

4-4. A thin plate with a hole at its center is hanging at point O . The density of the material is $\rho = 50 \text{ kg/m}^3$ and the thickness is $t \sim N(20, 2^2)$ mm. Find the moment of inertia about the axis that passes through O , perpendicular to the page.

Solution: $I_o \sim N(0.65, 0.07^2) \text{ kg} \cdot \text{m}^2$

