

Bone Density Model

>>> Instruction <<<

1. Product Introduction and Structure

The mold body is a cylindrical shape with a diameter of 80 mm and a height of 60 mm. I, II, III, and IV represent small cylindrical bodies with diameters of 20 mm and lengths of 40 mm, each having different densities. Among them, the centers of I and III are on the same straight line, and the centers of II and IV are also on the same straight line, and these two lines are perpendicular to each other.

The centers of I, II, III, and IV cylindrical bodies are on a circle with a diameter of 40 mm. The basic material of the mold body is soft tissue and similar materials (polyurethane resin), with a purity of over 99%. The materials in regions I, II, III, and IV are hydroxyapatite (HA), and the corresponding bone densities are 50 mg/cm^3 , 100 mg/cm^3 , 200 mg/cm^3 , and 300 mg/cm^3 , as shown in Figure A.1.

Unit: millimeters

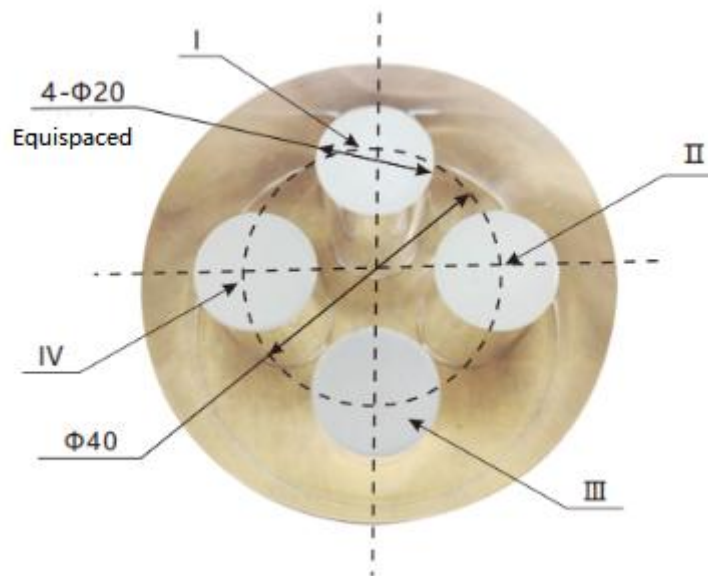
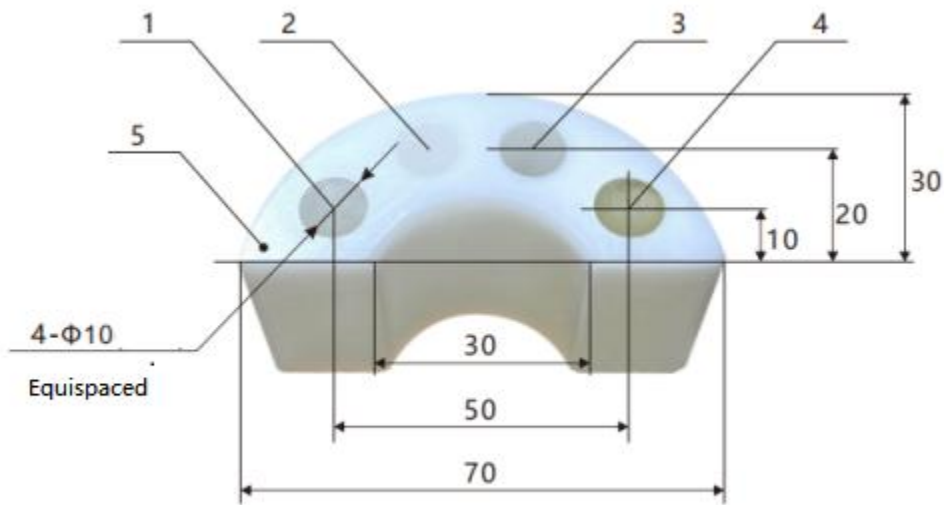


Figure A.1 The tangent plane of the model

Small cylinder	I	II	III	IV
Diameter(mm)	20	20	20	20
Length(mm)	40	40	40	40
Density	50 mg/cm^3	100 mg/cm^3	200 mg/cm^3	300 mg/cm^3

Unit: millimeters



Description:

- Module 1 – Solid water containing $K_2 HPO_4$ at a concentration of 0 mg/cm^3 ;
- Module 2 – Solid water containing $K_2 HPO_4$ at a concentration of 50 mg/cm^3 ;
- Module 3 – Solid water containing $K_2 HPO_4$ at a concentration of 100 mg/cm^3 ;
- Module 4 – Solid water containing $K_2 HPO_4$ at a concentration of 200 mg/cm^3 ;
- Module 5 – Sponge used to fix the phantom.