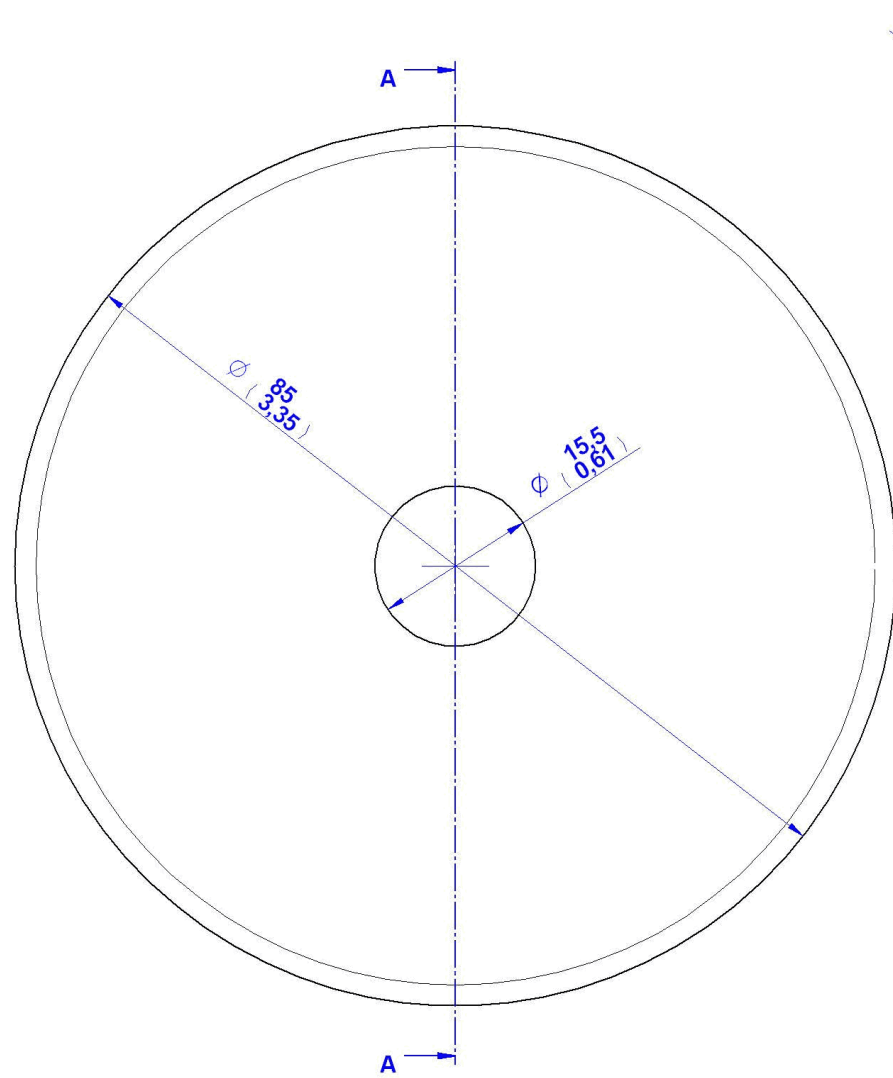
## 12. Hexagon 12

Chamfer = 0,5mm (0,02in)/45°

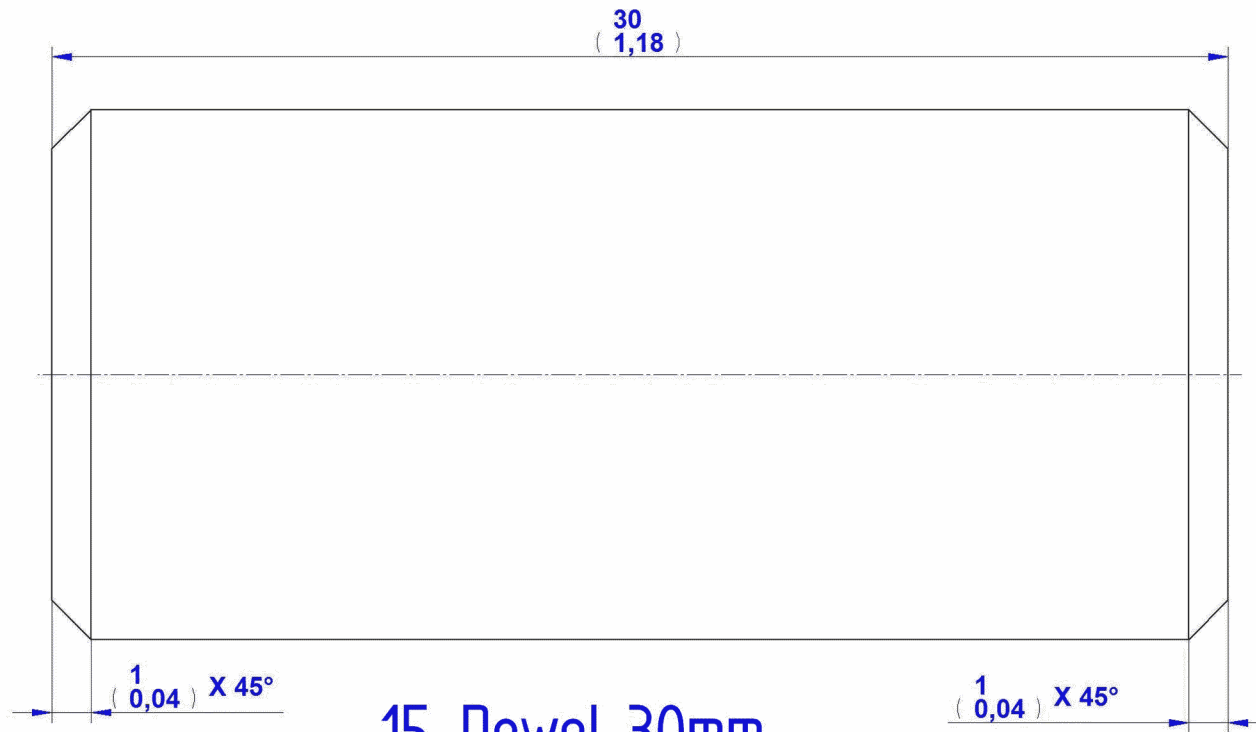


13. Mast

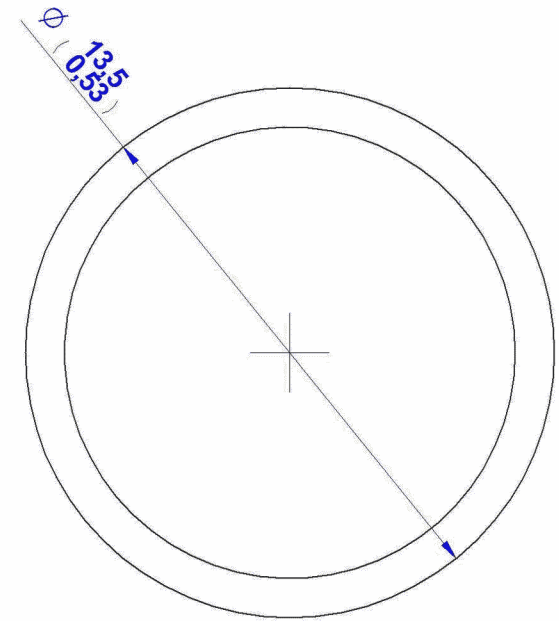


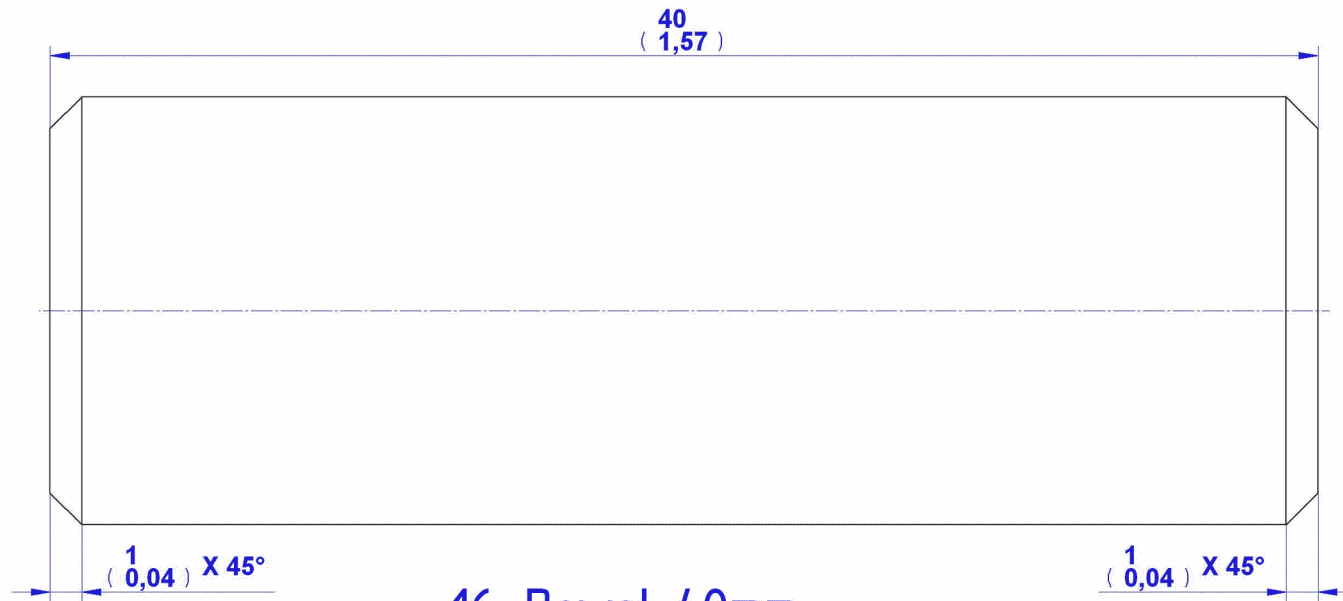


14. Bottom

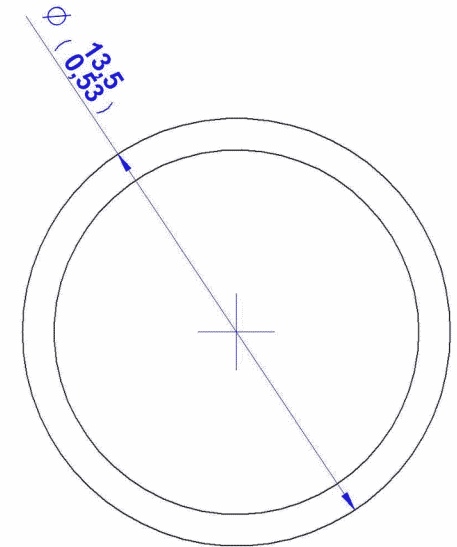


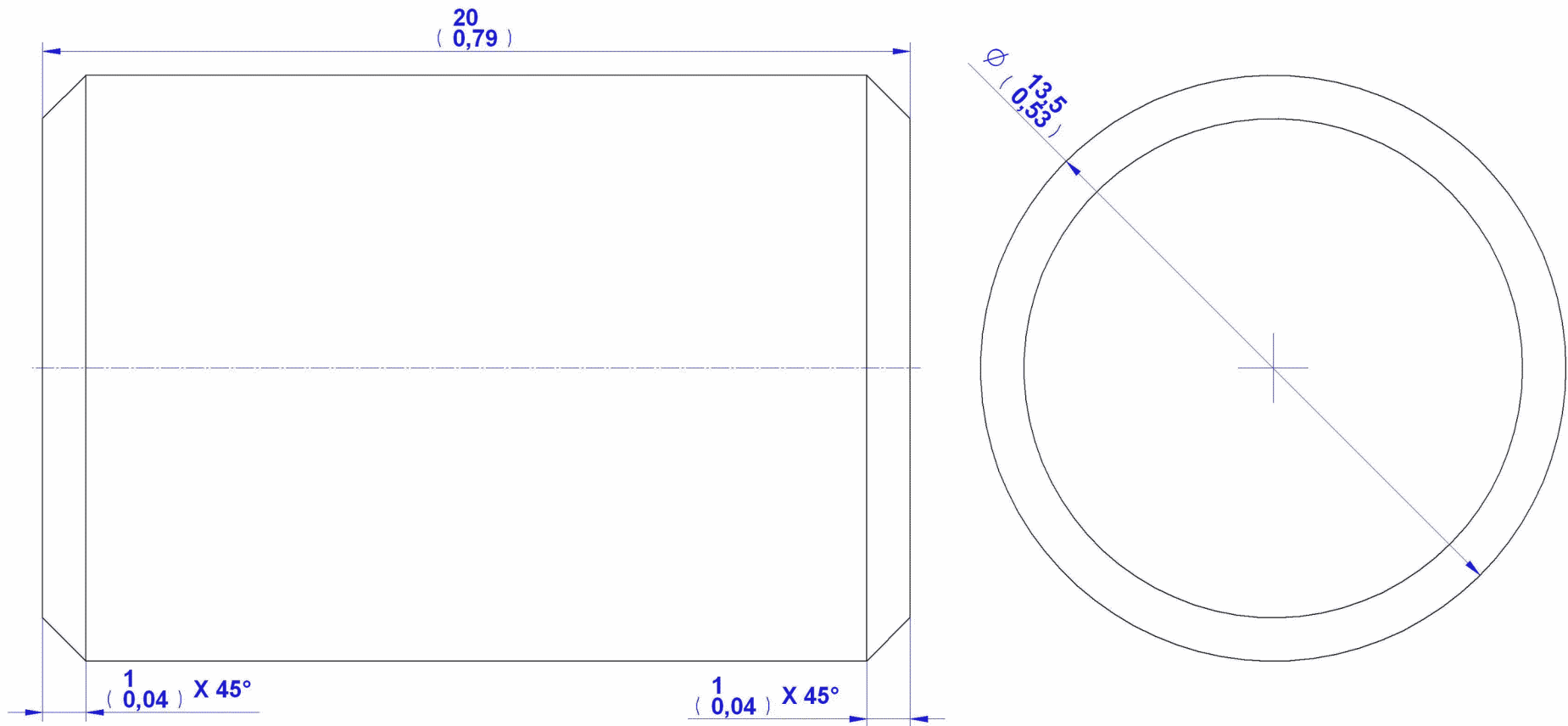
15. Dowel 30mm





16. Dowel 40mm



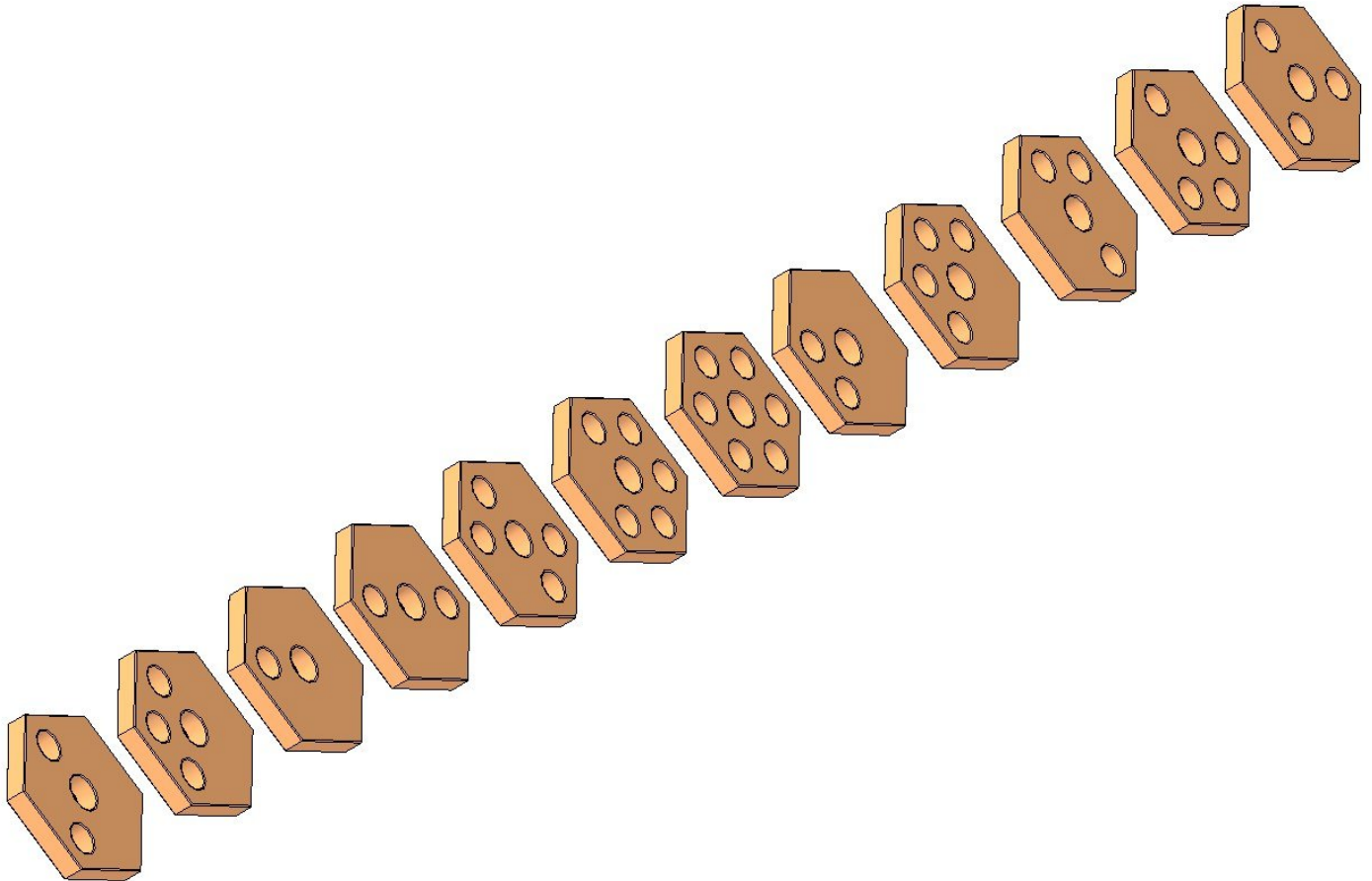


17. Dowel 20mm

## Assemblage images

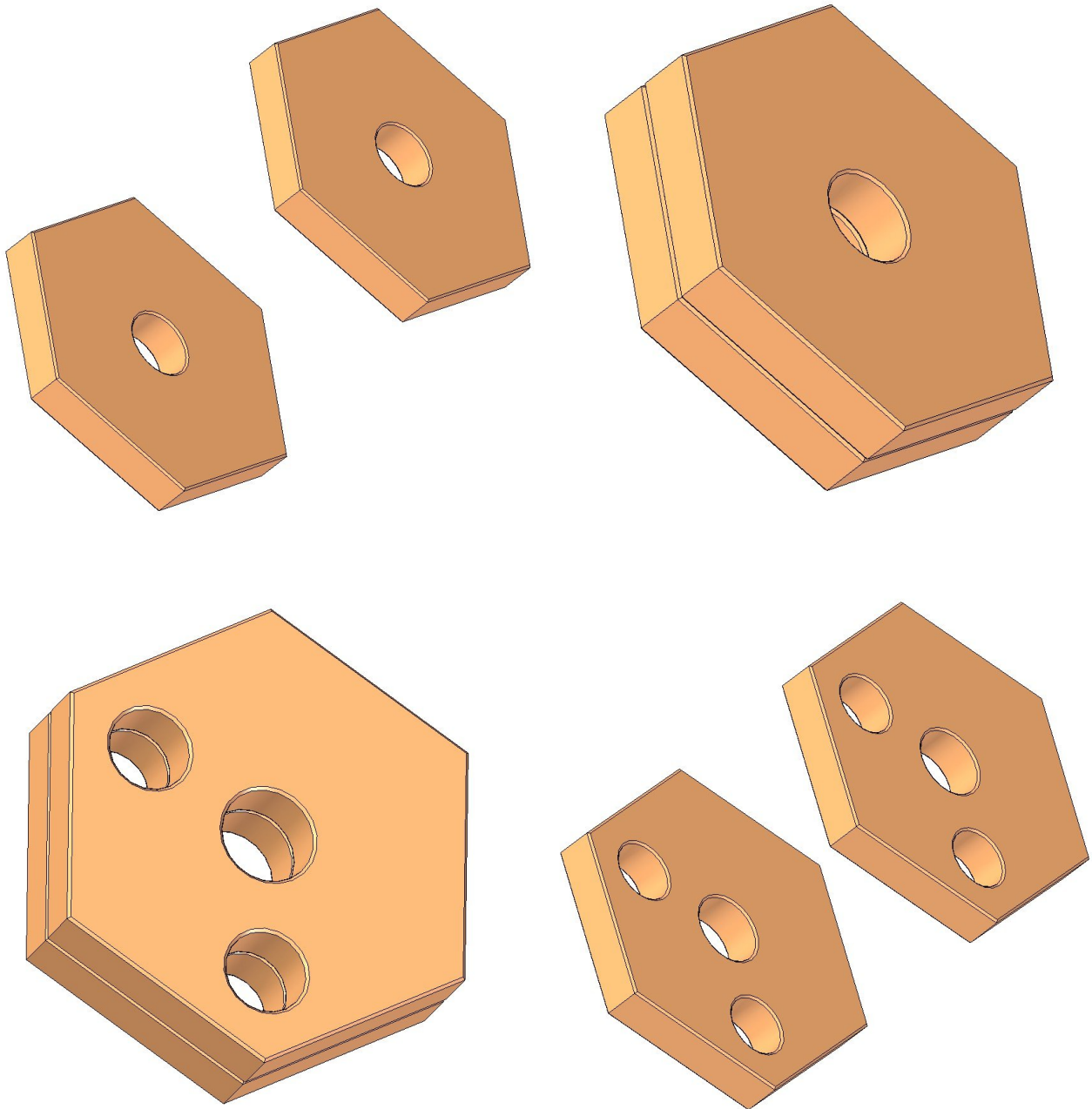
Making this puzzle is not difficult, but you have to drill the holes very precisely.

### SOLUTION

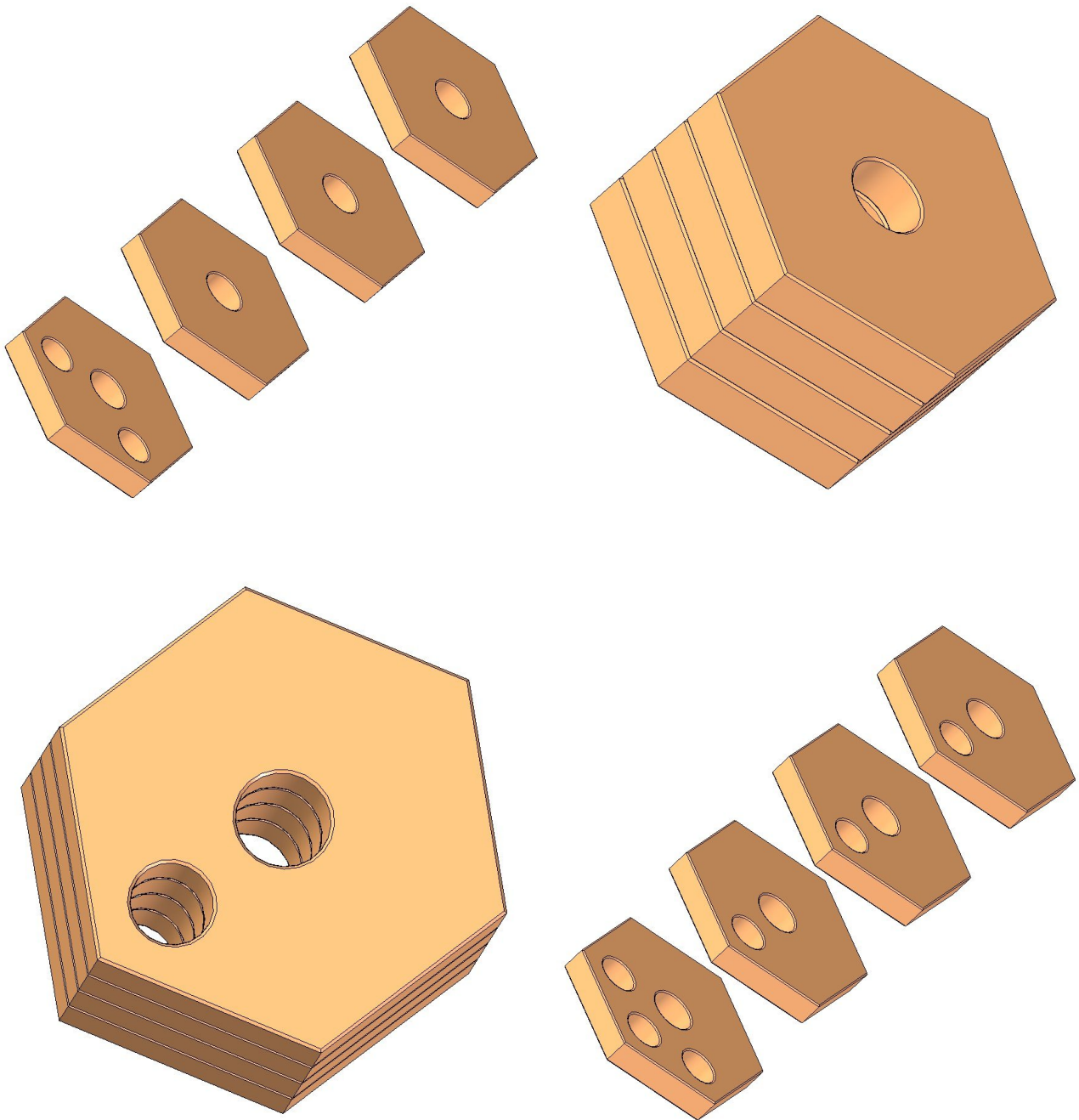


The easiest way to drill the holes is:

- Look at the picture with the puzzle solutions (above), take the first two Hexagon Discs and put them in the vise. Drill the first two holes through both 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 next three. Fasten it again in the vise, look at the picture with the puzzle solution and drill the hole going through all of these four 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.

