

SOLIDWORKS Part 1 Search Commands

Sketch Line Corner Rectangle Circle Polygon 3 Point Arc Spline Smart Dimension Add Relation Sketch Fillet Trim Linear Sketch Pattern Offset Entities Convert Entities Mirror Entities Extruded Boss/Base Extruded Cut Fillet Linear Pattern Mirror Draft Shell Reference Geometry Measure Mass Properties

Basic Modeling Tools Sketch Surfaces Simulation Analysis Preparation

Design Library

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- > 3D Components - Part

Part 1

Sensors

Solid Bodies(1)

- Combine1

Equations

Material <not specified>

Front Plane

Top Plane

Right Plane

Origin

Surface-Sweep1

Surface-Fill1

Thicken1

Thicken3

Combine1

Mass Properties

Part 1 Options...

Override Mass Properties... Recalculate

☒ Include hidden bodies/components

☐ Create Center of Mass feature

☐ Show weld bead mass

Report coordinate values relative to: -- default --

Mass properties of Part 1

Configuration: Default

Coordinate system: -- default --

Density = 0.04 pounds per cubic inch

Mass = 0.96 pounds

Volume = 26.51 cubic inches

Surface area = 427.88 square inches

Center of mass: (inches)

X = 0.00

Y = 0.00

Z = 4.53

Principal axes of inertia and principal moments of inertia: (pounds * square inches)

Taken at the center of mass.

lx = (0.00, 0.00, 1.00)	Px = 7.72
ly = (0.00, -1.00, 0.00)	Py = 14.00
lz = (1.00, 0.00, 0.00)	Pz = 15.95

Moments of inertia: (pounds * square inches)

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

Lxx = 15.95	Lxy = 0.00	Lxz = 0.00
Lyx = 0.00	Lyy = 14.00	Lyz = 0.00
Lzx = 0.00	Lzy = 0.00	Lzz = 7.72

Moments of inertia: (pounds * square inches)

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

lxx = 35.64	lxy = 0.00	lxz = 0.00
lyx = 0.00	lyy = 33.69	lyz = 0.00
lzx = 0.00	lzy = 0.00	lzz = 7.72

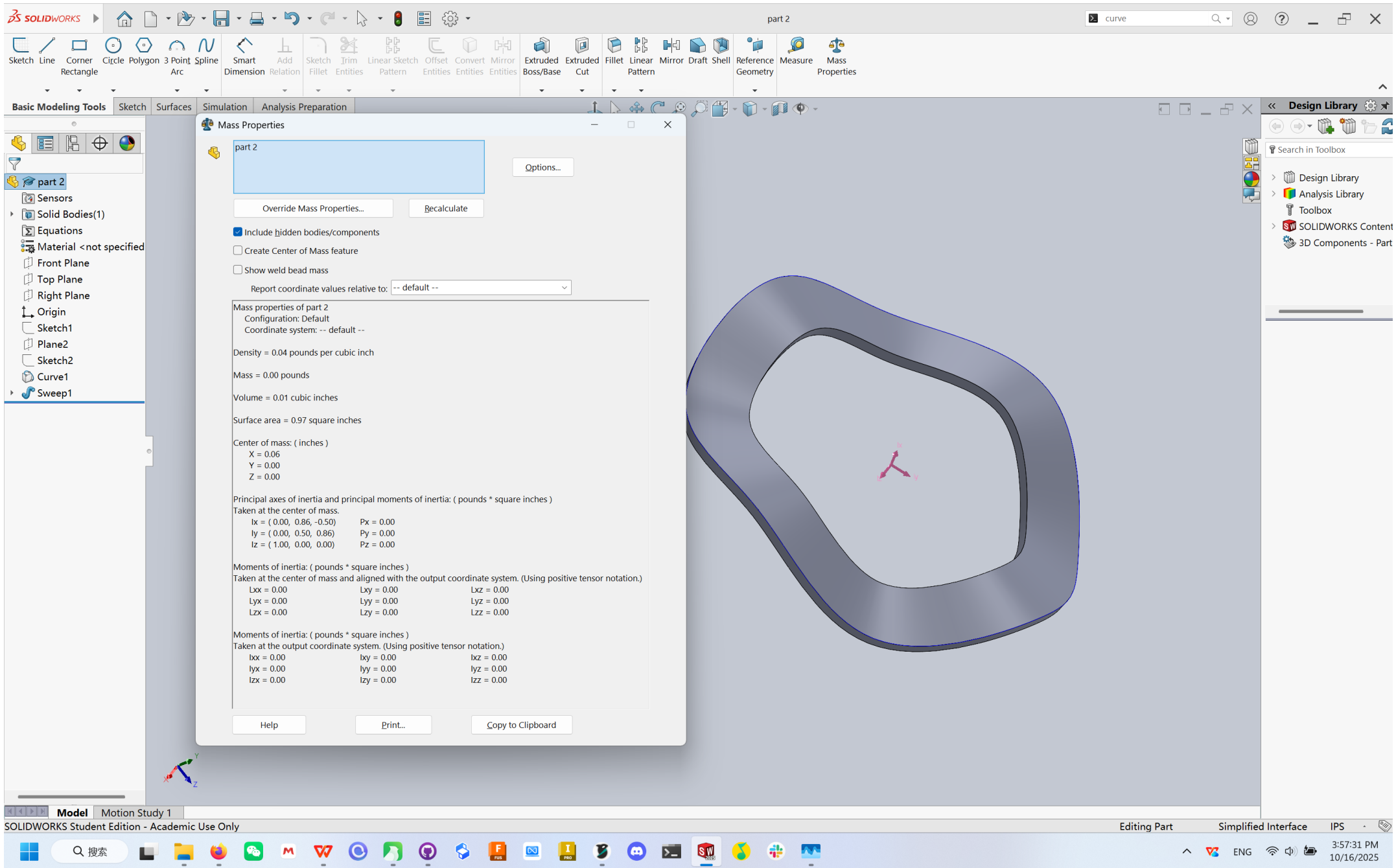
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Model Motion Study 1

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SOLIDWORKS part 3 Search Commands

Sketch Line Corner Rectangle Circle Polygon 3 Point Arc Spline Smart Dimension Add Relation Sketch Fillet Trim Linear Sketch Pattern Offset Entities Convert Entities Mirror Entities Extruded Boss/Base Extruded Cut Fillet Linear Pattern Mirror Draft Shell Reference Geometry Measure Mass Properties

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part 3

Sensors

Solid Bodies(1)

Equations

Material <not specified>

Front Plane

Top Plane

Right Plane

Origin

Helix/Spiral1

Sketch3

Sweep1

3DSketch1

Sweep2

3DSketch1

Sweep3

Mass Properties

part 3 Options...

Override Mass Properties... Recalculate

☒ Include hidden bodies/components

☐ Create Center of Mass feature

☐ Show weld bead mass

Report coordinate values relative to: -- default --

Mass properties of part 3
Configuration: Default
Coordinate system: -- default --

Density = 0.04 pounds per cubic inch

Mass = 0.04 pounds

Volume = 1.08 cubic inches

Surface area = 26.20 square inches

Center of mass: (inches)
X = -0.60
Y = 1.05
Z = 1.30

Principal axes of inertia and principal moments of inertia: (pounds * square inches)
Taken at the center of mass.
Ix = (-0.48, 0.88, -0.04) Px = 0.05
Iy = (-0.58, -0.29, 0.76) Py = 0.13
Iz = (0.65, 0.39, 0.65) Pz = 0.15

Moments of inertia: (pounds * square inches)
Taken at the center of mass and aligned with the output coordinate system. (Using positive tensor notation.)
Lxx = 0.12 Lxy = -0.04 Lxz = -0.01
Lyx = -0.04 Lyy = 0.07 Lyz = -0.01
Lzx = -0.01 Lzy = -0.01 Lzz = 0.14

Moments of inertia: (pounds * square inches)
Taken at the output coordinate system. (Using positive tensor notation.)
lxx = 0.23 lxy = -0.06 lxz = -0.04
lyx = -0.06 lyy = 0.15 lyz = 0.04
lzx = -0.04 lzy = 0.04 lzz = 0.19

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