

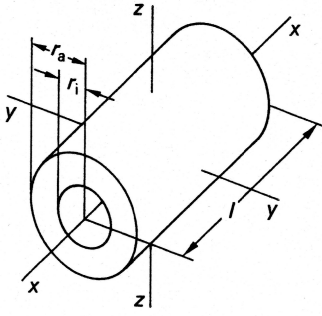
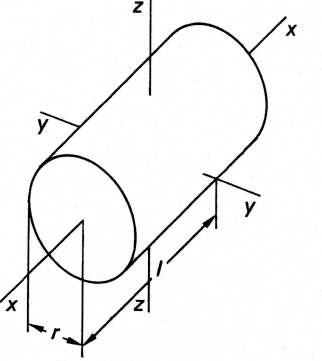
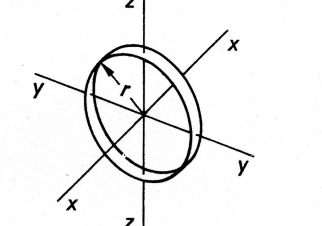
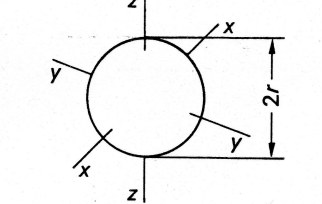
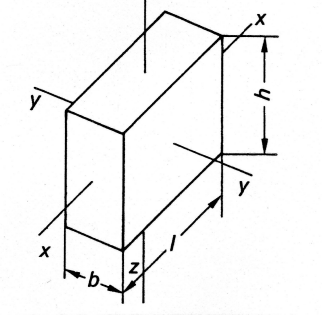
|   |  |  |
|---|--|--|
|    | Hohlzylinder   | $J_x = \frac{1}{2} m (r_a^2 + r_i^2)$<br>$J_y = J_z = \frac{1}{4} m (r_a^2 + r_i^2 + \frac{1}{3} l^2)$         |
|   | dünnwandiger Hohlzylinder  | $J_x = m r^2$<br>$J_y = J_z = \frac{1}{4} m (2 r^2 + \frac{1}{3} l^2)$   |
|    | Vollzylinder   | $J_x = \frac{1}{2} m r^2$<br>$J_y = J_z = \frac{1}{4} m r^2 + \frac{1}{12} m l^2$                              |
|   | dünne Scheibe ( $l \ll r$ )  | $J_x = \frac{1}{2} m r^2$<br>$J_y = J_z = \frac{1}{4} m r^2$   |
|   | dünner Stab ( $l \gg r$ ) unabhängig von der Form des Querschnitts | $J_x = \frac{1}{2} m r^2$<br>$J_y = J_z = \frac{1}{12} m l^2$  |
|   | dünner Ring  | $J_x = m r^2$<br>$J_y = J_z = \frac{1}{2} m r^2$   |
|  | Kugel, massiv  | $J_x = J_y = J_z = \frac{2}{5} m r^2$  |
|   | dünne Kugelschale  | $J_x = J_y = J_z = \frac{2}{3} m r^2$  |
|  | Quader   | $J_x = \frac{1}{12} m (b^2 + h^2)$<br>$J_y = \frac{1}{12} m (l^2 + h^2)$<br>$J_z = \frac{1}{12} m (l^2 + b^2)$ |

Bild 2-60. Massenträgheitsmomente einiger Körper.