

Mass properties of shaft_pando_ball

Configuration: Default

Coordinate system: first_pendulum_axis

Density = 0.01 grams per cubic millimeter

Mass (user-overridden) = 80.00 grams

Volume = 9332.13 cubic millimeters

Surface area = 4697.00 square millimeters

Center of mass: (millimeters)

X = 0.00

Y = -87.83

Z = 0.14

Principal axes of inertia and principal moments of inertia: (grams * square millimeters)

Taken at the center of mass.

Ix = (0.00, 1.00, 0.00)

Px = 1116.21

Iy = (1.00, 0.00, 0.00)

Py = 184029.76

Iz = (0.00, 0.00, -1.00)

Pz = 184082.00

Moments of inertia: (grams * square millimeters)

Taken at the center of mass and aligned with the output coordinate system. (Using positive tensor notation.)

Lxx = 184029.76 Lxy = 0.32 Lxz = -0.02

Lyx = 0.32 Lyy = 1118.17 Lyz = -598.45

Lzx = -0.02 Lzy = -598.45 Lzz = 184080.04

Moments of inertia: (grams * square millimeters)

Taken at the output coordinate system. (Using positive tensor notation.)

Ixx = 801188.30 Ixy = 1.29 Ixz = -0.03

Iyx = 1.29 Iyy = 1119.63 Iyz = -1547.86

Izx = -0.03 Izy = -1547.86 Izz = 801237.12