



$$1: (z - D)^2 + y^2 - R_1^2 \leq 0$$

$$2: \cos(\theta) y + \sin(\theta) z - \sin(\theta) D \leq 0$$

$$3: -\cos(\theta) y + \sin(\theta) z - \sin(\theta) D \leq 0$$

$$4: z - (D - R_2 \cos(\theta)) \leq 0$$

$$5: x - \frac{w}{2} \leq 0$$

$$6: -x - \frac{w}{2} \leq 0$$

$$D = \left( \frac{R_1^3 - R_2^3}{R_1^2 - R_2^2} \right) \frac{2\sin(\theta)}{3\theta}$$