As an example for the three dimensional solid geometry, the sketch shown in figure (1) will be created.

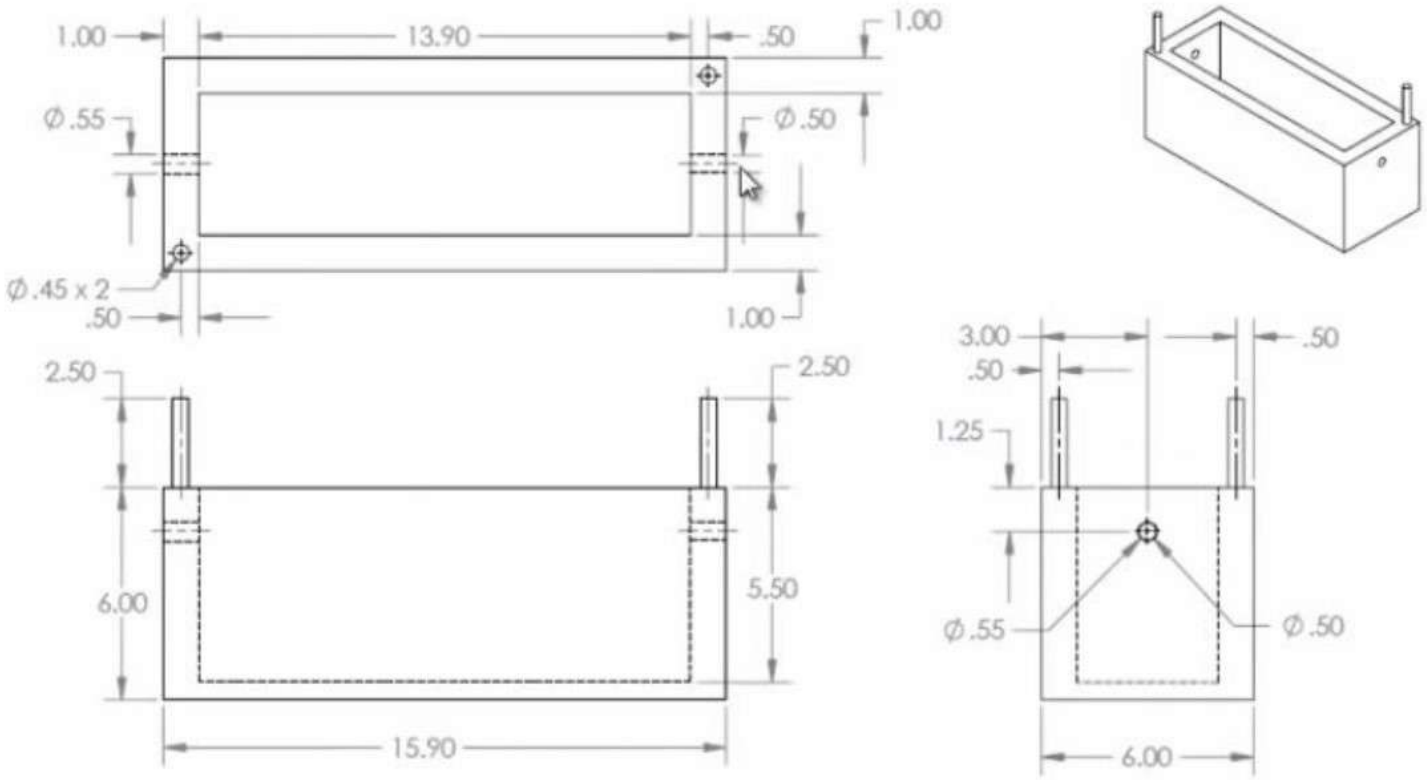

Figure (1) the units are IPS

- ⇨ Select the front plane
- ⇨ Select rectangular from the Sketch toolbar and create (6×15.9 in) rectangular
- ⇨ Select Extrude from the Features toolbar and extrude the rectangle by (6 in), figure (2)

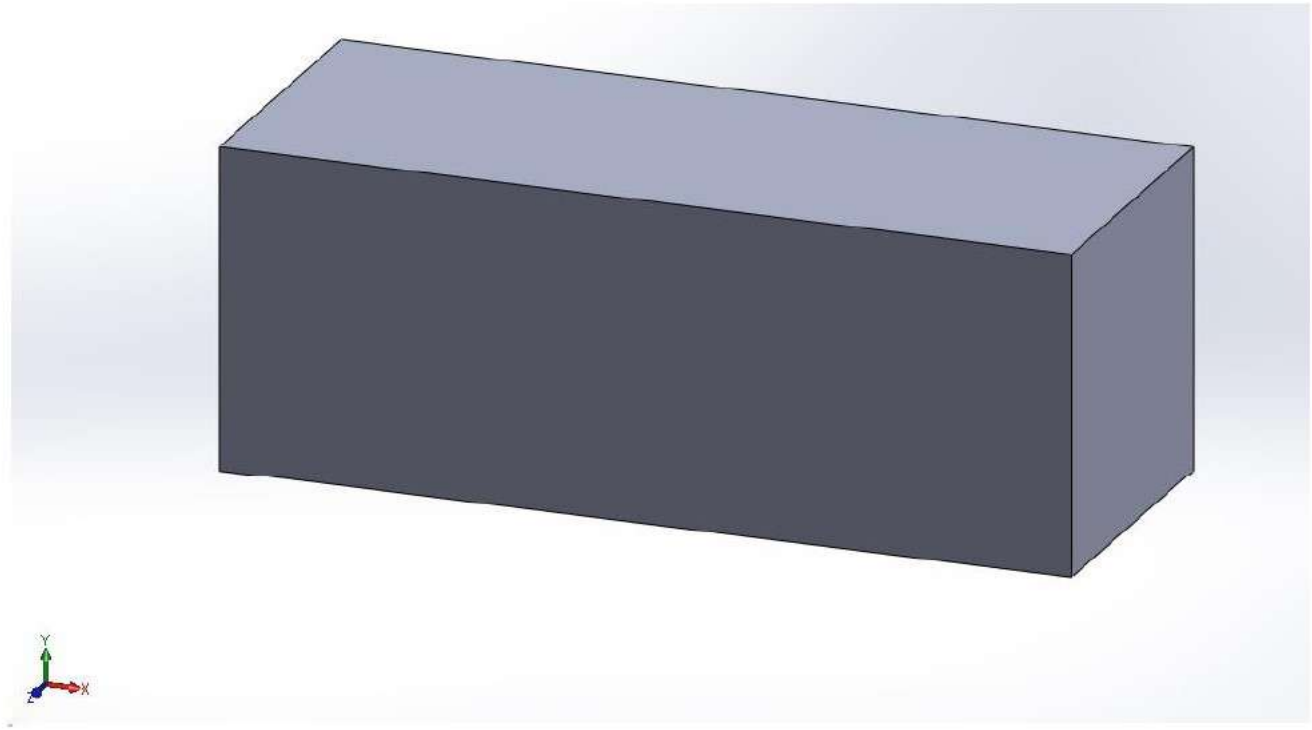

Figure (2)

⇨ Select the top surface of the rectangular geometry then select sketch as shown in figure (3)

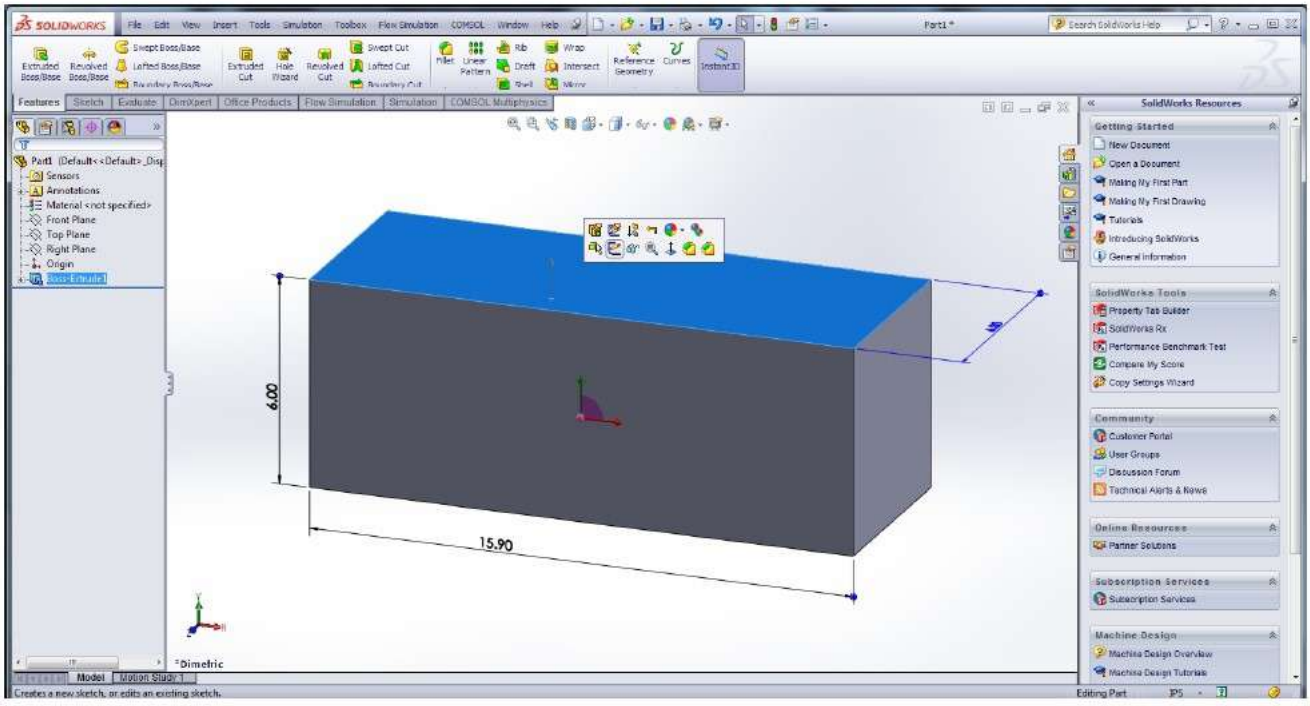

Figure (3)

⇨ Sketch a (4×13.9 in) rectangular on the center of the top surface
⇨ Select Extrude Cut from features toolbar to cut the rectangular sketch you just created (5.5 in)
⇨ The result should be as figure (4)

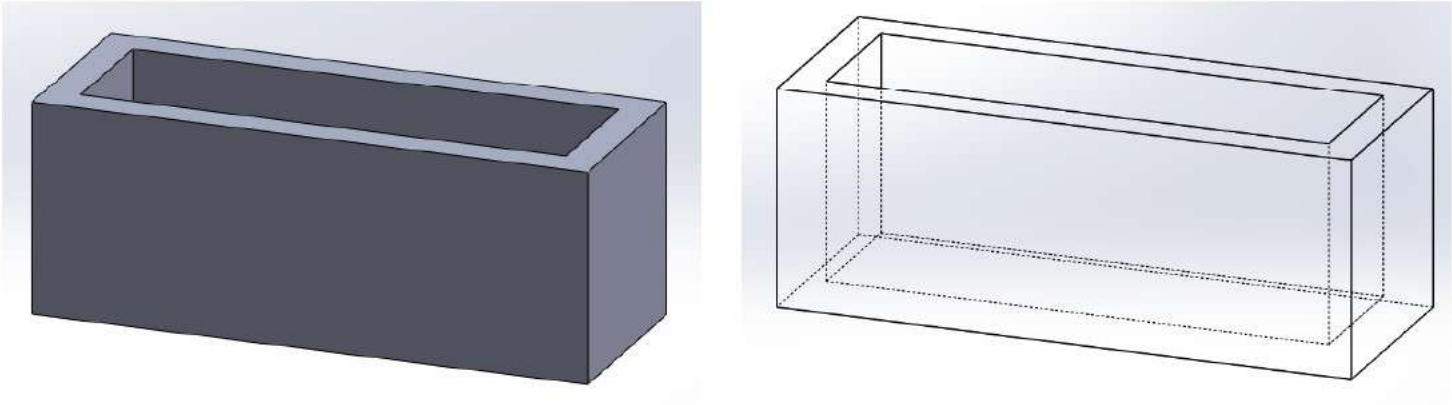

Figure (4)

- ⇨ Select the left edge of the top surface and select sketch
- ⇨ Create the two circles as shown in figure (5)
- ⇨ Select extrude and set the dimension as (2.5 in)
- ⇨ The result should be as figure (6)

Figure (5)

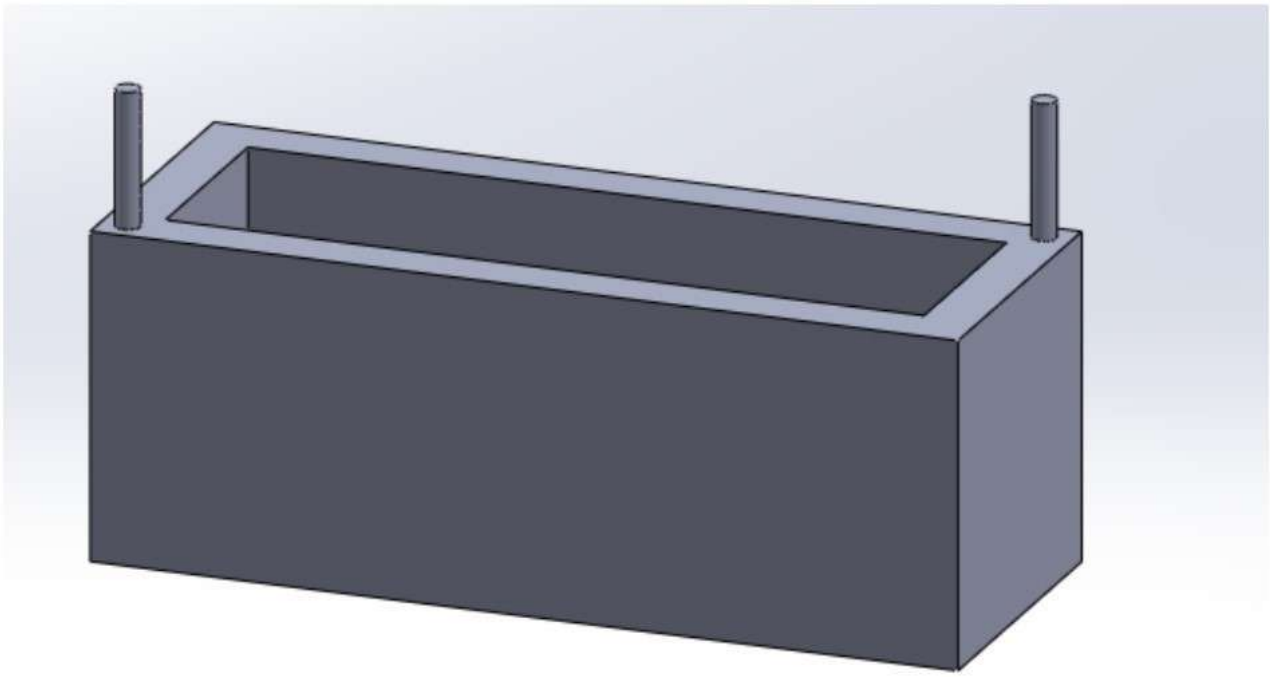

Figure (6)

- ⇨ Select the right surface then select sketch
- ⇨ Sketch the circle as shown in figure (7)
- ⇨ Select extrude cut and set the dimension as (1 in)
- ⇨ Select the left surface then select sketch
- ⇨ Sketch the circle as shown in figure (8)
- ⇨ Select extrude cut and set the dimension as (1 in)
- ⇨ The result should be as figure (9)

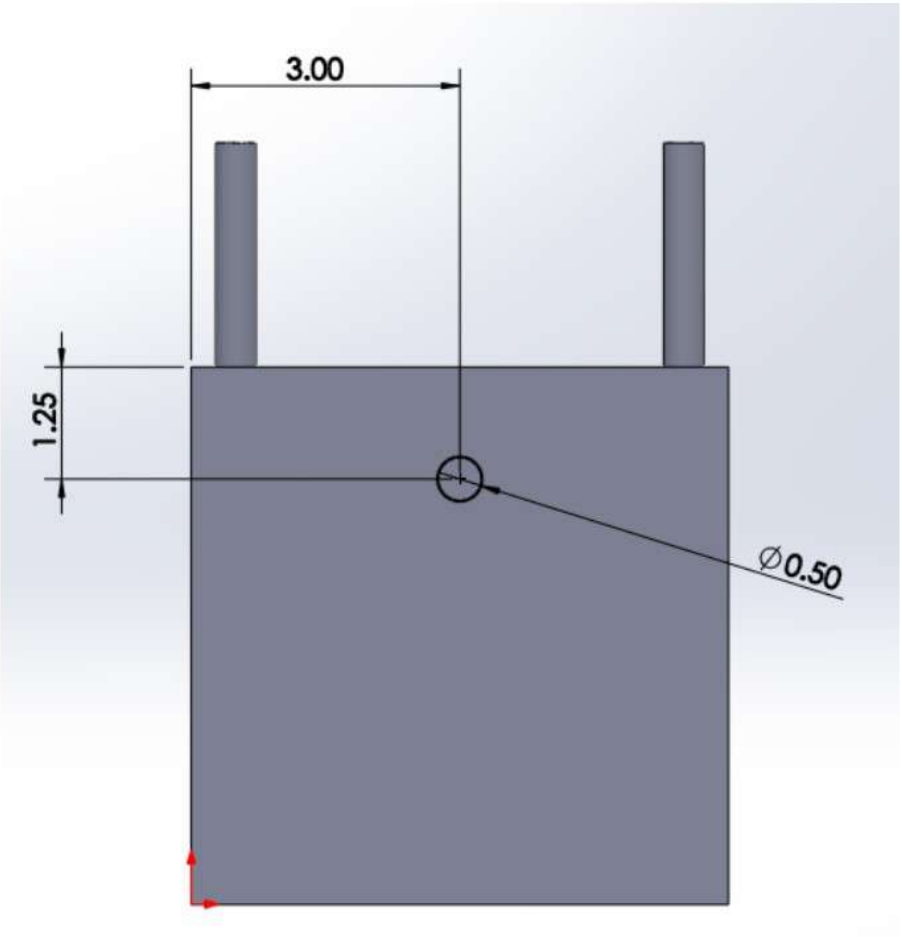

Figure (7)

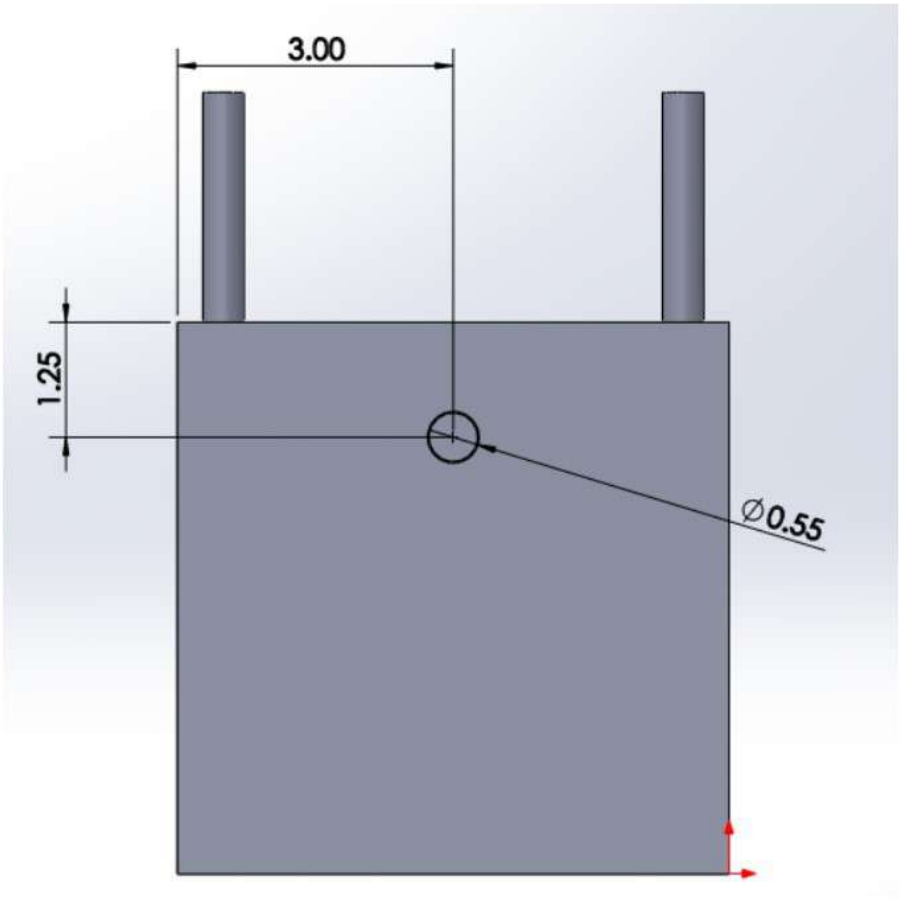

Figure (8)

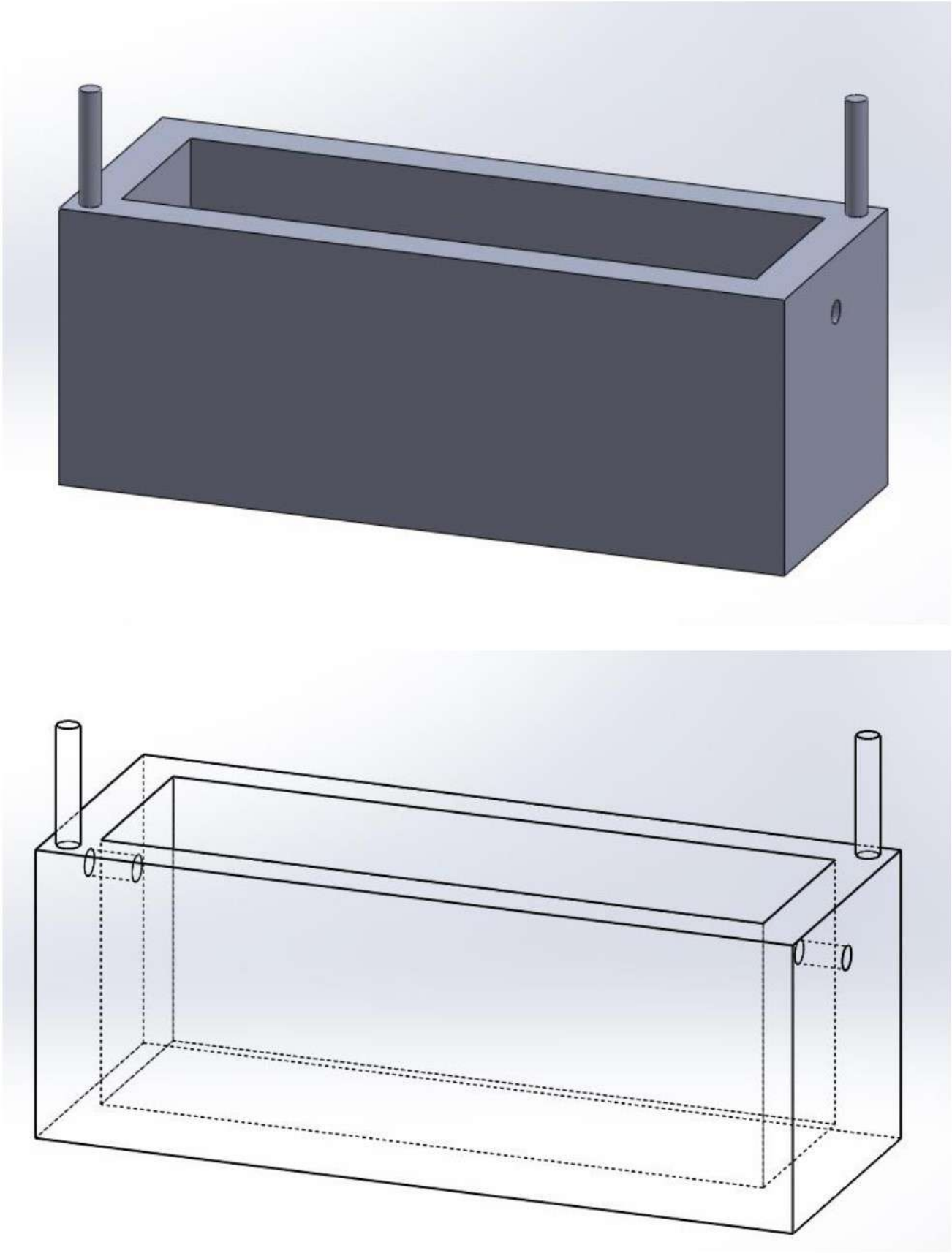

Figure (9)