

Enter 3D Coordinates — GstarCAD 2027

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Enter 3D Coordinates

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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:

$X<[\text{angle from } X \text{ axis}]<[\text{angle from } XY \text{ plane}]$

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:

$X<[\text{angle from } X \text{ axis}],Z$

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 3 units in the positive Z direction.

Other versions with matching text

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