

How to Calculate Bead Diameters

This technique is helpful when you're using different thicknesses of paper and want to roll beads with a consistent diameter.

What you'll need:

- A digital caliper tool (You can purchase one at your local hardware store, craft store, or online)
- Online Archimedean spiral calculator (The Bead Aisle uses the spiral calculator on planetcalc.com)
- Rolling tool
- Paper you'll use to cut your beads

Steps:

1. Turn your calipers on and ensure they are fully closed, and the display shows all zeros. (You may need to depress the zero button or on/off button to clear the screen)
2. Use the calipers to measure the diameter of your rolling tool and make a note of the result. (You may use either inches or millimeters for measurements. Working with millimeters is typically easier than working with inches)
3. Reset your calipers to zero, then measure the thickness of your paper and make a note of your result.
4. Using an internet browser, navigate to planetcalc.com/9063.
5. The calculator has three fields for data input, **Outer Diameter**, **Inner Diameter**, and **Thickness**. Before inputting your rolling tool and paper measurements, set each option to the same unit of measure (either inches or millimeters).
6. Enter the size of the bead you want to roll in the **Outer diameter** field.
7. Enter the measurement of your rolling tool in the **Inner Diameter** field.
8. Enter the thickness of your paper in the **Thickness** field. (A leading zero and decimal point are required for fractional numbers)
9. Select the measurement unit of your spiral length (centimeters or inches work best for this field). The number displayed in this field is the length of the paper strip you need to cut for your bead.
10. Adjust the precision of your calculation by moving the **Digits after the decimal point** slider to display the desired number of decimal points.