

## Enter 3D Coordinates

2492 GstarCAD MY /KW November 9, 2021 [Workflow](#) 0 669

When you create objects in 3D, Cartesian, cylindrical or spherical coordinates are used to locate points.

### Enter X.Y.Z coordinates

3D Cartesian coordinates determine a precise location by using three coordinate values: X, Y, and Z.

Entering 3D Cartesian coordinate values (X,Y,Z) is similar to entering 2D coordinate values (X,Y). In addition to specifying X and Y values, you also specify a Z value using the following format: X,Y,Z

### Enter Spherical Coordinates

3D spherical coordinates specify a location by a distance from the origin of the current [UCS](#) , an angle from the X axis in the XY plane and an angle from the XY plane.

You specify a point using absolute spherical coordinates with the following syntax:

X<[angle from X axis]<[angle from XY plane]

Enter the @ sign followed by the relative spherical coordinate values, if you need to define a point based on a previous point.

### Enter Cylindrical Coordinates

3D cylindrical coordinates describe a precise location by a distance from the UCS origin on the XY plane, an angle from the X axis in the XY plane, and a Z value.

You specify a point using absolute cylindrical coordinates with the following syntax:

X<[angle from X axis],Z

When you need to define a point based on a previous point , you can enter relative cylindrical coordinate values with the @ prefix. For example, @5<30,3 specifies a point 5 units on the XY plane from the last point entered, at an angle of 30 degrees from the positive X direction, and extending 3units in the positive Z direction.

Online URL: <https://www.gstarcad.com.my/knowledge/article/enter-3d-coordinates-2492.html>